

# FCC PART 15 TEST REPORT

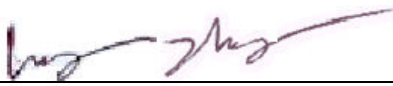
For

AMBIT Microsystems Corporation

4-1, Ming Shen Street, Tu Chen Industrial District.  
Tu Chen, Taipei Hsien 236, Taiwan, R.O.C.

**FCC ID: MCLT60M665**

2003-07-07

|                                                                                                                                                                     |                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>This Report Concerns:</b><br><input checked="" type="checkbox"/> Permissive II Change                                                                            | <b>Equipment Type:</b><br>Bluetooth Wireless Card with<br>Wireless LAN MiniPCI Card |
| <b>Test Engineer:</b> Ling Zhang                                                |                                                                                     |
| <b>Report No.:</b> R0306112                                                                                                                                         |                                                                                     |
| <b>Test Date:</b> 2003-06-03                                                                                                                                        |                                                                                     |
| <b>Reviewed By:</b> Hans Mellberg                                               |                                                                                     |
| <b>Prepared By:</b> Bay Area Compliance Laboratory Corporation (BACL)<br>230 Commercial Street<br>Sunnyvale, CA 94085<br>Tel: (408) 732-9162<br>Fax: (408) 732 9164 |                                                                                     |

**Note:** This test report is specially limited to the above client company and product model only. It may not be duplicated without prior written consent of Bay Area Compliance Laboratory Corporation. This report **must not** be used by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

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**TABLE OF CONTENTS**

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|                                                             |           |
|-------------------------------------------------------------|-----------|
| <b>1 - GENERAL INFORMATION.....</b>                         | <b>3</b>  |
| 1.1 PRODUCT DESCRIPTION FOR EQUIPMENT UNDER TEST (EUT)..... | 3         |
| 1.2 OBJECTIVE .....                                         | 3         |
| 1.3 RELATED SUBMITTAL(S)/GRANT(S).....                      | 3         |
| 1.4 TEST METHODOLOGY .....                                  | 3         |
| 1.5 TEST FACILITY .....                                     | 3         |
| 1.6 TEST EQUIPMENT LIST .....                               | 4         |
| 1.7 LOCAL SUPPORT EQUIPMENT LIST AND DETAILS.....           | 4         |
| 1.8 EXTERNAL I/O CABLING LIST AND DETAILS.....              | 5         |
| <b>2 - SYSTEM TEST CONFIGURATION.....</b>                   | <b>6</b>  |
| 2.1 JUSTIFICATION .....                                     | 6         |
| 2.2 EUT EXERCISE SOFTWARE.....                              | 6         |
| 2.3 SPECIAL ACCESSORIES.....                                | 6         |
| 2.4 SCHEMATICS / BLOCK DIAGRAM .....                        | 6         |
| 2.5 EQUIPMENT MODIFICATIONS.....                            | 6         |
| 2.6 CONFIGURATION OF TEST SYSTEM.....                       | 7         |
| 2.7 TEST SETUP BLOCK DIAGRAM .....                          | 7         |
| <b>3 - SUMMARY OF TEST RESULTS .....</b>                    | <b>8</b>  |
| <b>4 - SPURIOUS RADIATED EMISSION.....</b>                  | <b>9</b>  |
| 4.1 MEASUREMENT UNCERTAINTY .....                           | 9         |
| 4.2 EUT SETUP .....                                         | 10        |
| 4.3 SPECTRUM ANALYZER SETUP .....                           | 10        |
| 4.4 TEST PROCEDURE .....                                    | 11        |
| 4.5 CORRECTED AMPLITUDE & MARGIN CALCULATION .....          | 11        |
| 4.6 TEST RESULTS.....                                       | 12        |
| <b>5 - CONDUCTED EMISSIONS .....</b>                        | <b>31</b> |
| 5.1 MEASUREMENT UNCERTAINTY .....                           | 31        |
| 5.2 EUT SETUP .....                                         | 31        |
| 5.3 SPECTRUM ANALYZER SETUP .....                           | 31        |
| 5.4 TEST PROCEDURE .....                                    | 31        |
| 5.5 SUMMARY OF TEST RESULTS.....                            | 31        |
| 5.6 CONDUCTED EMISSIONS TEST DATA.....                      | 32        |
| 5.7 PLOT OF CONDUCTED EMISSIONS TEST DATA.....              | 32        |

## 1 - GENERAL INFORMATION

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### 1.1 Product Description for Equipment Under Test (EUT)

The *Ambit Microsystems Corporation's*, model: *T60M665*, or the "EUT" as referred to in this report is a bluetooth wireless Card which measures approximately 2.4"L x 1.7"W x 0.1"H. The EUT operates at 2402 - 2480 MHz, with output of 0.00224W and is co-located with a wireless LAN card.

*\* The test data gathered is from typical production samples provided by the manufacturer.*

### 1.2 Objective

This type approval report is prepared on behalf of. *AMBIT Microsystems Corporation* in accordance with Part 2, Subpart J, Part 15, Subparts A , C, and E of the Federal Communication Commissions rules.

The objective of the manufacturer is to demonstrate compliance with FCC rules for Conducted and Spurious Radiated Emission, for a Permissive Class II application. The difference between the original application and this PC2 is that an additional transmitter, Ambit wireless LAN card 802.11b, was co-located, transmitting with the EUT in the notebook PC. The wireless LAN card was certified with FCC ID: MCLT60H65600, M/N: T60H656. During the test, the EUT was installed in the ACER notebook PC, M/N: SKU-10. The antenna ZI1S and BY27 were used with the wireless LAN card respectively. The antennas were certified with the wireless LAN card 802.11b in the original grant. No changes are made to the EUT itself.

### 1.3 Related Submittal(s)/Grant(s)

The device was originally granted on 3/19/2003, please refer to FCC Grant under FCC ID:MCLT60M665. The co-located Ambit wireless LAN card is with M/N: T60H656, FCC ID: MCLT60H65600 and was granted on 12/27/02.

### 1.4 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-1992, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All radiated and conducted emissions measurement was performed at Bay Area Compliance Laboratory, Corp. The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

### 1.5 Test Facility

The Open Area Test site used by BACL to collect radiated and conducted emission measurement data is located in the back parking lot of the building at 230 Commercial Street, Sunnyvale, California, USA.

Test site at BACL has been fully described in reports submitted to the Federal Communication Commission (FCC) and Voluntary Control Council for Interference (VCCI). The details of these reports has been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on February 11 and December 10, 1997 and Article 8 of the VCCI regulations on December 25, 1997. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-1992.

The Federal Communications Commission and Voluntary Control Council for Interference has the reports on file and is listed under FCC file 31040/SIT 1300F2 and VCCI Registration No.: C-1298 and R-1234. The test site has been approved by the FCC and VCCI for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, BACL is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200167-0). The scope of the accreditation covers the FCC Method – 47 CFR Part – Digital Devices, CISPER 22: 1997: Electromagnetic Interference – Limits and Methods of Measurement of Information Technology Equipment test methods.

### 1.6 Test Equipment List

| Manufacturer    | Description                      | Model       | Serial Number | Cal. Due Date |
|-----------------|----------------------------------|-------------|---------------|---------------|
| HP              | Spectrum Analyzer                | 8568B       | 2517A01610    | 2003-10-30    |
| HP              | Spectrum Analyzer                | 8593A       | 29190A00242   | 2004-05-01    |
| HP              | Amplifier                        | 8447E       | 1937A01054    | 2004-05-01    |
| HP              | Quasi-Peak Adapter               | 85650A      | 2521A00718    | 2004-05-01    |
| Com-Power       | Biconical Antenna                | AB-100      | 14012         | 2004-05-01    |
| Com-Power       | LISN                             | LI-200      | 12005         | 2004-03-28    |
| Com-Power       | LISN                             | LI-200      | 12008         | 2004-03-28    |
| Com-Power       | Log Periodic Antenna             | AL-100      | 16091         | 2004-05-01    |
| Com-Power       | Log Periodic Antenna             | AB-900      | 15049         | 2004-05-01    |
| Rohde & Schwarz | EMI Test Receiver                | ESPI        | 1147 8007 07  | 2003-12-03    |
| Agilent         | Spectrum Analyzer (9KHz – 40GHz) | 8564E       | 08303         | 2003-08-01    |
| Agilent         | Spectrum Analyzer (9KHz – 50GHz) | 8565EC      | 06042         | 2004-05-03    |
| HP              | Amplifier (1-26.5GHz)            | 8449B       | 3147A00400    | 2004-03-14    |
| A.H.System      | Horn Antenna (700MHz-18GHz)      | SAS-200/571 | 261           | 2004-05-31    |

**\* Statement of Traceability: Bay Area Compliance Laboratory Corp.** certifies that all calibration has been performed using suitable standards traceable to the NIST.

### 1.7 Local Support Equipment List and Details

| Manufacturer | Description | Model  | Serial Number | FCC ID |
|--------------|-------------|--------|---------------|--------|
| ACER         | Notebook PC | SKU-10 | N/A           | DoC    |
| HP           | Printer     | 2225C  | 2821S14783    | DOC    |

**1.8 External I/O Cabling List and Details**

| Cable Description      | Length (M) | Port/From                 | To      |
|------------------------|------------|---------------------------|---------|
| Shielded Printer Cable | 2.0        | Parallel Port/Notebook PC | Printer |

## **2 - SYSTEM TEST CONFIGURATION**

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### **2.1 Justification**

The host system was configured for testing in a typical fashion (as normally used by a typical user).

The EUT was tested in the normal (native) operating mode to represent *worst-case* results during the final qualification test.

### **2.2 EUT Exercise Software**

The EUT exercise program used during radiated and conducted testing was designed to exercise the system components in a manner similar to a typical use. The test software, provided by the customer, is started the Windows terminal program under the Windows 98/2000/ME/XP operating system.

Once loaded, set the Tx channel to low, mid and high for testing.

### **2.3 Special Accessories**

As shown in section 2.7, all interface cables used for compliance testing are shielded. The host PC and the peripherals featured shielded metal connectors.

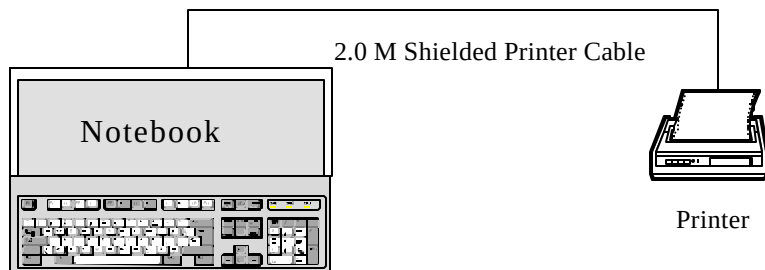
### **2.4 Schematics / Block Diagram**

Please refer to Appendix A.

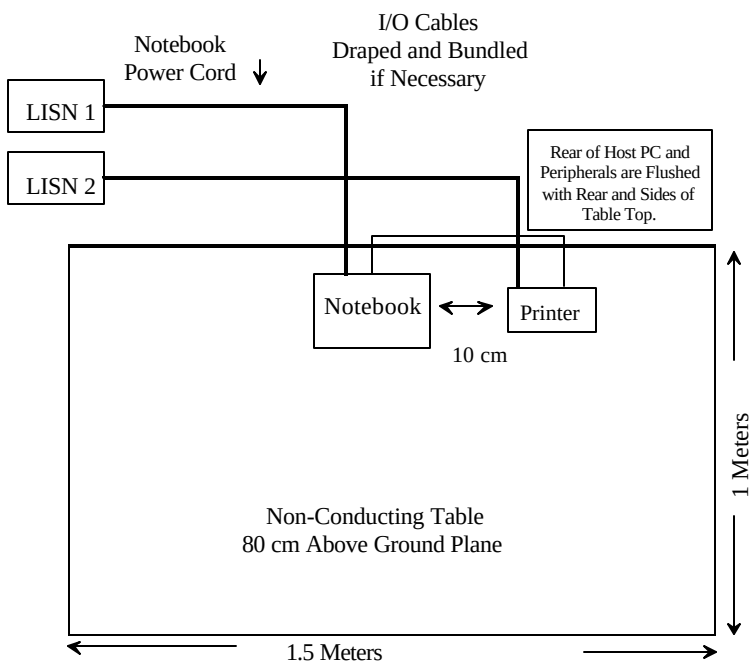
### **2.5 Equipment Modifications**

No modifications were made by BACL to ensure the EUT to comply with the applicable limits and requirements.

## 2.6 Configuration of Test System



## 2.7 Test Setup Block Diagram



### 3 - SUMMARY OF TEST RESULTS

| FCC RULES                             | DESCRIPTION OF TEST                                                                                                                                                                                                                                                             | RESULT    | REFERENCE |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|
| § 15.209 (a),<br>§ 15.205<br>§ 15.247 | Radiated Emission<br>Spurious Emission in Restricted Band<br>Unwanted Emission                                                                                                                                                                                                  | Compliant | Section 4 |
| § 15.207 (a)                          | For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequency within the band 450 kHz to 30 MHz shall not exceed 250 micorvolts. | Compliant | Section 5 |



## 4 - SPURIOUS RADIATED EMISSION

### 4.1 Measurement Uncertainty

All measurements involve certain levels of uncertainties. The factors contributing to uncertainties are spectrum analyzer, cable loss, antenna factor calibration, antenna directivity, antenna factor variation with height, antenna phase center variation, antenna factor frequency interpolation, measurement distance variation, site imperfections, mismatch (average), and system repeatability.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of a radiation emissions measurement at BACL is  $\pm 4.0$  dB.

According to §15.205, except as shown in paragraph (d) of this section, only spurious emissions are permitted in any of the frequency bands listed below:

| MHz                        | MHz                   | MHz             | GHz              |
|----------------------------|-----------------------|-----------------|------------------|
| 0.090 – 0.110              | 16.42 – 16.423        | 399.9 – 410     | 4.5 – 5.15       |
| <sup>1</sup> 0.495 – 0.505 | 16.69475 – 16.69525   | 608 – 614       | 5.35 – 5.46      |
| 2.1735 – 2.1905            | 16.80425 – 16.80475   | 960 – 1240      | 7.25 – 7.75      |
| 4.125 – 4.128              | 25.5 – 25.67          | 1300 – 1427     | 8.025 – 8.5      |
| 4.17725 – 4.17775          | 37.5 – 38.25          | 1435 – 1626.5   | 9.0 – 9.2        |
| 4.20725 – 4.20775          | 73 – 74.6             | 1645.5 – 1646.5 | 9.3 – 9.5        |
| 6.215 – 6.218              | 74.8 – 75.2           | 1660 – 1710     | 10.6 – 12.7      |
| 6.26775 – 6.26825          | 108 – 121.94          | 1718.8 – 1722.2 | 13.25 – 13.4     |
| 6.31175 – 6.31225          | 123 – 138             | 2200 – 2300     | 14.47 – 14.5     |
| 8.291 – 8.294              | 149.9 – 150.05        | 2310 – 2390     | 15.35 – 16.2     |
| 8.362 – 8.366              | 156.52475 – 156.52525 | 2483.5 – 2500   | 17.7 – 21.4      |
| 8.37625 – 8.38675          | 156.7 – 156.9         | 2655 – 2900     | 22.01 – 23.12    |
| 8.41425 – 8.41475          | 162.0125 – 167.17     | 3260 – 3267     | 23.6 – 24.0      |
| 12.29 – 12.293             | 167.72 – 173.2        | 3332 – 3339     | 31.2 – 31.8      |
| 12.51975 – 12.57725        | 240 – 285             | 3345.8 – 3358   | 36.43 – 36.5     |
| 13.36 – 13.41              | 322 – 335.4           | 3600 – 4400     | ( <sup>2</sup> ) |

<sup>1</sup> Until February 1, 1999, this restricted band shall be 0.490-0.510MHz

<sup>2</sup> Above 38.6

Except as provided in paragraph (d) and (e), the filed strength of emissions appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

According to §15.209, the device shall meet radiated emission general requirements.

