

*FCC PART 15, SUBPART B and C  
TEST REPORT**for***BLE MOUSE****MODEL: GYM3300**

Prepared for

**SMK-LINK ELECTRONICS  
3601 CALLE TECATE #B  
CAMARILLO, CALIFORNIA 93012**

Prepared by: \_\_\_\_\_

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DATE: OCTOBER 13, 2016

|       | REPORT<br>BODY | APPENDICES |   |   |    |    | TOTAL |
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## GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the federal government.

Device Tested: BLE Mouse  
Model: GYM3300  
S/N: N/A

Product Description: The EUT is a wireless door/window sensor.

Modifications: The EUT was not modified in order to meet the specifications.

Customer: SMK-Link Electronics  
3601 Calle Tecate #B  
Camarillo, California 93012

Test Dates: July 6 and 7, 2016; August 18, 2016; and September 16, 2016

Test Specification covered by accreditation:



Test Specifications: Emissions requirements  
CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.249

Test Procedure: ANSI C63.4 2014, ANSI C63.10 2013

Test Deviations: The test procedure was not deviated from during the testing.

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**SUMMARY OF TEST RESULTS**

| <b>TEST</b> | <b>DESCRIPTION</b>                                                                      | <b>RESULTS</b>                                                                                                                                                                                                                                                    |
|-------------|-----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1           | Spurious Radiated RF Emissions,<br>10 kHz – 25 GHz<br>(Transmitter and Digital portion) | Complies with the <b>Class B</b> limits of CFR Title 47,<br>Part 15 Subpart B; and the limits of CFR Title 47,<br>Part 15, Subpart C, section 15.205, 15.209 and 15.249<br><br>Highest reading in relation to spec limit: 27.27 dBuV/m @ 40.20 MHz (*U = 4.54 dB) |



## 1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the BLE Mouse, Model: GYM3300. The emissions measurements were performed according to the measurement procedure described in ANSI C63.4 and ANSI C63.10. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the Class B specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.249.



## 2. ADMINISTRATIVE DATA

### 2.1 Location of Testing

The emissions tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California 92823.

### 2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

### 2.3 Cognizant Personnel

SMK-Link Electronics

Daniel Grieder  
Massoud Niakan

RF Engineer  
General Manager Engineering and Program Management

Compatible Electronics Inc.

Kyle Fujimoto  
James Ross

Test Engineer  
Test Engineer

### 2.4 Date Test Sample was Received

The test sample was received on July 18, 2016.

### 2.5 Disposition of the Test Sample

The test sample has not been returned to SMK-Link Electronics as of the date of this test report.

### 2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

|      |                                      |
|------|--------------------------------------|
| RF   | Radio Frequency                      |
| EMI  | Electromagnetic Interference         |
| EUT  | Equipment Under Test                 |
| P/N  | Part Number                          |
| S/N  | Serial Number                        |
| HP   | Hewlett Packard                      |
| ITE  | Information Technology Equipment     |
| LISN | Line Impedance Stabilization Network |
| N/A  | Not Applicable                       |
| Tx   | Transmit                             |
| Rx   | Receiver                             |
| FCC  | Federal Communications Commission    |

### 3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this emissions Test Report.

| SPEC                                  | TITLE                                                                                                                                                                     |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FCC Title 47,<br>Part 15<br>Subpart C | FCC Rules – Radio frequency devices (including digital devices) –<br>Intentional Radiators                                                                                |
| FCC Title 47,<br>Part 15<br>Subpart B | FCC Rules – Radio frequency devices (including digital devices) –<br>Unintentional Radiators                                                                              |
| EN 50147-2:<br>1997                   | Anechoic chambers. Alternative test site suitability with respect to site<br>attenuation                                                                                  |
| ANSI C63.4<br>2014                    | American National Standard for Methods of Measurement of Radio-Noise<br>Emissions from Low-Voltage Electrical and Electronic Equipment in the<br>Range of 9 kHz to 40 GHz |
| ANSI C63.4<br>2014                    | Emissions from Low-Voltage Electrical and Electronic Equipment in the<br>Range of 9 kHz to 40 GHz                                                                         |
| ANSI C63.10<br>2013                   | American National Standard for Testing Unlicensed Wireless Devices                                                                                                        |



#### **4. DESCRIPTION OF TEST CONFIGURATION**

##### **4.1 Description of Test Configuration – Emissions**

The BLE Mouse, Model: GYM3300 (EUT) was tested as a stand alone device. A fresh set of batteries were inserted in the EUT prior to the testing.

The EUT was tested for emissions at the low, middle, and high channels while in the X, Y and Z axis. During the testing, the EUT was continuously transmitting.

The EUT was programmed to cycle through the low, middle, and high channels by pressing the upper left button on the EUT.

The X orientation is when the EUT is parallel to the ground. The Y orientation is when the EUT is perpendicular to the ground mounted vertically. The Z orientation is when the EUT is perpendicular to the ground mounted horizontally. The final radiated data for the EUT was taken in the mode described

##### **4.1.1 Cable Construction and Termination**

The EUT has no external cables.

**5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT****5.1 EUT and Accessory List**

| EQUIPMENT | MANUFACTURER            | MODEL NUMBER | SERIAL NUMBER | FCC ID   |
|-----------|-------------------------|--------------|---------------|----------|
| BLE MOUSE | SMK-LINK<br>ELECTRONICS | GYM3300      | N/A           | IE3AMV16 |

**5.2 Emissions Test Equipment**

| EQUIPMENT TYPE                              | MANU-FACTURER              | MODEL NUMBER | SERIAL NUMBER | CALIBRATION DATE  | CAL. CYCLE |
|---------------------------------------------|----------------------------|--------------|---------------|-------------------|------------|
| <b>GENERAL TEST EQUIPMENT USED IN LAB D</b> |                            |              |               |                   |            |
| TDK TestLab                                 | TDK RF Solutions, Inc.     | 9.22         | 700145        | N/A               | N/A        |
| Computer                                    | Hewlett Packard            | p6716f       | MXX1030PX0    | N/A               | N/A        |
| LCD Monitor                                 | Hewlett Packard            | 52031a       | 3CQ046N3MG    | N/A               | N/A        |
| EMI Receiver, 20 Hz – 26.5 GHz              | Agilent Technologies       | N9038A       | MY51210150    | December 29, 2015 | 1 Year     |
| <b>RF RADIATED EMISSIONS TEST EQUIPMENT</b> |                            |              |               |                   |            |
| CombiLog Antenna                            | Com-Power                  | AC-220       | 61060         | September 3, 2015 | 2 Year     |
| Preamplifier                                | Com-Power                  | PAM-118A     | 551024        | May 12, 2016      | 1 Year     |
| Loop Antenna                                | Com-Power                  | AL-130       | 17089         | February 6, 2015  | 2 Year     |
| Horn Antenna                                | Com-Power                  | AH-118       | 071175        | February 26, 2016 | 2 Year     |
| Horn Antenna                                | Com-Power                  | AH-826       | 71957         | N/A               | N/A        |
| Antenna Mast                                | Com Power                  | AM-100       | N/A           | N/A               | N/A        |
| System Controller                           | Sunol Sciences Corporation | SC110V       | 112213-1      | N/A               | N/A        |
| Turntable                                   | Sunol Sciences Corporation | 2011VS       | N/A           | N/A               | N/A        |
| Antenna-Mast                                | Sunol Sciences Corporation | TWR95-4      | 112213-3      | N/A               | N/A        |
| Preamplifier                                | Com-Power                  | PA-840       | 711013        | May 13, 2016      | 1 Year     |

## 6. TEST SITE DESCRIPTION

### 6.1 Test Facility Description

Please refer to section 2.1 and 7.1 of this report for emissions test location.

### 6.2 EUT Mounting, Bonding and Grounding

**For frequencies 1 GHz and below:** The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 0.8 meters above the ground plane.

**For frequencies above 1 GHz:** The EUT was mounted on a 1.0 by 1.5 meter non-conductive table 1.5 meters above the ground plane.

The EUT was not grounded.

## 7. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

### 7.1 RF Emissions

#### 7.1.1 Conducted Emissions Test

The EMI Receiver was used as a measuring meter. A quasi-peak and/or average reading was taken only where indicated in the data sheets. A transient limiter was used for the protection of the EMI Receiver input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the EMI Receiver. The output of the second LISN was terminated by a 50-ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding, and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI 63:4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by computer software. The final qualification data is located in Appendix E.

#### Test Results:

This test was not performed for the EUT is battery powered and does not connect to the AC power mains.

## 7.1.2 Radiated Emissions Test

The EMI Receiver was used as the measuring meter. A built-in, internal preamplifier was used to increase the sensitivity of the instrument. The EMI Receiver was initially used with the Analyzer mode feature activated. In this mode, the EMI receiver can then record the actual frequency to be measured. This final reading is then taken accurately in the EMI Receiver mode, which takes into account the cable loss, amplifier gain and antenna factors, so that a true reading is compared to the true limit. The effective measurement bandwidth used for the radiated emissions test was according to the frequency measured (200 Hz for 10 kHz to 150 kHz, 9 kHz for 150 kHz to 30 MHz, 120 kHz for 30 MHz to 1 GHz and 1 MHz for 1 GHz to 25 GHz).

For the harmonics above 1 GHz, the readings were averaged by “duty cycle correction factor”, derived from 20 log (dwell time /100ms). This duty cycle correction factor was then subtracted from the peak reading.

For the fundamental and band edge, the readings were averaged by the RMS detector function on the EMI Receiver.

The EMI test chamber of Compatible Electronics, Inc. was used for radiated emissions testing. This test site is in full compliance with ANSI C63.4, EN 50147-2 and CISPR 22. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results.

The EUT was tested at a 3-meter test distance. The six highest emissions are listed in Table 2.0.

The measurement bandwidths and transducers used for the radiated emissions test were:

| FREQUENCY RANGE   | EFFECTIVE MEASUREMENT BANDWIDTH | TRANSDUCER       |
|-------------------|---------------------------------|------------------|
| 10 kHz to 150 kHz | 200 Hz                          | Loop Antenna     |
| 150 kHz to 30 MHz | 9 kHz                           | Loop Antenna     |
| 30 MHz to 1 GHz   | 120 kHz                         | CombiLog Antenna |
| 1 GHz to 25 GHz   | 1 MHz                           | Horn Antenna     |

### Test Results:

The EUT complies with the **Class B** limits of **CFR** Title 47, Part 15, Subpart B; and Subpart C sections 15.205, 15.209 and 15.249 for radiated emissions.

### 7.1.3 RF Emissions Test Results

Table 1.0 RADIATED EMISSION RESULTS  
BLE Mouse  
Model: GYM3300

| Frequency<br>MHz  | EMI Reading<br>(dBuV/m) | Specification Limit<br>(dBuV) | Delta<br>(Cor. Reading – Spec. Limit)<br>dB) |
|-------------------|-------------------------|-------------------------------|----------------------------------------------|
| 2402 (V) (Z-Axis) | 93.67 (RMS)             | 93.97                         | -0.30                                        |
| 2402 (H) (X-Axis) | 93.40 (RMS)             | 93.97                         | -0.57                                        |
| 2480 (H) (X-Axis) | 92.85 (RMS)             | 93.97                         | -1.12                                        |
| 2480 (V) (Z-Axis) | 91.56 (RMS)             | 93.97                         | -2.41                                        |
| 2440 (H) (X-Axis) | 90.80 (RMS)             | 93.97                         | -3.17                                        |
| 2402 (H) (Z-Axis) | 90.36 (RMS)             | 93.97                         | -3.59                                        |

Notes:

\* The complete emissions data is given in Appendix E of this report.

(V) Vertical  
(H) Horizontal  
(QP) Quasi-Peak  
(RMS) RMS Average

## 7.2 Duty Cycle Calculations for Harmonics

The Duty Cycle Calculations were measured at a 3-meter test distance. The EMI Receiver was used to obtain the duty cycle. The data sheets are located in Appendix E.

Where

$$\delta(\text{dB}) = 20 \log \left[ \sum (nt_1 + mt_2 + \dots + \xi t_x) / T \right]$$

$n$  is the number of pulses of duration  $t_1$

$m$  is the number of pulses of duration  $t_2$

$\xi$  is the number of pulses of duration  $t_x$

$T$  is the period of the pulse train or 100 ms if the pulse train length is greater than 100 ms

Duty Cycle Correction Factor = -20.00 dB

The EUT was tested in both advertising and data modes. Please see Appendix E for the data sheets and more detailed explanation of how the duty cycle was derived.



