

**FCC PART 15, SUBPART B and C  
TEST REPORT***for***SINGLE INTELISOCKET****MODEL: IS-301**

Prepared for

**IBIS NETWORKS  
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DATE: MAY 4, 2016

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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: Single IntelliSocket  
Model: IS-301  
S/N: N/A

Product Description: The EUT is a smart socket which meters plug load energy usage and provides device on/off capability.

Modifications: The EUT was not modified during the testing.

Customer: IBIS Networks  
828 Bishop Street, Ste 1601  
Honolulu, Hawaii 96813

Test Dates: February 1, 4, 5 and 16, 2016

Test Specifications: Emissions requirements  
CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.209, and 15.247

Test Procedure: ANSI C63.10 and ANSI C63.4

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

## SUMMARY OF TEST RESULTS

| TEST | DESCRIPTION                                                                                             | RESULTS                                                                                                                                                  |
|------|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | Conducted RF Emissions, 150 kHz – 30 MHz                                                                | The EUT complies with the <b>Class B</b> limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, section 15.207. |
| 2    | Spurious Radiated RF Emissions, 30 MHz – 1000 MHz                                                       | The EUT complies with the <b>Class B</b> limits of CFR Title 47, Part 15 Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, section 15.209   |
| 3    | Spurious Radiated RF Emissions, 10 kHz – 30 MHz and 1000 MHz – 25000 MHz                                | The EUT complies with the <b>Class B</b> limits of CFR Title 47, Part 15, Subpart B; and CFR Title 47, Part 15, Subpart C, section 15.247(d)             |
| 4    | Fundamental and Emissions produced by the intentional radiator in non-restricted bands, 10 kHz – 25 GHz | Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247(d)                                                           |
| 5    | Emissions produced by the intentional radiator in restricted bands, 10 kHz – 25 GHz                     | Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.205, 15.209, and section 15.247 (d)                              |
| 6    | DTS Bandwidth                                                                                           | Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (a)(2)                                                       |
| 7    | Peak Power Output                                                                                       | Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (b)(3)                                                       |
| 8    | RF Conducted Antenna Test                                                                               | Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247 (d)                                                          |
| 9    | Peak Power Spectral Density from the Intentional Radiator to the Antenna                                | Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247 (e)                                                          |

**1. PURPOSE**

This document is a qualification test report based on the emissions tests performed on the Single IntelliSocket, Model: IS-301. The emissions measurements were performed according to the measurement procedure described in ANSI C63.10 and ANSI C63.4. 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 15.247.



## 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

IBIS Networks

Michael Pfeffer CEO

Compatible Electronics Inc.

Kyle Fujimoto Test Engineer  
James Ross Test Engineer

### 2.4 Date Test Sample was Received

The test sample was received on January 28, 2016.

### 2.5 Disposition of the Test Sample

The test sample has not been returned to IBIS Networks 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     |
| CML  | Corrected Meter Limit                |
| LISN | Line Impedance Stabilization Network |
| N/A  | Not Applicable                       |

### 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                                              |
| ANSI C63.4<br>2014                    | Methods of measurement of radio-noise emissions from low-voltage<br>electrical and electronic equipment in the range of 9 kHz to 40 GHz |
| ANSI C63.10<br>2013                   | American National Standard for Testing Unlicensed Wireless Devices                                                                      |
| FCC Title 47,<br>Part 15<br>Subpart B | FCC Rules - Radio frequency devices (including digital devices) –<br>Unintentional Radiators                                            |

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

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

The Single IntelliSocket Model: IS-301 (EUT) was connected to a lampstand. The EUT was continuously transmitting.

The EUT was tested in the X, Y and Z axis. 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 voltage was varied  $\pm 15\%$ ; the transmitting signal amplitude and frequency did not vary.

It was determined that the emissions were at their highest level when the EUT was operating in the above configuration. The final emissions data was taken in this mode of operation and any cables were maximized. All initial investigations were performed with the measurement receiver in manual mode scanning the frequency range continuously. Photographs of the test setup are in Appendix D of this report.

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

###### **Cable 1**

This is a 1-meter unshielded cable connecting the lampstand to the EUT. The cable has a 2-prong male AC connector at the EUT end and is hard wired into the lampstand.

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

| EQUIPMENT           | MANUFACTURER  | MODEL NUMBER | SERIAL NUMBER | FCC ID   |
|---------------------|---------------|--------------|---------------|----------|
| SINGLE INTELISOCKET | IBIS NETWORKS | IS-301       | N/A           | 2AECN301 |
| LAMPSTAND           | N/A           | N/A          | N/A           | N/A      |

## 5.2 Emissions Test Equipment

| EQUIPMENT TYPE                                       | MANU-FACTURER              | MODEL NUMBER | SERIAL NUMBER | CALIBRATION DATE  | CAL. CYCLE |
|------------------------------------------------------|----------------------------|--------------|---------------|-------------------|------------|
| <b>RF RADIATED EMISSIONS TEST EQUIPMENT</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       | MY51100115    | April 3, 2015     | 1 Year     |
| CombiLog Antenna                                     | Com-Power                  | AC-220       | 61060         | September 3, 2015 | 1 Year     |
| Preamplifier                                         | Com-Power                  | PA-118       | 551024        | March 6, 2015     | 2 Year     |
| Preamplifier                                         | Com-Power                  | PA-840       | 711013        | May 13, 2014      | 2 Year     |
| Loop Antenna                                         | Com-Power                  | AL-130       | 17089         | February 6, 2015  | 2 Year     |
| Horn Antenna                                         | Com-Power                  | AH-118       | 071175        | February 26, 2014 | 2 Year     |
| Horn Antenna                                         | Com-Power                  | AH-826       | 0071957       | 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        |
| <b>RF CONDUCTED EMISSIONS TEST EQUIPMENT – LAB A</b> |                            |              |               |                   |            |
| Shield Room Test                                     | Compatible Electronics     | 11CD         | N/A           | N/A               | N/A        |
| LISN                                                 | Com-Power                  | LI-215       | 12082         | June 9, 2015      | 1 Year     |
| LISN                                                 | Com-Power                  | LI-215       | 12090         | June 9, 2015      | 1 Year     |
| Transient Limiter                                    | Com-Power                  | 252A910      | 1             | October 14, 2015  | 1 Year     |
| Monitor                                              | Hewlett Packard            | D5258A       | TW74500641    | N/A               | N/A        |
| Computer                                             | Hewlett Packard            | 4530         | US91912319    | N/A               | N/A        |
| Spectrum Analyzer – Main Section                     | Hewlett Packard            | 8566B        | 3638A08768    | May 27, 2015      | 1 Year     |
| Spectrum Analyzer – Display Section                  | Hewlett Packard            | 85662A       | 2648A15285    | May 27, 2015      | 1 Year     |
| Quasi-Peak Adapter                                   | Hewlett Packard            | 85650A       | 2430A00424    | May 27, 2015      | 1 Year     |

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## **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 grounded via the third wire safety ground in the AC power plug.

## **7. CHARACTERISTICS OF THE TRANSMITTER**

### **7.1 Channel Description and Frequencies**

The lowest frequency the EUT will use is 2405 MHz and the highest frequency the EUT will use is 2480 MHz. The EUT will be able to be tuned every 5 MHz between the lowest frequency and the highest frequency.

### **7.2 Antenna Gain**

The EUT utilizes a chip antenna.

## **8. TEST PROCEDURES**

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

### **8.1 RF Emissions**

#### **8.1.1 Conducted Emissions Test**

The spectrum analyzer was used as a measuring meter. The data was collected with the spectrum analyzer in the peak detect mode with the "Max Hold" feature activated. The quasi-peak was used only where indicated in the data sheets. A transient limiter was used for the protection of the spectrum analyzer input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the spectrum analyzer. 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 C63.4. 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 the Compatible Electronics conducted emissions software in several overlapping sweeps by running the spectrum analyzer at a minimum scan rate of 10 seconds per octave. The final qualification data is located in Appendix E.

#### **Test Results:**

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.207.

### 8.1.2 Radiated Emissions (Spurious and Harmonics) Test

The EMI Receiver was used as the measuring meter. Below 1 GHz, a built-in, internal preamplifier was used to increase the sensitivity of the instrument. At frequencies above 1 GHz, external preamplifiers were used. The Com Power Microwave Preamplifier Model: PA-118 was used for frequencies above from 1 GHz to 18 GHz, and the Com Power Microwave Preamplifier Model: PA-840 was used for frequencies above 18 GHz. 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. A quasi-peak reading was taken only for those readings, which are marked accordingly on the data sheets.

The frequencies above 1 GHz were averaged by using a duty cycle correction factor.

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

| FREQUENCY RANGE   | EFFECTIVE MEASUREMENT BANDWIDTH | TRANSDUCER       |
|-------------------|---------------------------------|------------------|
| 9 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     |

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. 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.

#### Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, Sections 15.209 and 15.247 (d) for radiated emissions. Please see Appendix E for the data sheets.



## 8.2 DTS Bandwidth

The DTS Bandwidth was measured using the EMI Receiver. The bandwidth was measured using a direct connection from the RF output of the EUT. The following steps were performed for measuring the DTS Bandwidth.

1. Set RBW = 100 kHz
2. Set the video bandwidth (VBW) to equal or greater than 3 times the RBW
3. Detector = Peak
4. Trace Mode = Max Hold
5. Sweep = Auto Couple
6. Allow the trace to stabilize
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

### Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (a)(2).

## 8.3 Peak Output Power

The Peak Output Power was measured using the EMI Receiver. The peak output power was measured using a direct connection from the RF output of the EUT. The resolution bandwidth was 8 MHz and the video bandwidth was 50 MHz. The cable loss was also added back into the reading using the reference level offset. The Peak Output Power was then taken.

### Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (b)(3).

## 8.4 Emissions in Non-Restricted Bands

The emissions in the non-restricted frequency bands measurements were performed using the EMI receiver directly connected to the EUT. The reference level was established by setting the instrument center frequency to DTS channel center frequency. The span was set to  $\geq 1.5$  times the DTS bandwidth. The RBW was set to 100 kHz and the VBW was set to 300 kHz. A peak detector was used with sweep set to auto. A max hold trace was used and allowed to fully stabilize. The peak marker function was used to determine the level and 20 dB below that was the reference level. For emission level measurement, the center frequency and span were set to encompass the frequency range to be measured. The RBW was set to 100 kHz and the VBW was set to 300 kHz. A peak detector was used with a sweep time set to auto. The number of measurement points were greater than the span/RBW. A max hold trace was used and allowed to fully stabilize. The peak marker function was used to determine the maximum amplitude level. The final qualification data sheets are located in Appendix E.

### Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (d).

## 8.5 RF Band Edges

The RF band edges were taken at 2390 MHz when the EUT was on the low channel and 2483.5 MHz when the EUT was on the high channel using the EMI Receiver. A preamplifier was used to boost the signal level, with the plots being taken at a 3 meter test distance. The radiated emissions test procedure as describe in section 8.1.2 of this test report was used to maximize the emission.

### Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (d). The RF power at the restricted bands closest to the band edges at 2390 MHz and 2483.5 MHz also meet the limits of section 15.209. Please see the data sheets located in Appendix E.

## 8.6 Spectral Density Test

The spectrum density output was measured using the EMI Receiver. The spectral density output was measured using a direct connection from the RF out on the EUT into the input of the EMI Receiver. The following steps were performed for measuring the spectral density.

1. Set analyzer center frequency to DTS channel center frequency
2. Set the span to 1.5 times the DTS bandwidth.
3. Set the RBW to 3 kHz  $\leq$  RBW  $\leq$  100 kHz
4. Set the VBW  $\geq$  3 X RBW
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Allow trace to fully stabilize
9. Use the peak marker function to determine the maximum amplitude level within the RBW
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat..

### Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (e).

## 9. CONCLUSIONS

The Single IntelliSocket, Model: IS-301, as tested, meets all of the specification limits defined in FCC Title 47, Part 15, Subpart B, and Subpart C, sections 15.205, 15.209, 15.207, and 15.247.



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

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## LABORATORY ACCREDITATIONS AND RECOGNITIONS



For US, Canada, Australia/New Zealand, Japan, Taiwan, Korea, and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025. Please follow the link to the NIST/NVLAP site for each of our facilities' NVLAP certificate and scope of accreditation

**NVLAP listing links**

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.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).

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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 15.247 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.

The EUT was not modified during the testing.





**APPENDIX C**

***ADDITIONAL MODELS COVERED  
UNDER THIS REPORT***

## **ADDITIONAL MODELS COVERED UNDER THIS REPORT**

USED FOR THE PRIMARY TEST

Single IntelSocket  
Model: IS-301  
S/N: N/A

There were no additional models covered under this report.