Except for Class A device, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

| Frequency of Emission<br>(MHz) | Field Strength<br>(Microvolts/meter) | dB<br>(dB $\mu$ V/meter) |
|--------------------------------|--------------------------------------|--------------------------|
| 30 - 88                        | 100                                  | 40                       |
| 88 - 216                       | 150                                  | 43.5                     |
| 216 - 960                      | 200                                  | 46                       |
| Above 960                      | 500                                  | 54                       |

## 4.2 EUT Setup

The radiated emission tests were performed in the open area 3-meter test site, using the setup in accordance with the ANSI C63.4-1992. The specification used was the FCC 15 Subpart C limits.

The spacing between the peripherals was 10 centimeters.

External I/O cables were draped along the edge of the test table and bundle when necessary.

The host PC system was connected with 120Vac/60Hz power source.

## 4.3 Spectrum Analyzer Setup

According to FCC CFR 47, Section 15.31, the EUT was tested to 40GHz. During the radiated emission test, the spectrum analyzer was set with the following configurations:

Start Frequency .....30 MHz  
 Stop Frequency .....40GHz  
 Sweep Speed.....Auto  
 IF Bandwidth.....1 MHz  
 Video Bandwidth .....1 MHz  
 Quasi-Peak Adapter Bandwidth .....120 kHz  
 Quasi-Peak Adapter Mode.....Normal  
 Resolution Bandwidth.....1MHz

#### 4.4 Test Procedure

For the radiated emissions test, the Host PC system power cord was connected to the AC floor outlet since the power supply used in the EUT did not provide an accessory power outlet.

Maximizing procedure was performed on the six (6) highest emissions to ensure EUT compliance is with all installation combinations. All data was recorded in the peak detection mode. Quasi-peak readings was performed only when an emission was found to be marginal (within -4 dB $\mu$ V of specification limits), and are distinguished with a "Qp" in the data table.

#### 4.5 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

$$\text{Corr. Ampl.} = \text{Indicated Reading} + \text{Antenna Factor} + \text{Cable Factor} - \text{Amplifier Gain}$$

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB $\mu$ V means the emission is 7dB $\mu$ V below the maximum limit for Subpart C. The equation for margin calculation is as follows:

$$\text{Margin} = \text{Corr. Ampl.} - \text{Subpart C Limit}$$

#### 4.6 Test Results

According to the following data, the EUT complied with the FCC Title 47, Part 15, Subpart C, section 15.205, 15.209 (a) and 15.247, and had the worst margin of:

ZI1S Antenna, 30MHz – 25GHz:

T60M665 (Bluetooth Card) transmitted at Low Channel:

**-4.9 dB** at **4824.00 MHz** in the **Vertical** polarization, T60H656 transmitted at Low Channel

**-3.3 dB** at **4874.00 MHz** in the **Vertical** polarization, T60H656 transmitted at Middle Channel

**-4.4 dB** at **4924.00 MHz** in the **Vertical** polarization, T60H656 transmitted at High Channel

T60M665 (Bluetooth Card) transmitted at Mid Channel:

**-2.6 dB** at **4824.00 MHz** in the **Vertical** polarization, T60H656 transmitted at Low Channel

**-3.9 dB** at **4874.00 MHz** in the **Vertical** polarization, T60H656 transmitted at Middle Channel

**-2.9 dB** at **4924.00 MHz** in the **Vertical** polarization, T60H656 transmitted at High Channel

T60M665 (Bluetooth Card) transmitted at High Channel:

**-5.4 dB** at **4824.00 MHz** in the **Vertical** polarization, T60H656 transmitted at Low Channel

**-5.6 dB** at **4874.00 MHz** in the **Vertical** polarization, T60H656 transmitted at Middle Channel

**-2.4 dB** at **4924.00 MHz** in the **Vertical** polarization, T60H656 transmitted at High Channel

**-4.7 dB** at **205.15 MHz** in the **Vertical** polarization, Unwanted Emission

## BY27 Antenna, 30MHz – 25GHz:

T60M665 (Bluetooth Card) transmitted at Low Channel:

**-13.4 dB** at **7236.00 MHz** in the **Horizontal** polarization, T60H656 transmitted at Low Channel

**-12.8 dB** at **7311.00.00 MHz** in the **Horizontal** polarization, T60H656 transmitted at Middle Channel

**-12.6 dB** at **7386.00 MHz** in the **Vertical** polarization, T60H656 transmitted at High Channel

T60M665 (Bluetooth Card) transmitted at Mid Channel:

**-13.3 dB** at **7236.00 MHz** in the **Horizontal** polarization, T60H656 transmitted at Low Channel

**-12.8 dB** at **7311.00 MHz** in the **Horizontal** polarization, T60H656 transmitted at Middle Channel

**-11.7 dB** at **7323.00 MHz** in the **Vertical** polarization, T60H656 transmitted at High Channel

T60M665 (Bluetooth Card) transmitted at High Channel:

**-12.8 dB** at **7236.00 MHz** in the **Horizontal** polarization, T60H656 transmitted at Low Channel

**-13.8 dB** at **7311.00 MHz** in the **Horizontal** polarization, T60H656 transmitted at Middle Channel

**-3.8 dB** at **7440.00 MHz** in the **Vertical** polarization, T60H656 transmitted at High Channel

**-3.3 dB** at **972.50 MHz** in the **Vertical** polarization, Unwanted Emission

#### 4.6.1 T60H656 802.11b transmitted with T60M665 Bluetooth Low Channel, Antenna ZI1S

| INDICATED                |                 |          | TABLE           | ANTENNA         |               | CORRECTION FACTOR |             |            | CORRECTED<br>AMPLITUDE | FCC 15<br>SUBPART C |              |
|--------------------------|-----------------|----------|-----------------|-----------------|---------------|-------------------|-------------|------------|------------------------|---------------------|--------------|
| Frequency<br>MHz         | Ampl.<br>dBμV/m | Comments | Angle<br>Degree | Height<br>Meter | Polar<br>H/ V | Antenna<br>dBμV/m | Cable<br>DB | Amp.<br>DB | Corr. Ampl.<br>dBμV/m  | Limit<br>dBμV/<br>m | Margin<br>dB |
| Low Channel, 30MHz-25GHz |                 |          |                 |                 |               |                   |             |            |                        |                     |              |
| 2412.00                  | 107.8           | Peak     | 45              | 2.2             | v             | 28.1              | 3.4         | 35.2       | 104.1                  |                     |              |
| 2412.00                  | 101.7           | Peak     | 270             | 2.0             | h             | 28.1              | 3.4         | 35.2       | 97.9                   |                     |              |
| 2412.00                  | 98.7            | Ave      | 45              | 2.2             | v             | 28.1              | 3.4         | 35.2       | 94.9                   |                     |              |
| 2412.00                  | 93.5            | Ave      | 270             | 2.0             | h             | 28.1              | 3.4         | 35.2       | 89.8                   |                     |              |
| 4824.00                  | 44.7            | Ave      | 180             | 1.0             | v             | 32.5              | 4.9         | 33.0       | 49.1                   | 54                  | -4.9         |
| 4824.00                  | 39.7            | Ave      | 15              | 1.6             | h             | 32.5              | 4.9         | 33.0       | 44.1                   | 54                  | -9.9         |
| 7236.00                  | 36.5            | Ave      | 200             | 1.5             | v             | 35.1              | 5.6         | 33.5       | 43.7                   | 54                  | -10.3        |
| 7236.00                  | 36.3            | Ave      | 0               | 1.4             | h             | 35.1              | 5.6         | 33.5       | 43.6                   | 54                  | -10.4        |
| 7236.00                  | 49.5            | Peak     | 200             | 1.5             | v             | 35.1              | 5.6         | 33.5       | 56.7                   | 74                  | -17.3        |
| 7236.00                  | 48.3            | Peak     | 0               | 1.4             | h             | 35.1              | 5.6         | 33.5       | 55.6                   | 74                  | -18.4        |
| 4824.00                  | 50.7            | Peak     | 180             | 1.0             | v             | 32.5              | 4.9         | 33.0       | 55.1                   | 74                  | -18.9        |
| 4824.00                  | 48.5            | Peak     | 15              | 1.6             | h             | 32.5              | 4.9         | 33.0       | 52.9                   | 74                  | -21.1        |

| Mid Channel, 30MHz-25GHz |       |      |     |     |   |      |     |      |       |    |       |
|--------------------------|-------|------|-----|-----|---|------|-----|------|-------|----|-------|
| 2437.00                  | 108.2 | Peak | 30  | 1.0 | v | 28.1 | 3.4 | 35.2 | 104.4 |    |       |
| 2437.00                  | 102.2 | Peak | 270 | 1.0 | h | 28.1 | 3.4 | 35.2 | 98.4  |    |       |
| 2437.00                  | 99.8  | Ave  | 30  | 1.0 | v | 28.1 | 3.4 | 35.2 | 96.1  |    |       |
| 2437.00                  | 95.2  | Ave  | 270 | 1.0 | h | 28.1 | 3.4 | 36.2 | 90.4  |    |       |
| 2402.00                  | 94.3  | Peak | 270 | 1.0 | v | 28.1 | 3.4 | 35.2 | 90.6  |    |       |
| 2402.00                  | 88.7  | Peak | 0   | 1.8 | h | 28.1 | 3.4 | 35.2 | 84.9  |    |       |
| 2402.00                  | 93.2  | Ave  | 270 | 1.0 | v | 28.1 | 3.4 | 35.2 | 89.4  |    |       |
| 2402.00                  | 87.8  | Ave  | 0   | 1.8 | h | 28.1 | 3.4 | 36.2 | 83.1  |    |       |
| 4874.00                  | 46.3  | Ave  | 150 | 1.5 | v | 32.5 | 4.9 | 33.0 | 50.7  | 54 | -3.3  |
| 4874.00                  | 40.0  | Ave  | 180 | 1.8 | h | 32.5 | 4.9 | 33.0 | 44.4  | 54 | -9.6  |
| 7311.00                  | 36.7  | Ave  | 30  | 1.2 | v | 35.1 | 5.6 | 33.5 | 43.9  | 54 | -10.1 |
| 7311.00                  | 36.5  | Ave  | 200 | 1.6 | h | 35.1 | 5.6 | 33.5 | 43.7  | 54 | -10.3 |
| 7206.00                  | 36.3  | Ave  | 0   | 1.5 | v | 35.1 | 5.6 | 33.5 | 43.5  | 54 | -10.5 |
| 7206.00                  | 36.2  | Ave  | 45  | 1.4 | h | 35.1 | 5.6 | 33.5 | 43.4  | 54 | -10.6 |
| 4804.00                  | 33.8  | Ave  | 270 | 1.4 | v | 32.5 | 4.9 | 33.0 | 38.2  | 54 | -15.8 |
| 4804.00                  | 33.5  | Ave  | 90  | 1.5 | h | 32.5 | 4.9 | 33.0 | 37.9  | 54 | -16.1 |
| 7311.00                  | 49.8  | Peak | 30  | 1.2 | v | 35.1 | 5.6 | 33.5 | 57.1  | 74 | -16.9 |
| 4874.00                  | 49.5  | Peak | 180 | 1.8 | h | 32.5 | 4.9 | 33.0 | 56.6  | 74 | -17.4 |
| 7311.00                  | 49.4  | Peak | 200 | 1.6 | h | 35.1 | 5.6 | 33.5 | 56.6  | 74 | -17.4 |
| 7206.00                  | 48.8  | Peak | 0   | 1.5 | v | 35.1 | 5.6 | 33.5 | 56.1  | 74 | -17.9 |
| 7206.00                  | 48.7  | Peak | 45  | 1.4 | h | 35.1 | 5.6 | 33.5 | 55.9  | 74 | -18.1 |
| 4874.00                  | 52.2  | Peak | 150 | 1.5 | v | 32.5 | 4.9 | 35.2 | 54.4  | 74 | -19.6 |
| 4804.00                  | 46.2  | Peak | 90  | 1.5 | h | 32.5 | 4.9 | 33.0 | 50.9  | 74 | -23.1 |
| 4804.00                  | 46.5  | Peak | 270 | 1.4 | v | 32.5 | 4.9 | 35.2 | 48.7  | 74 | -25.3 |

| High Channel, 30MHz-25GHz |       |      |     |     |   |      |     |      |      |    |       |
|---------------------------|-------|------|-----|-----|---|------|-----|------|------|----|-------|
| 2462.00                   | 102.7 | Peak | 270 | 1.3 | v | 28.1 | 3.4 | 35.2 | 98.9 |    |       |
| 2462.00                   | 98.5  | Peak | 100 | 1.6 | h | 28.1 | 3.4 | 35.2 | 94.8 |    |       |
| 2462.00                   | 94.0  | Ave  | 270 | 1.3 | v | 28.1 | 3.4 | 35.2 | 90.3 |    |       |
| 2462.00                   | 89.5  | Ave  | 100 | 1.6 | h | 28.1 | 3.4 | 36.2 | 84.8 |    |       |
| 2402.00                   | 91.7  | Peak | 180 | 2.0 | v | 28.1 | 3.4 | 35.2 | 87.9 |    |       |
| 2402.00                   | 89.5  | Peak | 180 | 1.2 | h | 28.1 | 3.4 | 35.2 | 85.8 |    |       |
| 2402.00                   | 90.2  | Ave  | 180 | 2.0 | v | 28.1 | 3.4 | 35.2 | 86.4 |    |       |
| 2402.00                   | 88.0  | Ave  | 180 | 1.2 | h | 28.1 | 3.4 | 36.2 | 83.3 |    |       |
| 4924.00                   | 45.2  | Ave  | 0   | 1.5 | v | 32.5 | 4.9 | 33.0 | 49.6 | 54 | -4.4  |
| 4924.00                   | 39.3  | Ave  | 180 | 1.7 | h | 32.5 | 4.9 | 33.0 | 43.7 | 54 | -10.3 |
| 7386.00                   | 36.2  | Ave  | 270 | 1.4 | v | 35.1 | 5.6 | 33.5 | 43.4 | 54 | -10.6 |
| 7386.00                   | 36.1  | Ave  | 120 | 1.5 | h | 35.1 | 5.6 | 33.5 | 43.3 | 54 | -10.7 |
| 7206.00                   | 36.1  | Ave  | 180 | 2.0 | v | 35.1 | 5.6 | 33.5 | 43.3 | 54 | -10.7 |
| 7206.00                   | 36.0  | Ave  | 0   | 1.4 | h | 35.1 | 5.6 | 33.5 | 43.2 | 54 | -10.8 |
| 4804.00                   | 33.4  | Ave  | 150 | 1.8 | v | 32.5 | 4.9 | 33.0 | 37.8 | 54 | -16.2 |
| 4804.00                   | 33.3  | Ave  | 30  | 1.5 | h | 32.5 | 4.9 | 33.0 | 37.7 | 54 | -16.3 |
| 7386.00                   | 49.5  | Peak | 270 | 1.4 | v | 35.1 | 5.6 | 33.5 | 56.7 | 74 | -17.3 |
| 4924.00                   | 49.2  | Peak | 180 | 1.7 | h | 32.5 | 4.9 | 33.0 | 56.6 | 74 | -17.4 |
| 7206.00                   | 49.2  | Peak | 180 | 2.0 | v | 35.1 | 5.6 | 33.5 | 56.4 | 74 | -17.6 |
| 7206.00                   | 49.2  | Peak | 0   | 1.4 | h | 35.1 | 5.6 | 33.5 | 56.4 | 74 | -17.6 |
| 7386.00                   | 49.0  | Peak | 120 | 1.5 | h | 35.1 | 5.6 | 33.5 | 56.2 | 74 | -17.8 |
| 4924.00                   | 52.2  | Peak | 0   | 1.5 | v | 32.5 | 4.9 | 35.2 | 54.4 | 74 | -19.6 |
| 4804.00                   | 46.0  | Peak | 30  | 1.5 | h | 32.5 | 4.9 | 33.0 | 50.7 | 74 | -23.3 |
| 4804.00                   | 46.3  | Peak | 150 | 1.8 | v | 32.5 | 4.9 | 35.2 | 48.5 | 74 | -25.5 |