## 8. CONCLUSIONS

The BLE Mouse, Models: GYM3300 (EUT), as tested, meets all of the specification limits defined in FCC Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.249.



  
**APPENDIX A*****LABORATORY ACCREDITATIONS AND RECOGNITIONS***

---

**Brea Division**  
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## LABORATORY ACCREDITATIONS AND RECOGNITIONS



NVLAP LAB CODE 200528-0

® For US, Canada, Australia/New Zealand, Japan, Taiwan, Korea, and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025.

**For the most up-to-date version of our scopes and certificates please visit**

**<http://celectronics.com/quality/scope/>**

Quote from ISO-ILAC-IAF Communiqué on 17025:

"A laboratory's fulfilment of the requirements of ISO/IEC 17025:2005 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025:2005 (Section 4) are written in language relevant to laboratory operations and meet the principles of ISO 9001:2008 Quality Management Systems — Requirements."

ANSI listing [CETCB](#)

Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for EMC under the US/EU Mutual Recognition Agreement (MRA).

**US/EU MRA list** [NIST MRA site](#)



Compatible Electronics has been nominated as a Conformity Assessment Body (CAB) for Taiwan/BSMI under the US/APEC (Asia-Pacific Economic Cooperation) Mutual Recognition Agreement (MRA).

**APEC MRA list** [NIST MRA site](#)

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FCC Listing, from FCC OET site

[FCC test lab search](https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm) <https://fjallfoss.fcc.gov/oetcf/eas/reports/TestFirmSearch.cfm>



Compatible Electronics IC listing can be found at:

<http://www.ic.gc.ca/eic/site/ic1.nsf/eng/home>

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**APPENDIX B**

***MODIFICATIONS TO THE EUT***

## MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC Subpart B and FCC 15.249 specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modifications were made to the EUT during the testing.



  
**APPENDIX C*****ADDITIONAL MODELS COVERED  
UNDER THIS REPORT***

---

**Brea Division**  
114 Olinda Drive  
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## ADDITIONAL MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

BLE Mouse  
Model: GYM3300  
S/N: N/A

There are no additional models covered under this report.

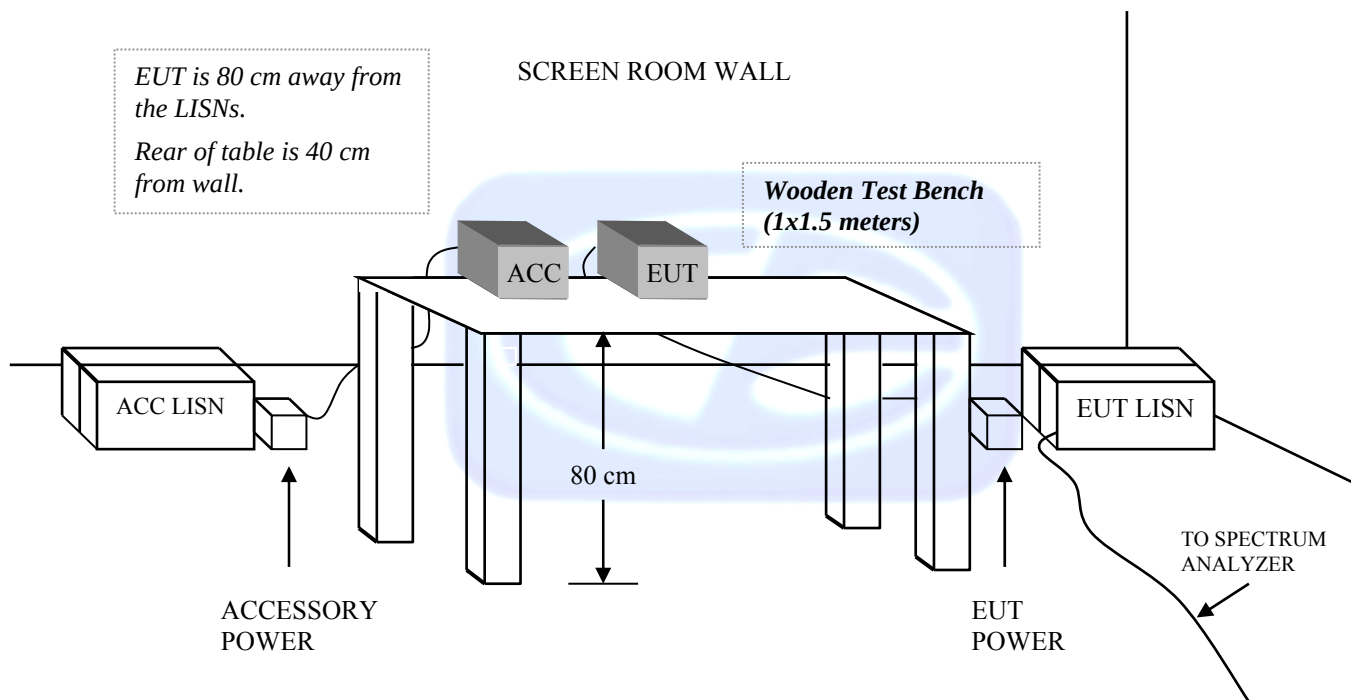




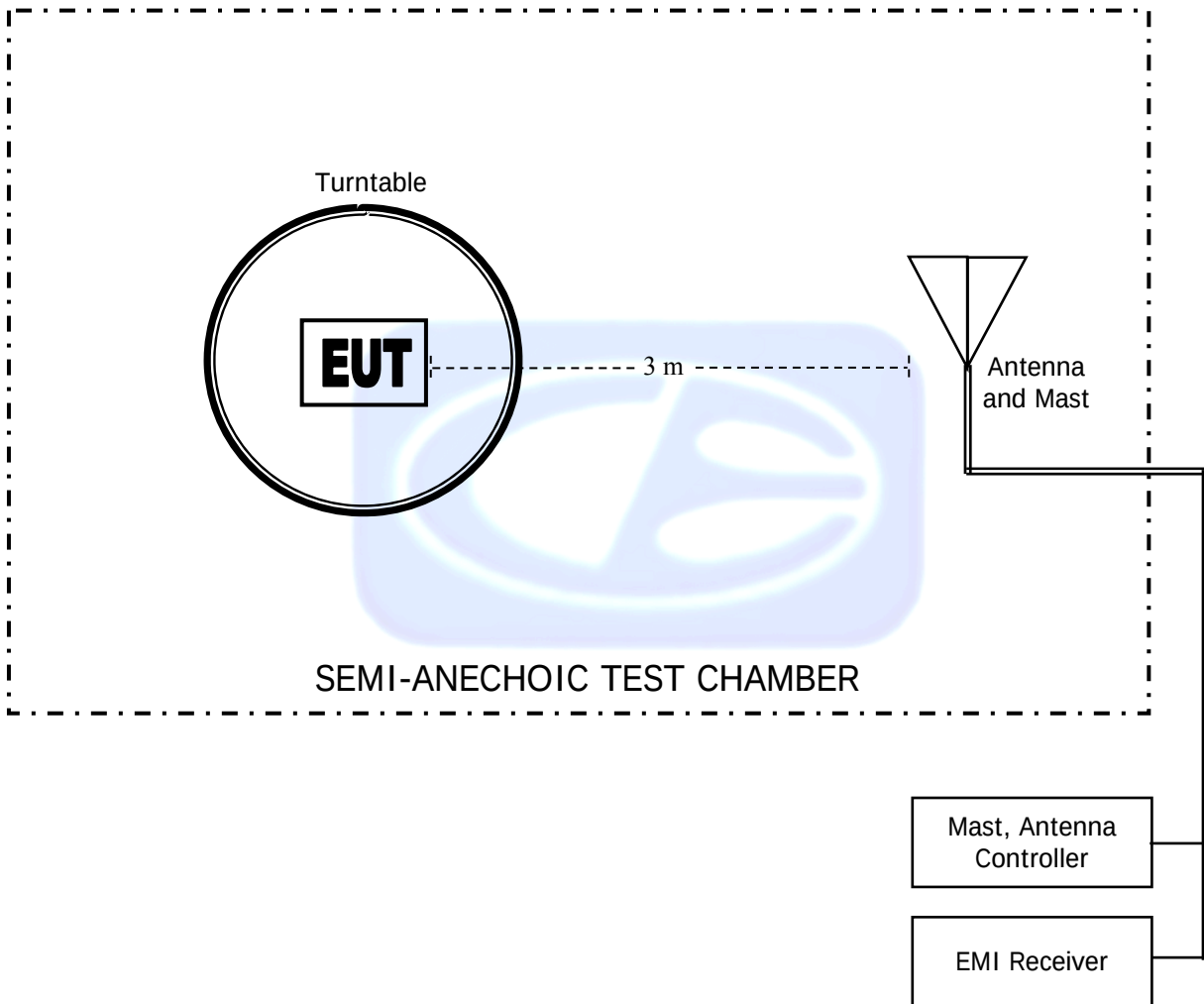
**APPENDIX D**

***DIAGRAMS AND CHARTS***



**FIGURE 1: CONDUCTED EMISSIONS TEST SETUP**

**FIGURE 2: LAYOUT OF THE SEMI-ANECHOIC TEST CHAMBER**



**COM-POWER AL-130****LOOP ANTENNA**

S/N: 17089

CALIBRATION DATE: FEBRUARY 6, 2015

| <b>FREQUENCY<br/>(MHz)</b> | <b>MAGNETIC<br/>(dB/m)</b> | <b>ELECTRIC<br/>(dB/m)</b> |
|----------------------------|----------------------------|----------------------------|
| 0.009                      | -33.18                     | 18.32                      |
| 0.01                       | -34.10                     | 17.40                      |
| 0.02                       | -38.65                     | 12.85                      |
| 0.03                       | -39.28                     | 12.22                      |
| 0.04                       | -40.09                     | 11.41                      |
| 0.05                       | -40.85                     | 10.65                      |
| 0.06                       | -40.88                     | 10.62                      |
| 0.07                       | -41.07                     | 10.43                      |
| 0.08                       | -41.04                     | 10.46                      |
| 0.09                       | -41.19                     | 10.31                      |
| 0.1                        | -41.20                     | 10.30                      |
| 0.2                        | -41.52                     | 9.98                       |
| 0.3                        | -41.53                     | 9.97                       |
| 0.4                        | -41.42                     | 10.08                      |
| 0.5                        | -41.53                     | 9.97                       |
| 0.6                        | -41.53                     | 9.97                       |
| 0.7                        | -41.43                     | 10.07                      |
| 0.8                        | -41.23                     | 10.27                      |
| 0.9                        | -41.13                     | 10.37                      |
| 1                          | -41.14                     | 10.36                      |
| 2                          | -40.80                     | 10.70                      |
| 3                          | -40.66                     | 10.84                      |
| 4                          | -40.61                     | 10.89                      |
| 5                          | -40.33                     | 11.17                      |
| 6                          | -40.53                     | 10.97                      |
| 7                          | -40.47                     | 11.03                      |
| 8                          | -40.48                     | 11.02                      |
| 9                          | -39.93                     | 11.57                      |
| 10                         | -39.81                     | 11.69                      |
| 15                         | -43.35                     | 8.15                       |
| 20                         | -39.16                     | 12.34                      |
| 25                         | -40.24                     | 11.26                      |
| 30                         | -43.18                     | 8.32                       |

**COM-POWER AC-220****COMBILOG ANTENNA****S/N: 61060****CALIBRATION DATE: SEPTEMBER 3, 2015**

| <b>FREQUENCY<br/>(MHz)</b> | <b>FACTOR<br/>(dB)</b> | <b>FREQUENCY<br/>(MHz)</b> | <b>FACTOR<br/>(dB)</b> |
|----------------------------|------------------------|----------------------------|------------------------|
| 30                         | 24.00                  | 200                        | 13.00                  |
| 35                         | 24.30                  | 250                        | 15.30                  |
| 40                         | 25.40                  | 300                        | 18.20                  |
| 45                         | 21.50                  | 350                        | 17.90                  |
| 50                         | 22.50                  | 400                        | 18.60                  |
| 60                         | 15.40                  | 450                        | 19.80                  |
| 70                         | 12.70                  | 500                        | 21.60                  |
| 80                         | 11.10                  | 550                        | 22.40                  |
| 90                         | 13.40                  | 600                        | 23.70                  |
| 100                        | 13.80                  | 650                        | 24.30                  |
| 120                        | 15.40                  | 700                        | 24.00                  |
| 125                        | 15.40                  | 750                        | 24.50                  |
| 140                        | 13.10                  | 800                        | 24.30                  |
| 150                        | 17.20                  | 850                        | 26.30                  |
| 160                        | 13.20                  | 900                        | 26.90                  |
| 175                        | 14.20                  | 950                        | 26.00                  |
| 180                        | 14.30                  | 1000                       | 25.60                  |