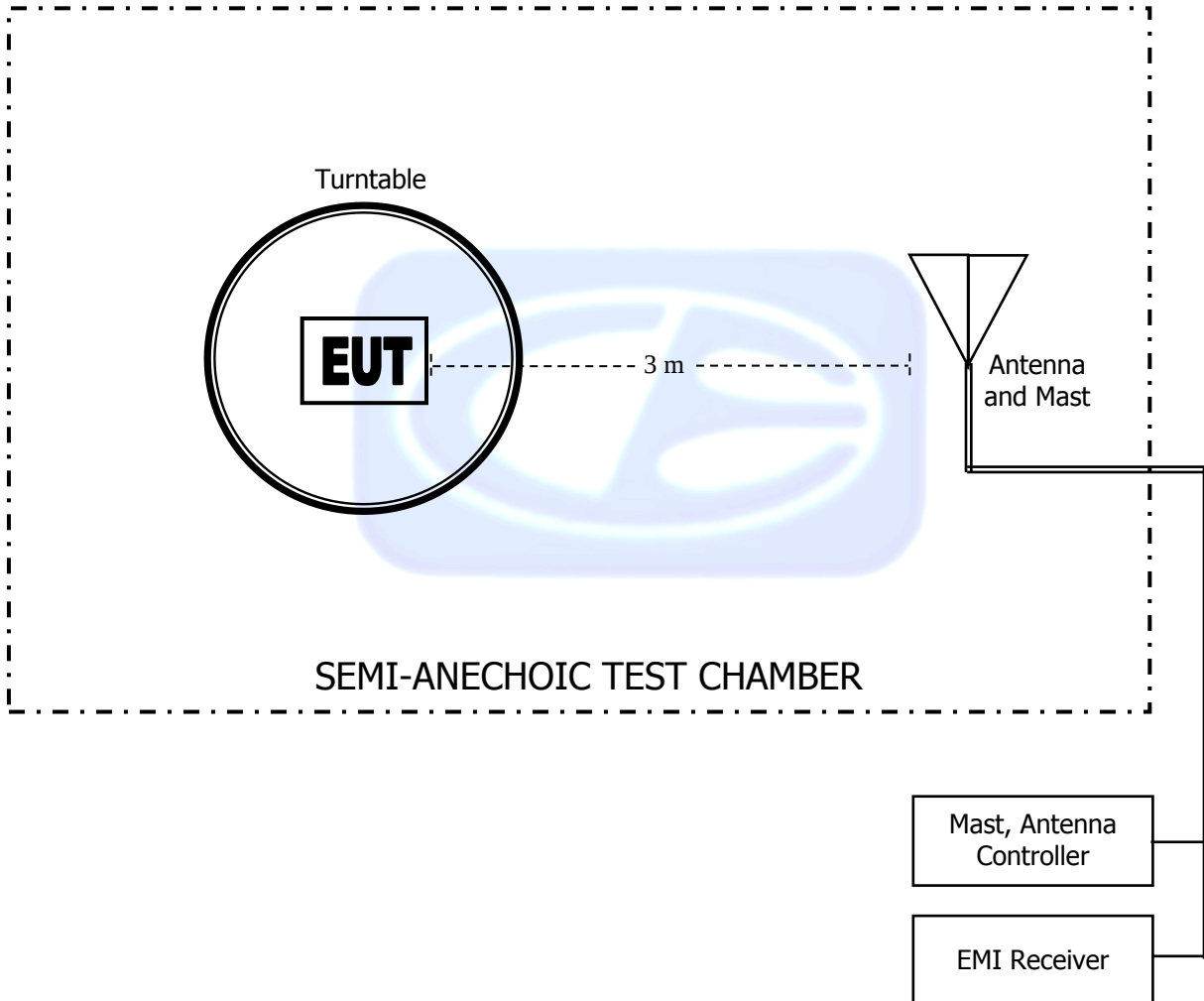




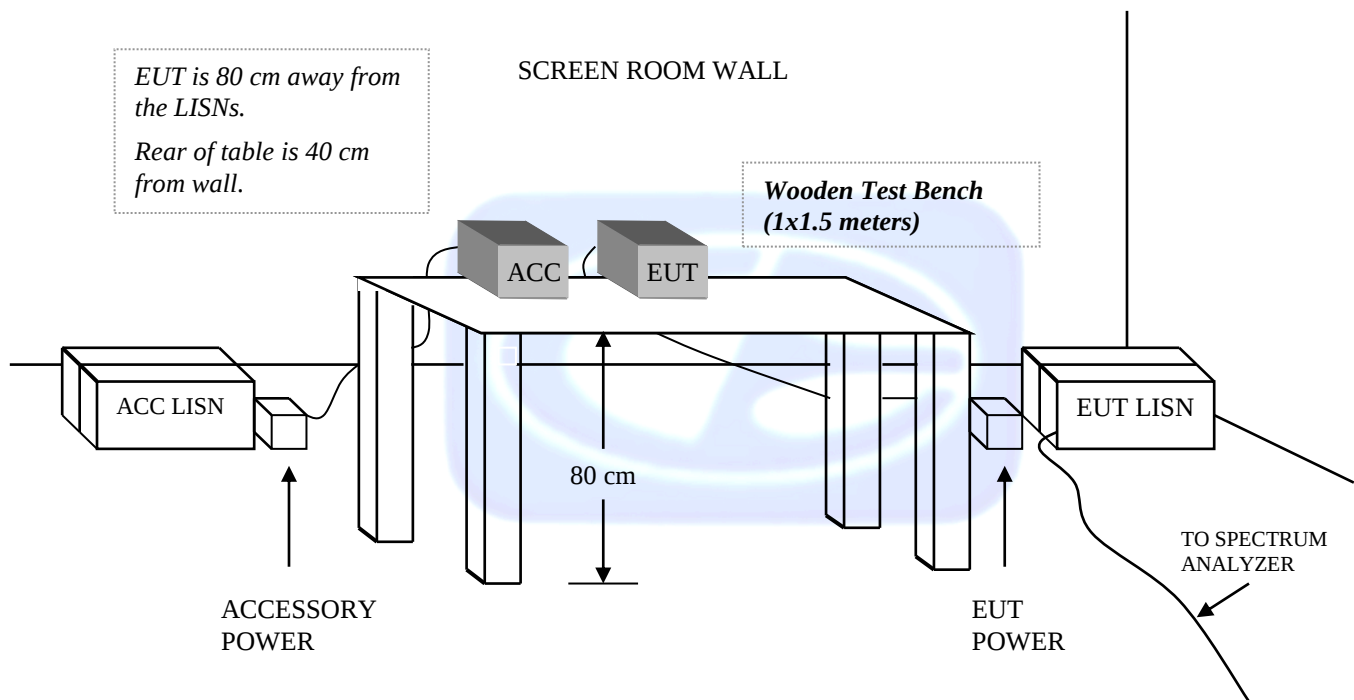
**APPENDIX D**

***DIAGRAMS AND CHARTS***

**FIGURE 1: LAYOUT OF THE SEMI-ANECHOIC TEST CHAMBER**



**FIGURE 2: CONDUCTED EMISSIONS TEST SETUP**



**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, 2014**

| <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> | <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> |
|----------------------------|------------------------|----------------------------|------------------------|
| 1.0                        | 24.23                  | 10.0                       | 38.43                  |
| 1.5                        | 25.84                  | 10.5                       | 40.19                  |
| 2.0                        | 28.14                  | 11.0                       | 40.49                  |
| 2.5                        | 29.51                  | 11.5                       | 41.39                  |
| 3.0                        | 31.20                  | 12.0                       | 42.02                  |
| 3.5                        | 32.17                  | 12.5                       | 43.30                  |
| 4.0                        | 31.40                  | 13.0                       | 42.77                  |
| 4.5                        | 31.86                  | 13.5                       | 40.18                  |
| 5.0                        | 34.82                  | 14.0                       | 42.59                  |
| 5.5                        | 34.38                  | 14.5                       | 41.74                  |
| 6.0                        | 36.31                  | 15.0                       | 41.84                  |
| 6.5                        | 34.81                  | 15.5                       | 38.48                  |
| 7.0                        | 37.48                  | 16.0                       | 39.52                  |
| 7.5                        | 36.98                  | 16.5                       | 37.85                  |
| 8.0                        | 36.66                  | 17.0                       | 41.33                  |
| 8.5                        | 38.47                  | 17.5                       | 44.96                  |
| 9.0                        | 37.22                  | 18.0                       | 48.50                  |
| 9.5                        | 37.86                  |                            |                        |

**COM-POWER PA-118****PREAMPLIFIER****S/N: 551024****CALIBRATION DATE: MARCH 6, 2015**

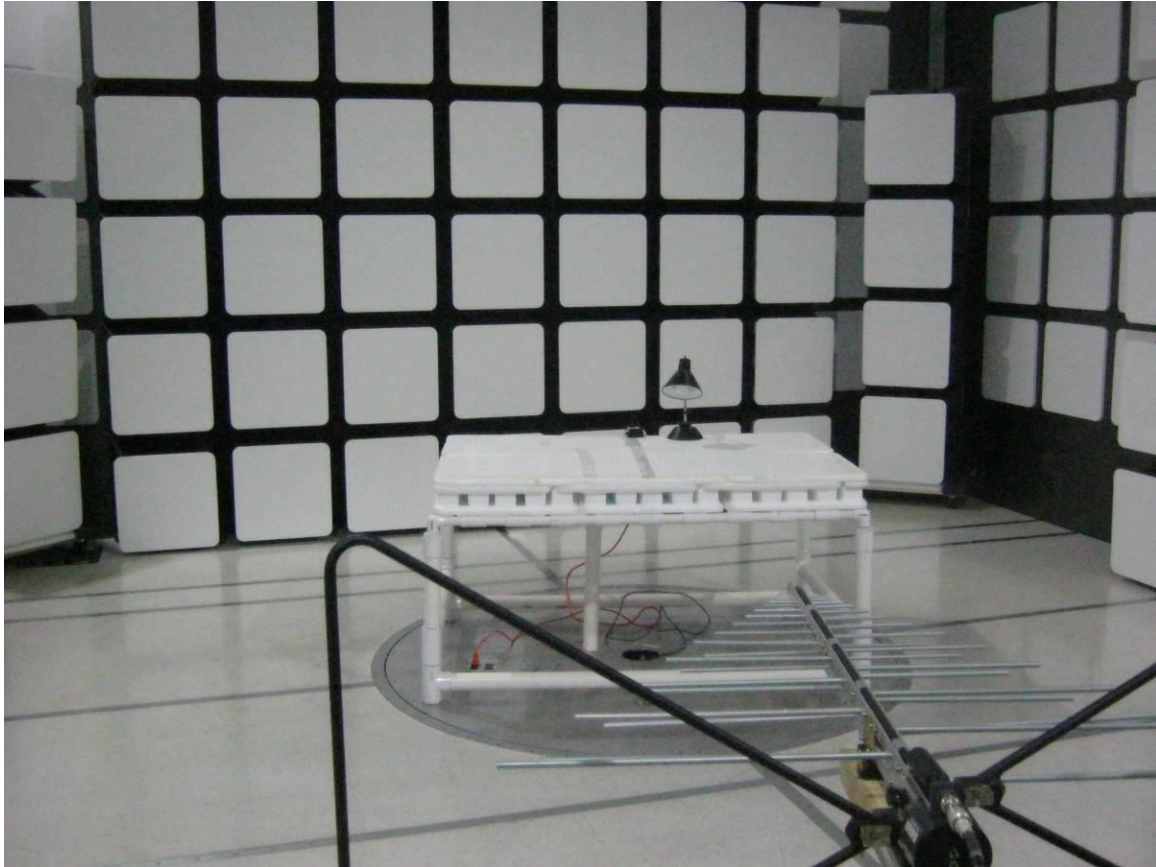
| <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> | <b>FREQUENCY<br/>(GHz)</b> | <b>FACTOR<br/>(dB)</b> |
|----------------------------|------------------------|----------------------------|------------------------|
| 1.0                        | 39.76                  | 6.0                        | 38.77                  |
| 1.1                        | 40.46                  | 6.5                        | 38.46                  |
| 1.2                        | 40.05                  | 7.0                        | 38.27                  |
| 1.3                        | 40.58                  | 7.5                        | 38.77                  |
| 1.4                        | 39.50                  | 8.0                        | 39.25                  |
| 1.5                        | 39.92                  | 8.5                        | 38.63                  |
| 1.6                        | 40.40                  | 9.0                        | 39.58                  |
| 1.7                        | 40.10                  | 9.5                        | 42.12                  |
| 1.8                        | 40.49                  | 10.0                       | 38.53                  |
| 1.9                        | 38.86                  | 11.0                       | 40.21                  |
| 2.0                        | 41.53                  | 12.0                       | 41.15                  |
| 2.5                        | 41.05                  | 13.0                       | 40.51                  |
| 3.0                        | 40.29                  | 14.0                       | 40.32                  |
| 3.5                        | 40.82                  | 15.0                       | 39.47                  |
| 4.0                        | 40.88                  | 16.0                       | 39.88                  |
| 4.5                        | 41.37                  | 17.0                       | 39.79                  |
| 5.0                        | 40.73                  | 18.0                       | 40.61                  |
| 5.5                        | 39.05                  |                            |                        |