#### 4.6.2 T60H656 802.11b transmitted with T60M665 Bluetooth Mid Channel, Antenna ZI1S

| INDICATED                |                 |          | TABLE           | ANTENNA         |               | CORRECTION FACTOR |             |            | CORRECTED<br>AMPLITUDE | FCC 15<br>SUBPART C |              |
|--------------------------|-----------------|----------|-----------------|-----------------|---------------|-------------------|-------------|------------|------------------------|---------------------|--------------|
| Frequency<br>MHz         | Ampl.<br>dBμV/m | Comments | Angle<br>Degree | Height<br>Meter | Polar<br>H/ V | Antenna<br>dBμV/m | Cable<br>DB | Amp.<br>DB | Corr. Ampl.<br>dBμV/m  | Limit<br>dBμV/<br>m | Margin<br>dB |
| Low Channel, 30MHz-25GHz |                 |          |                 |                 |               |                   |             |            |                        |                     |              |
| 2412.00                  | 109.2           | Peak     | 270             | 1.5             | v             | 28.1              | 3.4         | 35.2       | 105.4                  |                     |              |
| 2412.00                  | 104.2           | Peak     | 30              | 1.4             | h             | 28.1              | 3.4         | 35.2       | 100.4                  |                     |              |
| 2412.00                  | 103.0           | Ave      | 270             | 1.5             | v             | 28.1              | 3.4         | 35.2       | 99.3                   |                     |              |
| 2412.00                  | 96.0            | Ave      | 30              | 1.4             | h             | 28.1              | 3.4         | 35.2       | 92.3                   |                     |              |
| 2441.00                  | 92.83           | Peak     | 270             | 1.0             | v             | 28.1              | 3.4         | 35.2       | 89.1                   |                     |              |
| 2441.00                  | 86.2            | Peak     | 180             | 1.4             | h             | 28.1              | 3.4         | 35.2       | 82.4                   |                     |              |
| 2441.00                  | 91.67           | Ave      | 270             | 1.0             | v             | 28.1              | 3.4         | 35.2       | 87.9                   |                     |              |
| 2441.00                  | 85.2            | Ave      | 180             | 1.4             | h             | 28.1              | 3.4         | 36.2       | 80.4                   |                     |              |
| 4824.00                  | 47.0            | Ave      | 60              | 1.5             | v             | 32.5              | 4.9         | 33.0       | 51.4                   | 54                  | -2.6         |
| 4824.00                  | 40.7            | Ave      | 220             | 1.8             | h             | 32.5              | 4.9         | 33.0       | 45.1                   | 54                  | -8.9         |
| 7236.00                  | 36.5            | Ave      | 270             | 1.2             | v             | 35.1              | 5.6         | 33.5       | 43.7                   | 54                  | -10.3        |
| 7236.00                  | 36.5            | Ave      | 270             | 1.7             | h             | 35.1              | 5.6         | 33.5       | 43.7                   | 54                  | -10.3        |
| 7323.00                  | 36.3            | Ave      | 90              | 1.0             | v             | 35.1              | 5.6         | 33.5       | 43.5                   | 54                  | -10.5        |
| 7323.00                  | 36.3            | Ave      | 30              | 1.5             | h             | 35.1              | 5.6         | 33.5       | 43.5                   | 54                  | -10.5        |
| 4882.00                  | 33.3            | Ave      | 250             | 1.2             | v             | 32.5              | 4.9         | 33.0       | 37.7                   | 54                  | -16.3        |
| 4882.00                  | 33.0            | Ave      | 30              | 1.3             | h             | 32.5              | 4.9         | 33.0       | 37.4                   | 54                  | -16.6        |
| 7323.00                  | 49.5            | Peak     | 90              | 1.0             | v             | 35.1              | 5.6         | 33.5       | 56.7                   | 74                  | -17.3        |
| 7323.00                  | 49.3            | Peak     | 30              | 1.5             | h             | 35.1              | 5.6         | 33.5       | 56.5                   | 74                  | -17.5        |
| 4824.00                  | 52.0            | Peak     | 60              | 1.5             | v             | 32.5              | 4.9         | 33.0       | 56.4                   | 74                  | -17.6        |
| 7236.00                  | 49.2            | Peak     | 270             | 1.7             | h             | 35.1              | 5.6         | 33.5       | 56.4                   | 74                  | -17.6        |
| 7236.00                  | 49.0            | Peak     | 270             | 1.2             | v             | 35.1              | 5.6         | 33.5       | 56.2                   | 74                  | -17.8        |
| 4824.00                  | 49.3            | Peak     | 220             | 1.8             | h             | 32.5              | 4.9         | 33.0       | 53.7                   | 74                  | -20.3        |
| 4882.00                  | 46.2            | Peak     | 30              | 1.3             | h             | 32.5              | 4.9         | 33.0       | 50.9                   | 74                  | -23.1        |
| 4882.00                  | 46.5            | Peak     | 250             | 1.2             | v             | 32.5              | 4.9         | 35.2       | 48.7                   | 74                  | -25.3        |

| Mid Channel, 30MHz-25GHz  |       |      |     |     |   |      |     |      |       |    |       |
|---------------------------|-------|------|-----|-----|---|------|-----|------|-------|----|-------|
| 2437.00                   | 108.8 | Peak | 200 | 1.2 | v | 28.1 | 3.4 | 35.2 | 105.1 |    |       |
| 2437.00                   | 101.7 | Peak | 180 | 2.2 | h | 28.1 | 3.4 | 35.2 | 97.9  |    |       |
| 2437.00                   | 101.2 | Ave  | 200 | 1.2 | v | 28.1 | 3.4 | 35.2 | 97.4  |    |       |
| 2437.00                   | 94.5  | Ave  | 180 | 2.2 | h | 28.1 | 3.4 | 36.2 | 89.8  |    |       |
| 4874.00                   | 45.7  | Ave  | 0   | 2.2 | v | 32.5 | 4.9 | 33.0 | 50.1  | 54 | -3.9  |
| 7311.00                   | 36.7  | Ave  | 200 | 1.5 | v | 35.1 | 5.6 | 33.5 | 43.9  | 54 | -10.1 |
| 7311.00                   | 36.5  | Ave  | 30  | 1.8 | h | 35.1 | 5.6 | 33.5 | 43.7  | 54 | -10.3 |
| 4874.00                   | 37.7  | Ave  | 270 | 1.5 | h | 32.5 | 4.9 | 33.0 | 42.1  | 54 | -11.9 |
| 7311.00                   | 49.5  | Peak | 200 | 1.5 | v | 35.1 | 5.6 | 33.5 | 56.7  | 74 | -17.3 |
| 4874.00                   | 48.2  | Peak | 270 | 1.5 | h | 32.5 | 4.9 | 33.0 | 56.6  | 74 | -17.4 |
| 7311.00                   | 49.2  | Peak | 30  | 1.8 | h | 35.1 | 5.6 | 33.5 | 56.4  | 74 | -17.6 |
| 4874.00                   | 52.2  | Peak | 0   | 2.2 | v | 32.5 | 4.9 | 35.2 | 54.4  | 74 | -19.6 |
| High Channel, 30MHz-25GHz |       |      |     |     |   |      |     |      |       |    |       |
| 2462.00                   | 105.3 | Peak | 270 | 1.5 | v | 28.1 | 3.4 | 35.2 | 101.6 |    |       |
| 2462.00                   | 98.3  | Peak | 250 | 1.2 | h | 28.1 | 3.4 | 35.2 | 94.6  |    |       |
| 2462.00                   | 96.2  | Ave  | 270 | 1.5 | v | 28.1 | 3.4 | 35.2 | 92.4  |    |       |
| 2462.00                   | 88.5  | Ave  | 250 | 1.2 | h | 28.1 | 3.4 | 36.2 | 83.8  |    |       |
| 2441.00                   | 92.8  | Peak | 270 | 1.0 | v | 28.1 | 3.4 | 35.2 | 89.1  |    |       |
| 2441.00                   | 86.3  | Peak | 250 | 1.6 | h | 28.1 | 3.4 | 35.2 | 82.6  |    |       |
| 2441.00                   | 91.5  | Ave  | 270 | 1.0 | v | 28.1 | 3.4 | 35.2 | 87.8  |    |       |
| 2441.00                   | 85.8  | Ave  | 250 | 1.6 | h | 28.1 | 3.4 | 36.2 | 81.1  |    |       |
| 4924.00                   | 46.7  | Ave  | 180 | 1.7 | v | 32.5 | 4.9 | 33.0 | 51.1  | 54 | -2.9  |
| 4924.00                   | 39.3  | Ave  | 270 | 1.6 | h | 32.5 | 4.9 | 33.0 | 43.7  | 54 | -10.3 |
| 7386.00                   | 36.3  | Ave  | 90  | 1.6 | v | 35.1 | 5.6 | 33.5 | 43.6  | 54 | -10.4 |
| 7323.00                   | 36.3  | Ave  | 300 | 1.2 | v | 35.1 | 5.6 | 33.5 | 43.5  | 54 | -10.5 |
| 7386.00                   | 36.2  | Ave  | 220 | 1.5 | h | 35.1 | 5.6 | 33.5 | 43.4  | 54 | -10.6 |
| 7323.00                   | 36.2  | Ave  | 60  | 1.4 | h | 35.1 | 5.6 | 33.5 | 43.4  | 54 | -10.6 |
| 4882.00                   | 33.3  | Ave  | 270 | 1.0 | v | 32.5 | 4.9 | 33.0 | 37.7  | 54 | -16.3 |
| 4882.00                   | 33.2  | Ave  | 120 | 1.5 | h | 32.5 | 4.9 | 33.0 | 37.6  | 54 | -16.4 |
| 4924.00                   | 49.7  | Peak | 270 | 1.6 | h | 32.5 | 4.9 | 33.0 | 57.4  | 74 | -16.6 |
| 7323.00                   | 49.4  | Peak | 300 | 1.2 | v | 35.1 | 5.6 | 33.5 | 56.6  | 74 | -17.4 |
| 7386.00                   | 49.3  | Peak | 90  | 1.6 | v | 35.1 | 5.6 | 33.5 | 56.5  | 74 | -17.5 |
| 7386.00                   | 49.0  | Peak | 220 | 1.5 | h | 35.1 | 5.6 | 33.5 | 56.2  | 74 | -17.8 |
| 7323.00                   | 49.0  | Peak | 60  | 1.4 | h | 35.1 | 5.6 | 33.5 | 56.2  | 74 | -17.8 |
| 4924.00                   | 53.0  | Peak | 180 | 1.7 | v | 32.5 | 4.9 | 35.2 | 55.2  | 74 | -18.8 |
| 4882.00                   | 46.0  | Peak | 120 | 1.5 | h | 32.5 | 4.9 | 33.0 | 50.8  | 74 | -23.2 |
| 4882.00                   | 46.4  | Peak | 270 | 1.0 | v | 32.5 | 4.9 | 35.2 | 48.6  | 74 | -25.4 |

### 4.6.3 T60H656 802.11b transmitted with T60M665 Bluetooth high Channel, Antenna ZI1S

| INDICATED                |                 |          | TABLE           | ANTENNA         |               | CORRECTION FACTOR |             |            | CORRECTED<br>AMPLITUDE | FCC 15<br>SUBPART C |              |
|--------------------------|-----------------|----------|-----------------|-----------------|---------------|-------------------|-------------|------------|------------------------|---------------------|--------------|
| Frequency<br>MHz         | Ampl.<br>dBμV/m | Comments | Angle<br>Degree | Height<br>Meter | Polar<br>H/ V | Antenna<br>dBμV/m | Cable<br>DB | Amp.<br>DB | Corr. Ampl.<br>dBμV/m  | Limit<br>dBμV/<br>m | Margin<br>dB |
| Low Channel, 30MHz-25GHz |                 |          |                 |                 |               |                   |             |            |                        |                     |              |
| 2412.00                  | 109.0           | Peak     | 60              | 1.0             | v             | 28.1              | 3.4         | 35.2       | 105.3                  |                     |              |
| 2412.00                  | 103.0           | Peak     | 250             | 1.2             | h             | 28.1              | 3.4         | 35.2       | 99.3                   |                     |              |
| 2412.00                  | 102.0           | Ave      | 60              | 1.0             | v             | 28.1              | 3.4         | 35.2       | 98.3                   |                     |              |
| 2412.00                  | 93.7            | Ave      | 250             | 1.2             | h             | 28.1              | 3.4         | 35.2       | 89.9                   |                     |              |
| 2480.00                  | 91.5            | Peak     | 270             | 1.5             | v             | 28.1              | 3.4         | 35.2       | 87.8                   |                     |              |
| 2480.00                  | 85.3            | Peak     | 220             | 1.6             | h             | 28.1              | 3.4         | 35.2       | 81.6                   |                     |              |
| 2480.00                  | 91.2            | Ave      | 270             | 1.5             | v             | 28.1              | 3.4         | 35.2       | 87.4                   |                     |              |
| 2480.00                  | 83.7            | Ave      | 220             | 1.6             | h             | 28.1              | 3.4         | 36.2       | 78.9                   |                     |              |
| 4824.00                  | 44.2            | Ave      | 270             | 1.1             | v             | 32.5              | 4.9         | 33.0       | 48.6                   | 54                  | -5.4         |
| 7236.00                  | 36.5            | Ave      | 30              | 1.4             | v             | 35.1              | 5.6         | 33.5       | 43.7                   | 54                  | -10.3        |
| 7440.00                  | 36.4            | Ave      | 250             | 1.5             | v             | 35.1              | 5.6         | 33.5       | 43.6                   | 54                  | -10.4        |
| 7236.00                  | 36.3            | Ave      | 270             | 1.2             | h             | 35.1              | 5.6         | 33.5       | 43.5                   | 54                  | -10.5        |
| 7440.00                  | 36.3            | Ave      | 30              | 1.6             | h             | 35.1              | 5.6         | 33.5       | 43.5                   | 54                  | -10.5        |
| 4824.00                  | 38.2            | Ave      | 45              | 1.0             | h             | 32.5              | 4.9         | 33.0       | 42.6                   | 54                  | -11.4        |
| 4960.00                  | 33.2            | Ave      | 300             | 1.5             | v             | 32.5              | 4.9         | 33.0       | 37.6                   | 54                  | -16.4        |
| 4960.00                  | 33.2            | Ave      | 180             | 1.4             | h             | 32.5              | 4.9         | 33.0       | 37.6                   | 54                  | -16.4        |
| 7236.00                  | 49.7            | Peak     | 30              | 1.4             | v             | 35.1              | 5.6         | 33.5       | 56.9                   | 74                  | -17.1        |
| 7440.00                  | 49.5            | Peak     | 250             | 1.5             | v             | 35.1              | 5.6         | 33.5       | 56.7                   | 74                  | -17.3        |
| 7236.00                  | 49.3            | Peak     | 270             | 1.2             | h             | 35.1              | 5.6         | 33.5       | 56.5                   | 74                  | -17.5        |
| 7440.00                  | 49.2            | Peak     | 30              | 1.6             | h             | 35.1              | 5.6         | 33.5       | 56.4                   | 74                  | -17.6        |
| 4824.00                  | 50.3            | Peak     | 270             | 1.1             | v             | 32.5              | 4.9         | 33.0       | 54.7                   | 74                  | -19.3        |
| 4824.00                  | 48.0            | Peak     | 45              | 1.0             | h             | 32.5              | 4.9         | 33.0       | 52.4                   | 74                  | -21.6        |
| 4960.00                  | 46.1            | Peak     | 180             | 1.4             | h             | 32.5              | 4.9         | 33.0       | 50.7                   | 74                  | -23.3        |
| 4960.00                  | 46.3            | Peak     | 300             | 1.5             | v             | 32.5              | 4.9         | 35.2       | 48.5                   | 74                  | -25.5        |