**COM POWER AH-118****HORN ANTENNA****S/N: 071175****CALIBRATION DATE: FEBRUARY 26, 2016**

| <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> | <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> |
|----------------------------|------------------------|----------------------------|------------------------|
| 1.0                        | 23.93                  | 10.0                       | 39.33                  |
| 1.5                        | 25.54                  | 10.5                       | 39.64                  |
| 2.0                        | 28.09                  | 11.0                       | 41.04                  |
| 2.5                        | 30.21                  | 11.5                       | 44.29                  |
| 3.0                        | 30.15                  | 12.0                       | 41.22                  |
| 3.5                        | 30.17                  | 12.5                       | 41.50                  |
| 4.0                        | 31.90                  | 13.0                       | 41.62                  |
| 4.5                        | 33.51                  | 13.5                       | 40.63                  |
| 5.0                        | 33.87                  | 14.0                       | 39.94                  |
| 5.5                        | 35.08                  | 14.5                       | 41.84                  |
| 6.0                        | 34.81                  | 15.0                       | 42.69                  |
| 6.5                        | 34.26                  | 15.5                       | 39.03                  |
| 7.0                        | 36.33                  | 16.0                       | 39.07                  |
| 7.5                        | 37.03                  | 16.5                       | 41.40                  |
| 8.0                        | 37.56                  | 17.0                       | 43.18                  |
| 8.5                        | 40.07                  | 17.5                       | 47.01                  |
| 9.0                        | 38.92                  | 18.0                       | 46.48                  |
| 9.5                        | 38.21                  |                            |                        |

**COM-POWER PA-118****PREAMPLIFIER**

S/N: 551024

CALIBRATION DATE: MAY 12, 2016

| <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> | <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> |
|----------------------------|------------------------|----------------------------|------------------------|
| 1.0                        | 39.84                  | 6.0                        | 39.05                  |
| 1.1                        | 39.40                  | 6.5                        | 38.94                  |
| 1.2                        | 39.58                  | 7.0                        | 39.25                  |
| 1.3                        | 39.68                  | 7.5                        | 39.09                  |
| 1.4                        | 39.91                  | 8.0                        | 39.01                  |
| 1.5                        | 39.78                  | 8.5                        | 38.60                  |
| 1.6                        | 39.50                  | 9.0                        | 38.64                  |
| 1.7                        | 39.81                  | 9.5                        | 39.67                  |
| 1.8                        | 39.89                  | 10.0                       | 39.30                  |
| 1.9                        | 39.94                  | 11.0                       | 39.15                  |
| 2.0                        | 39.57                  | 12.0                       | 39.24                  |
| 2.5                        | 40.39                  | 13.0                       | 39.49                  |
| 3.0                        | 40.63                  | 14.0                       | 39.44                  |
| 3.5                        | 40.80                  | 15.0                       | 39.94                  |
| 4.0                        | 40.86                  | 16.0                       | 40.09                  |
| 4.5                        | 39.94                  | 17.0                       | 40.06                  |
| 5.0                        | 34.47                  | 18.0                       | 39.76                  |
| 5.5                        | 39.32                  |                            |                        |

**COM-POWER AH-826****HORN ANTENNA**

S/N: 71957

| <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> | <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> |
|----------------------------|------------------------|----------------------------|------------------------|
| 18.0                       | 33.5                   | 22.5                       | 35.5                   |
| 18.5                       | 33.5                   | 23.0                       | 35.9                   |
| 19.0                       | 34.0                   | 23.5                       | 35.7                   |
| 19.5                       | 34.0                   | 24.0                       | 35.6                   |
| 20.0                       | 34.3                   | 24.5                       | 36.0                   |
| 20.5                       | 34.9                   | 25.0                       | 36.2                   |
| 21.0                       | 34.7                   | 25.5                       | 36.1                   |
| 21.5                       | 35.0                   | 26.0                       | 36.2                   |
| 22.0                       | 35.0                   | 26.5                       | 35.7                   |

**COM-POWER PA-840****MICROWAVE PREAMPLIFIER**

S/N: 711013

CALIBRATION DATE: MAY 13, 2016

| <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> | <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> |
|----------------------------|------------------------|----------------------------|------------------------|
| 18.0                       | 25.19                  | 31.0                       | 25.69                  |
| 19.0                       | 24.48                  | 31.5                       | 25.74                  |
| 20.0                       | 24.39                  | 32.0                       | 26.35                  |
| 21.0                       | 24.73                  | 32.5                       | 26.64                  |
| 22.0                       | 23.49                  | 33.0                       | 25.98                  |
| 23.0                       | 24.23                  | 33.5                       | 24.68                  |
| 24.0                       | 24.59                  | 34.0                       | 24.61                  |
| 25.0                       | 25.32                  | 34.5                       | 23.78                  |
| 26.0                       | 25.66                  | 35.0                       | 24.74                  |
| 26.5                       | 25.99                  | 35.5                       | 24.39                  |
| 27.0                       | 26.26                  | 36.0                       | 23.46                  |
| 27.5                       | 25.33                  | 36.5                       | 23.71                  |
| 28.0                       | 24.49                  | 37.0                       | 26.35                  |
| 28.5                       | 24.74                  | 37.5                       | 23.49                  |
| 29.0                       | 25.93                  | 38.0                       | 25.42                  |
| 29.5                       | 26.28                  | 38.5                       | 24.87                  |
| 30.0                       | 26.17                  | 39.0                       | 22.60                  |
| 30.5                       | 26.11                  | 39.5                       | 20.57                  |
|                            |                        | 40.0                       | 19.15                  |





**FRONT VIEW**

SMK-LINK ELECTRONICS

BLE MOUSE

MODEL: GYM3300

FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION  
FOR MAXIMUM EMISSIONS**

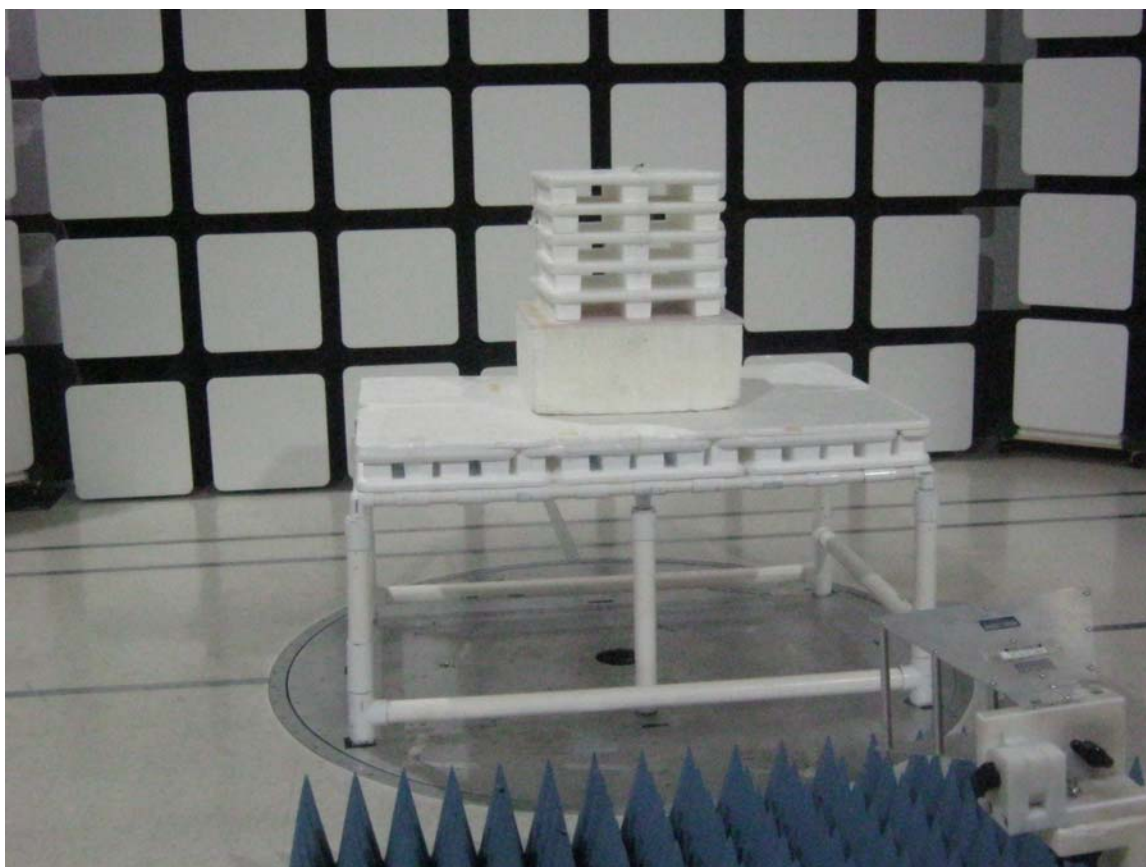


**REAR VIEW**

SMK-LINK ELECTRONICS  
BLE MOUSE  
MODEL: GYM3300

FCC SUBPART B AND C – RADIATED EMISSIONS – BELOW 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION  
FOR MAXIMUM EMISSIONS**



**FRONT VIEW**

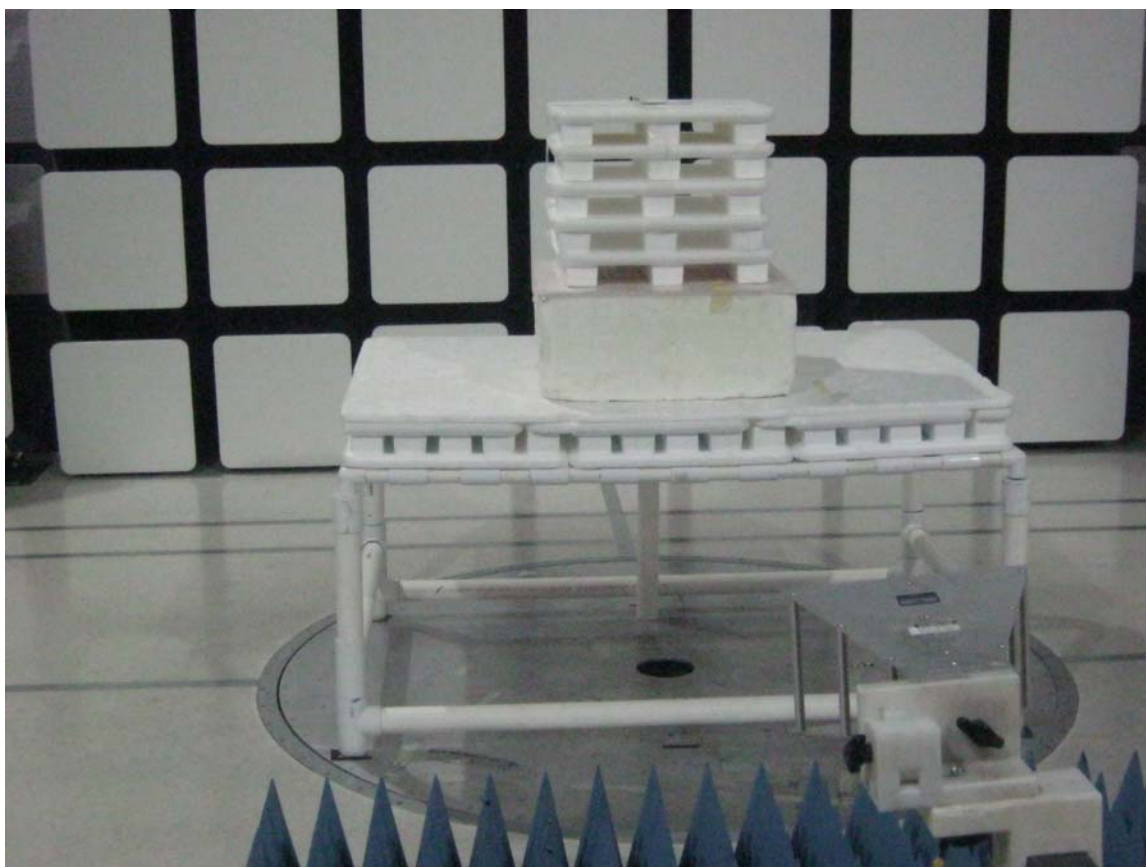
SMK-LINK ELECTRONICS

BLE MOUSE

MODEL: GYM3300

FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION  
FOR MAXIMUM EMISSIONS**