**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, 2014**

| <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                  |

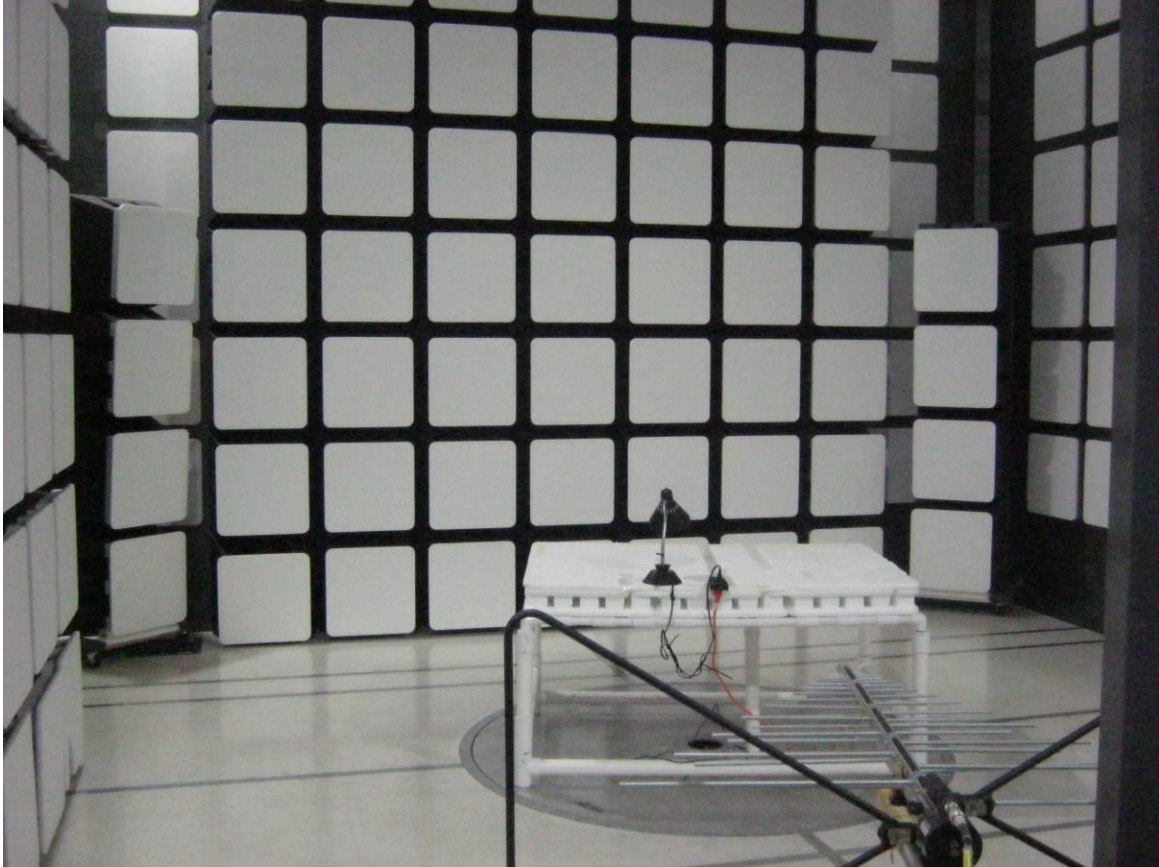


**FRONT VIEW**

**IBIS NETWORKS  
SINGLE INTELISOCKET  
MODEL: IS-301**

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

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

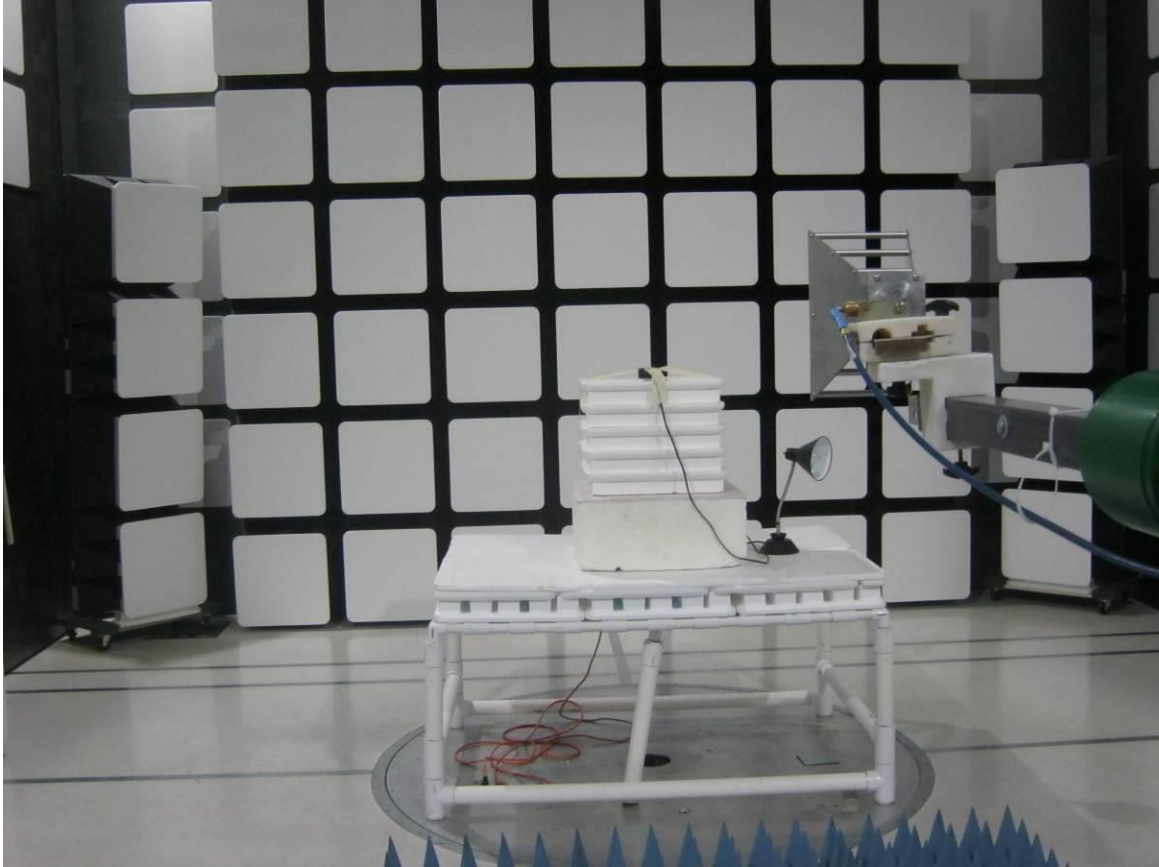


**REAR VIEW**

**IBIS NETWORKS  
SINGLE INTELISOCKET  
MODEL: IS-301**

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

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

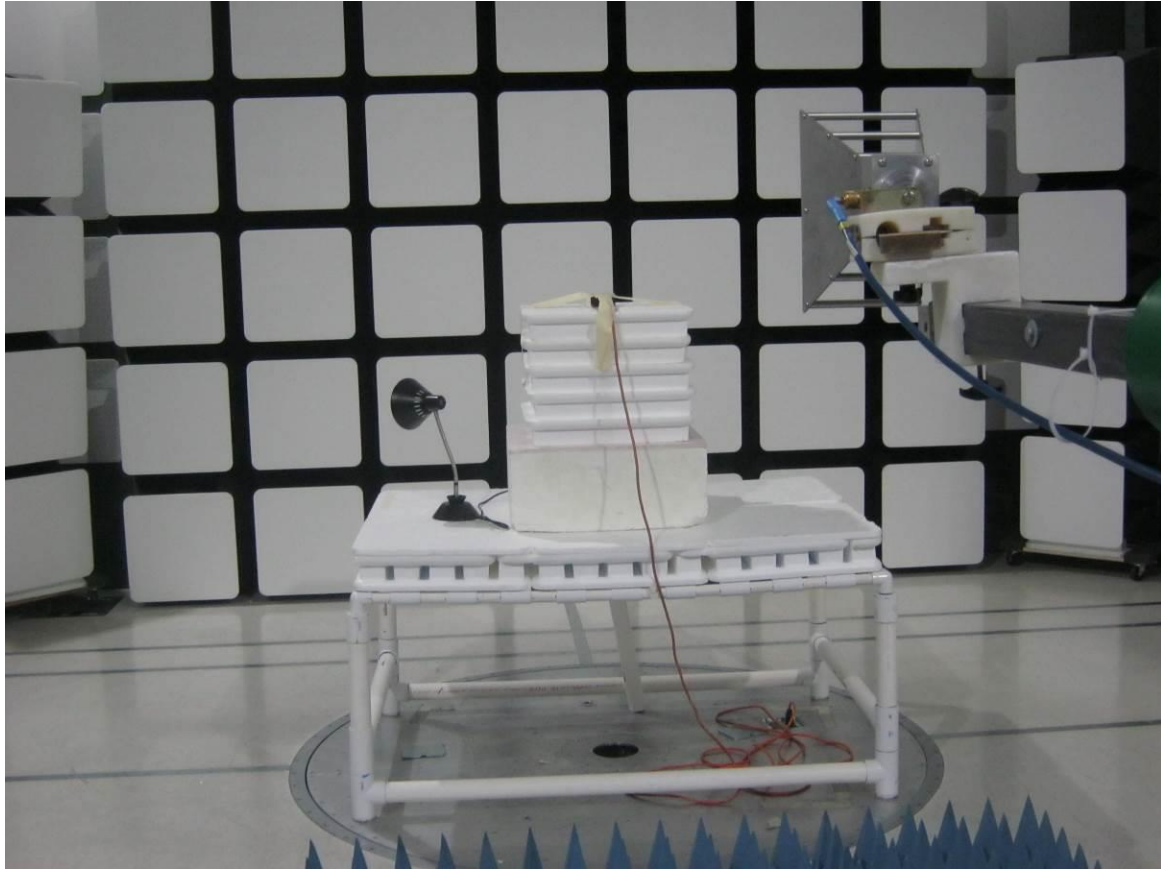


**FRONT VIEW**

IBIS NETWORKS  
SINGLE INTELISOCKET  
MODEL: IS-301

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

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



**REAR VIEW**

IBIS NETWORKS  
SINGLE INTELISOCKET  
MODEL: IS-301

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

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



**FRONT VIEW**

**IBIS NETWORKS  
SINGLE INTELISOCKET  
MODEL: IS-301**

**FCC SUBPART B AND C – CONDUCTED EMISSIONS**

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



**REAR VIEW**

IBIS NETWORKS  
SINGLE INTELISOCKET  
MODEL: IS-301

FCC SUBPART B AND C – CONDUCTED EMISSIONS

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



**APPENDIX E**

***DATA SHEETS***



***RADIATED EMISSIONS  
DATA SHEETS***

**FCC 15.247**

IBIS Networks

Single IntelliSocket

Model: IS-301

Configuration: Continuously Transmitting

**2405 MHz**
**Transmit Mode - X-Axis**

Date: 02/01/2016

Lab: D

Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4810           | 60.17           | V            | 74.00 | -13.83 | Peak                  | 32.50                   | 178.08                 |              |
| 4810           | 40.17           | V            | 54.00 | -13.83 | Peak                  | 32.50                   | 178.08                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7215           | 66.18           | V            | 74.00 | -7.82  | Peak                  | 120.00                  | 203.40                 |              |
| 7215           | 46.18           | V            | 54.00 | -7.82  | Avg                   | 120.00                  | 203.40                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9620           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9620           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 12025          |                 |              |       |        |                       |                         |                        | No Emissions |
| 12025          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 14430          |                 |              |       |        |                       |                         |                        | No Emissions |
| 14430          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 16835          |                 |              |       |        |                       |                         |                        | No Emissions |
| 16835          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 19240          |                 |              |       |        |                       |                         |                        | No Emissions |
| 19240          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 21645          |                 |              |       |        |                       |                         |                        | No Emissions |
| 21645          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 24050          |                 |              |       |        |                       |                         |                        | No Emissions |
| 24050          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |

**FCC 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2405 MHz**  
**Transmit Mode - Y-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4810           | 65.36           | V            | 74.00 | -8.64  | Peak                  | 8.25                    | 161.13                 |              |
| 4810           | 45.36           | V            | 54.00 | -8.64  | Peak                  | 8.25                    | 161.13                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7215           | 70.22           | V            | 74.00 | -3.78  | Peak                  | 218.50                  | 204.23                 |              |
| 7215           | 50.22           | V            | 54.00 | -3.78  | Avg                   | 218.50                  | 204.23                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9620           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9620           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 12025          |                 |              |       |        |                       |                         |                        | No Emissions |
| 12025          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 14430          |                 |              |       |        |                       |                         |                        | No Emissions |
| 14430          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 16835          |                 |              |       |        |                       |                         |                        | No Emissions |
| 16835          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 19240          |                 |              |       |        |                       |                         |                        | No Emissions |
| 19240          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 21645          |                 |              |       |        |                       |                         |                        | No Emissions |
| 21645          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 24050          |                 |              |       |        |                       |                         |                        | No Emissions |
| 24050          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |

**FCC 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2405 MHz**  
**Transmit Mode - Z-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4810           | 58.38           | V            | 74.00 | -15.62 | Peak                  | 0.00                    | 146.86                 |              |
| 4810           | 38.38           | V            | 54.00 | -15.62 | Peak                  | 0.00                    | 146.86                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7215           | 68.84           | V            | 74.00 | -5.16  | Peak                  | 220.25                  | 154.44                 |              |
| 7215           | 48.84           | V            | 54.00 | -5.16  | Avg                   | 220.25                  | 154.44                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9620           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9620           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 12025          |                 |              |       |        |                       |                         |                        | No Emissions |
| 12025          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 14430          |                 |              |       |        |                       |                         |                        | No Emissions |
| 14430          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 16835          |                 |              |       |        |                       |                         |                        | No Emissions |
| 16835          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 19240          |                 |              |       |        |                       |                         |                        | No Emissions |
| 19240          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 21645          |                 |              |       |        |                       |                         |                        | No Emissions |
| 21645          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 24050          |                 |              |       |        |                       |                         |                        | No Emissions |
| 24050          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |

**FCC 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2405 MHz**  
**Transmit Mode - X-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4810           | 61.23           | H            | 74.00 | -12.77 | Peak                  | 140.00                  | 178.08                 |              |
| 4810           | 41.23           | H            | 54.00 | -12.77 | Peak                  | 140.00                  | 178.08                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7215           | 70.71           | H            | 74.00 | -3.29  | Peak                  | 311.25                  | 188.77                 |              |
| 7215           | 50.71           | H            | 54.00 | -3.29  | Avg                   | 311.25                  | 188.77                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9620           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9620           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 12025          |                 |              |       |        |                       |                         |                        | No Emissions |
| 12025          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 14430          |                 |              |       |        |                       |                         |                        | No Emissions |
| 14430          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 16835          |                 |              |       |        |                       |                         |                        | No Emissions |
| 16835          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 19240          |                 |              |       |        |                       |                         |                        | No Emissions |
| 19240          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 21645          |                 |              |       |        |                       |                         |                        | No Emissions |
| 21645          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 24050          |                 |              |       |        |                       |                         |                        | No Emissions |
| 24050          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |

**FCC 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2405 MHz**  
**Transmit Mode - Y-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4810           | 63.65           | H            | 74.00 | -10.35 | Peak                  | 188.75                  | 134.98                 |              |
| 4810           | 43.65           | H            | 54.00 | -10.35 | Peak                  | 188.75                  | 134.98                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7215           | 66.91           | H            | 74.00 | -7.09  | Peak                  | 28.50                   | 182.98                 |              |
| 7215           | 46.91           | H            | 54.00 | -7.09  | Avg                   | 28.50                   | 182.98                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9620           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9620           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 12025          |                 |              |       |        |                       |                         |                        | No Emissions |
| 12025          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 14430          |                 |              |       |        |                       |                         |                        | No Emissions |
| 14430          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 16835          |                 |              |       |        |                       |                         |                        | No Emissions |
| 16835          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 19240          |                 |              |       |        |                       |                         |                        | No Emissions |
| 19240          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 21645          |                 |              |       |        |                       |                         |                        | No Emissions |
| 21645          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 24050          |                 |              |       |        |                       |                         |                        | No Emissions |
| 24050          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |

**FCC 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2405 MHz**  
**Transmit Mode - Z-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4810           | 64.47           | H            | 74.00 | -9.53  | Peak                  | 255.25                  | 196.17                 |              |
| 4810           | 44.47           | H            | 54.00 | -9.53  | Peak                  | 255.25                  | 196.17                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7215           | 70.05           | H            | 74.00 | -3.96  | Peak                  | 77.75                   | 194.44                 |              |
| 7215           | 50.05           | H            | 54.00 | -3.96  | Avg                   | 77.75                   | 194.44                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9620           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9620           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 12025          |                 |              |       |        |                       |                         |                        | No Emissions |
| 12025          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 14430          |                 |              |       |        |                       |                         |                        | No Emissions |
| 14430          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 16835          |                 |              |       |        |                       |                         |                        | No Emissions |
| 16835          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 19240          |                 |              |       |        |                       |                         |                        | No Emissions |
| 19240          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 21645          |                 |              |       |        |                       |                         |                        | No Emissions |
| 21645          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 24050          |                 |              |       |        |                       |                         |                        | No Emissions |
| 24050          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |

**FCC 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2440 MHz**  
**Transmit Mode - X-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4880           | 65.84           | V            | 74.00 | -8.16  | Peak                  | 116.00                  | 172.59                 |              |
| 4880           | 45.84           | V            | 54.00 | -8.16  | Peak                  | 116.00                  | 172.59                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7320           | 66.77           | V            | 74.00 | -7.23  | Peak                  | 139.25                  | 146.68                 |              |
| 7320           | 46.77           | V            | 54.00 | -7.23  | Avg                   | 139.25                  | 146.68                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9760           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9760           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 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 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2440 MHz**  
**Transmit Mode - Y-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4880           | 65.75           | V            | 74.00 | -8.25  | Peak                  | 5.00                    | 163.34                 |              |
| 4880           | 45.75           | V            | 54.00 | -8.25  | Peak                  | 5.00                    | 163.34                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7320           | 55.94           | V            | 74.00 | -18.06 | Peak                  | 25.25                   | 204.95                 |              |
| 7320           | 35.94           | V            | 54.00 | -18.06 | Avg                   | 25.25                   | 204.95                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9760           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9760           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 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 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2440 MHz**  
**Transmit Mode - Z-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4880           | 65.95           | V            | 74.00 | -8.05  | Peak                  | 355.00                  | 105.01                 |              |
| 4880           | 45.95           | V            | 54.00 | -8.05  | Peak                  | 355.00                  | 105.01                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7320           | 66.22           | V            | 74.00 | -7.78  | Peak                  | 331.50                  | 176.17                 |              |
| 7320           | 46.22           | V            | 54.00 | -7.78  | Avg                   | 331.50                  | 176.17                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9760           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9760           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 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 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2440 MHz**  
**Transmit Mode - X-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4880           | 60.44           | H            | 74.00 | -13.56 | Peak                  | 299.50                  | 265.55                 |              |
| 4880           | 40.44           | H            | 54.00 | -13.56 | Peak                  | 299.50                  | 265.55                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7320           | 68.18           | H            | 74.00 | -5.82  | Peak                  | 174.00                  | 222.98                 |              |
| 7320           | 48.18           | H            | 54.00 | -5.82  | Avg                   | 174.00                  | 222.98                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9760           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9760           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 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 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2440 MHz**  
**Transmit Mode - Y-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4880           | 63.43           | H            | 74.00 | -10.57 | Peak                  | 158.25                  | 193.55                 |              |
| 4880           | 43.43           | H            | 54.00 | -10.57 | Peak                  | 158.25                  | 193.55                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7320           | 67.03           | H            | 74.00 | -6.97  | Peak                  | 165.50                  | 144.41                 |              |
| 7320           | 47.03           | H            | 54.00 | -6.97  | Avg                   | 165.50                  | 144.41                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9760           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9760           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 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 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2440 MHz**  
**Transmit Mode - Z-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4880           | 56.93           | H            | 74.00 | -17.07 | Peak                  | 256.25                  | 186.26                 |              |
| 4880           | 36.93           | H            | 54.00 | -17.07 | Peak                  | 256.25                  | 186.26                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7320           | 69.07           | H            | 74.00 | -4.93  | Peak                  | 32.25                   | 115.22                 |              |
| 7320           | 49.07           | H            | 54.00 | -4.93  | Avg                   | 32.25                   | 115.22                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9760           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9760           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 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 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2475 MHz**  
**Transmit Mode - X-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4950           | 65.90           | V            | 74.00 | -8.10  | Peak                  | 64.75                   | 186.80                 |              |
| 4950           | 45.90           | V            | 54.00 | -8.10  | Peak                  | 64.75                   | 186.80                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7425           | 68.90           | V            | 74.00 | -5.10  | Peak                  | 262.25                  | 185.07                 |              |
| 7425           | 48.90           | V            | 54.00 | -5.10  | Avg                   | 262.25                  | 185.07                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9900           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9900           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 12375          |                 |              |       |        |                       |                         |                        | No Emissions |
| 12375          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 14850          |                 |              |       |        |                       |                         |                        | No Emissions |
| 14850          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 17325          |                 |              |       |        |                       |                         |                        | No Emissions |
| 17325          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 19800          |                 |              |       |        |                       |                         |                        | No Emissions |
| 19800          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 22275          |                 |              |       |        |                       |                         |                        | No Emissions |
| 22275          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 24750          |                 |              |       |        |                       |                         |                        | No Emissions |
| 24750          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |

**FCC 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2475 MHz**  
**Transmit Mode - Y-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4950           | 62.89           | V            | 74.00 | -11.11 | Peak                  | 303.25                  | 126.98                 |              |
| 4950           | 42.89           | V            | 54.00 | -11.11 | Peak                  | 303.25                  | 126.98                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7425           | 65.69           | V            | 74.00 | -8.31  | Peak                  | 196.00                  | 139.76                 |              |
| 7425           | 45.69           | V            | 54.00 | -8.31  | Avg                   | 196.00                  | 139.76                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9900           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9900           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 12375          |                 |              |       |        |                       |                         |                        | No Emissions |
| 12375          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 14850          |                 |              |       |        |                       |                         |                        | No Emissions |
| 14850          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 17325          |                 |              |       |        |                       |                         |                        | No Emissions |
| 17325          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 19800          |                 |              |       |        |                       |                         |                        | No Emissions |
| 19800          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 22275          |                 |              |       |        |                       |                         |                        | No Emissions |
| 22275          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 24750          |                 |              |       |        |                       |                         |                        | No Emissions |
| 24750          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |

**FCC 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2475 MHz**  
**Transmit Mode - Z-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4950           | 63.80           | V            | 74.00 | -10.20 | Peak                  | 220.75                  | 139.10                 |              |
| 4950           | 43.80           | V            | 54.00 | -10.20 | Peak                  | 220.75                  | 139.10                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7425           | 64.10           | V            | 74.00 | -9.90  | Peak                  | 0.00                    | 126.80                 |              |
| 7425           | 44.10           | V            | 54.00 | -9.90  | Avg                   | 0.00                    | 126.80                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9900           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9900           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 12375          |                 |              |       |        |                       |                         |                        | No Emissions |
| 12375          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 14850          |                 |              |       |        |                       |                         |                        | No Emissions |
| 14850          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 17325          |                 |              |       |        |                       |                         |                        | No Emissions |
| 17325          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 19800          |                 |              |       |        |                       |                         |                        | No Emissions |
| 19800          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 22275          |                 |              |       |        |                       |                         |                        | No Emissions |
| 22275          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 24750          |                 |              |       |        |                       |                         |                        | No Emissions |
| 24750          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |

**FCC 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2475 MHz**  
**Transmit Mode - X-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4950           | 62.59           | H            | 74.00 | -11.41 | Peak                  | 54.25                   | 169.01                 |              |
| 4950           | 42.59           | H            | 54.00 | -11.41 | Peak                  | 54.25                   | 169.01                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7425           | 67.52           | H            | 74.00 | -6.48  | Peak                  | 284.00                  | 183.76                 |              |
| 7425           | 47.52           | H            | 54.00 | -6.48  | Avg                   | 284.00                  | 183.76                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9900           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9900           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 12375          |                 |              |       |        |                       |                         |                        | No Emissions |
| 12375          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 14850          |                 |              |       |        |                       |                         |                        | No Emissions |
| 14850          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 17325          |                 |              |       |        |                       |                         |                        | No Emissions |
| 17325          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 19800          |                 |              |       |        |                       |                         |                        | No Emissions |
| 19800          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 22275          |                 |              |       |        |                       |                         |                        | No Emissions |
| 22275          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 24750          |                 |              |       |        |                       |                         |                        | No Emissions |
| 24750          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |

**FCC 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2475 MHz**  
**Transmit Mode - Y-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4950           | 64.48           | H            | 74.00 | -9.52  | Peak                  | 160.50                  | 171.88                 |              |
| 4950           | 44.48           | H            | 54.00 | -9.52  | Peak                  | 160.50                  | 171.88                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7425           | 63.53           | H            | 74.00 | -10.47 | Peak                  | 148.50                  | 156.59                 |              |
| 7425           | 43.53           | H            | 54.00 | -10.47 | Avg                   | 148.50                  | 156.59                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9900           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9900           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 12375          |                 |              |       |        |                       |                         |                        | No Emissions |
| 12375          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 14850          |                 |              |       |        |                       |                         |                        | No Emissions |
| 14850          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 17325          |                 |              |       |        |                       |                         |                        | No Emissions |
| 17325          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 19800          |                 |              |       |        |                       |                         |                        | No Emissions |
| 19800          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 22275          |                 |              |       |        |                       |                         |                        | No Emissions |
| 22275          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 24750          |                 |              |       |        |                       |                         |                        | No Emissions |
| 24750          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |

**FCC 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2475 MHz**  
**Transmit Mode - Z-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4950           | 64.26           | H            | 74.00 | -9.74  | Peak                  | 279.75                  | 130.86                 |              |
| 4950           | 44.26           | H            | 54.00 | -9.74  | Peak                  | 279.75                  | 130.86                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7425           | 70.33           | H            | 74.00 | -3.67  | Peak                  | 61.00                   | 114.26                 |              |
| 7425           | 50.33           | H            | 54.00 | -3.67  | Avg                   | 61.00                   | 114.26                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9900           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9900           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 12375          |                 |              |       |        |                       |                         |                        | No Emissions |
| 12375          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 14850          |                 |              |       |        |                       |                         |                        | No Emissions |
| 14850          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 17325          |                 |              |       |        |                       |                         |                        | No Emissions |
| 17325          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 19800          |                 |              |       |        |                       |                         |                        | No Emissions |
| 19800          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 22275          |                 |              |       |        |                       |                         |                        | No Emissions |
| 22275          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 24750          |                 |              |       |        |                       |                         |                        | No Emissions |
| 24750          |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |

**FCC 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2480 MHz**  
**Transmit Mode - X-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4960           | 52.88           | V            | 74.00 | -21.12 | Peak                  | 7.00                    | 175.64                 |              |
| 4960           | 32.88           | V            | 54.00 | -21.12 | Peak                  | 7.00                    | 175.64                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7440           | 56.74           | V            | 74.00 | -17.26 | Peak                  | 198.75                  | 185.26                 |              |
| 7440           | 36.74           | V            | 54.00 | -17.26 | Avg                   | 198.75                  | 185.26                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9920           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9920           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 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 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2480 MHz**  
**Transmit Mode - Y-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4960           | 50.47           | V            | 74.00 | -23.53 | Peak                  | 307.50                  | 150.20                 |              |
| 4960           | 30.47           | V            | 54.00 | -23.53 | Peak                  | 307.50                  | 150.20                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7440           | 57.66           | V            | 74.00 | -16.34 | Peak                  | 355.00                  | 150.20                 |              |
| 7440           | 37.66           | V            | 54.00 | -16.34 | Avg                   | 355.00                  | 150.20                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9920           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9920           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 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 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2480 MHz**  
**Transmit Mode - Z-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4960           | 51.47           | V            | 74.00 | -22.53 | Peak                  | 199.00                  | 150.20                 |              |
| 4960           | 31.47           | V            | 54.00 | -22.53 | Peak                  | 199.00                  | 150.20                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7440           | 58.64           | V            | 74.00 | -15.36 | Peak                  | 355.00                  | 152.29                 |              |
| 7440           | 38.64           | V            | 54.00 | -15.36 | Avg                   | 355.00                  | 152.29                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9920           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9920           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 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 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2480 MHz**  
**Transmit Mode - X-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4960           | 48.86           | H            | 74.00 | -25.14 | Peak                  | 55.25                   | 175.64                 |              |
| 4960           | 28.86           | H            | 54.00 | -25.14 | Peak                  | 55.25                   | 175.64                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7440           | 57.42           | H            | 74.00 | -16.58 | Peak                  | 286.25                  | 180.58                 |              |
| 7440           | 37.42           | H            | 54.00 | -16.58 | Avg                   | 286.25                  | 180.58                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9920           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9920           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 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 15.247**

IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2480 MHz**  
**Transmit Mode - Y-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4960           | 52.46           | H            | 74.00 | -21.54 | Peak                  | 86.25                   | 161.37                 |              |
| 4960           | 32.46           | H            | 54.00 | -21.54 | Peak                  | 86.25                   | 161.37                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7440           | 56.20           | H            | 74.00 | -17.80 | Peak                  | 98.75                   | 185.25                 |              |
| 7440           | 36.20           | H            | 54.00 | -17.80 | Avg                   | 989.75                  | 185.25                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9920           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9920           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 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 15.247**

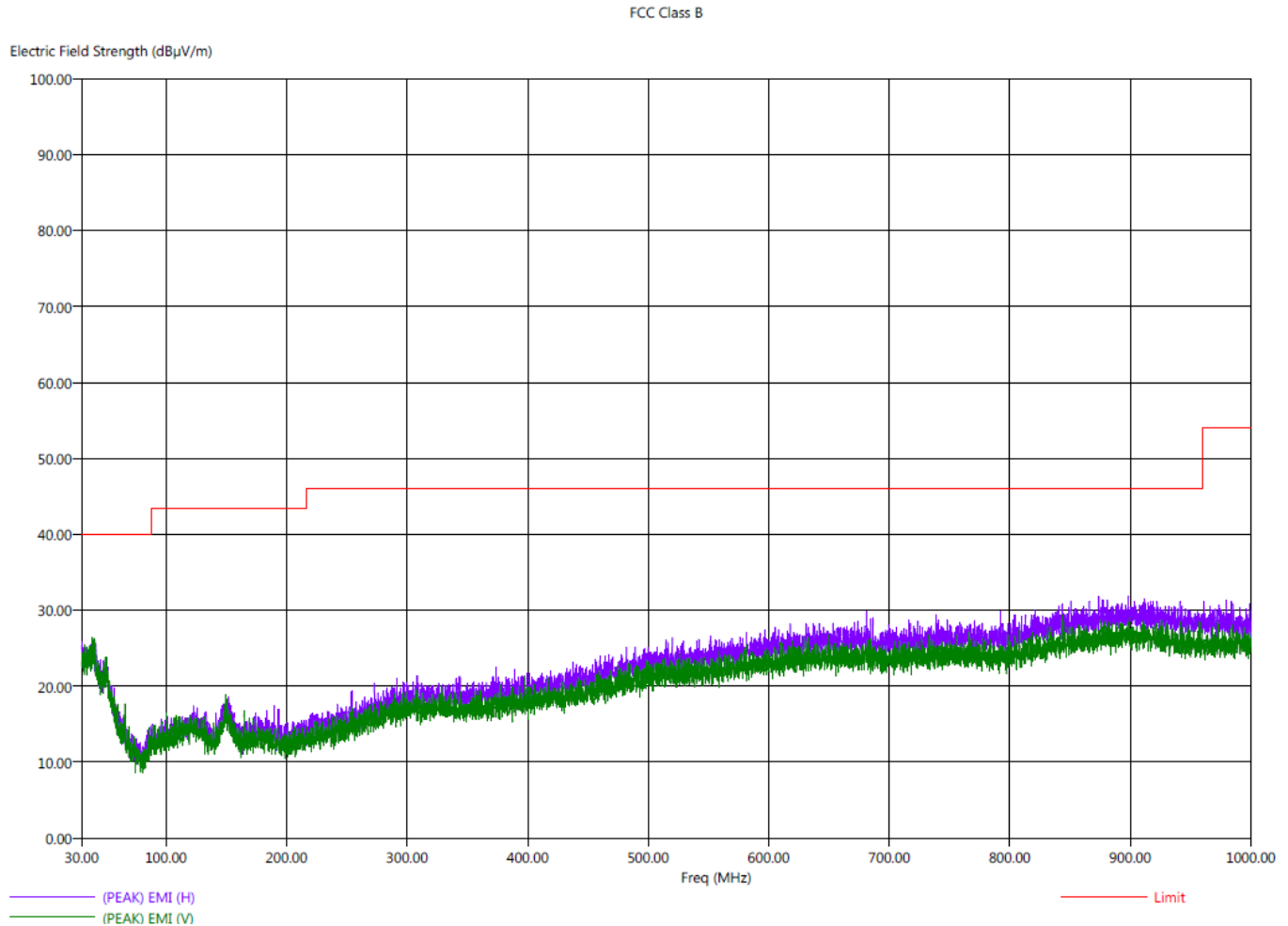
IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously Transmitting  
**2480 MHz**  
**Transmit Mode - Z-Axis**

Date: 02/01/2016  
Lab: D  
Tested By: Kyle Fujimoto

| Freq.<br>(MHz) | Level<br>(dBuV) | Pol<br>(v/h) | Limit | Margin | Peak /<br>QP /<br>Avg | Table<br>Angle<br>(deg) | Ant.<br>Height<br>(cm) | Comments     |
|----------------|-----------------|--------------|-------|--------|-----------------------|-------------------------|------------------------|--------------|
| 4960           | 51.59           | H            | 74.00 | -22.41 | Peak                  | 26.00                   | 150.20                 |              |
| 4960           | 31.59           | H            | 54.00 | -22.41 | Peak                  | 26.00                   | 150.20                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 7440           | 55.16           | H            | 74.00 | -18.84 | Peak                  | 171.50                  | 153.25                 |              |
| 7440           | 35.16           | H            | 54.00 | -18.84 | Avg                   | 171.50                  | 153.25                 |              |
|                |                 |              |       |        |                       |                         |                        |              |
| 9920           |                 |              |       |        |                       |                         |                        | No Emissions |
| 9920           |                 |              |       |        |                       |                         |                        | Detected     |
|                |                 |              |       |        |                       |                         |                        |              |
| 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 - Radiated Pre-Scan 30-1000Mhz - One Socket Unit - 02-04-16.set  
Operator: Kyle Fujimoto  
EUT Type: Single IntelliSocket  
EUT Condition: Continuously Transmitting - X-Axis  
Comments: Customer: IBIS Networks  
Model: IS-301

2/4/2016 6:54:12 PM  
Sequence: Preliminary Scan



No additional emissions, except for harmonics, were found between 10 kHz – 30 MHz and 1 GHz – 25 GHz.

Title: Radiated Final - 30-1000 MHz - FCC Class B  
 File: Agilent - Radiated Final Scan - 30-1000Mhz - One Socket Unit - 02-04-16.set  
 Operator: Kyle Fujimoto  
 EUT Type: Single IntelliSocket  
 EUT Condition: Continuously Transmitting - Z-Axis Worst Case  
 Comments: Customer: IBIS Networks  
 Model: IS-301

2/4/2016 7:29:17 PM  
 Sequence: Final Measurements

FCC Class B

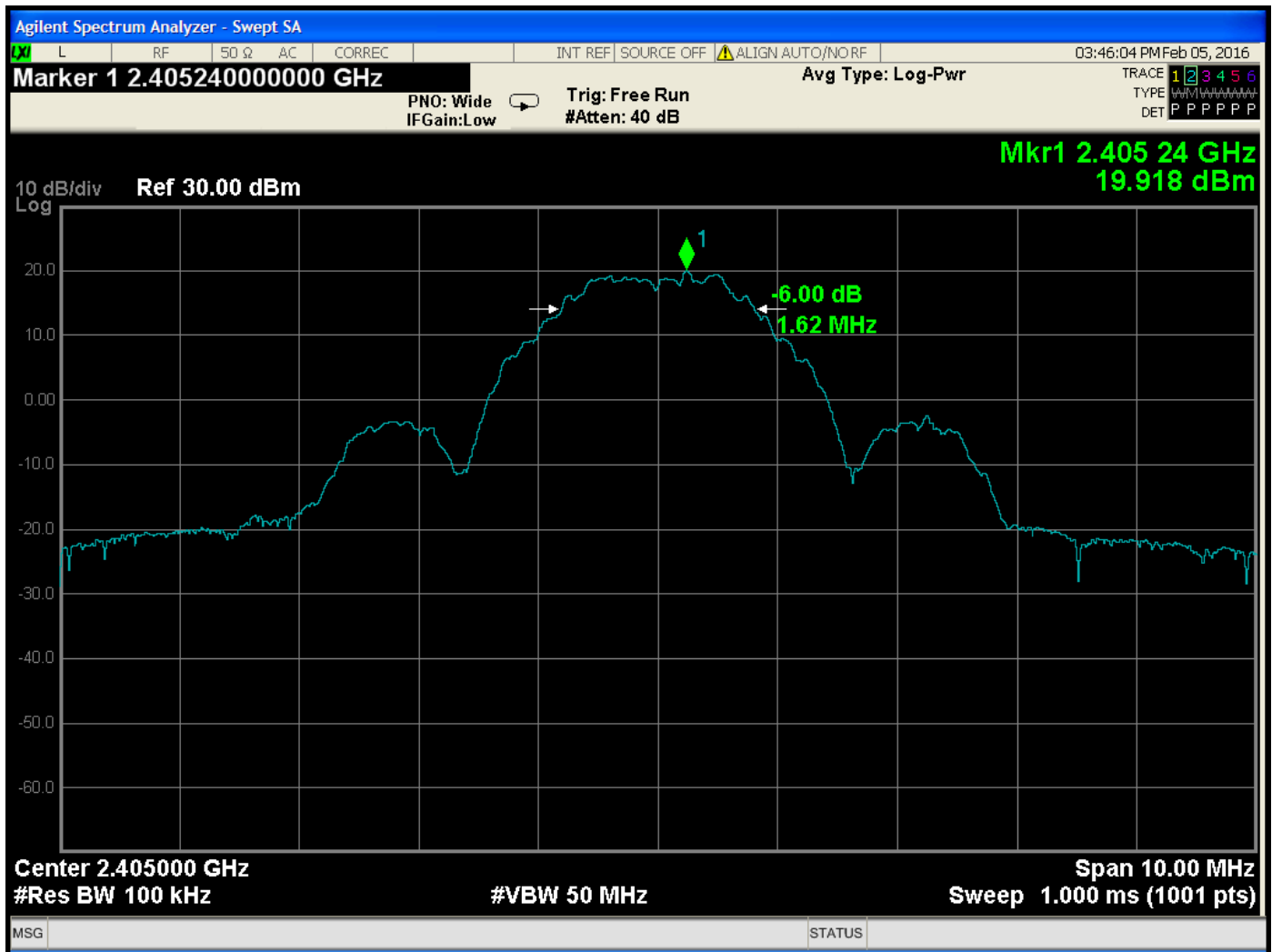
| Freq<br>(MHz) | Pol | (PEAK) EMI<br>(dBµV/m) | (QP) EMI<br>(dBµV/m) | (PEAK) Margin<br>(dB) | (QP) Margin<br>(dB) | Limit<br>(dBµV/m) | Transducer<br>(dB) | Cable<br>(dB) | Ttbl Agl<br>(deq) | Twr Ht<br>(cm) |
|---------------|-----|------------------------|----------------------|-----------------------|---------------------|-------------------|--------------------|---------------|-------------------|----------------|
| 33.60         | H   | 26.16                  | 21.93                | -13.84                | -18.07              | 40.00             | 24.22              | 0.38          | 220.50            | 401.01         |
| 33.90         | H   | 25.37                  | 21.98                | -14.63                | -18.02              | 40.00             | 24.24              | 0.38          | 343.25            | 160.71         |
| 35.70         | H   | 26.59                  | 22.25                | -13.41                | -17.75              | 40.00             | 24.49              | 0.40          | 153.00            | 400.89         |
| 37.90         | V   | 27.96                  | 22.86                | -12.04                | -17.14              | 40.00             | 24.98              | 0.42          | 91.75             | 384.35         |
| 38.40         | V   | 27.26                  | 22.94                | -12.74                | -17.06              | 40.00             | 25.02              | 0.42          | 232.00            | 287.28         |
| 42.00         | H   | 26.23                  | 21.67                | -13.77                | -18.33              | 40.00             | 23.79              | 0.45          | 82.50             | 127.94         |
| 49.10         | H   | 24.28                  | 20.18                | -15.72                | -19.82              | 40.00             | 22.36              | 0.50          | 72.25             | 348.83         |
| 51.10         | V   | 24.52                  | 19.72                | -15.48                | -20.28              | 40.00             | 21.61              | 0.51          | 107.75            | 191.58         |