| Mid Channel, 30MHz-25GHz |       |      |     |     |   |      |     |      |       |    |       |
|--------------------------|-------|------|-----|-----|---|------|-----|------|-------|----|-------|
| 2437.00                  | 107.7 | Peak | 270 | 1.5 | v | 28.1 | 3.4 | 35.2 | 103.9 |    |       |
| 2437.00                  | 103.2 | Peak | 250 | 1.6 | h | 28.1 | 3.4 | 35.2 | 99.4  |    |       |
| 2437.00                  | 99.8  | Ave  | 270 | 1.5 | v | 28.1 | 3.4 | 35.2 | 96.1  |    |       |
| 2437.00                  | 95.0  | Ave  | 250 | 1.6 | h | 28.1 | 3.4 | 36.2 | 90.3  |    |       |
| 2480.00                  | 92.3  | Peak | 270 | 1.0 | v | 28.1 | 3.4 | 35.2 | 88.6  |    |       |
| 2480.00                  | 87.0  | Peak | 270 | 1.5 | h | 28.1 | 3.4 | 35.2 | 83.3  |    |       |
| 2480.00                  | 90.8  | Ave  | 270 | 1.0 | v | 28.1 | 3.4 | 35.2 | 87.1  |    |       |
| 2480.00                  | 86.3  | Ave  | 270 | 1.5 | h | 28.1 | 3.4 | 36.2 | 81.6  |    |       |
| 4874.00                  | 44.0  | Ave  | 150 | 1.3 | v | 32.5 | 4.9 | 33.0 | 48.4  | 54 | -5.6  |
| 7311.00                  | 36.3  | Ave  | 270 | 1.5 | v | 35.1 | 5.6 | 33.5 | 43.5  | 54 | -10.5 |
| 7311.00                  | 36.2  | Ave  | 180 | 1.4 | h | 35.1 | 5.6 | 33.5 | 43.4  | 54 | -10.6 |
| 7440.00                  | 36.1  | Ave  | 250 | 1.2 | v | 35.1 | 5.6 | 33.5 | 43.3  | 54 | -10.7 |
| 7440.00                  | 36.1  | Ave  | 270 | 1.5 | h | 35.1 | 5.6 | 33.5 | 43.3  | 54 | -10.7 |
| 4874.00                  | 38.3  | Ave  | 15  | 1.2 | h | 32.5 | 4.9 | 33.0 | 42.7  | 54 | -11.3 |
| 4960.00                  | 33.1  | Ave  | 90  | 1.2 | v | 32.5 | 4.9 | 33.0 | 37.5  | 54 | -16.5 |
| 4960.00                  | 33.0  | Ave  | 270 | 1.5 | h | 32.5 | 4.9 | 33.0 | 37.4  | 54 | -16.6 |
| 7311.00                  | 49.4  | Peak | 270 | 1.5 | v | 35.1 | 5.6 | 33.5 | 56.6  | 74 | -17.4 |
| 7440.00                  | 49.3  | Peak | 250 | 1.2 | v | 35.1 | 5.6 | 33.5 | 56.5  | 74 | -17.5 |
| 7440.00                  | 49.2  | Peak | 270 | 1.5 | h | 35.1 | 5.6 | 33.5 | 56.4  | 74 | -17.6 |
| 7311.00                  | 48.8  | Peak | 180 | 1.4 | h | 35.1 | 5.6 | 33.5 | 56.1  | 74 | -17.9 |
| 4874.00                  | 48.8  | Peak | 15  | 1.2 | h | 32.5 | 4.9 | 33.0 | 54.4  | 74 | -19.6 |
| 4874.00                  | 50.0  | Peak | 150 | 1.3 | v | 32.5 | 4.9 | 35.2 | 52.2  | 74 | -21.8 |
| 4960.00                  | 46.2  | Peak | 270 | 1.5 | h | 32.5 | 4.9 | 33.0 | 50.8  | 74 | -23.2 |
| 4960.00                  | 46.4  | Peak | 90  | 1.2 | v | 32.5 | 4.9 | 35.2 | 48.6  | 74 | -25.4 |

| High Channel, 1-50GHz |       |      |     |     |   |      |     |      |       |    |       |
|-----------------------|-------|------|-----|-----|---|------|-----|------|-------|----|-------|
| 2462.00               | 106.0 | Peak | 60  | 1.0 | v | 28.1 | 3.4 | 35.2 | 102.3 |    |       |
| 2462.00               | 102.5 | Peak | 270 | 1.6 | h | 28.1 | 3.4 | 35.2 | 98.8  |    |       |
| 2462.00               | 97.7  | Ave  | 60  | 1.0 | v | 28.1 | 3.4 | 35.2 | 93.9  |    |       |
| 2462.00               | 94.3  | Ave  | 270 | 1.6 | h | 28.1 | 3.4 | 36.2 | 89.6  |    |       |
| 2480.00               | 92.7  | Peak | 270 | 1.0 | v | 28.1 | 3.4 | 35.2 | 88.9  |    |       |
| 2480.00               | 87.3  | Peak | 250 | 1.5 | h | 28.1 | 3.4 | 35.2 | 83.6  |    |       |
| 2480.00               | 91.5  | Ave  | 270 | 1.0 | v | 28.1 | 3.4 | 35.2 | 87.8  |    |       |
| 2480.00               | 85.3  | Ave  | 250 | 1.5 | h | 28.1 | 3.4 | 36.2 | 80.6  |    |       |
| 4924.00               | 47.2  | Ave  | 180 | 1.8 | v | 32.5 | 4.9 | 33.0 | 51.6  | 54 | -2.4  |
| 4924.00               | 39.8  | Ave  | 180 | 1.6 | h | 32.5 | 4.9 | 33.0 | 44.2  | 54 | -9.8  |
| 7386.00               | 36.5  | Ave  | 45  | 1.2 | v | 35.1 | 5.6 | 33.5 | 43.7  | 54 | -10.3 |
| 7440.00               | 36.4  | Ave  | 270 | 1.2 | v | 35.1 | 5.6 | 33.5 | 43.6  | 54 | -10.4 |
| 7386.00               | 36.3  | Ave  | 270 | 1.5 | h | 35.1 | 5.6 | 33.5 | 43.5  | 54 | -10.5 |
| 7440.00               | 36.3  | Ave  | 250 | 1.5 | h | 35.1 | 5.6 | 33.5 | 43.5  | 54 | -10.5 |
| 4960.00               | 33.3  | Ave  | 90  | 1.2 | v | 32.5 | 4.9 | 33.0 | 37.7  | 54 | -16.3 |
| 4960.00               | 33.2  | Ave  | 300 | 1.5 | h | 32.5 | 4.9 | 33.0 | 37.6  | 54 | -16.4 |
| 7440.00               | 49.7  | Peak | 270 | 1.2 | v | 35.1 | 5.6 | 33.5 | 56.9  | 74 | -17.1 |
| 4924.00               | 49.7  | Peak | 180 | 1.6 | h | 32.5 | 4.9 | 33.0 | 56.6  | 74 | -17.4 |
| 7386.00               | 49.3  | Peak | 45  | 1.2 | v | 35.1 | 5.6 | 33.5 | 56.5  | 74 | -17.5 |
| 7386.00               | 49.1  | Peak | 270 | 1.5 | h | 35.1 | 5.6 | 33.5 | 56.3  | 74 | -17.7 |
| 7440.00               | 49.0  | Peak | 250 | 1.5 | h | 35.1 | 5.6 | 33.5 | 56.2  | 74 | -17.8 |
| 4924.00               | 52.2  | Peak | 180 | 1.8 | v | 32.5 | 4.9 | 35.2 | 54.4  | 74 | -19.6 |
| 4960.00               | 46.0  | Peak | 300 | 1.5 | h | 32.5 | 4.9 | 33.0 | 50.7  | 74 | -23.3 |
| 4960.00               | 46.3  | Peak | 90  | 1.2 | v | 32.5 | 4.9 | 35.2 | 48.5  | 74 | -25.5 |

| Unwanted Emission, 30 – 1000MHz |       |   |     |     |   |      |     |      |      |      |       |
|---------------------------------|-------|---|-----|-----|---|------|-----|------|------|------|-------|
| 205.15                          | 50.17 | / | 250 | 1.5 | v | 11.5 | 2.2 | 25.0 | 38.8 | 43.5 | -4.7  |
| 232.53                          | 49.83 | / | 220 | 1.5 | v | 12.6 | 2.2 | 25.0 | 39.6 | 46   | -6.4  |
| 396.25                          | 44.30 | / | 90  | 1.2 | h | 16.4 | 2.5 | 25.0 | 38.2 | 46   | -7.8  |
| 175.83                          | 45.20 | / | 0   | 1.4 | v | 13.1 | 1.9 | 25.0 | 35.2 | 43.5 | -8.3  |
| 132.00                          | 45.50 | / | 100 | 1.2 | v | 12.0 | 1.6 | 25.0 | 34.1 | 43.5 | -9.4  |
| 149.50                          | 44.00 | / | 90  | 1.8 | h | 12.6 | 1.7 | 25.0 | 33.2 | 43.5 | -10.3 |
| 482.17                          | 35.17 | / | 120 | 1.4 | v | 18.3 | 3.1 | 25.0 | 31.6 | 46   | -14.4 |

#### 4.6.4 T60H656 802.11b transmitted with T60M665 Bluetooth Low Channel, Antenna BY27

| INDICATED                |        |          | TABLE  | ANTENNA |       | CORRECTION FACTOR |       |      | CORRECTED<br>AMPLITUDE | FCC 15<br>SUBPART C |        |
|--------------------------|--------|----------|--------|---------|-------|-------------------|-------|------|------------------------|---------------------|--------|
| Frequency                | Ampl.  | Comments | Angle  | Height  | Polar | Antenna           | Cable | Amp. | Corr. Ampl.            | Limit               | Margin |
| MHz                      | dBμV/m |          | Degree | Meter   | H/ V  | dBμV/m            | DB    | DB   | dBμV/m                 | dBμV/<br>m          | dB     |
| Low Channel, 30MHz-25GHz |        |          |        |         |       |                   |       |      |                        |                     |        |
| 2412.00                  | 111.33 | Peak     | 90     | 1.6     | v     | 28.1              | 3.4   | 29.0 | 113.8                  |                     |        |
| 2412.00                  | 109.83 | Peak     | 330    | 1.5     | h     | 28.1              | 3.4   | 29.0 | 112.3                  |                     |        |
| 2412.00                  | 103.67 | Ave      | 90     | 1.6     | v     | 28.1              | 3.4   | 29.0 | 106.1                  |                     |        |
| 2412.00                  | 101.50 | Ave      | 330    | 1.5     | h     | 28.1              | 3.4   | 29.0 | 104.0                  |                     |        |
| 2402.00                  | 96.00  | Peak     | 90     | 1.5     | v     | 28.1              | 3.4   | 29.0 | 98.5                   |                     |        |
| 2402.00                  | 92.17  | Peak     | 270    | 1.4     | h     | 28.1              | 3.4   | 29.0 | 94.6                   |                     |        |
| 2402.00                  | 93.50  | Ave      | 90     | 1.5     | v     | 28.1              | 3.4   | 29.0 | 96.0                   |                     |        |
| 2402.00                  | 89.67  | Ave      | 270    | 1.4     | h     | 28.1              | 3.4   | 29.0 | 92.1                   |                     |        |
| 7236.00                  | 36.33  | Ave      | 180    | 1.4     | h     | 35.1              | 5.6   | 36.5 | 40.6                   | 54                  | -13.4  |
| 4824.00                  | 35.83  | Ave      | 170    | 1.4     | h     | 32.5              | 4.9   | 33.0 | 40.2                   | 54                  | -13.8  |
| 7236.00                  | 35.33  | Ave      | 90     | 1.6     | v     | 35.1              | 5.6   | 36.5 | 39.6                   | 54                  | -14.4  |
| 7206.00                  | 35.33  | Ave      | 90     | 1.6     | v     | 35.1              | 5.6   | 36.5 | 39.6                   | 54                  | -14.4  |
| 7206.00                  | 35.17  | Ave      | 270    | 1.5     | h     | 35.1              | 5.6   | 36.5 | 39.4                   | 54                  | -14.6  |
| 4824.00                  | 34.01  | Ave      | 0      | 1.6     | v     | 32.5              | 4.9   | 33.0 | 38.4                   | 54                  | -15.6  |
| 4804.00                  | 33.50  | Ave      | 45     | 1.5     | v     | 32.5              | 4.9   | 33.0 | 37.9                   | 54                  | -16.1  |
| 4804.00                  | 33.33  | Ave      | 90     | 1.4     | h     | 32.5              | 4.9   | 33.0 | 37.7                   | 54                  | -16.3  |
| 4824.00                  | 49.00  | Peak     | 0      | 1.6     | v     | 32.5              | 4.9   | 33.0 | 53.4                   | 74                  | -20.6  |
| 7236.00                  | 48.33  | Peak     | 180    | 1.4     | h     | 35.1              | 5.6   | 36.5 | 52.6                   | 74                  | -21.4  |
| 4804.00                  | 47.17  | Peak     | 45     | 1.5     | v     | 32.5              | 4.9   | 33.0 | 51.6                   | 74                  | -22.4  |
| 7236.00                  | 47.17  | Peak     | 90     | 1.6     | v     | 35.1              | 5.6   | 36.5 | 51.4                   | 74                  | -22.6  |
| 4824.00                  | 46.50  | Peak     | 170    | 1.4     | h     | 32.5              | 4.9   | 33.0 | 50.9                   | 74                  | -23.1  |
| 7206.00                  | 46.53  | Peak     | 270    | 1.5     | h     | 35.1              | 5.6   | 36.5 | 50.8                   | 74                  | -23.2  |
| 7206.00                  | 46.33  | Peak     | 90     | 1.6     | v     | 35.1              | 5.6   | 36.5 | 50.6                   | 74                  | -23.4  |
| 4804.00                  | 45.67  | Peak     | 90     | 1.4     | h     | 32.5              | 4.9   | 33.0 | 50.1                   | 74                  | -23.9  |