**REAR VIEW**

SMK-LINK ELECTRONICS

BLE MOUSE

MODEL: GYM3300

FCC SUBPART B AND C – RADIATED EMISSIONS – ABOVE 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION  
FOR MAXIMUM EMISSIONS**



**APPENDIX E**

***DATA SHEETS***



***RADIATED EMISSIONS  
DATA SHEETS***











**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - Low Channel**  
**X-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments                 |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------------------|
| 4804           | 52.29             | V            | 73.97 | -21.68 | Peak                  | 274.50                  | 126.89                 |                          |
| 4804           | 32.29             | V            | 53.97 | -21.68 | Avg                   | 274.50                  | 126.89                 |                          |
| 7206           | 54.02             | V            | 73.97 | -19.95 | Peak                  | 188.25                  | 111.49                 |                          |
| 7206           | 34.02             | V            | 53.97 | -19.95 | Avg                   | 188.25                  | 111.49                 |                          |
| 9608           | 60.45             | V            | 73.97 | -13.52 | Peak                  | 187.25                  | 103.91                 |                          |
| 9608           | 40.45             | V            | 53.97 | -13.52 | Avg                   | 187.25                  | 103.91                 |                          |
| 12010          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 14412          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 16814          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 19216          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 21618          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 24020          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
|                |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016  
Lab: D  
Tested By: Kyle Fujimoto

**Harmonics - Low Channel  
X-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4804           | 57.09             | H            | 73.97 | -16.88 | Peak                  | 298.00                  | 110.05                 |              |
| 4804           | 37.09             | H            | 53.97 | -16.88 | Avg                   | 298.00                  | 110.05                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7206           | 57.90             | H            | 73.97 | -16.07 | Peak                  | 351.00                  | 108.08                 |              |
| 7206           | 37.90             | H            | 53.97 | -16.07 | Avg                   | 351.00                  | 108.08                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9608           | 63.52             | H            | 73.97 | -10.45 | Peak                  | 83.50                   | 110.71                 |              |
| 9608           | 43.52             | H            | 53.97 | -10.45 | Avg                   | 83.50                   | 110.71                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12010          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12010          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14412          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14412          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 16814          |                   |              |       |        |                       |                         |                        | No Emissions |
| 16814          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19216          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19216          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 21618          |                   |              |       |        |                       |                         |                        | No Emissions |
| 21618          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24020          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24020          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016  
Lab: D  
Tested By: Kyle Fujimoto

**Harmonics - Low Channel  
Y-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4804           | 54.37             | V            | 73.97 | -19.60 | Peak                  | 79.50                   | 126.95                 |              |
| 4804           | 34.37             | V            | 53.97 | -19.60 | Avg                   | 79.50                   | 126.95                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7206           | 55.12             | V            | 73.97 | -18.85 | Peak                  | 76.75                   | 125.82                 |              |
| 7206           | 35.12             | V            | 53.97 | -18.85 | Avg                   | 76.75                   | 125.82                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9608           | 61.32             | V            | 73.97 | -12.65 | Peak                  | 84.25                   | 111.01                 |              |
| 9608           | 41.32             | V            | 53.97 | -12.65 | Avg                   | 84.25                   | 111.01                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12010          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12010          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14412          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14412          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 16814          |                   |              |       |        |                       |                         |                        | No Emissions |
| 16814          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19216          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19216          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 21618          |                   |              |       |        |                       |                         |                        | No Emissions |
| 21618          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24020          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24020          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016  
Lab: D  
Tested By: Kyle Fujimoto

**Harmonics - Low Channel  
Y-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4804           | 56.89             | H            | 73.97 | -17.08 | Peak                  | 186.75                  | 176.50                 |              |
| 4804           | 36.89             | H            | 53.97 | -17.08 | Avg                   | 186.75                  | 176.50                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7206           | 55.55             | H            | 73.97 | -18.42 | Peak                  | 186.00                  | 174.89                 |              |
| 7206           | 35.55             | H            | 53.97 | -18.42 | Avg                   | 186.00                  | 174.89                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9608           | 57.14             | H            | 73.97 | -16.83 | Peak                  | 294.00                  | 142.95                 |              |
| 9608           | 37.14             | H            | 53.97 | -16.83 | Avg                   | 294.00                  | 142.95                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12010          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12010          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14412          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14412          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 16814          |                   |              |       |        |                       |                         |                        | No Emissions |
| 16814          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19216          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19216          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 21618          |                   |              |       |        |                       |                         |                        | No Emissions |
| 21618          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24020          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24020          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016  
Lab: D  
Tested By: Kyle Fujimoto

**Harmonics - Low Channel  
Z-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4804           | 54.37             | V            | 73.97 | -19.60 | Peak                  | 310.00                  | 177.94                 |              |
| 4804           | 34.37             | V            | 53.97 | -19.60 | Avg                   | 310.00                  | 177.94                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7206           | 58.96             | V            | 73.97 | -15.01 | Peak                  | 313.25                  | 241.76                 |              |
| 7206           | 38.96             | V            | 53.97 | -15.01 | Avg                   | 313.25                  | 241.76                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9608           | 61.58             | V            | 73.97 | -12.39 | Peak                  | 318.25                  | 104.86                 |              |
| 9608           | 41.58             | V            | 53.97 | -12.39 | Avg                   | 318.25                  | 104.86                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12010          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12010          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14412          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14412          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 16814          |                   |              |       |        |                       |                         |                        | No Emissions |
| 16814          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19216          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19216          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 21618          |                   |              |       |        |                       |                         |                        | No Emissions |
| 21618          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24020          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24020          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016  
Lab: D  
Tested By: Kyle Fujimoto

**Harmonics - Low Channel  
Z-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4804           | 55.41             | H            | 73.97 | -18.56 | Peak                  | 78.00                   | 126.89                 |              |
| 4804           | 35.41             | H            | 53.97 | -18.56 | Avg                   | 78.00                   | 126.89                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7206           | 53.17             | H            | 73.97 | -20.80 | Peak                  | 189.25                  | 109.76                 |              |
| 7206           | 33.17             | H            | 53.97 | -20.80 | Avg                   | 189.25                  | 109.76                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9608           | 58.96             | H            | 73.97 | -15.01 | Peak                  | 162.25                  | 110.95                 |              |
| 9608           | 38.96             | H            | 53.97 | -15.01 | Avg                   | 162.25                  | 110.95                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12010          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12010          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14412          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14412          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 16814          |                   |              |       |        |                       |                         |                        | No Emissions |
| 16814          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19216          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19216          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 21618          |                   |              |       |        |                       |                         |                        | No Emissions |
| 21618          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24020          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24020          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |



**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - Middle Channel  
X-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments                 |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------------------|
| 4880           | 54.37             | V            | 73.97 | -19.60 | Peak                  | 0.00                    | 110.83                 |                          |
| 4880           | 34.37             | V            | 53.97 | -19.60 | Avg                   | 0.00                    | 110.83                 |                          |
| 7320           | 54.92             | V            | 73.97 | -19.05 | Peak                  | 0.25                    | 110.77                 |                          |
| 7320           | 34.92             | V            | 53.97 | -19.05 | Avg                   | 0.25                    | 110.77                 |                          |
| 9760           | 54.35             | V            | 73.97 | -19.62 | Peak                  | 359.25                  | 110.71                 |                          |
| 9760           | 34.35             | V            | 53.97 | -19.62 | Avg                   | 359.25                  | 110.71                 |                          |
| 12200          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 12200          |                   |              |       |        |                       |                         |                        |                          |
| 14640          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 14640          |                   |              |       |        |                       |                         |                        |                          |
| 17080          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 17080          |                   |              |       |        |                       |                         |                        |                          |
| 19520          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 19520          |                   |              |       |        |                       |                         |                        |                          |
| 21960          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 21960          |                   |              |       |        |                       |                         |                        |                          |
| 24400          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 24400          |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |



**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - Middle Channel**
**X-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4880           | 59.97             | H            | 73.97 | -14.00 | Peak                  | 97.00                   | 111.19                 |              |
| 4880           | 39.97             | H            | 53.97 | -14.00 | Avg                   | 97.00                   | 111.19                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7320           | 59.34             | H            | 73.97 | -14.63 | Peak                  | 168.00                  | 111.13                 |              |
| 7320           | 39.34             | H            | 53.97 | -14.63 | Avg                   | 168.00                  | 111.13                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9760           | 57.23             | H            | 73.97 | -16.74 | Peak                  | 267.00                  | 110.71                 |              |
| 9760           | 37.23             | H            | 53.97 | -16.74 | Avg                   | 267.00                  | 110.71                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12200          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12200          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14640          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14640          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 17080          |                   |              |       |        |                       |                         |                        | No Emissions |
| 17080          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19520          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19520          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 21960          |                   |              |       |        |                       |                         |                        | No Emissions |
| 21960          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24400          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24400          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016  
Lab: D  
Tested By: Kyle Fujimoto

**Harmonics - Middle Channel  
Y-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4880           | 58.56             | V            | 73.97 | -15.41 | Peak                  | 116.25                  | 115.58                 |              |
| 4880           | 38.56             | V            | 53.97 | -15.41 | Avg                   | 116.25                  | 115.58                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7320           | 56.29             | V            | 73.97 | -17.68 | Peak                  | 117.25                  | 116.66                 |              |
| 7320           | 36.29             | V            | 53.97 | -17.68 | Avg                   | 117.25                  | 116.66                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9760           | 51.28             | V            | 73.97 | -22.69 | Peak                  | 120.25                  | 118.25                 |              |
| 9760           | 31.28             | V            | 53.97 | -22.69 | Avg                   | 120.25                  | 118.25                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12200          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12200          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14640          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14640          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 17080          |                   |              |       |        |                       |                         |                        | No Emissions |
| 17080          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19520          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19520          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 21960          |                   |              |       |        |                       |                         |                        | No Emissions |
| 21960          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24400          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24400          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - Middle Channel  
Y-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4880           | 58.56             | H            | 73.97 | -15.41 | Peak                  | 102.75                  | 111.26                 |              |
| 4880           | 38.56             | H            | 53.97 | -15.41 | Avg                   | 102.75                  | 111.26                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7320           | 54.59             | H            | 73.97 | -19.38 | Peak                  | 95.25                   | 113.25                 |              |
| 7320           | 34.59             | H            | 53.97 | -19.38 | Avg                   | 95.25                   | 113.25                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9760           | 58.26             | H            | 73.97 | -15.71 | Peak                  | 342.25                  | 114.25                 |              |
| 9760           | 38.26             | H            | 53.97 | -15.71 | Avg                   | 342.25                  | 114.25                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12200          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12200          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14640          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14640          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 17080          |                   |              |       |        |                       |                         |                        | No Emissions |
| 17080          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19520          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19520          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 21960          |                   |              |       |        |                       |                         |                        | No Emissions |
| 21960          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24400          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24400          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016  
Lab: D  
Tested By: Kyle Fujimoto

**Harmonics - Middle Channel  
Z-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments                 |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------------------|
| 4880           | 58.59             | V            | 73.97 | -15.38 | Peak                  | 125.55                  | 145.25                 |                          |
| 4880           | 38.59             | V            | 53.97 | -15.38 | Avg                   | 125.55                  | 145.25                 |                          |
| 7320           | 52.14             | V            | 73.97 | -21.83 | Peak                  | 110.25                  | 162.25                 |                          |
| 7320           | 32.14             | V            | 53.97 | -21.83 | Avg                   | 110.25                  | 162.25                 |                          |
| 9760           | 53.69             | V            | 73.97 | -20.28 | Peak                  | 111.26                  | 164.25                 |                          |
| 9760           | 33.69             | V            | 53.97 | -20.28 | Avg                   | 111.26                  | 164.25                 |                          |
| 12200          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 14640          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 17080          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 19520          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 21960          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 24400          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
|                |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - Middle Channel  
Z-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments                 |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------------------|
| 4880           | 59.26             | H            | 73.97 | -14.71 | Peak                  | 158.25                  | 147.26                 |                          |
| 4880           | 39.26             | H            | 53.97 | -14.71 | Avg                   | 158.25                  | 147.26                 |                          |
| 7320           | 53.58             | H            | 73.97 | -20.39 | Peak                  | 111.29                  | 168.25                 |                          |
| 7320           | 33.58             | H            | 53.97 | -20.39 | Avg                   | 111.29                  | 168.25                 |                          |
| 9760           | 54.26             | H            | 73.97 | -19.71 | Peak                  | 102.25                  | 166.25                 |                          |
| 9760           | 34.26             | H            | 53.97 | -19.71 | Avg                   | 102.25                  | 166.25                 |                          |
| 12200          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 14640          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 17080          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 19520          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 21960          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 24400          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
|                |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016  
Lab: D  
Tested By: Kyle Fujimoto