***-6 dB BANDWIDTH***

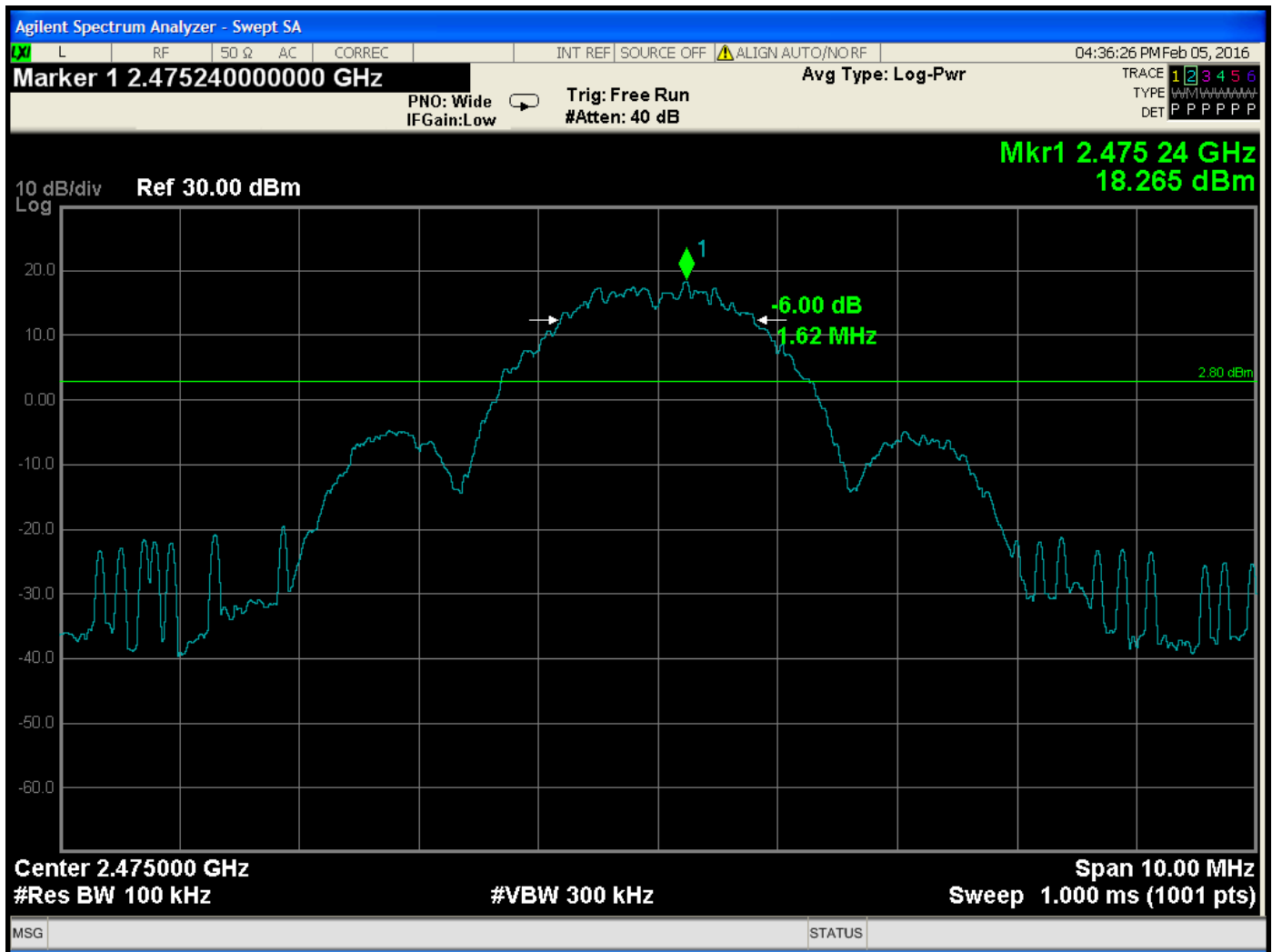
***DATA SHEETS***



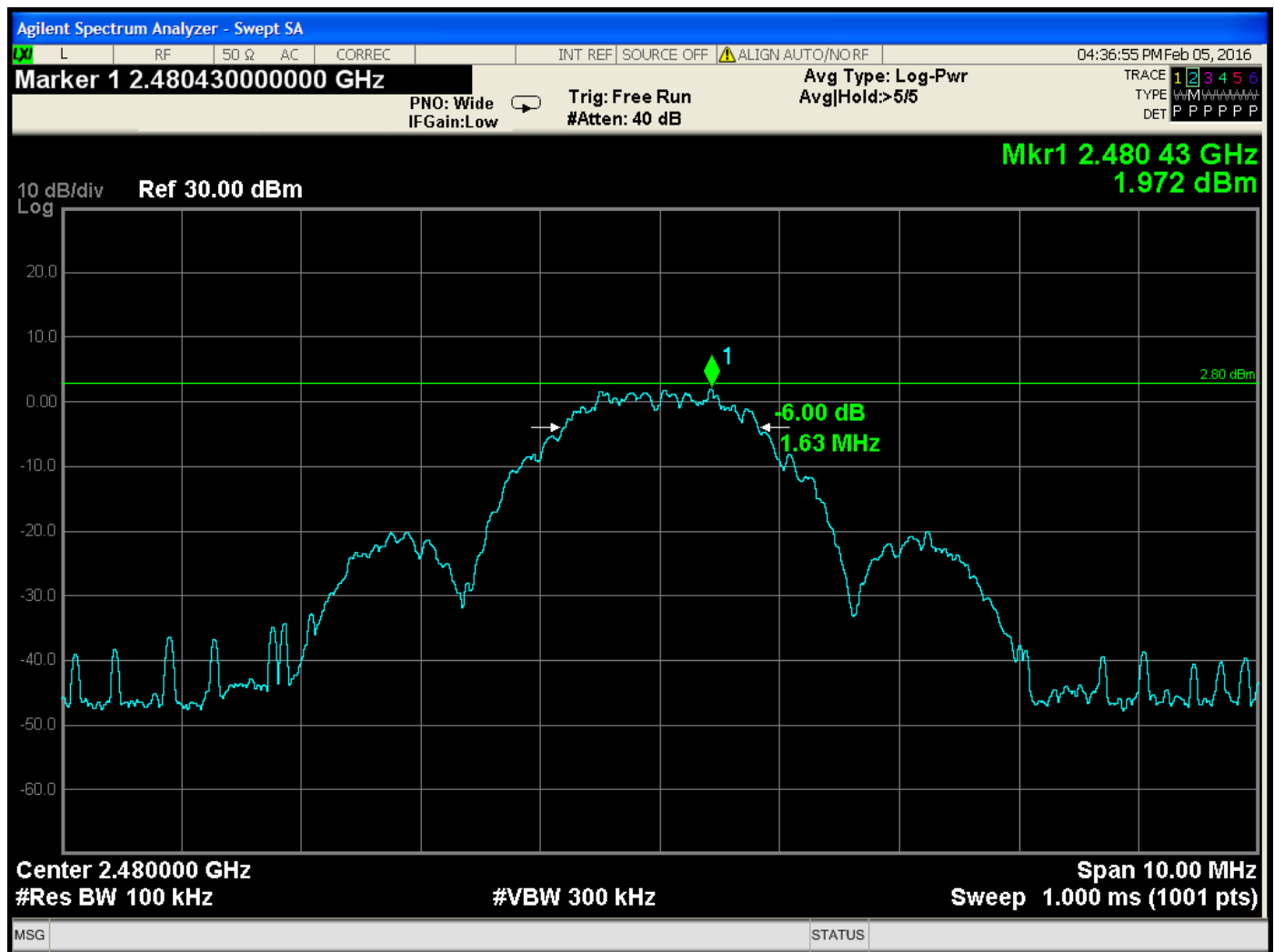
-6 dB Bandwidth – Low Channel – Model: IS-301