| Mid Channel, 30MHz-25GHz |        |      |     |     |   |      |     |      |       |    |       |
|--------------------------|--------|------|-----|-----|---|------|-----|------|-------|----|-------|
| 2437.00                  | 111.33 | Peak | 90  | 1.3 | v | 28.1 | 3.4 | 29.0 | 113.8 |    |       |
| 2437.00                  | 108.00 | Peak | 90  | 1.4 | h | 28.1 | 3.4 | 29.0 | 110.5 |    |       |
| 2437.00                  | 102.50 | Ave  | 90  | 1.3 | v | 28.1 | 3.4 | 29.0 | 105.0 |    |       |
| 2437.00                  | 99.50  | Ave  | 90  | 1.4 | h | 28.1 | 3.4 | 29.0 | 102.0 |    |       |
| 2402.00                  | 96.50  | Peak | 100 | 1.5 | v | 28.1 | 3.4 | 29.0 | 99.0  |    |       |
| 2402.00                  | 93.00  | Peak | 270 | 1.4 | h | 28.1 | 3.4 | 29.0 | 95.5  |    |       |
| 2402.00                  | 94.00  | Ave  | 100 | 1.5 | v | 28.1 | 3.4 | 29.0 | 96.5  |    |       |
| 2402.00                  | 90.21  | Ave  | 270 | 1.4 | h | 28.1 | 3.4 | 29.0 | 92.7  |    |       |
| 7311.00                  | 36.91  | Ave  | 270 | 1.5 | h | 35.1 | 5.6 | 36.5 | 41.2  | 54 | -12.8 |
| 7206.00                  | 36.25  | Ave  | 90  | 1.6 | v | 35.1 | 5.6 | 36.5 | 40.5  | 54 | -13.5 |
| 7311.00                  | 35.48  | Ave  | 90  | 1.6 | v | 35.1 | 5.6 | 36.5 | 39.7  | 54 | -14.3 |
| 7206.00                  | 35.17  | Ave  | 270 | 1.5 | h | 35.1 | 5.6 | 36.5 | 39.4  | 54 | -14.6 |
| 4874.00                  | 34.12  | Ave  | 45  | 1.5 | v | 32.5 | 4.9 | 33.0 | 38.5  | 54 | -15.5 |
| 4874.00                  | 34.00  | Ave  | 90  | 1.4 | h | 32.5 | 4.9 | 33.0 | 38.4  | 54 | -15.6 |
| 4804.00                  | 33.50  | Ave  | 45  | 1.5 | v | 32.5 | 4.9 | 33.0 | 37.9  | 54 | -16.1 |
| 4804.00                  | 33.33  | Ave  | 90  | 1.4 | h | 32.5 | 4.9 | 33.0 | 37.7  | 54 | -16.3 |
| 7311.00                  | 48.24  | Peak | 270 | 1.5 | h | 35.1 | 5.6 | 36.5 | 52.5  | 74 | -21.5 |
| 4874.00                  | 47.52  | Peak | 45  | 1.5 | v | 32.5 | 4.9 | 33.0 | 51.9  | 74 | -22.1 |
| 4804.00                  | 47.17  | Peak | 45  | 1.5 | v | 32.5 | 4.9 | 33.0 | 51.6  | 74 | -22.4 |
| 7311.00                  | 47.00  | Peak | 90  | 1.6 | v | 35.1 | 5.6 | 36.5 | 51.2  | 74 | -22.8 |
| 7206.00                  | 46.53  | Peak | 270 | 1.5 | h | 35.1 | 5.6 | 36.5 | 50.8  | 74 | -23.2 |
| 7206.00                  | 46.35  | Peak | 90  | 1.6 | v | 35.1 | 5.6 | 36.5 | 50.6  | 74 | -23.4 |
| 4804.00                  | 45.87  | Peak | 90  | 1.4 | h | 32.5 | 4.9 | 33.0 | 50.3  | 74 | -23.7 |
| 4874.00                  | 45.25  | Peak | 90  | 1.4 | h | 32.5 | 4.9 | 33.0 | 49.7  | 74 | -24.3 |

| High Channel, 30MHz-25GHz |        |      |     |     |   |      |     |      |       |    |       |
|---------------------------|--------|------|-----|-----|---|------|-----|------|-------|----|-------|
| 2462.00                   | 113.93 | Peak | 90  | 1.3 | v | 28.1 | 3.4 | 29.0 | 116.4 |    |       |
| 2462.00                   | 110.67 | Peak | 60  | 1.4 | h | 28.1 | 3.4 | 29.0 | 113.1 |    |       |
| 2462.00                   | 106.98 | Ave  | 90  | 1.3 | v | 28.1 | 3.4 | 29.0 | 109.4 |    |       |
| 2462.00                   | 102.17 | Ave  | 60  | 1.4 | h | 28.1 | 3.4 | 29.0 | 104.6 |    |       |
| 2402.00                   | 92.00  | Peak | 85  | 1.4 | v | 28.1 | 3.4 | 29.0 | 94.5  |    |       |
| 2402.00                   | 92.17  | Peak | 130 | 1.2 | h | 28.1 | 3.4 | 29.0 | 94.6  |    |       |
| 2402.00                   | 91.50  | Ave  | 85  | 1.4 | v | 28.1 | 3.4 | 29.0 | 94.0  |    |       |
| 2402.00                   | 91.83  | Ave  | 130 | 1.2 | h | 28.1 | 3.4 | 29.0 | 94.3  |    |       |
| 7386.00                   | 37.17  | Ave  | 120 | 1.1 | v | 35.1 | 5.6 | 36.5 | 41.4  | 54 | -12.6 |
| 7386.00                   | 37.02  | Ave  | 300 | 1.2 | h | 35.1 | 5.6 | 36.5 | 41.3  | 54 | -12.7 |
| 4924.00                   | 36.17  | Ave  | 85  | 1.2 | v | 32.5 | 4.9 | 33.0 | 40.6  | 54 | -13.4 |
| 7206.00                   | 35.57  | Ave  | 90  | 1.6 | v | 35.1 | 5.6 | 36.5 | 39.8  | 54 | -14.2 |
| 7206.00                   | 35.20  | Ave  | 270 | 1.5 | h | 35.1 | 5.6 | 36.5 | 39.4  | 54 | -14.6 |
| 4924.00                   | 34.83  | Ave  | 300 | 1.1 | h | 32.5 | 4.9 | 33.0 | 39.2  | 54 | -14.8 |
| 4804.00                   | 33.56  | Ave  | 50  | 1.4 | v | 32.5 | 4.9 | 33.0 | 38.0  | 54 | -16.0 |
| 4804.00                   | 33.50  | Ave  | 90  | 1.3 | h | 32.5 | 4.9 | 33.0 | 37.9  | 54 | -16.1 |
| 7386.00                   | 48.17  | Peak | 120 | 1.1 | v | 35.1 | 5.6 | 36.5 | 52.4  | 74 | -21.6 |
| 7386.00                   | 48.00  | Peak | 300 | 1.2 | h | 35.1 | 5.6 | 36.5 | 52.2  | 74 | -21.8 |
| 4924.00                   | 47.17  | Peak | 85  | 1.2 | v | 32.5 | 4.9 | 33.0 | 51.6  | 74 | -22.4 |
| 4804.00                   | 47.21  | Peak | 50  | 1.4 | v | 32.5 | 4.9 | 33.0 | 51.6  | 74 | -22.4 |
| 7206.00                   | 46.51  | Peak | 270 | 1.5 | h | 35.1 | 5.6 | 36.5 | 50.8  | 74 | -23.2 |
| 4924.00                   | 46.27  | Peak | 300 | 1.1 | h | 32.5 | 4.9 | 33.0 | 50.7  | 74 | -23.3 |
| 7206.00                   | 46.31  | Peak | 90  | 1.6 | v | 35.1 | 5.6 | 36.5 | 50.6  | 74 | -23.4 |
| 4804.00                   | 45.67  | Peak | 90  | 1.3 | h | 32.5 | 4.9 | 33.0 | 50.1  | 74 | -23.9 |



#### 4.6.5 T60H656 802.11b transmitted with T60M665 Bluetooth Mid Channel, Antenna BY27

| INDICATED                |                 |          | TABLE           | ANTENNA         |               | CORRECTION FACTOR |             |            | CORRECTED<br>AMPLITUDE | FCC 15<br>SUBPART C |              |
|--------------------------|-----------------|----------|-----------------|-----------------|---------------|-------------------|-------------|------------|------------------------|---------------------|--------------|
| Frequency<br>MHz         | Ampl.<br>dBμV/m | Comments | Angle<br>Degree | Height<br>Meter | Polar<br>H/ V | Antenna<br>dBμV/m | Cable<br>DB | Amp.<br>DB | Corr. Ampl.<br>dBμV/m  | Limit<br>dBμV/<br>m | Margin<br>dB |
| Low Channel, 30MHz-25GHz |                 |          |                 |                 |               |                   |             |            |                        |                     |              |
| 2412.00                  | 112.33          | Peak     | 90              | 1.7             | v             | 28.1              | 3.4         | 29.0       | 114.8                  |                     |              |
| 2412.00                  | 109.33          | Peak     | 330             | 1.6             | h             | 28.1              | 3.4         | 29.0       | 111.8                  |                     |              |
| 2412.00                  | 104.33          | Ave      | 90              | 1.7             | v             | 28.1              | 3.4         | 29.0       | 106.8                  |                     |              |
| 2412.00                  | 101.33          | Ave      | 330             | 1.6             | h             | 28.1              | 3.4         | 29.0       | 103.8                  |                     |              |
| 2441.00                  | 92.17           | Peak     | 90              | 1.7             | v             | 28.1              | 3.4         | 29.0       | 94.6                   |                     |              |
| 2441.00                  | 84.33           | Peak     | 300             | 1.6             | h             | 28.1              | 3.4         | 29.0       | 86.8                   |                     |              |
| 2441.00                  | 91.83           | Ave      | 90              | 1.7             | v             | 28.1              | 3.4         | 29.0       | 94.3                   |                     |              |
| 2441.00                  | 82.67           | Ave      | 300             | 1.6             | h             | 28.1              | 3.4         | 29.0       | 85.1                   |                     |              |
| 7236.00                  | 36.50           | Ave      | 180             | 1.4             | h             | 35.1              | 5.6         | 36.5       | 40.7                   | 54                  | -13.3        |
| 4824.00                  | 36.00           | Ave      | 170             | 1.4             | h             | 32.5              | 4.9         | 33.0       | 40.4                   | 54                  | -13.6        |
| 7236.00                  | 35.38           | Ave      | 90              | 1.5             | v             | 35.1              | 5.6         | 36.5       | 39.6                   | 54                  | -14.4        |
| 7323.00                  | 34.84           | Ave      | 90              | 1.5             | v             | 35.1              | 5.6         | 36.5       | 39.1                   | 54                  | -14.9        |
| 4824.00                  | 34.54           | Ave      | 0               | 1.5             | v             | 32.5              | 4.9         | 33.0       | 39.0                   | 54                  | -15.1        |
| 7323.00                  | 34.52           | Ave      | 260             | 1.4             | h             | 35.1              | 5.6         | 36.5       | 38.8                   | 54                  | -15.2        |
| 4882.00                  | 32.87           | Ave      | 50              | 1.5             | v             | 32.5              | 4.9         | 33.0       | 37.3                   | 54                  | -16.7        |
| 4882.00                  | 32.77           | Ave      | 85              | 1.4             | h             | 32.5              | 4.9         | 33.0       | 37.2                   | 54                  | -16.8        |
| 4824.00                  | 49.83           | Peak     | 0               | 1.5             | v             | 32.5              | 4.9         | 33.0       | 54.2                   | 74                  | -19.8        |
| 7236.00                  | 48.51           | Peak     | 180             | 1.4             | h             | 35.1              | 5.6         | 36.5       | 52.8                   | 74                  | -21.2        |
| 7236.00                  | 47.40           | Peak     | 90              | 1.5             | v             | 35.1              | 5.6         | 36.5       | 51.6                   | 74                  | -22.4        |
| 4824.00                  | 46.71           | Peak     | 170             | 1.4             | h             | 32.5              | 4.9         | 33.0       | 51.1                   | 74                  | -22.9        |
| 4882.00                  | 46.64           | Peak     | 50              | 1.5             | v             | 32.5              | 4.9         | 33.0       | 51.1                   | 74                  | -23.0        |
| 7323.00                  | 45.97           | Peak     | 260             | 1.4             | h             | 35.1              | 5.6         | 36.5       | 50.2                   | 74                  | -23.8        |
| 7323.00                  | 45.75           | Peak     | 90              | 1.5             | v             | 35.1              | 5.6         | 36.5       | 50.0                   | 74                  | -24.0        |
| 4882.00                  | 45.11           | Peak     | 85              | 1.4             | h             | 32.5              | 4.9         | 33.0       | 49.5                   | 74                  | -24.5        |