**Harmonics - High Channel  
X-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments                 |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------------------|
| 4960           | 58.13             | V            | 73.97 | -15.84 | Peak                  | 222.75                  | 111.13                 |                          |
| 4960           | 38.13             | V            | 53.97 | -15.84 | Avg                   | 222.75                  | 111.13                 |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
| 7440           | 43.96             | V            | 73.97 | -30.01 | Peak                  | 2.00                    | 126.89                 |                          |
| 7440           | 23.96             | V            | 53.97 | -30.01 | Avg                   | 2.00                    | 126.89                 |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
| 9920           | 46.57             | V            | 73.97 | -27.40 | Peak                  | 358.50                  | 110.95                 |                          |
| 9920           | 26.57             | V            | 53.97 | -27.40 | Avg                   | 358.50                  | 110.95                 |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
| 12400          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 12400          |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
| 14880          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 14880          |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
| 17360          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 17360          |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
| 19840          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 19840          |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
| 22320          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 22320          |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
| 24800          |                   |              |       |        |                       |                         |                        | No Emissions<br>Detected |
| 24800          |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |
|                |                   |              |       |        |                       |                         |                        |                          |



**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016  
Lab: D  
Tested By: Kyle Fujimoto

**Harmonics - High Channel  
X-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4960           | 65.02             | H            | 73.97 | -8.95  | Peak                  | 94.25                   | 142.89                 |              |
| 4960           | 45.02             | H            | 53.97 | -8.95  | Avg                   | 94.25                   | 142.89                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7440           | 57.29             | H            | 73.97 | -16.68 | Peak                  | 151.75                  | 127.31                 |              |
| 7440           | 37.29             | H            | 53.97 | -16.68 | Avg                   | 151.75                  | 127.31                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9920           | 48.94             | H            | 73.97 | -25.03 | Peak                  | 85.00                   | 111.13                 |              |
| 9920           | 28.94             | H            | 53.97 | -25.03 | Avg                   | 85.00                   | 111.13                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12400          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12400          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14880          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14880          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 17360          |                   |              |       |        |                       |                         |                        | No Emissions |
| 17360          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19840          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19840          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 22320          |                   |              |       |        |                       |                         |                        | No Emissions |
| 22320          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24800          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24800          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - High Channel  
Y-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4960           | 61.58             | V            | 73.97 | -12.39 | Peak                  | 48.00                   | 142.95                 |              |
| 4960           | 41.58             | V            | 53.97 | -12.39 | Avg                   | 48.00                   | 142.95                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7440           | 53.95             | V            | 73.97 | -20.02 | Peak                  | 235.00                  | 174.83                 |              |
| 7440           | 33.95             | V            | 53.97 | -20.02 | Avg                   | 235.00                  | 174.83                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9920           | 44.95             | V            | 73.97 | -29.02 | Peak                  | 258.00                  | 249.11                 |              |
| 9920           | 24.95             | V            | 53.97 | -29.02 | Avg                   | 258.00                  | 249.11                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12400          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12400          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14880          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14880          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 17360          |                   |              |       |        |                       |                         |                        | No Emissions |
| 17360          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19840          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19840          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 22320          |                   |              |       |        |                       |                         |                        | No Emissions |
| 22320          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24800          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24800          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |



**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016  
Lab: D  
Tested By: Kyle Fujimoto

**Harmonics - High Channel  
Y-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4960           | 64.10             | H            | 73.97 | -9.87  | Peak                  | 10.00                   | 126.83                 |              |
| 4960           | 44.10             | H            | 53.97 | -9.87  | Avg                   | 10.00                   | 126.83                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7440           | 54.02             | H            | 73.97 | -19.95 | Peak                  | 353.00                  | 206.77                 |              |
| 7440           | 34.02             | H            | 53.97 | -19.95 | Avg                   | 353.00                  | 206.77                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9920           | 47.61             | H            | 73.97 | -26.36 | Peak                  | 116.00                  | 158.83                 |              |
| 9920           | 27.61             | H            | 53.97 | -26.36 | Avg                   | 116.00                  | 158.83                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12400          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12400          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14880          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14880          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 17360          |                   |              |       |        |                       |                         |                        | No Emissions |
| 17360          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19840          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19840          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 22320          |                   |              |       |        |                       |                         |                        | No Emissions |
| 22320          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24800          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24800          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016  
Lab: D  
Tested By: Kyle Fujimoto

**Harmonics - High Channel  
Z-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4960           | 60.08             | V            | 73.97 | -13.89 | Peak                  | 200.00                  | 128.38                 |              |
| 4960           | 40.08             | V            | 53.97 | -13.89 | Avg                   | 200.00                  | 128.38                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7440           | 56.24             | V            | 73.97 | -17.73 | Peak                  | 146.25                  | 110.71                 |              |
| 7440           | 36.24             | V            | 53.97 | -17.73 | Avg                   | 146.25                  | 110.71                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9920           | 46.95             | V            | 73.97 | -27.02 | Peak                  | 144.00                  | 191.43                 |              |
| 9920           | 26.95             | V            | 53.97 | -27.02 | Avg                   | 144.00                  | 191.43                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12400          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12400          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14880          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14880          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 17360          |                   |              |       |        |                       |                         |                        | No Emissions |
| 17360          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19840          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19840          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 22320          |                   |              |       |        |                       |                         |                        | No Emissions |
| 22320          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24800          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24800          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |

**FCC 15.249**

SMK-Link Electronics  
BLE Mouse  
Model: GYM3300

Date: 08/18/2016

Lab: D

Tested By: Kyle Fujimoto

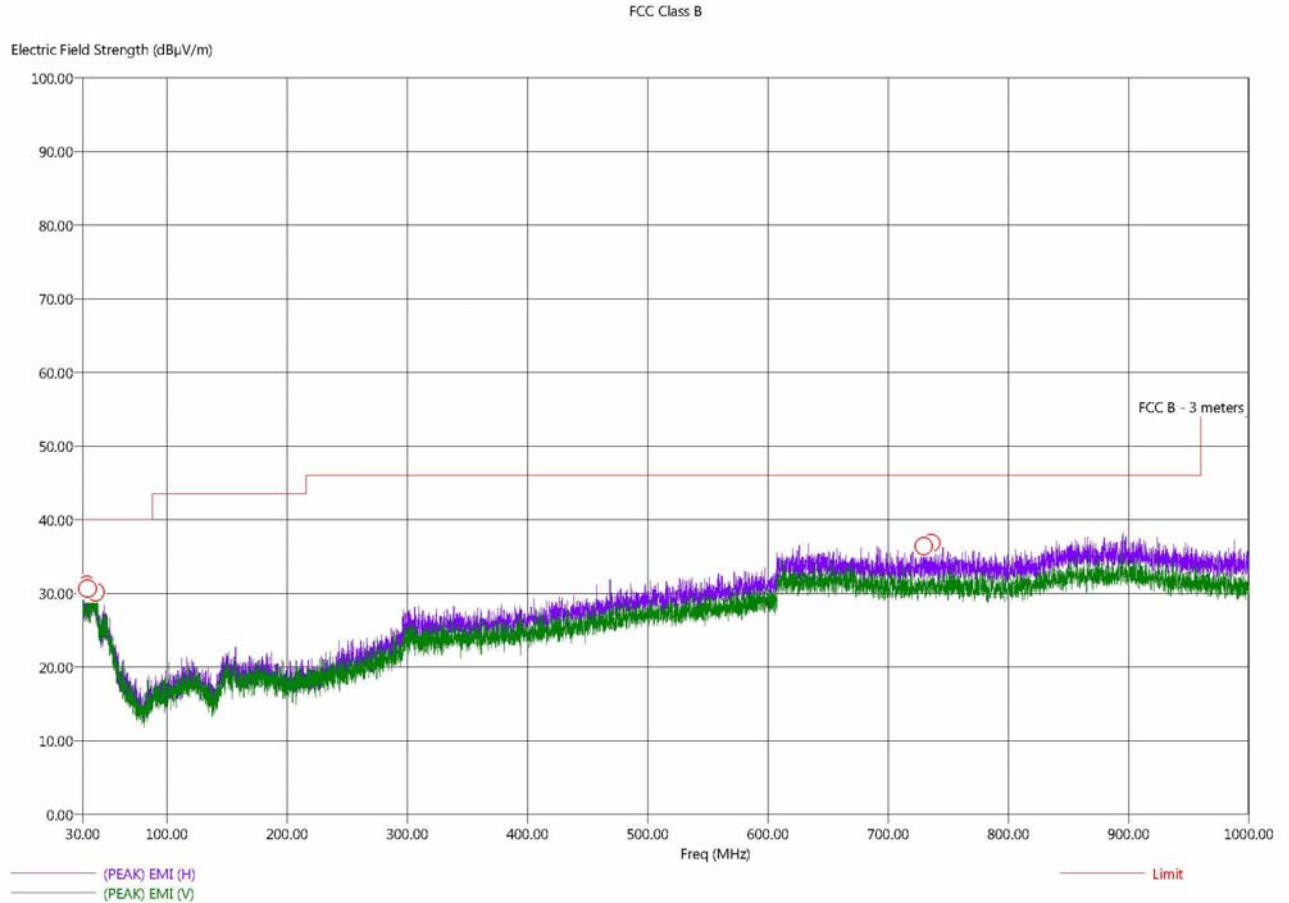
**Harmonics - High Channel  
Z-Axis**

| Freq.<br>(MHz) | Level<br>(dBuV/m) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-------------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4960           | 60.90             | H            | 73.97 | -13.07 | Peak                  | 301.05                  | 143.25                 |              |
| 4960           | 40.90             | H            | 53.97 | -13.07 | Avg                   | 301.05                  | 143.25                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 7440           | 52.67             | H            | 73.97 | -21.30 | Peak                  | 58.25                   | 111.31                 |              |
| 7440           | 32.67             | H            | 53.97 | -21.30 | Avg                   | 58.25                   | 111.31                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 9920           | 45.27             | H            | 73.97 | -28.70 | Peak                  | 57.50                   | 239.37                 |              |
| 9920           | 25.27             | H            | 53.97 | -28.70 | Avg                   | 57.50                   | 239.37                 |              |
|                |                   |              |       |        |                       |                         |                        |              |
| 12400          |                   |              |       |        |                       |                         |                        | No Emissions |
| 12400          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 14880          |                   |              |       |        |                       |                         |                        | No Emissions |
| 14880          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 17360          |                   |              |       |        |                       |                         |                        | No Emissions |
| 17360          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 19840          |                   |              |       |        |                       |                         |                        | No Emissions |
| 19840          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 22320          |                   |              |       |        |                       |                         |                        | No Emissions |
| 22320          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
| 24800          |                   |              |       |        |                       |                         |                        | No Emissions |
| 24800          |                   |              |       |        |                       |                         |                        | Detected     |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |
|                |                   |              |       |        |                       |                         |                        |              |



Title: Pre-Scan - FCC Class B  
File: Agilent - Pre-Scan - FCC Class B - 30 MHz to 1000 MHz - X-Axis.set  
Operator: Kyle Fujimoto  
EUT Type: Ecolink Wireless Door/Window Contact 2016  
EUT Condition: The EUT is continuously transmitting at the low channel - X-axis  
Comments: Company: Ecolink Intelligent Technology, Inc.  
Model: 4655BC0-R

9/27/2016 2:02:25 PM  
Sequence: Preliminary Scan



Title: Radiated Final - FCC Class B  
File: Agilent - Final Scan - FCC Class B - 30 MHz to 1000 MHz - X-Axis Worst Case.set  
Operator: Kyle Fujimoto  
EUT Type: Ecolink Wireless Door/Window Contact 2016  
EUT Condition: The EUT is continuously transmitting at the low channel - X-Axis  
Comments: Company: Ecolink Intelligent Technology, Inc.  
Model: 4655BC0-R  
X-Axis is Worst Case