-6 dB Bandwidth – Middle Channel – Model: IS-301



-6 dB Bandwidth – High Channel(2475 MHz) – Model: IS-301

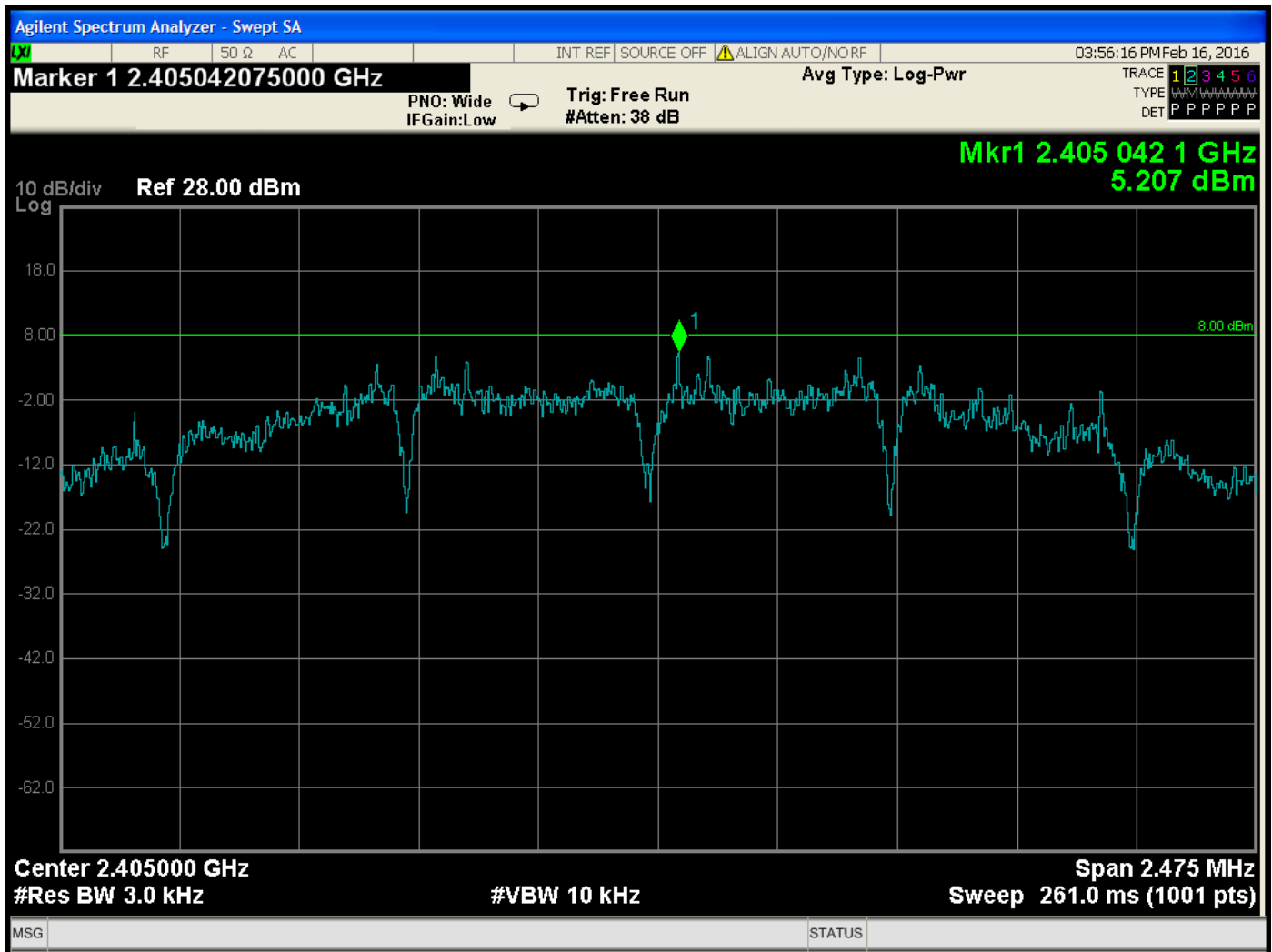


-6 dB Bandwidth – High Channel(2480 MHz) – Model: IS-301



***SPECTRAL DENSITY OUTPUT***

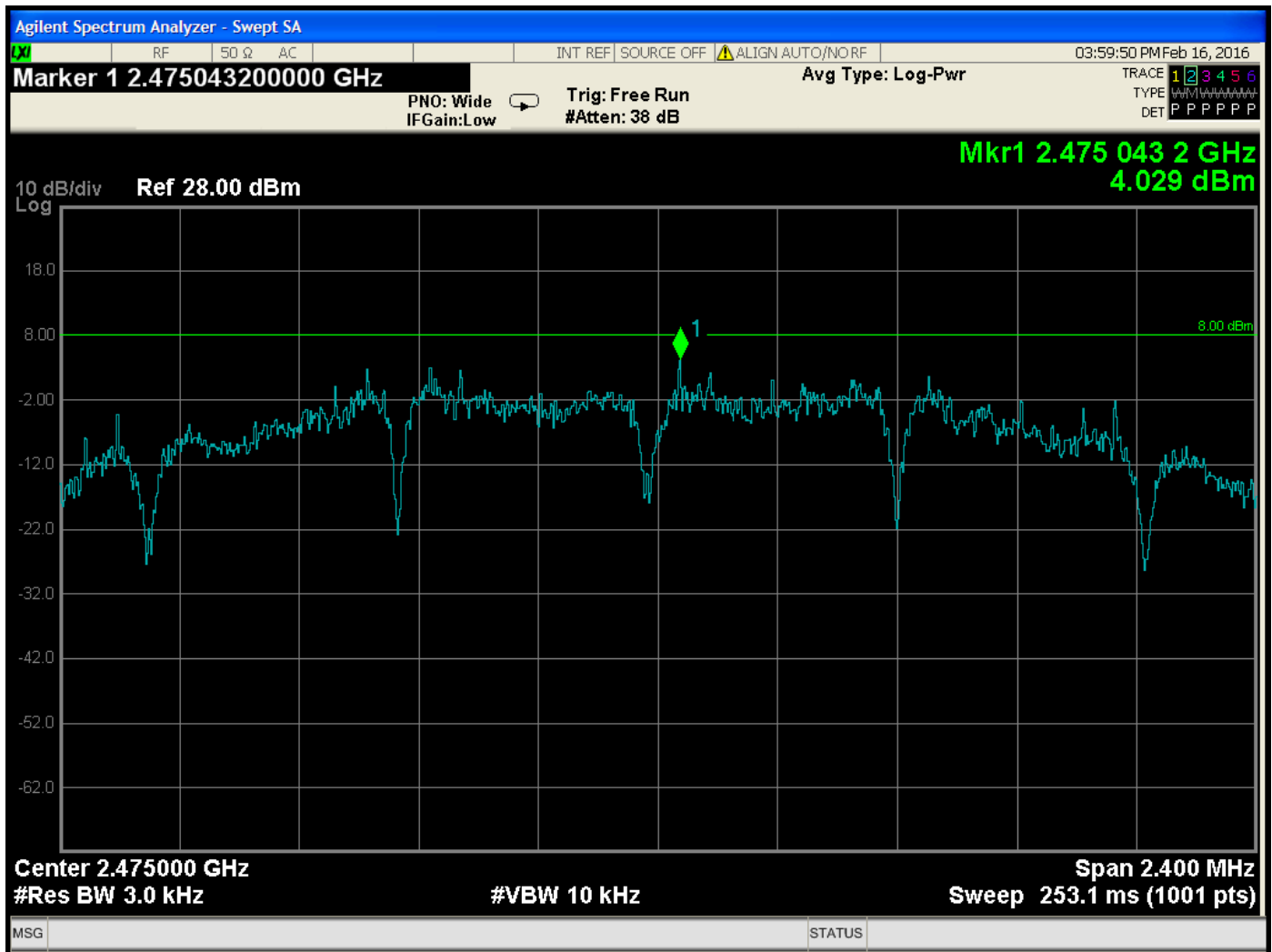
***DATA SHEETS***



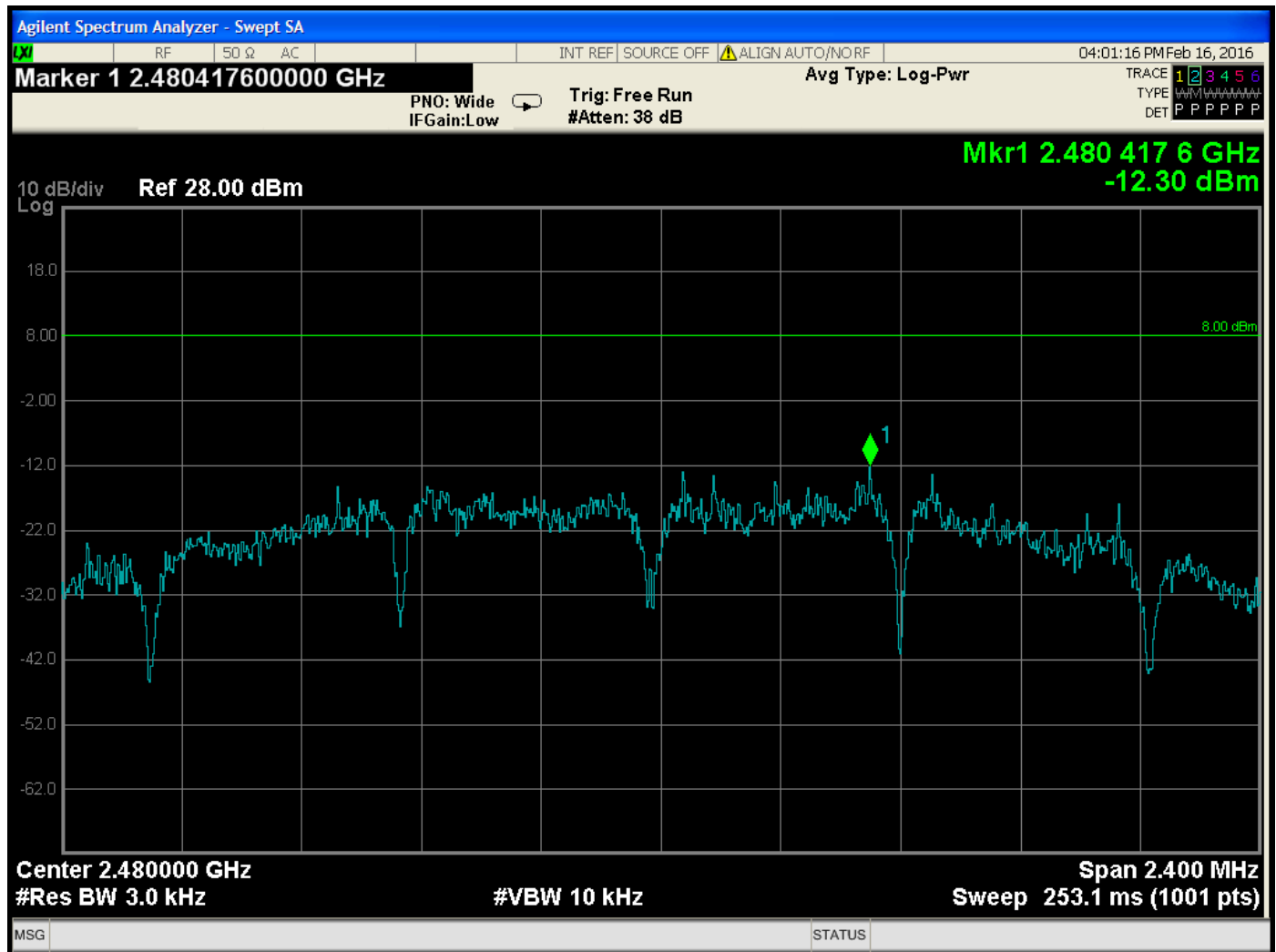
Spectral Density – Low Channel – Model: IS-301



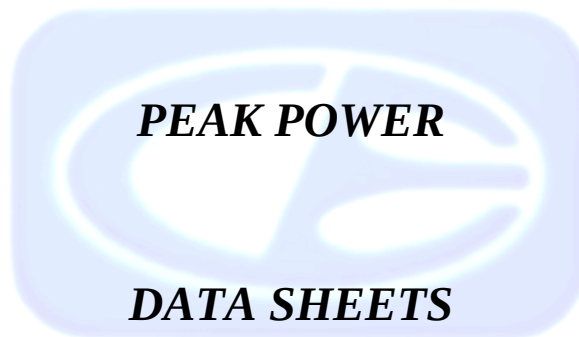
Spectral Density – Middle Channel – Model: IS-301