| Mid Channel, 30MHz-25GHz |        |      |     |     |   |      |     |      |       |    |       |
|--------------------------|--------|------|-----|-----|---|------|-----|------|-------|----|-------|
| 2437.00                  | 111.50 | Peak | 90  | 1.3 | v | 28.1 | 3.4 | 29.0 | 114.0 |    |       |
| 2437.00                  | 108.02 | Peak | 100 | 1.5 | h | 28.1 | 3.4 | 29.0 | 110.5 |    |       |
| 2437.00                  | 102.35 | Ave  | 90  | 1.3 | v | 28.1 | 3.4 | 29.0 | 104.8 |    |       |
| 2437.00                  | 99.35  | Ave  | 100 | 1.5 | h | 28.1 | 3.4 | 29.0 | 101.8 |    |       |
| 2441.00                  | 92.20  | Peak | 90  | 1.6 | v | 28.1 | 3.4 | 29.0 | 94.7  |    |       |
| 2441.00                  | 84.35  | Peak | 320 | 1.6 | h | 28.1 | 3.4 | 29.0 | 86.8  |    |       |
| 2441.00                  | 91.73  | Ave  | 90  | 1.6 | v | 28.1 | 3.4 | 29.0 | 94.2  |    |       |
| 2441.00                  | 82.65  | Ave  | 320 | 1.6 | h | 28.1 | 3.4 | 29.0 | 85.1  |    |       |
| 7311.00                  | 36.91  | Ave  | 270 | 1.5 | h | 35.1 | 5.6 | 36.5 | 41.2  | 54 | -12.8 |
| 7311.00                  | 35.48  | Ave  | 90  | 1.6 | v | 35.1 | 5.6 | 36.5 | 39.7  | 54 | -14.3 |
| 7323.00                  | 34.84  | Ave  | 90  | 1.5 | v | 35.1 | 5.6 | 36.5 | 39.1  | 54 | -14.9 |
| 4874.00                  | 34.51  | Ave  | 45  | 1.5 | v | 32.5 | 4.9 | 33.0 | 38.9  | 54 | -15.1 |
| 7323.00                  | 34.52  | Ave  | 270 | 1.4 | h | 35.1 | 5.6 | 36.5 | 38.8  | 54 | -15.2 |
| 4874.00                  | 34.00  | Ave  | 90  | 1.4 | h | 32.5 | 4.9 | 33.0 | 38.4  | 54 | -15.6 |
| 4882.00                  | 33.17  | Ave  | 60  | 1.5 | v | 32.5 | 4.9 | 33.0 | 37.6  | 54 | -16.4 |
| 4882.00                  | 33.07  | Ave  | 90  | 1.4 | h | 32.5 | 4.9 | 33.0 | 37.5  | 54 | -16.5 |
| 7311.00                  | 48.24  | Peak | 270 | 1.5 | h | 35.1 | 5.6 | 36.5 | 52.5  | 74 | -21.5 |
| 4874.00                  | 47.52  | Peak | 45  | 1.5 | v | 32.5 | 4.9 | 33.0 | 51.9  | 74 | -22.1 |
| 4882.00                  | 46.94  | Peak | 60  | 1.5 | v | 32.5 | 4.9 | 33.0 | 51.4  | 74 | -22.7 |
| 7311.00                  | 47.00  | Peak | 90  | 1.6 | v | 35.1 | 5.6 | 36.5 | 51.2  | 74 | -22.8 |
| 7323.00                  | 45.97  | Peak | 270 | 1.4 | h | 35.1 | 5.6 | 36.5 | 50.2  | 74 | -23.8 |
| 7323.00                  | 45.75  | Peak | 90  | 1.5 | v | 35.1 | 5.6 | 36.5 | 50.0  | 74 | -24.0 |
| 4882.00                  | 45.41  | Peak | 90  | 1.4 | h | 32.5 | 4.9 | 33.0 | 49.8  | 74 | -24.2 |
| 4874.00                  | 45.25  | Peak | 90  | 1.4 | h | 32.5 | 4.9 | 33.0 | 49.7  | 74 | -24.3 |

| High Channel, 30MHz-25GHz |        |      |     |     |   |      |     |      |       |    |       |
|---------------------------|--------|------|-----|-----|---|------|-----|------|-------|----|-------|
| 2462.00                   | 114.96 | Peak | 90  | 1.2 | v | 28.1 | 3.4 | 29.0 | 117.4 |    |       |
| 2462.00                   | 110.83 | Peak | 45  | 1.3 | h | 28.1 | 3.4 | 29.0 | 113.3 |    |       |
| 2462.00                   | 106.75 | Ave  | 90  | 1.2 | v | 28.1 | 3.4 | 29.0 | 109.2 |    |       |
| 2462.00                   | 102.81 | Ave  | 45  | 1.3 | h | 28.1 | 3.4 | 29.0 | 105.3 |    |       |
| 2441.00                   | 91.50  | Peak | 90  | 1.3 | v | 28.1 | 3.4 | 29.0 | 94.0  |    |       |
| 2441.00                   | 91.37  | Peak | 110 | 1.2 | h | 28.1 | 3.4 | 29.0 | 93.8  |    |       |
| 2441.00                   | 88.00  | Ave  | 90  | 1.3 | v | 28.1 | 3.4 | 29.0 | 90.5  |    |       |
| 2441.00                   | 87.96  | Ave  | 110 | 1.2 | h | 28.1 | 3.4 | 29.0 | 90.4  |    |       |
| 7323.00                   | 38.01  | Ave  | 90  | 1.4 | v | 35.1 | 5.6 | 36.5 | 42.3  | 54 | -11.7 |
| 7386.00                   | 37.56  | Ave  | 110 | 1.1 | v | 35.1 | 5.6 | 36.5 | 41.8  | 54 | -12.2 |
| 7323.00                   | 37.45  | Ave  | 270 | 1.5 | h | 35.1 | 5.6 | 36.5 | 41.7  | 54 | -12.3 |
| 7386.00                   | 37.31  | Ave  | 300 | 1.2 | h | 35.1 | 5.6 | 36.5 | 41.6  | 54 | -12.4 |
| 4924.00                   | 36.58  | Ave  | 90  | 1.2 | v | 32.5 | 4.9 | 33.0 | 41.0  | 54 | -13.0 |
| 4924.00                   | 35.24  | Ave  | 300 | 1.2 | h | 32.5 | 4.9 | 33.0 | 39.7  | 54 | -14.4 |
| 4882.00                   | 34.23  | Ave  | 90  | 1.4 | v | 32.5 | 4.9 | 33.0 | 38.6  | 54 | -15.4 |
| 4882.00                   | 34.00  | Ave  | 60  | 1.5 | h | 32.5 | 4.9 | 33.0 | 38.4  | 54 | -15.6 |
| 7323.00                   | 48.61  | Peak | 90  | 1.4 | v | 35.1 | 5.6 | 36.5 | 52.9  | 74 | -21.1 |
| 7386.00                   | 48.58  | Peak | 110 | 1.1 | v | 35.1 | 5.6 | 36.5 | 52.8  | 74 | -21.2 |
| 7386.00                   | 48.41  | Peak | 300 | 1.2 | h | 35.1 | 5.6 | 36.5 | 52.7  | 74 | -21.3 |
| 7323.00                   | 48.31  | Peak | 270 | 1.5 | h | 35.1 | 5.6 | 36.5 | 52.6  | 74 | -21.4 |
| 4924.00                   | 47.58  | Peak | 90  | 1.2 | v | 32.5 | 4.9 | 33.0 | 52.0  | 74 | -22.0 |
| 4882.00                   | 47.00  | Peak | 90  | 1.4 | v | 32.5 | 4.9 | 33.0 | 51.4  | 74 | -22.6 |
| 4882.00                   | 46.83  | Peak | 60  | 1.5 | h | 32.5 | 4.9 | 33.0 | 51.2  | 74 | -22.8 |
| 4924.00                   | 46.68  | Peak | 300 | 1.2 | h | 32.5 | 4.9 | 33.0 | 51.1  | 74 | -22.9 |

#### 4.6.6 T60H656 802.11b transmitted with T60M665 Bluetooth high Channel, Antenna BY27

| INDICATED                |                 |          | TABLE           | ANTENNA         |               | CORRECTION FACTOR |             |            | CORRECTED<br>AMPLITUDE | FCC 15<br>SUBPART C |              |
|--------------------------|-----------------|----------|-----------------|-----------------|---------------|-------------------|-------------|------------|------------------------|---------------------|--------------|
| Frequency<br>MHz         | Ampl.<br>dBμV/m | Comments | Angle<br>Degree | Height<br>Meter | Polar<br>H/ V | Antenna<br>dBμV/m | Cable<br>DB | Amp.<br>DB | Corr. Ampl.<br>dBμV/m  | Limit<br>dBμV/<br>m | Margin<br>dB |
| Low Channel, 30MHz-25GHz |                 |          |                 |                 |               |                   |             |            |                        |                     |              |
| 2412.00                  | 112.01          | Peak     | 90              | 1.6             | v             | 28.1              | 3.4         | 29.0       | 114.5                  |                     |              |
| 2412.00                  | 108.33          | Peak     | 330             | 1.6             | h             | 28.1              | 3.4         | 29.0       | 110.8                  |                     |              |
| 2412.00                  | 104.20          | Ave      | 90              | 1.6             | v             | 28.1              | 3.4         | 29.0       | 106.7                  |                     |              |
| 2412.00                  | 101.30          | Ave      | 330             | 1.6             | h             | 28.1              | 3.4         | 29.0       | 103.8                  |                     |              |
| 2480.00                  | 92.17           | Peak     | 270             | 1.9             | v             | 28.1              | 3.4         | 29.0       | 90.1                   |                     |              |
| 2480.00                  | 87.67           | Peak     | 45              | 1.9             | h             | 28.1              | 3.4         | 29.0       | 93.8                   |                     |              |
| 2480.00                  | 91.33           | Ave      | 270             | 1.9             | v             | 28.1              | 3.4         | 29.0       | 89.0                   |                     |              |
| 2480.00                  | 86.50           | Ave      | 45              | 1.9             | h             | 28.1              | 3.4         | 29.0       | 89.0                   |                     |              |
| 7236.00                  | 36.91           | Ave      | 180             | 1.6             | h             | 35.1              | 5.6         | 36.5       | 41.2                   | 54                  | -12.8        |
| 4824.00                  | 36.12           | Ave      | 170             | 1.5             | h             | 32.5              | 4.9         | 33.0       | 40.5                   | 54                  | -13.5        |
| 7236.00                  | 35.48           | Ave      | 90              | 1.5             | v             | 35.1              | 5.6         | 36.5       | 39.7                   | 54                  | -14.3        |
| 7440.00                  | 34.95           | Ave      | 80              | 1.5             | v             | 35.1              | 5.6         | 36.5       | 39.2                   | 54                  | -14.8        |
| 4824.00                  | 34.54           | Ave      | 0               | 1.5             | v             | 32.5              | 4.9         | 33.0       | 39.0                   | 54                  | -15.1        |
| 4960.00                  | 34.33           | Ave      | 60              | 1.4             | v             | 32.5              | 4.9         | 33.0       | 38.7                   | 54                  | -15.3        |
| 7440.00                  | 34.25           | Ave      | 260             | 1.4             | h             | 35.1              | 5.6         | 36.5       | 38.5                   | 54                  | -15.5        |
| 4960.00                  | 34.00           | Ave      | 130             | 1.3             | h             | 32.5              | 4.9         | 33.0       | 38.4                   | 54                  | -15.6        |
| 4824.00                  | 49.57           | Peak     | 0               | 1.5             | v             | 32.5              | 4.9         | 33.0       | 54.0                   | 74                  | -20.0        |
| 7236.00                  | 48.50           | Peak     | 180             | 1.6             | h             | 35.1              | 5.6         | 36.5       | 52.7                   | 74                  | -21.3        |
| 7236.00                  | 47.08           | Peak     | 90              | 1.5             | v             | 35.1              | 5.6         | 36.5       | 51.3                   | 74                  | -22.7        |
| 4824.00                  | 46.67           | Peak     | 170             | 1.5             | h             | 32.5              | 4.9         | 33.0       | 51.1                   | 74                  | -22.9        |
| 4960.00                  | 46.17           | Peak     | 60              | 1.4             | v             | 32.5              | 4.9         | 33.0       | 50.6                   | 74                  | -23.4        |
| 4960.00                  | 45.83           | Peak     | 130             | 1.3             | h             | 32.5              | 4.9         | 33.0       | 50.6                   | 74                  | -23.4        |
| 7440.00                  | 45.97           | Peak     | 260             | 1.4             | h             | 35.1              | 5.6         | 36.5       | 50.2                   | 74                  | -23.8        |
| 7440.00                  | 45.75           | Peak     | 80              | 1.5             | v             | 35.1              | 5.6         | 36.5       | 50.0                   | 74                  | -24.0        |

| Mid Channel, 30MHz-25GHz |        |      |     |     |   |      |     |      |       |    |       |
|--------------------------|--------|------|-----|-----|---|------|-----|------|-------|----|-------|
| 2437.00                  | 111.83 | Peak | 95  | 1.1 | v | 28.1 | 3.4 | 29.0 | 114.3 |    |       |
| 2437.00                  | 106.17 | Peak | 270 | 1.4 | h | 28.1 | 3.4 | 29.0 | 108.6 |    |       |
| 2437.00                  | 101.83 | Ave  | 95  | 1.1 | v | 28.1 | 3.4 | 29.0 | 104.3 |    |       |
| 2437.00                  | 98.00  | Ave  | 270 | 1.4 | h | 28.1 | 3.4 | 29.0 | 100.5 |    |       |
| 2480.00                  | 93.33  | Peak | 95  | 1.2 | v | 28.1 | 3.4 | 29.0 | 90.0  |    |       |
| 2480.00                  | 87.50  | Peak | 5   | 1.4 | h | 28.1 | 3.4 | 29.0 | 95.5  |    |       |
| 2480.00                  | 93.00  | Ave  | 95  | 1.2 | v | 28.1 | 3.4 | 29.0 | 88.3  |    |       |
| 2480.00                  | 85.83  | Ave  | 5   | 1.4 | h | 28.1 | 3.4 | 29.0 | 88.3  |    |       |
| 7311.00                  | 36.00  | Ave  | 270 | 1.5 | h | 35.1 | 5.6 | 36.5 | 40.2  | 54 | -13.8 |
| 7311.00                  | 35.41  | Ave  | 90  | 1.6 | v | 35.1 | 5.6 | 36.5 | 39.7  | 54 | -14.3 |
| 7440.00                  | 34.95  | Ave  | 80  | 1.5 | v | 35.1 | 5.6 | 36.5 | 39.2  | 54 | -14.8 |
| 4874.00                  | 34.27  | Ave  | 50  | 1.5 | v | 32.5 | 4.9 | 33.0 | 38.7  | 54 | -15.3 |
| 4960.00                  | 34.20  | Ave  | 60  | 1.3 | v | 32.5 | 4.9 | 33.0 | 38.6  | 54 | -15.4 |
| 4960.00                  | 34.17  | Ave  | 130 | 1.3 | h | 32.5 | 4.9 | 33.0 | 38.6  | 54 | -15.4 |
| 7440.00                  | 34.25  | Ave  | 260 | 1.4 | h | 35.1 | 5.6 | 36.5 | 38.5  | 54 | -15.5 |
| 4874.00                  | 34.00  | Ave  | 90  | 1.4 | h | 32.5 | 4.9 | 33.0 | 38.4  | 54 | -15.6 |
| 7311.00                  | 48.02  | Peak | 270 | 1.5 | h | 35.1 | 5.6 | 36.5 | 52.3  | 74 | -21.7 |
| 4960.00                  | 46.00  | Peak | 60  | 1.3 | v | 32.5 | 4.9 | 33.0 | 51.4  | 74 | -22.6 |
| 4960.00                  | 47.00  | Peak | 130 | 1.3 | h | 32.5 | 4.9 | 33.0 | 51.4  | 74 | -22.6 |
| 7311.00                  | 46.89  | Peak | 90  | 1.6 | v | 35.1 | 5.6 | 36.5 | 51.1  | 74 | -22.9 |
| 4874.00                  | 46.17  | Peak | 90  | 1.4 | h | 32.5 | 4.9 | 33.0 | 50.6  | 74 | -23.4 |
| 4874.00                  | 45.83  | Peak | 50  | 1.5 | v | 32.5 | 4.9 | 33.0 | 50.2  | 74 | -23.8 |
| 7440.00                  | 45.97  | Peak | 260 | 1.4 | h | 35.1 | 5.6 | 36.5 | 50.2  | 74 | -23.8 |
| 7440.00                  | 45.75  | Peak | 80  | 1.5 | v | 35.1 | 5.6 | 36.5 | 50.0  | 74 | -24.0 |