9/27/2016 2:31:10 PM  
Sequence: Final Measurements

FCC Class B

| Freq<br>(MHz) | Pol | (PEAK) EMI<br>(dBμV/m) | (QP) EMI<br>(dBμV/m) | (PEAK) Margin<br>(dB) | (QP) Margin<br>(dB) | Limit<br>(dBμV/m) | Transducer<br>(dB) | Cable<br>(dB) | Ttbl Aql<br>(deq) | Twr Ht<br>(cm) |
|---------------|-----|------------------------|----------------------|-----------------------|---------------------|-------------------|--------------------|---------------|-------------------|----------------|
| 33.60         | H   | 32.15                  | 26.56                | -7.85                 | -13.44              | 40.00             | 24.21              | 0.34          | 242.25            | 207.25         |
| 37.00         | H   | 32.21                  | 26.83                | -7.79                 | -13.17              | 40.00             | 24.75              | 0.37          | 138.50            | 143.49         |
| 38.90         | V   | 32.42                  | 27.24                | -7.58                 | -12.76              | 40.00             | 25.21              | 0.39          | 68.50             | 175.07         |
| 40.20         | H   | 33.15                  | 27.27                | -6.85                 | -12.73              | 40.00             | 25.15              | 0.40          | 356.25            | 303.73         |
| 684.20        | H   | 36.13                  | 31.10                | -9.87                 | -14.90              | 46.00             | 24.09              | 2.24          | 202.25            | 111.07         |
| 687.80        | H   | 36.13                  | 30.99                | -9.87                 | -15.01              | 46.00             | 24.07              | 2.25          | 225.00            | 191.25         |