| High Channel, 1-50GHz |        |      |    |     |   |      |     |      |       |    |       |
|-----------------------|--------|------|----|-----|---|------|-----|------|-------|----|-------|
| 2462.00               | 115.33 | Peak | 90 | 1.3 | v | 28.1 | 3.4 | 29.0 | 117.8 |    |       |
| 2462.00               | 110.33 | Peak | 85 | 1.2 | h | 28.1 | 3.4 | 29.0 | 112.8 |    |       |
| 2462.00               | 106.83 | Ave  | 90 | 1.3 | v | 28.1 | 3.4 | 29.0 | 109.3 |    |       |
| 2462.00               | 102.53 | Ave  | 85 | 1.2 | h | 28.1 | 3.4 | 29.0 | 105.0 |    |       |
| 2480.00               | 95.67  | Peak | 90 | 1.1 | v | 28.1 | 3.4 | 29.0 | 94.8  |    |       |
| 2480.00               | 92.33  | Peak | 90 | 1.1 | h | 28.1 | 3.4 | 29.0 | 95.0  |    |       |
| 2480.00               | 92.50  | Ave  | 90 | 1.1 | v | 28.1 | 3.4 | 29.0 | 91.3  |    |       |
| 2480.00               | 88.83  | Ave  | 90 | 1.1 | h | 28.1 | 3.4 | 29.0 | 91.3  |    |       |
| 7440.00               | 35.00  | Ave  | 90 | 1.1 | v | 35.1 | 5.6 | 36.5 | 50.2  | 54 | -3.8  |
| 7386.00               | 37.61  | Ave  | 85 | 1.1 | v | 35.1 | 5.6 | 36.5 | 41.9  | 54 | -12.1 |
| 7386.00               | 37.45  | Ave  | 85 | 1.2 | h | 35.1 | 5.6 | 36.5 | 41.7  | 54 | -12.3 |
| 4924.00               | 37.17  | Ave  | 90 | 1.2 | v | 32.5 | 4.9 | 33.0 | 41.6  | 54 | -12.4 |
| 4924.00               | 37.00  | Ave  | 90 | 1.2 | h | 32.5 | 4.9 | 33.0 | 41.4  | 54 | -12.6 |
| 4960.00               | 35.00  | Ave  | 85 | 1.2 | v | 32.5 | 4.9 | 33.0 | 39.4  | 54 | -14.6 |
| 7440.00               | 34.53  | Ave  | 90 | 1.2 | h | 35.1 | 5.6 | 36.5 | 39.2  | 54 | -14.8 |
| 4960.00               | 34.33  | Ave  | 85 | 1.2 | h | 32.5 | 4.9 | 33.0 | 38.7  | 54 | -15.3 |
| 4924.00               | 49.98  | Peak | 90 | 1.2 | v | 32.5 | 4.9 | 33.0 | 54.4  | 74 | -19.6 |
| 4924.00               | 49.83  | Peak | 90 | 1.2 | h | 32.5 | 4.9 | 33.0 | 54.2  | 74 | -19.8 |
| 7386.00               | 48.78  | Peak | 85 | 1.1 | v | 35.1 | 5.6 | 36.5 | 53.0  | 74 | -21.0 |
| 7386.00               | 48.50  | Peak | 85 | 1.2 | h | 35.1 | 5.6 | 36.5 | 52.7  | 74 | -21.3 |
| 4960.00               | 47.00  | Peak | 85 | 1.2 | v | 32.5 | 4.9 | 33.0 | 51.4  | 74 | -22.6 |
| 4960.00               | 46.50  | Peak | 85 | 1.2 | h | 32.5 | 4.9 | 33.0 | 51.4  | 74 | -22.6 |
| 7440.00               | 45.83  | Peak | 90 | 1.1 | v | 35.1 | 5.6 | 36.5 | 50.1  | 74 | -23.9 |
| 7440.00               | 46.00  | Peak | 90 | 1.2 | h | 35.1 | 5.6 | 36.5 | 50.1  | 74 | -23.9 |

| Unwanted Emission, 30 – 1000MHz |       |   |     |     |   |      |     |      |      |      |       |
|---------------------------------|-------|---|-----|-----|---|------|-----|------|------|------|-------|
| 972.50                          | 39.56 | / | 180 | 1.3 | v | 23.9 | 4.3 | 25.0 | 42.7 | 46   | -3.3  |
| 199.28                          | 48.53 | / | 250 | 1.3 | v | 14.2 | 2.1 | 25.0 | 39.9 | 43.5 | -3.6  |
| 538.80                          | 44.65 | / | 120 | 1.3 | v | 19.3 | 3.0 | 25.0 | 41.9 | 46   | -4.1  |
| 761.20                          | 41.25 | / | 85  | 1.2 | h | 22.6 | 2.6 | 25.0 | 41.5 | 46   | -4.5  |
| 823.80                          | 40.23 | / | 60  | 1.3 | h | 22.3 | 3.7 | 25.0 | 41.3 | 46   | -4.7  |
| 634.20                          | 43.12 | / | 30  | 1.3 | v | 20.0 | 3.0 | 25.0 | 41.2 | 46   | -4.8  |
| 457.70                          | 43.56 | / | 45  | 1.3 | h | 17.1 | 3.0 | 25.0 | 38.7 | 46   | -7.3  |
| 203.76                          | 46.35 | / | 220 | 1.3 | h | 11.5 | 2.2 | 25.0 | 35.0 | 43.5 | -8.5  |
| 215.78                          | 45.83 | / | 120 | 1.2 | h | 11.9 | 2.2 | 25.0 | 34.9 | 43.5 | -8.6  |
| 123.50                          | 46.50 | / | 30  | 1.3 | h | 11.7 | 1.6 | 25.0 | 34.8 | 43.5 | -8.7  |
| 271.53                          | 45.50 | / | 280 | 1.3 | v | 13.3 | 2.2 | 25.0 | 36.0 | 46   | -10.0 |
| 207.74                          | 44.33 | / | 90  | 1.2 | h | 11.5 | 2.2 | 25.0 | 33.0 | 43.5 | -10.5 |
| 255.03                          | 44.33 | / | 85  | 1.1 | h | 13.3 | 2.2 | 25.0 | 34.8 | 46   | -11.2 |
| 346.35                          | 41.67 | / | 90  | 1.2 | v | 15.4 | 2.3 | 25.0 | 34.4 | 46   | -11.6 |
| 183.20                          | 40.00 | / | 270 | 1.3 | h | 13.2 | 2.0 | 25.0 | 30.2 | 43.5 | -13.3 |
| 235.92                          | 42.50 | / | 160 | 1.2 | v | 12.6 | 2.2 | 25.0 | 32.3 | 46   | -13.7 |
| 210.03                          | 40.33 | / | 60  | 1.2 | v | 11.9 | 2.2 | 25.0 | 29.4 | 43.5 | -14.1 |
| 226.05                          | 42.00 | / | 140 | 1.3 | h | 11.8 | 2.2 | 25.0 | 31.0 | 46   | -15.0 |
| 150.50                          | 37.00 | / | 180 | 1.3 | v | 12.7 | 1.7 | 25.0 | 26.4 | 43.5 | -17.1 |

## 5 - CONDUCTED EMISSIONS

### 5.1 Measurement Uncertainty

All measurements involve certain levels of uncertainties. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at BACL is  $\pm 2.4$  dB.

### 5.2 EUT Setup

The measurement was performed at the Shield Room, using the same setup per ANSI C63.4-1992 measurement procedure. The specification used was FCC 15 Subpart B limits.

The spacing between the peripherals was 10 centimeters.

External I/O cables were draped along the edge of the test table and bundle when necessary.

The host PC system was connected with 120Vac/60Hz power source.

### 5.3 Spectrum Analyzer Setup

The spectrum analyzer was set with the following configurations during the conduction test:

|                                   |         |
|-----------------------------------|---------|
| Start Frequency .....             | 150 kHz |
| Stop Frequency .....              | 30 MHz  |
| Sweep Speed.....                  | Auto    |
| IF Bandwidth.....                 | 10 kHz  |
| Video Bandwidth .....             | 10 kHz  |
| Quasi-Peak Adapter Bandwidth..... | 9 kHz   |
| Quasi-Peak Adapter Mode.....      | Normal  |

### 5.4 Test Procedure

During the conducted emission test, the power cord of the host system was connected to the auxiliary outlet of the first LISN.

Maximizing procedure was performed on the six (6) highest emissions of each modes tested to ensure EUT is compliant with all installation combination.

All data was recorded in the peak detection mode. Quasi-peak readings were only performed when an emission was found to be marginal (within -4 dB $\mu$ V of specification limits). Quasi-peak readings are distinguished with a "Qp".

### 5.5 Summary of Test Results

According to the data in section 11.6, the EUT complies with the FCC Conducted margin for a Class B device, with the *worst* margin reading of:

-17.9 dB $\mu$ V at 15.6 MHz in the Neutral mode, ZI1S antenna

-11.2 dB $\mu$ V at 0.165 MHz in the Line mode, BY27 antenna

## 5.6 Conducted Emissions Test Data

EUT operates with ZI1S Antenna:

| LINE CONDUCTED EMISSIONS |                         |                         |                       | FCC PART 15 CLASS B |              |
|--------------------------|-------------------------|-------------------------|-----------------------|---------------------|--------------|
| Frequency<br>MHz         | Amplitude<br>dB $\mu$ V | Detector<br>Qp/Ave/Peak | Phase<br>Line/Neutral | Limit<br>dB $\mu$ V | Margin<br>dB |
| 15.6                     | 32.1                    | Ave                     | Neutral               | 50                  | -17.9        |
| 0.715                    | 27.3                    | Ave                     | Neutral               | 46                  | -18.7        |
| 0.15                     | 45.4                    | Qp                      | Line                  | 66                  | -20.6        |
| 0.15                     | 45.2                    | Qp                      | Neutral               | 66                  | -20.8        |
| 0.71                     | 25                      | Ave                     | Line                  | 46                  | -21          |
| 15.4                     | 38.3                    | Qp                      | Neutral               | 60                  | -21.7        |
| 0.15                     | 33.9                    | Ave                     | Neutral               | 56                  | -22.1        |
| 0.715                    | 33.1                    | Qp                      | Neutral               | 56                  | -22.9        |
| 0.15                     | 32.6                    | Ave                     | Line                  | 56                  | -23.4        |
| 0.71                     | 32.5                    | Qp                      | Line                  | 56                  | -23.5        |
| 13.7                     | 25.3                    | Ave                     | Line                  | 50                  | -24.7        |
| 13.7                     | 31.2                    | Qp                      | Line                  | 60                  | -28.8        |

EUT operates with BY27 Antenna:

| LINE CONDUCTED EMISSIONS |                         |                         |                       | FCC PART 15 CLASS B |              |
|--------------------------|-------------------------|-------------------------|-----------------------|---------------------|--------------|
| Frequency<br>MHz         | Amplitude<br>dB $\mu$ V | Detector<br>Qp/Ave/Peak | Phase<br>Line/Neutral | Limit<br>dB $\mu$ V | Margin<br>dB |
| 0.165                    | 41.80                   | Ave                     | Line                  | 53                  | -11.20       |
| 15.2                     | 37.70                   | Ave                     | Neutral               | 50                  | -12.30       |
| 0.165                    | 47.70                   | Qp                      | Line                  | 63                  | -15.30       |
| 15.2                     | 44.70                   | Qp                      | Neutral               | 60                  | -15.30       |
| 0.205                    | 36.80                   | Ave                     | Neutral               | 53                  | -16.20       |
| 14                       | 30.10                   | Ave                     | Line                  | 50                  | -19.90       |
| 0.205                    | 42.00                   | Qp                      | Neutral               | 63                  | -21.00       |
| 0.505                    | 28.00                   | Ave                     | Neutral               | 50                  | -22.00       |
| 14                       | 35.60                   | Qp                      | Line                  | 60                  | -24.40       |
| 0.505                    | 33.60                   | Qp                      | Neutral               | 60                  | -26.40       |
| 0.25                     | 34.10                   | Qp                      | Line                  | 62                  | -27.90       |
| 0.25                     | 17.60                   | Ave                     | Line                  | 52                  | -34.40       |

## 5.7 Plot of Conducted Emissions Test Data

Plot(s) of Conducted Emissions Test Data is presented hereinafter as reference.



Bay Area Compliance Laboratory Corp  
FCC CLASS B

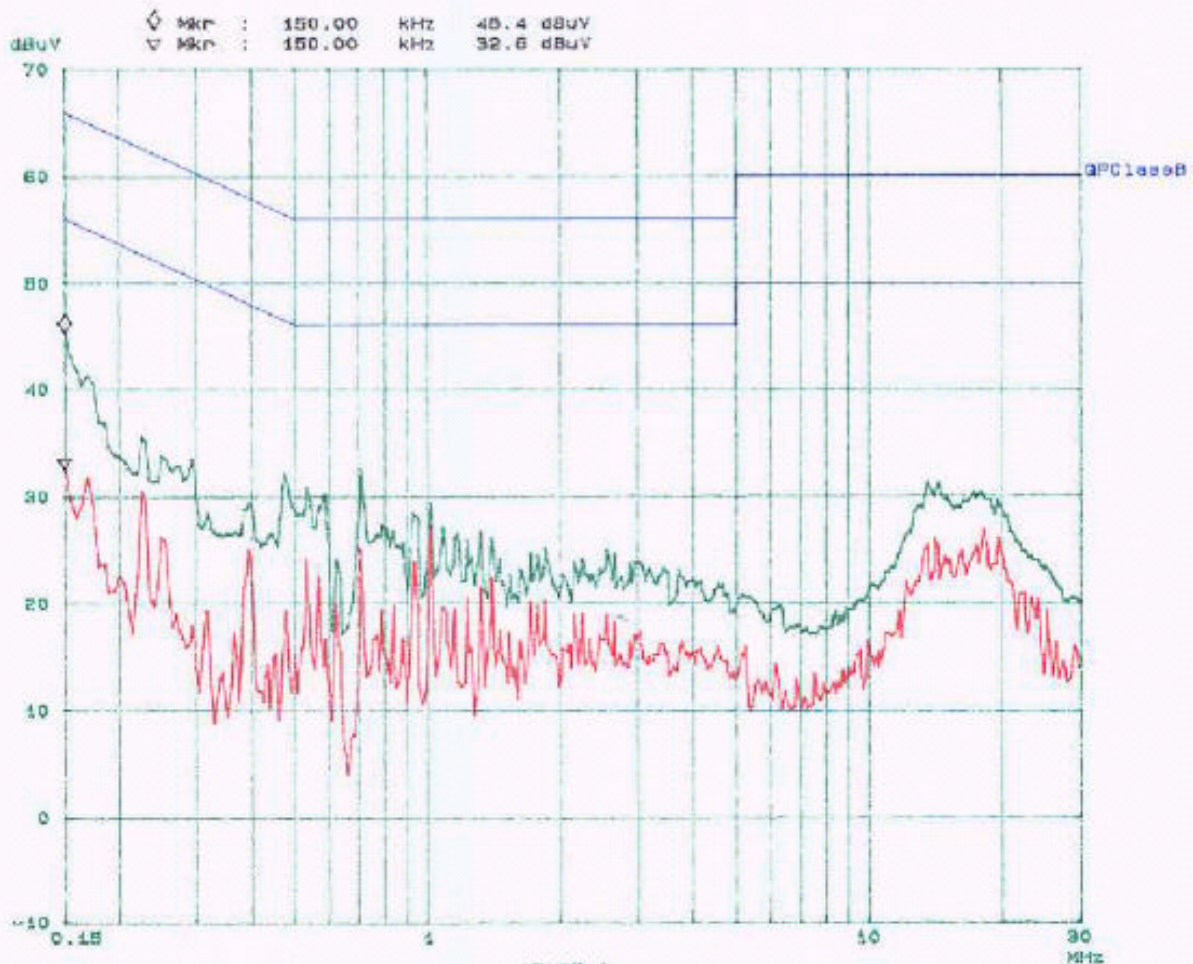
12 Jun 03 14:17

EUT: T80H888+T80M888  
Makuf: AMBIT  
Op Cond: Normal  
Operator: Ling  
Comment: Line