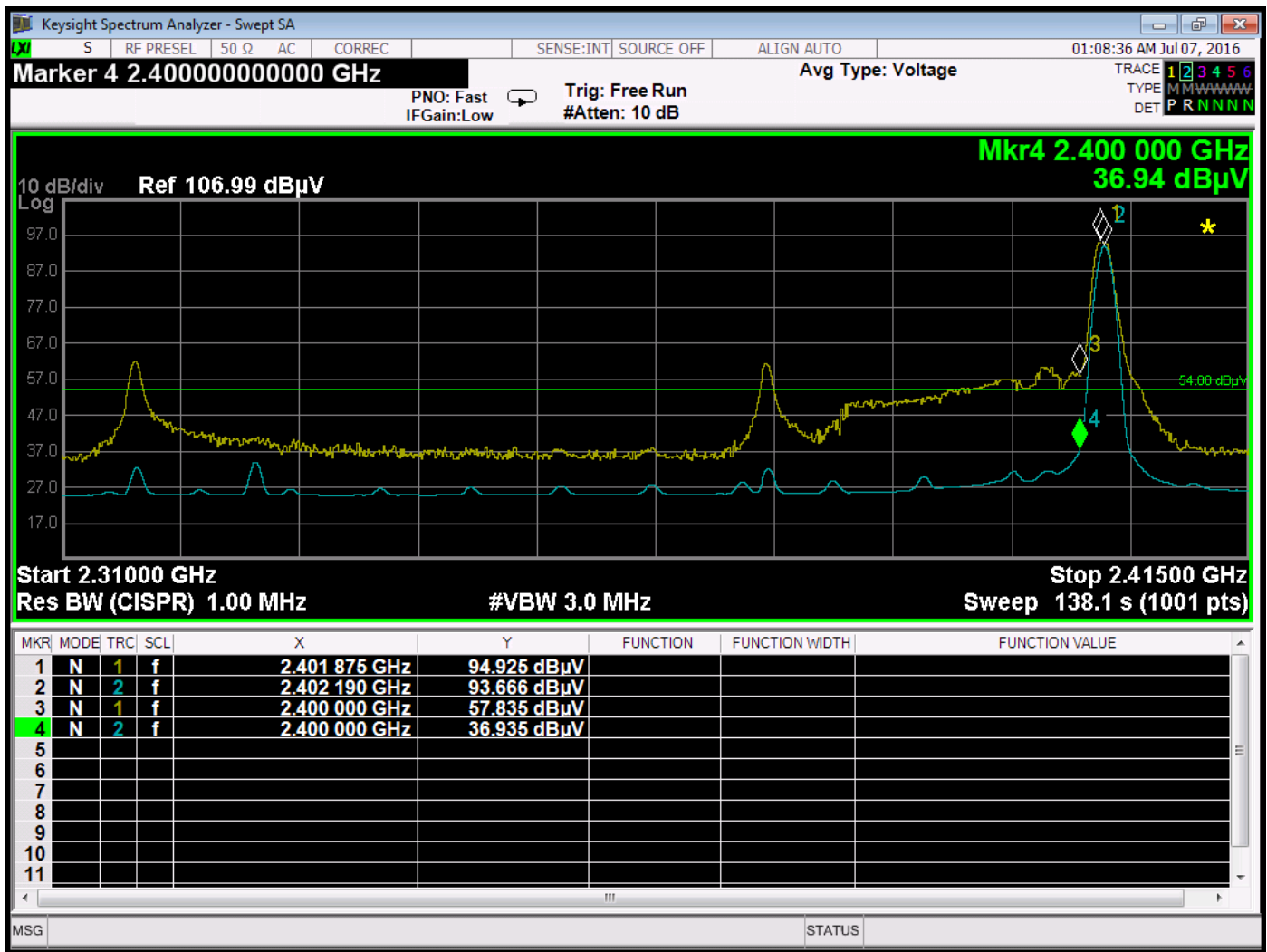


***BAND EDGES  
DATA SHEETS***

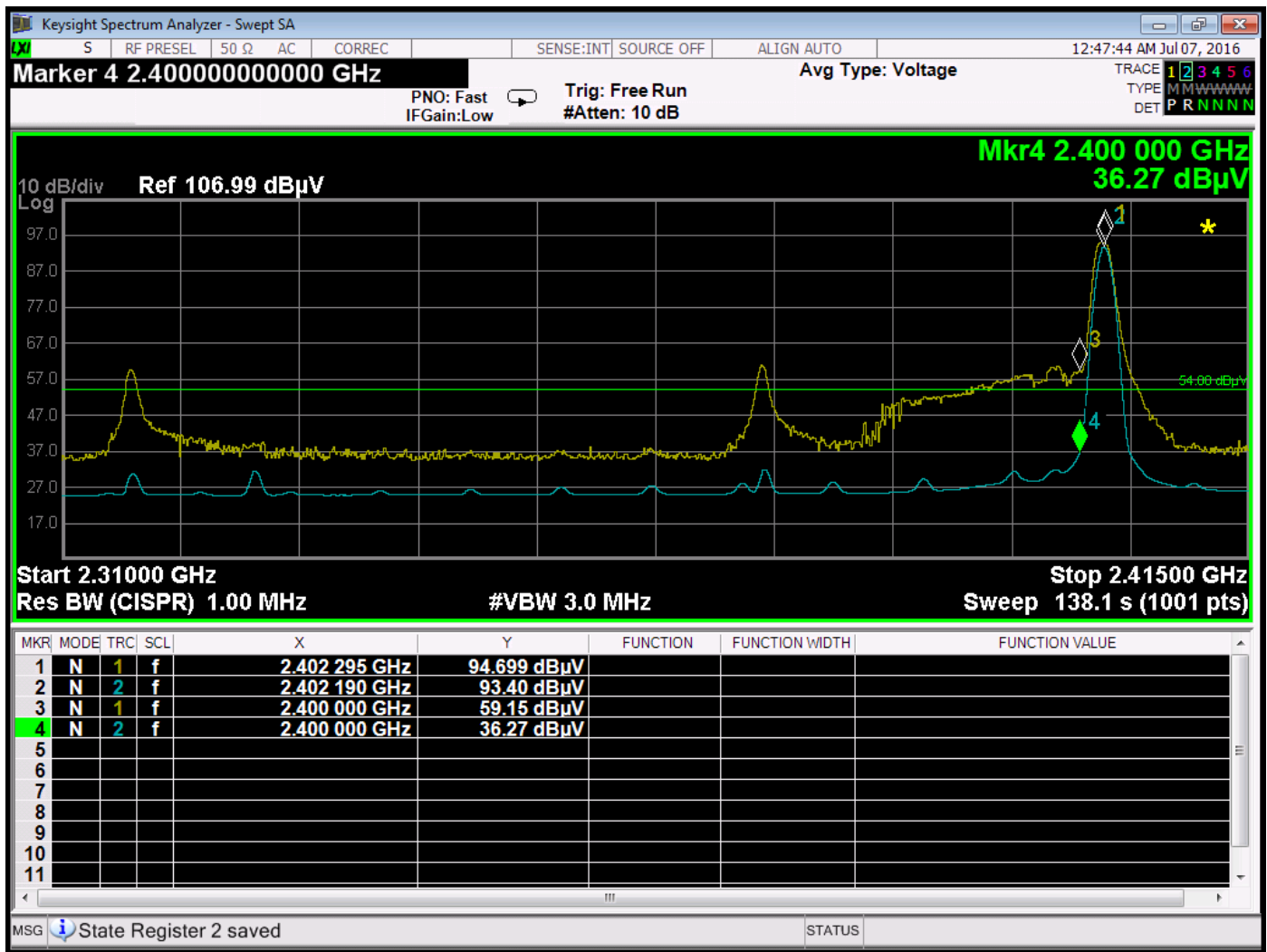




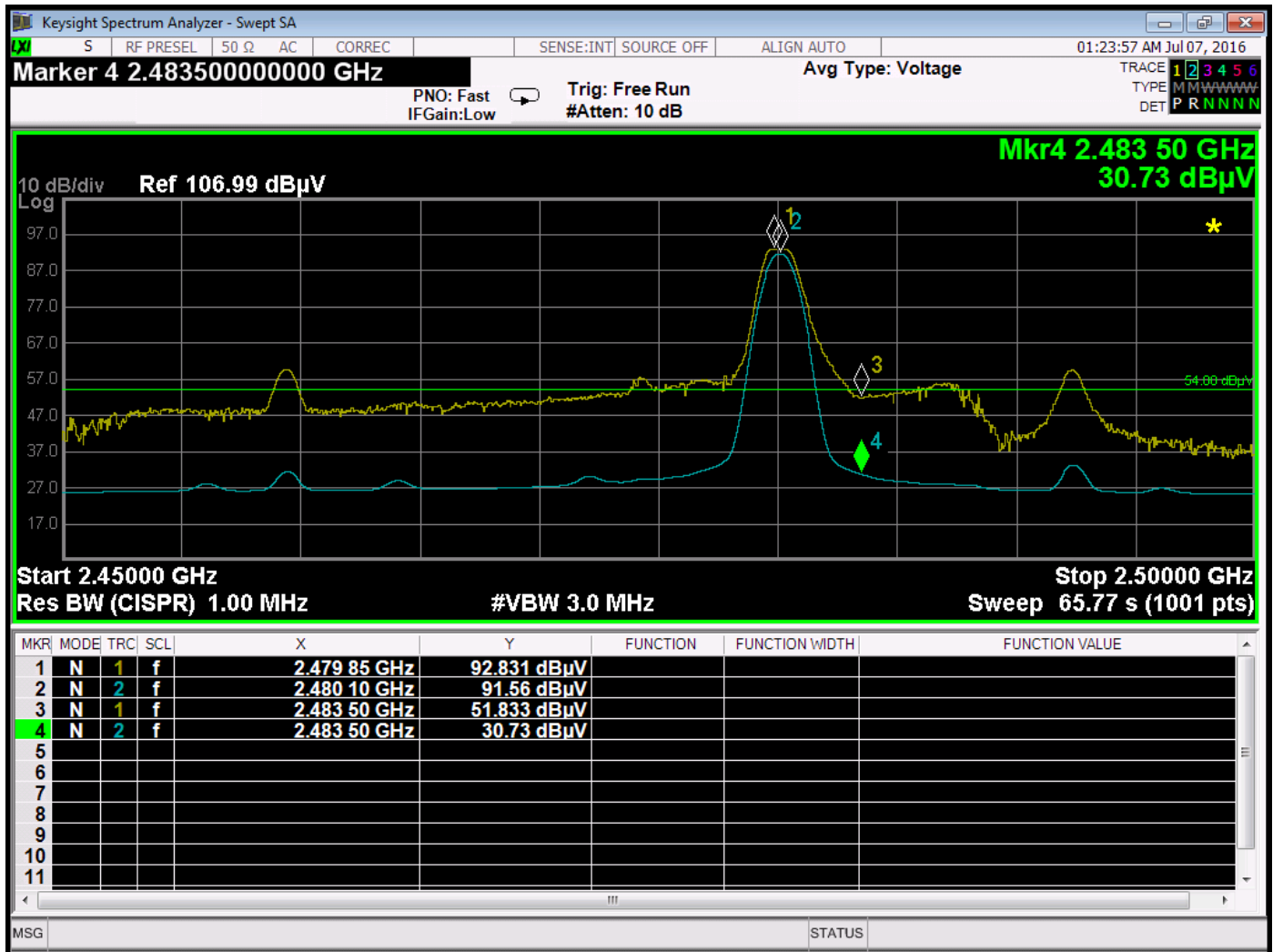




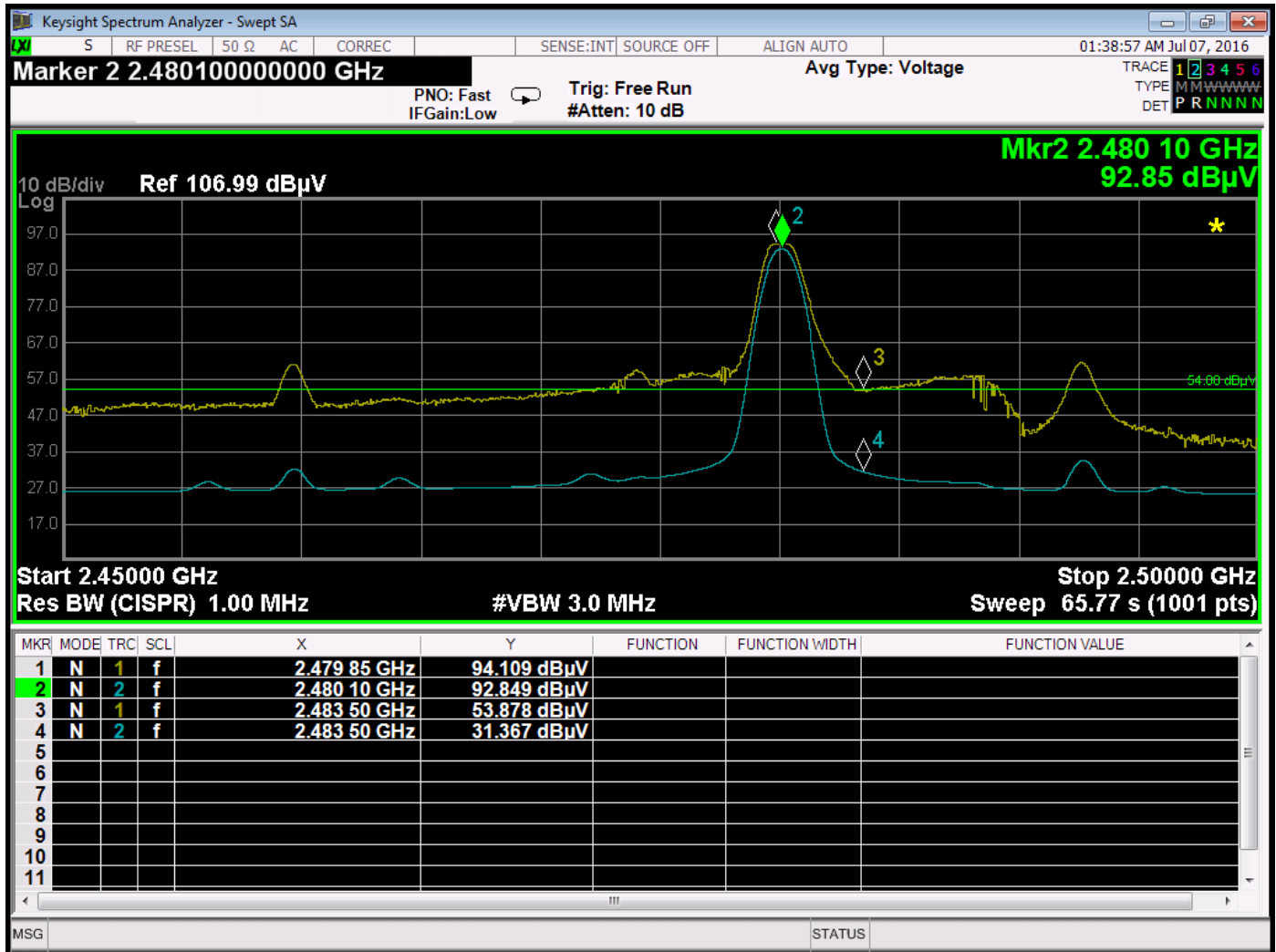
Band Edge – Vertical Polarization – Low Channel – Model: GYM3300 – Z-Axis Worst Case



Band Edge – Horizontal Polarization – Low Channel – Model: GYM3300 – X-Axis Worst Case



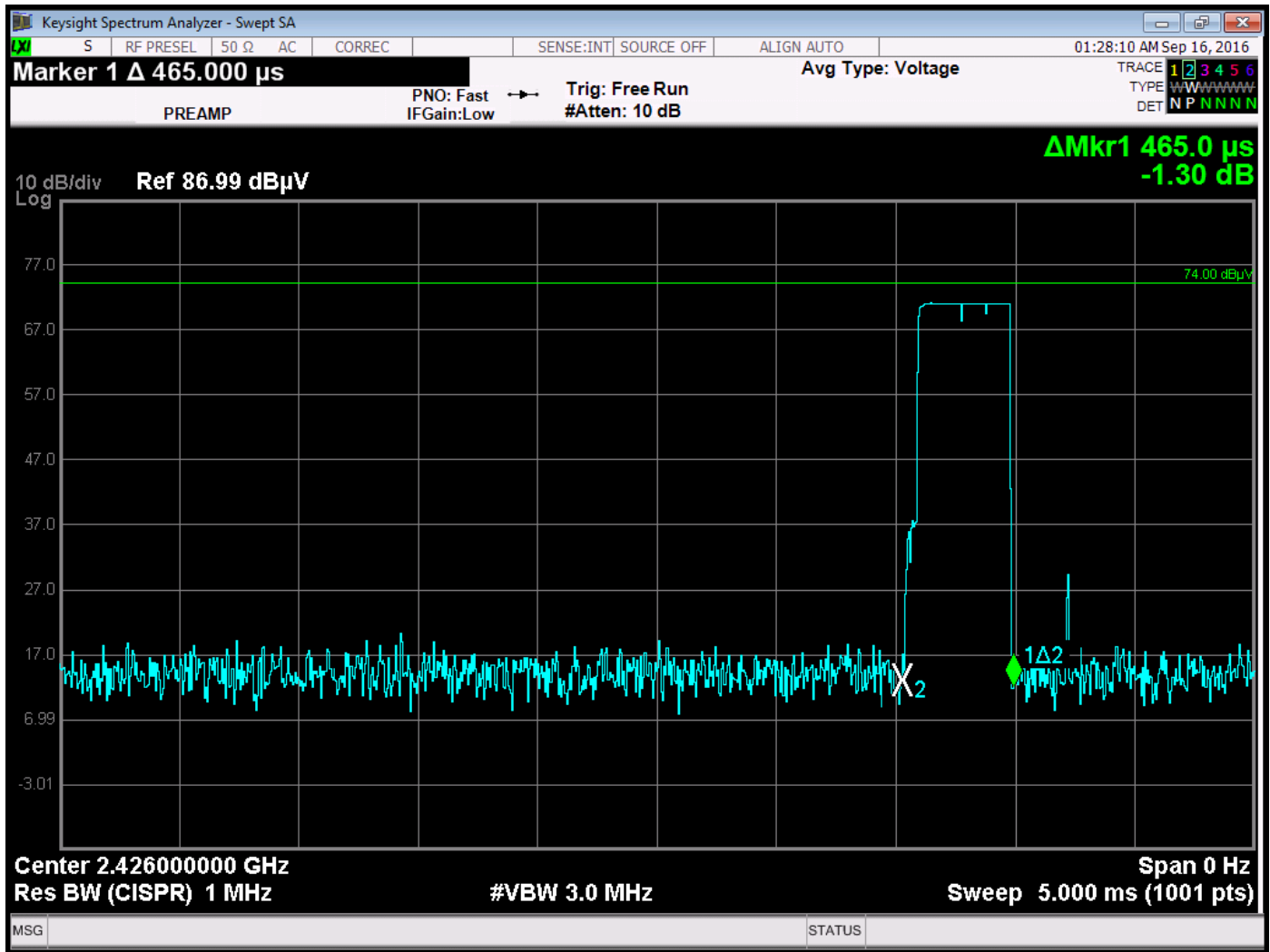
Band Edge – Vertical Polarization – High Channel – Model: GYM3300 – Z-Axis Worst Case



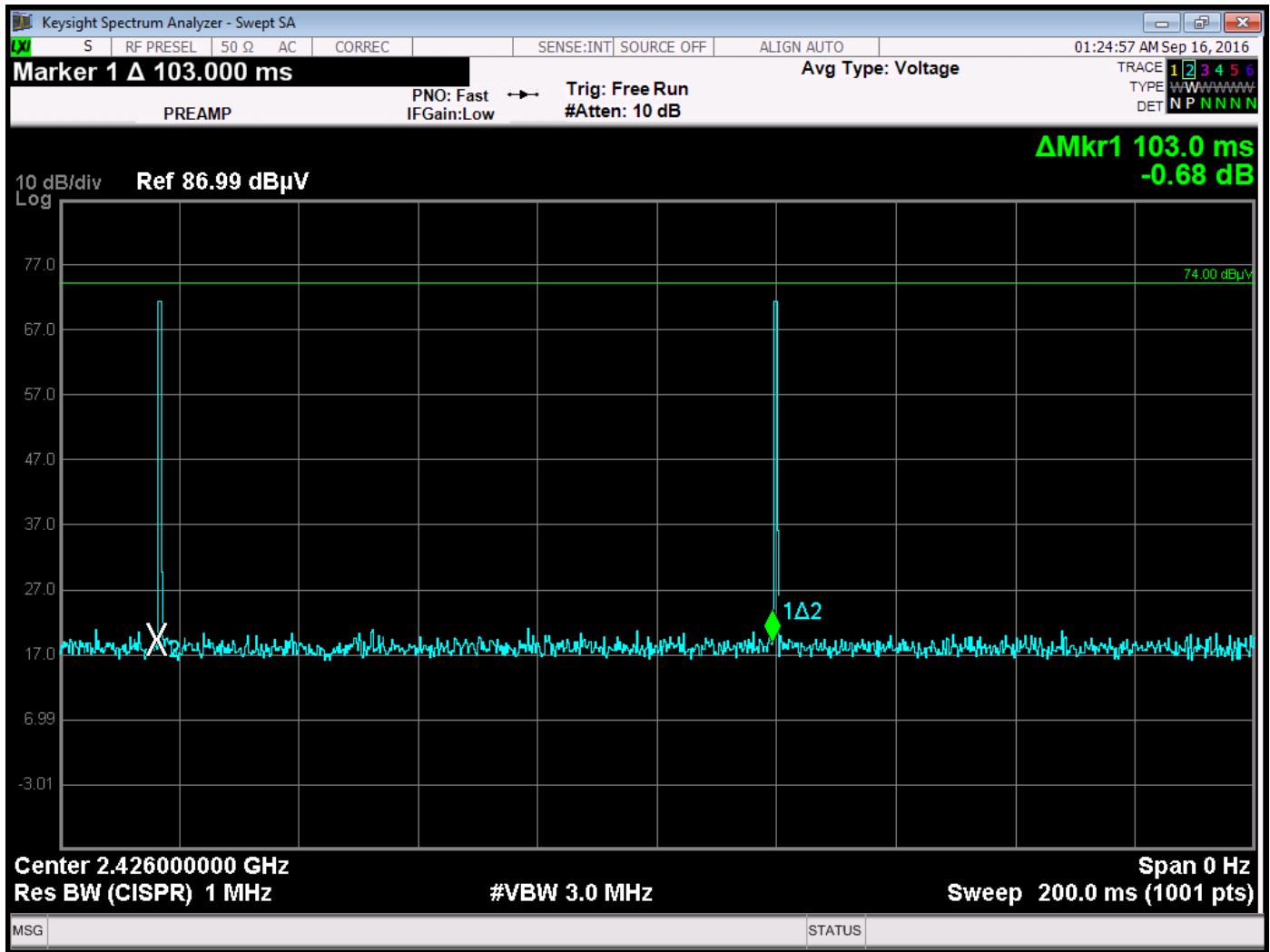
Band Edge – Horizontal Polarization – High Channel – Model: GYM3300 – X-Axis Worst Case