Scan Settings (2 Ranges)

| Frequencies |      |      | Receiver Settings |          |        |         |        |
|-------------|------|------|-------------------|----------|--------|---------|--------|
| Start       | Stop | Step | IF BW             | Detector | M-Time | Atten   | Preamp |
| 100k        | 5M   | 5k   | 9k                | QP+AV    | 20ms   | 10dB LN | OFF    |
| 5M          | 30M  | 100k | 9k                | QP+AV    | 1ms    | 10dB LN | OFF    |

Final Measurement: x GP / + AV  
Hans Time: 1 s  
Subrange: 25  
Acc Margin: 6dB



2003-6-3

# Bay Area Compliance Laboratory Corp FCC CLASS B

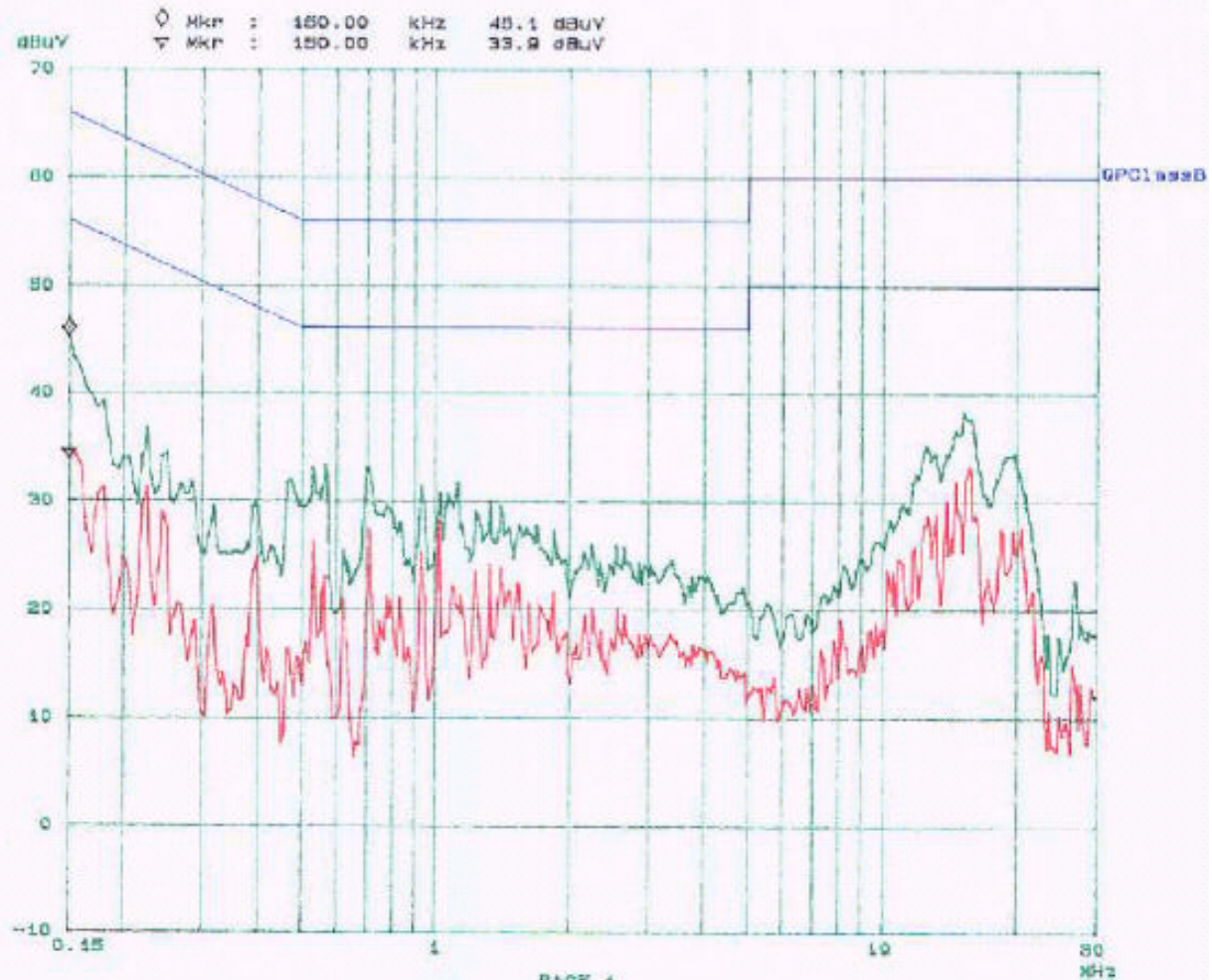
12. Jun 03 15:02

EUT: T60H666+T60H665  
 Manuf: AMBIT  
 Op Cond: Normal  
 Operator: Ling  
 Comment: Neutral

## Scan Settings (2 Ranges)

| Frequencies |      |      | Receiver Settings |          |        |         |        |
|-------------|------|------|-------------------|----------|--------|---------|--------|
| Start       | Stop | Step | IF BW             | Detector | M-Time | Atten   | Preamp |
| 150k        | 5M   | 5k   | 9k                | QP+AV    | 20ms   | 10dB LN | OFF    |
| 5M          | 30M  | 100k | 9k                | QP+AV    | 1ms    | 10dB LN | OFF    |

Final Measurement: x QP / + AV  
 Meas Time: 1 s  
 Subranges: 25  
 Acc Margin: 6dB



Log 2003-6-31



# Bay Area Compliance Laboratory Corp CLASS B

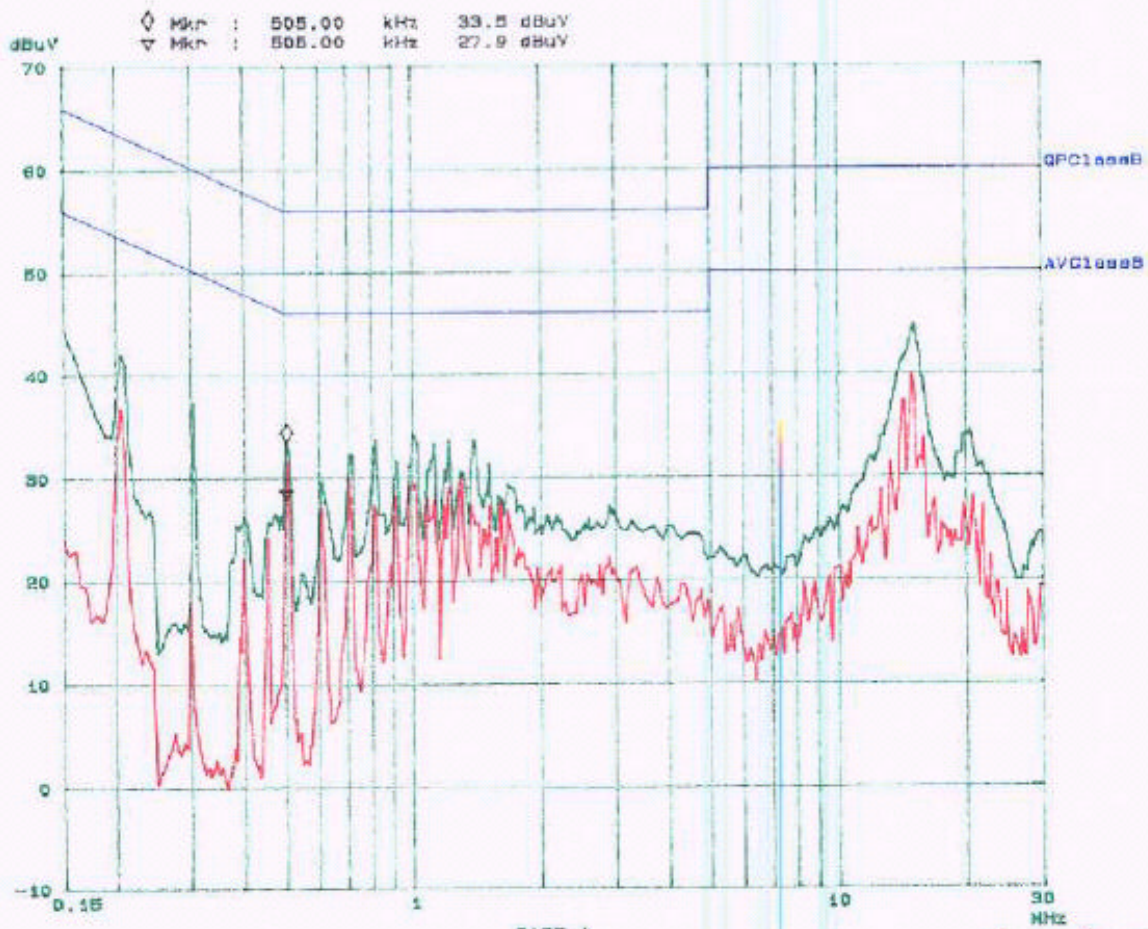
29. Jun 03 12:05

EUT: 760H555+760M555  
Manuf: AMBIT  
Op Cond: 50mW  
Operator: JAMES  
Comment: N

## Scan Settings (3 Ranges)

| Frequencies |      |      | Receiver Settings |          |        |              |
|-------------|------|------|-------------------|----------|--------|--------------|
| Start       | Stop | Step | IF BW             | Detector | W-Time | Atten Preset |
| 150k        | 1M   | 5k   | 9k                | QP+AV    | 20ms   | 10dB LN OFF  |
| 1M          | 30M  | 10k  | 9k                | QP+AV    | 1ms    | 10dB LN OFF  |
| 30M         | 300M | 100k | 9k                | QP+AV    | 1ms    | 10dB LN OFF  |

Final Measurement: x QP / + AV  
Meas Time: 1.8  
Subranges: 25  
Acc Margin: 5dB



for James  
2003-6-29

Bay Area Compliance Laboratory Corp  
CLASS B

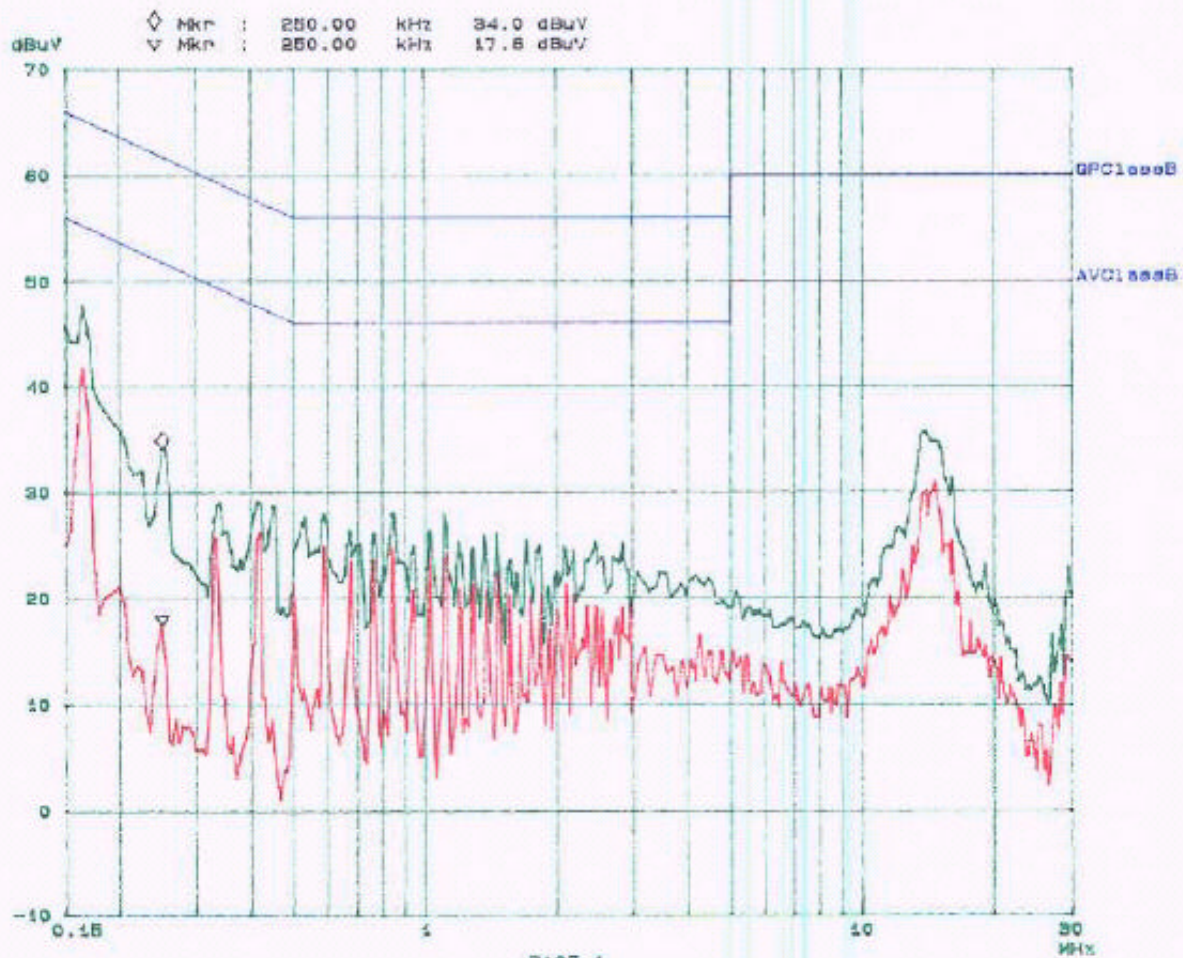
29. Jun 03 11:52

EUT: T80H888+T80H888  
Manuf: AMBIT  
Op Cond: B0rme1  
Operator: JAMES  
Comment: L

Scan Settings (3 Ranges)

| Frequencies |      |      | Receiver Settings |          |        |         |         |
|-------------|------|------|-------------------|----------|--------|---------|---------|
| Start       | Stop | Step | IF BW             | Detector | M-Time | Atten   | Preampl |
| 100k        | 1M   | 5k   | 9k                | QP+AV    | 20ms   | 10dB LN | OFF     |
| 1M          | 3M   | 10k  | 9k                | QP+AV    | 1ms    | 10dB LN | OFF     |
| 3M          | 30M  | 100k | 9k                | QP+AV    | 1ms    | 10dB LN | OFF     |

Final Measurement: x QP / + AV  
Meas Time: 1 s  
Subranges: 25  
Acc Margin: 6dB



*Long for January  
2003-0-29*