***DUTY CYCLE  
DATA SHEETS***

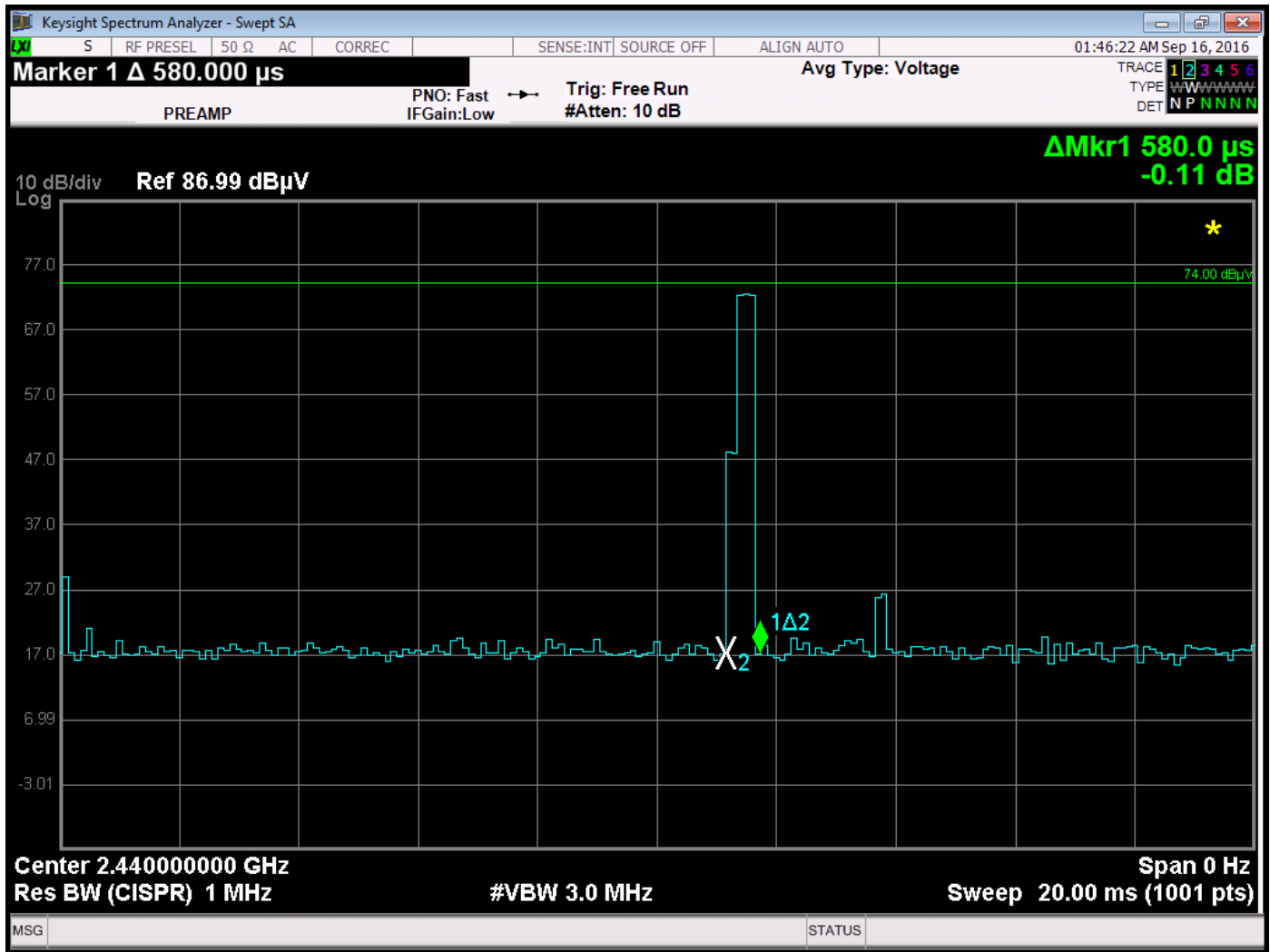


Time of One Pulse = 465  $\mu$ s – Advertising Mode

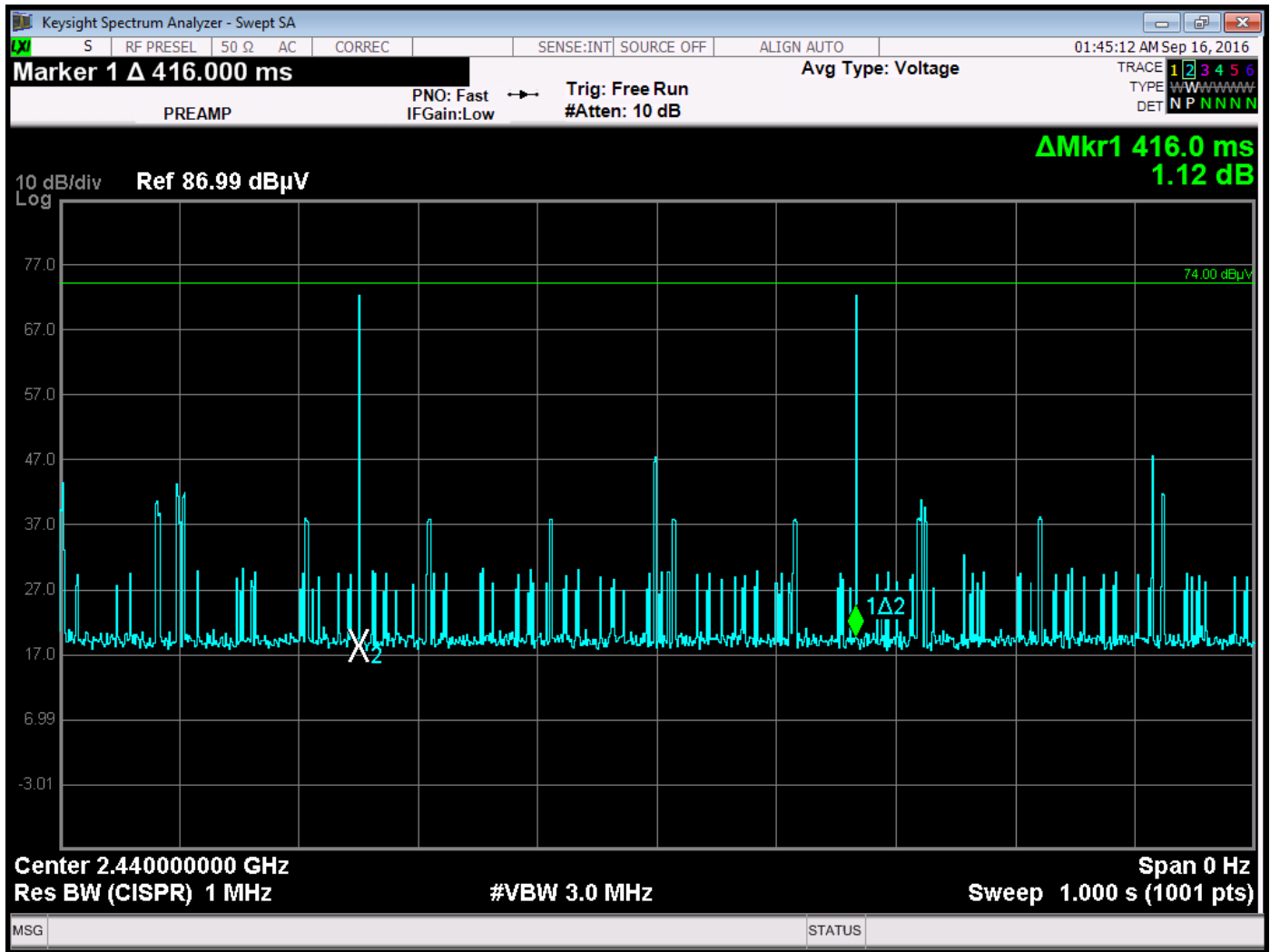


Time Between Pulses = 103 ms – Advertising Mode  
 Total Duty Cycle = (465 us) / 100 ms = 0.465%  
 The maximum peak to average ratio of -20 dB can be utilized.

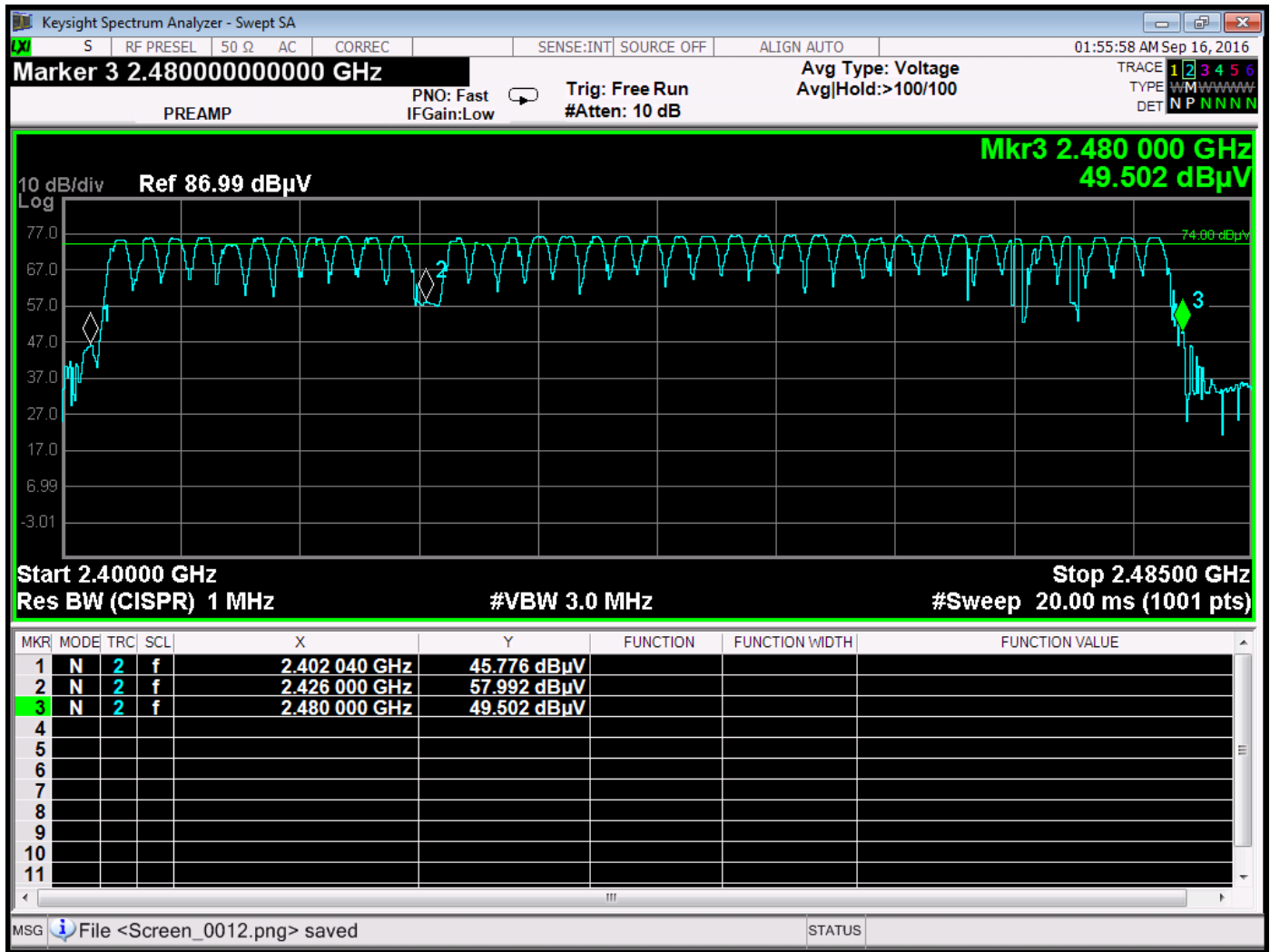




Time of One Pulse = 580  $\mu$ s – Data Mode



Time Between Pulses = 103 ms – Data Mode  
Total Duty Cycle = (580 us) / 100 ms = 0.580%  
The maximum peak to average ratio of -20 dB can be utilized.



Proof that 2402 MHz, 2426 MHz, and 2480 MHz are not active and that there is 37 channels for data mode.