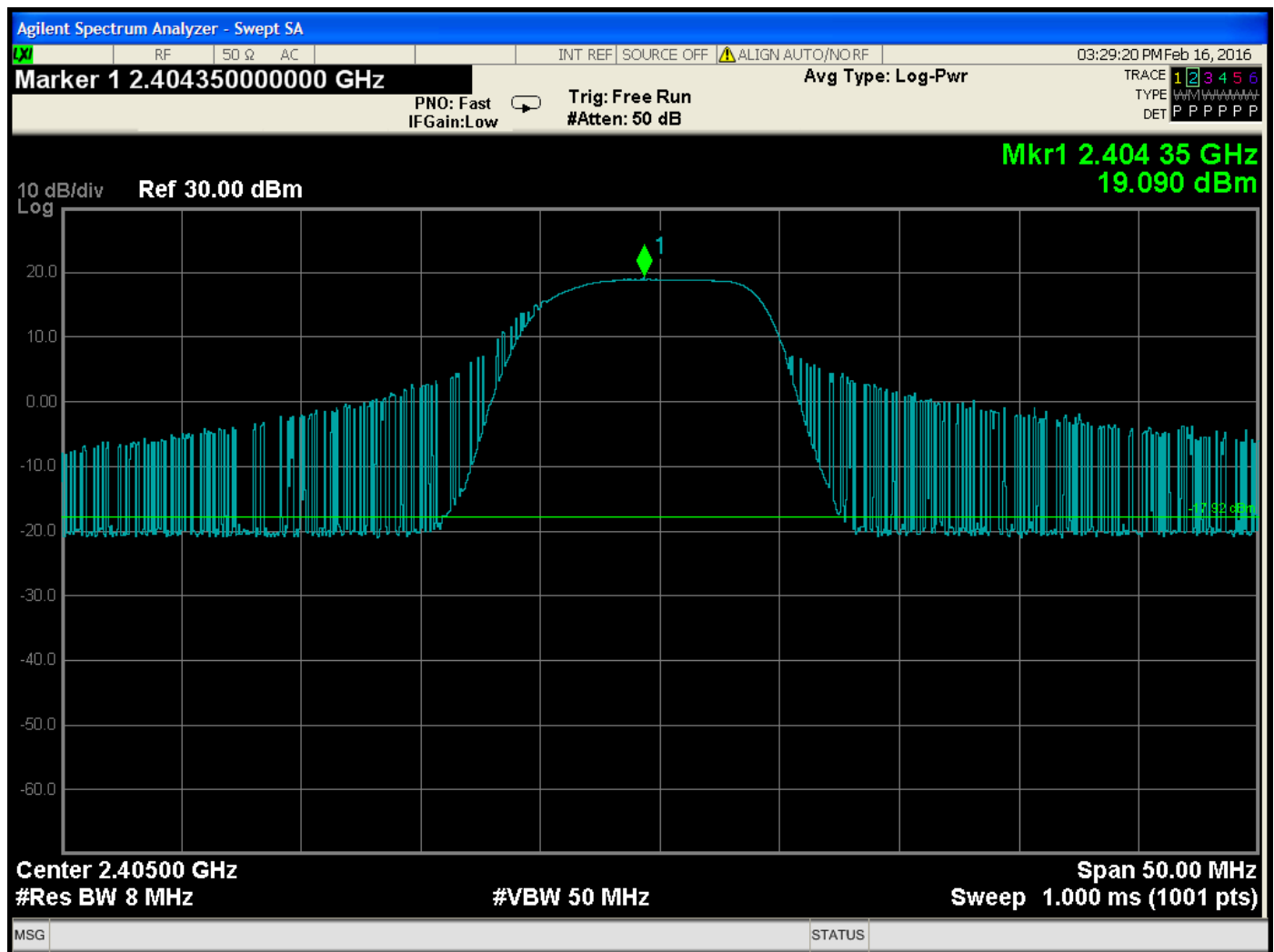


Spectral Density – High Channel(2475 MHz) – Model: IS-301

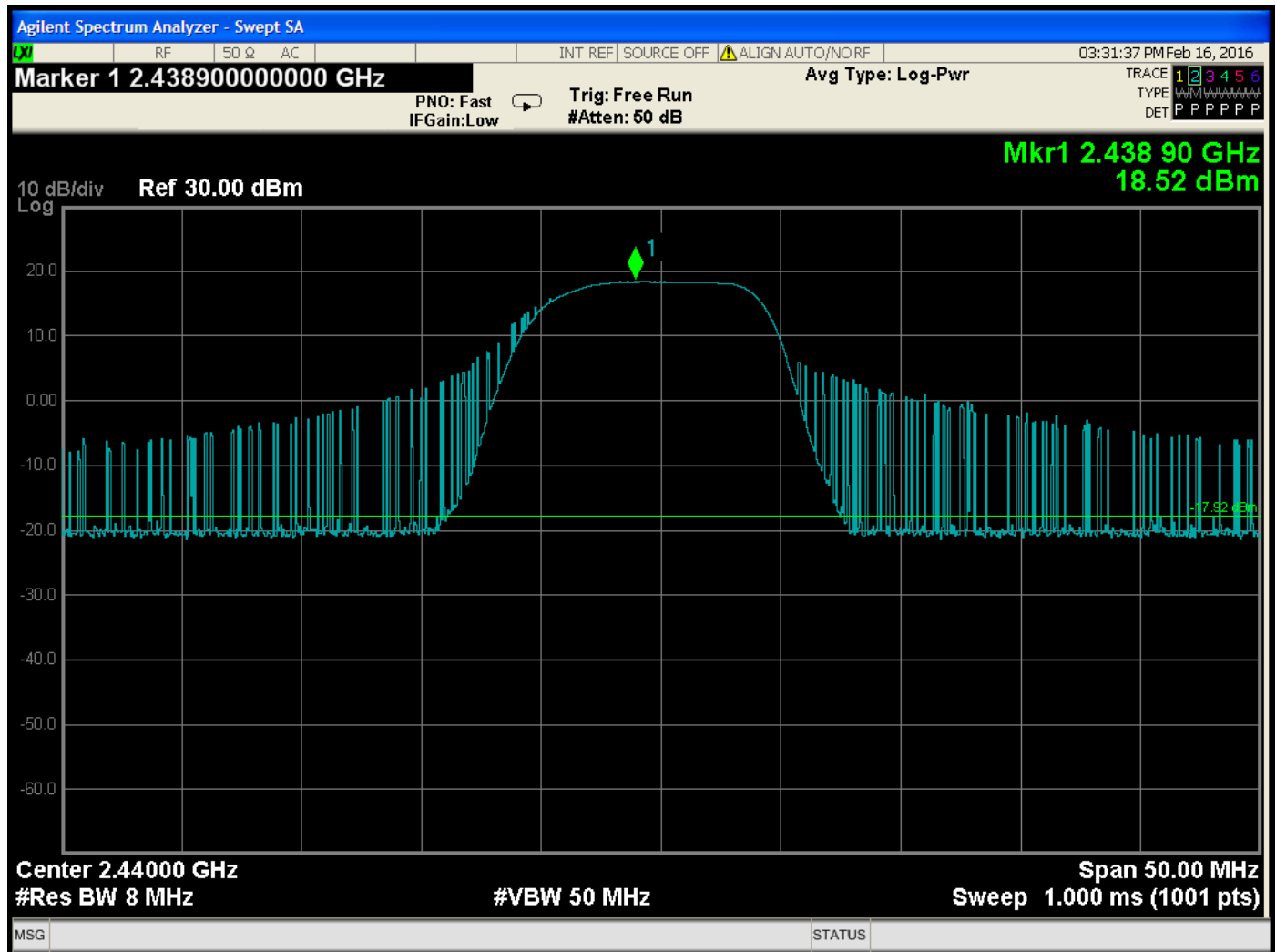


Spectral Density – High Channel(2480 MHz) – Model: IS-301

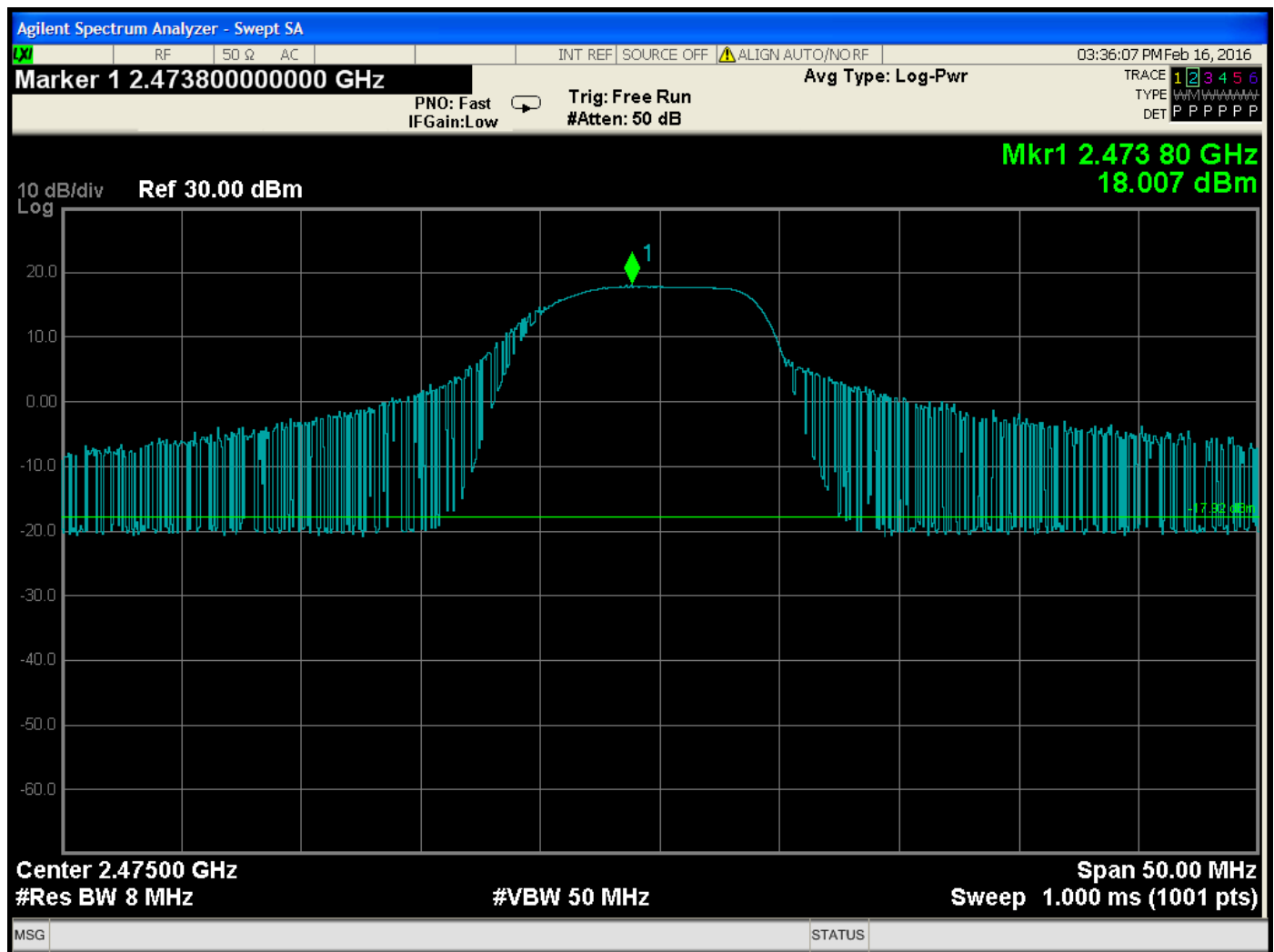




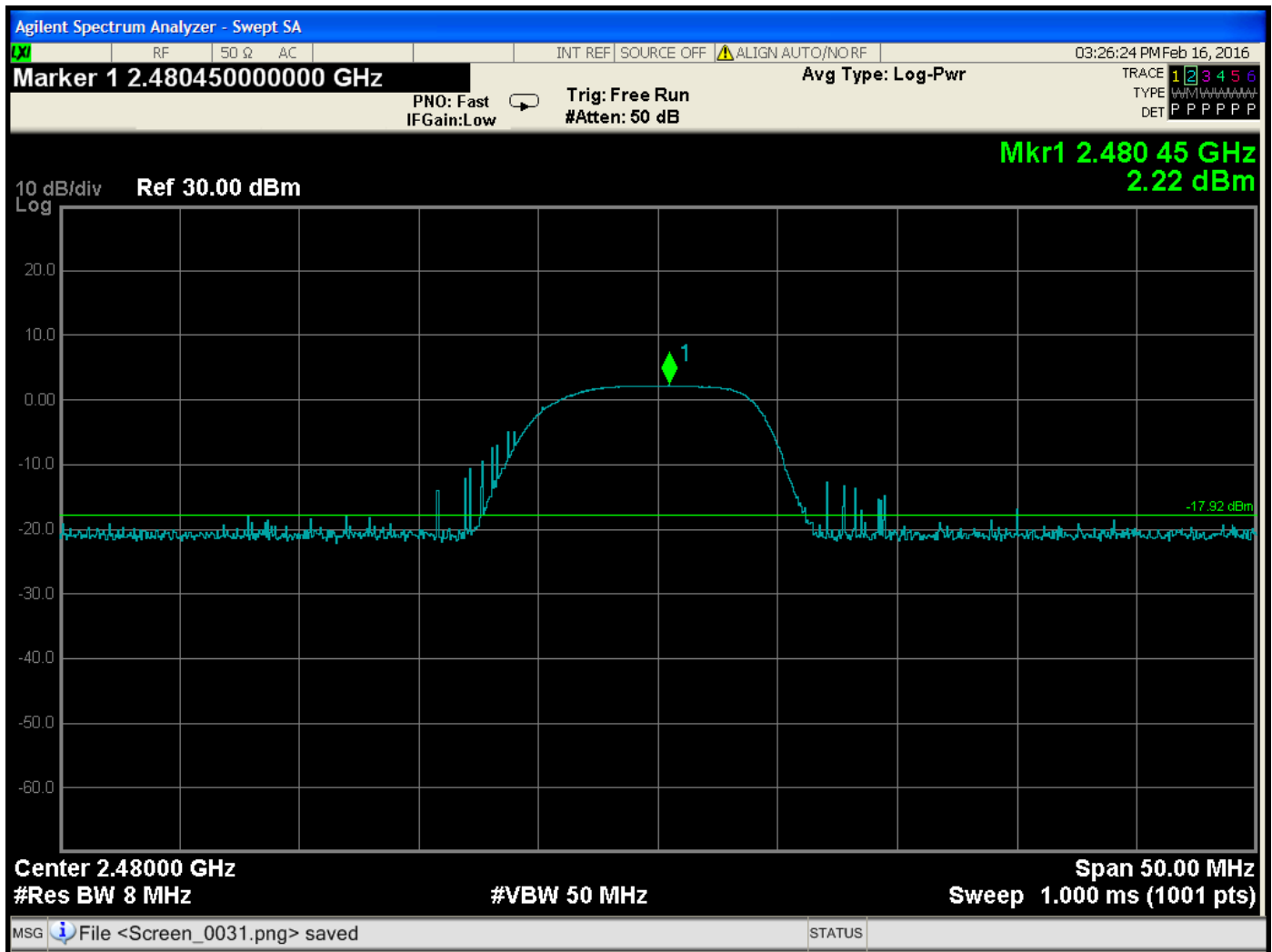
Peak Power Output – Low Channel – Model: IS-301



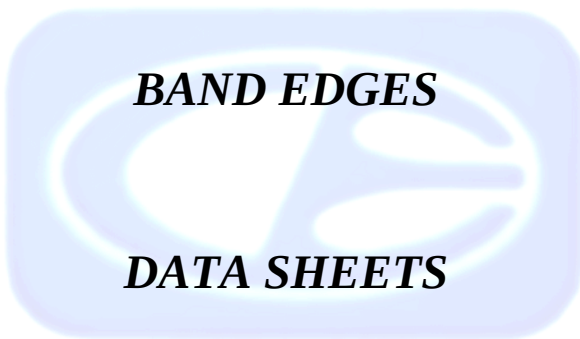
Peak Power Output – Middle Channel – Model: IS-301



Peak Power Output – High Channel(2475 MHz) – Model: IS-301



Peak Power Output – High Channel(2480 MHz) – Model: IS-301



***BAND EDGES***

***DATA SHEETS***





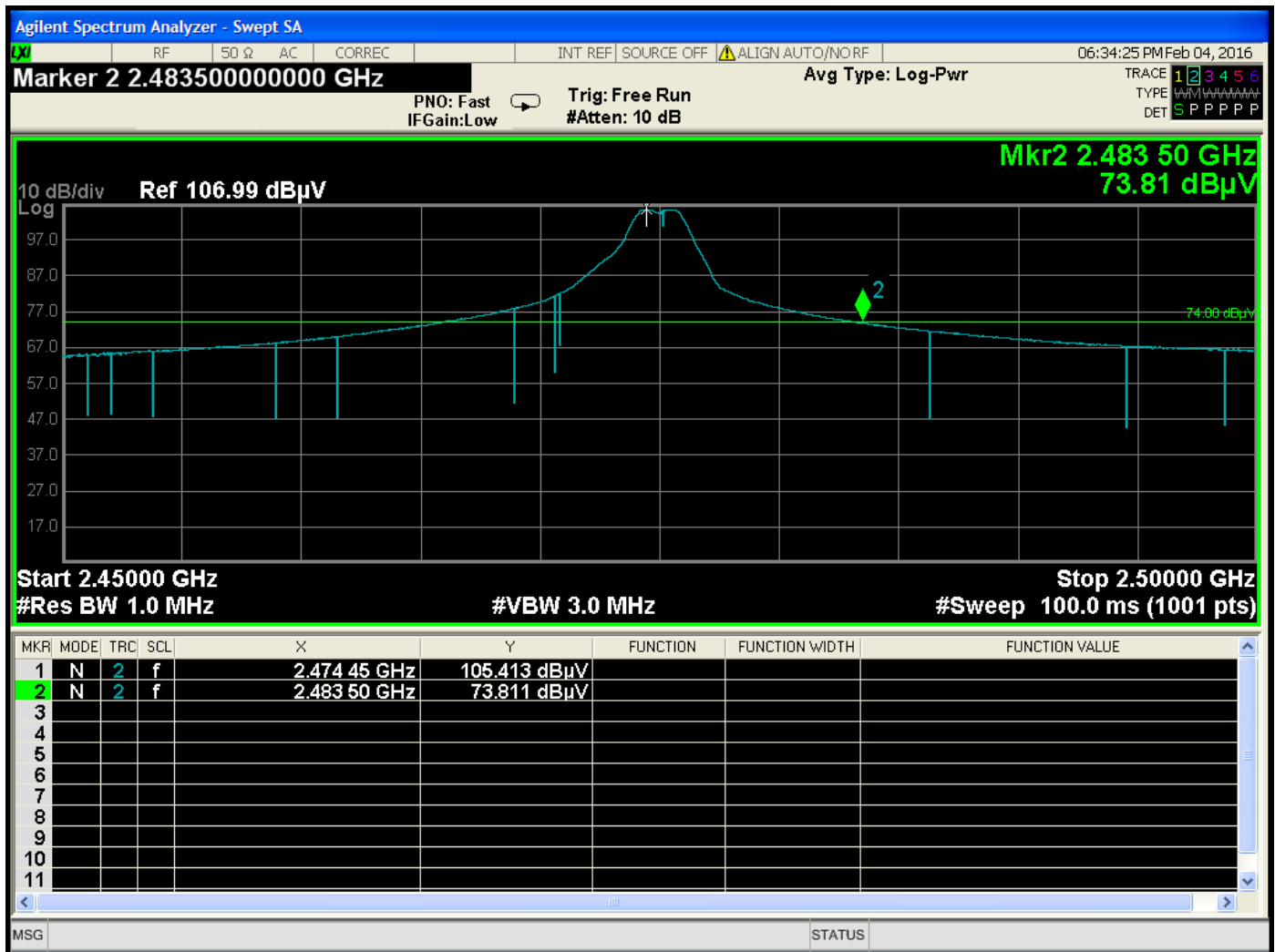




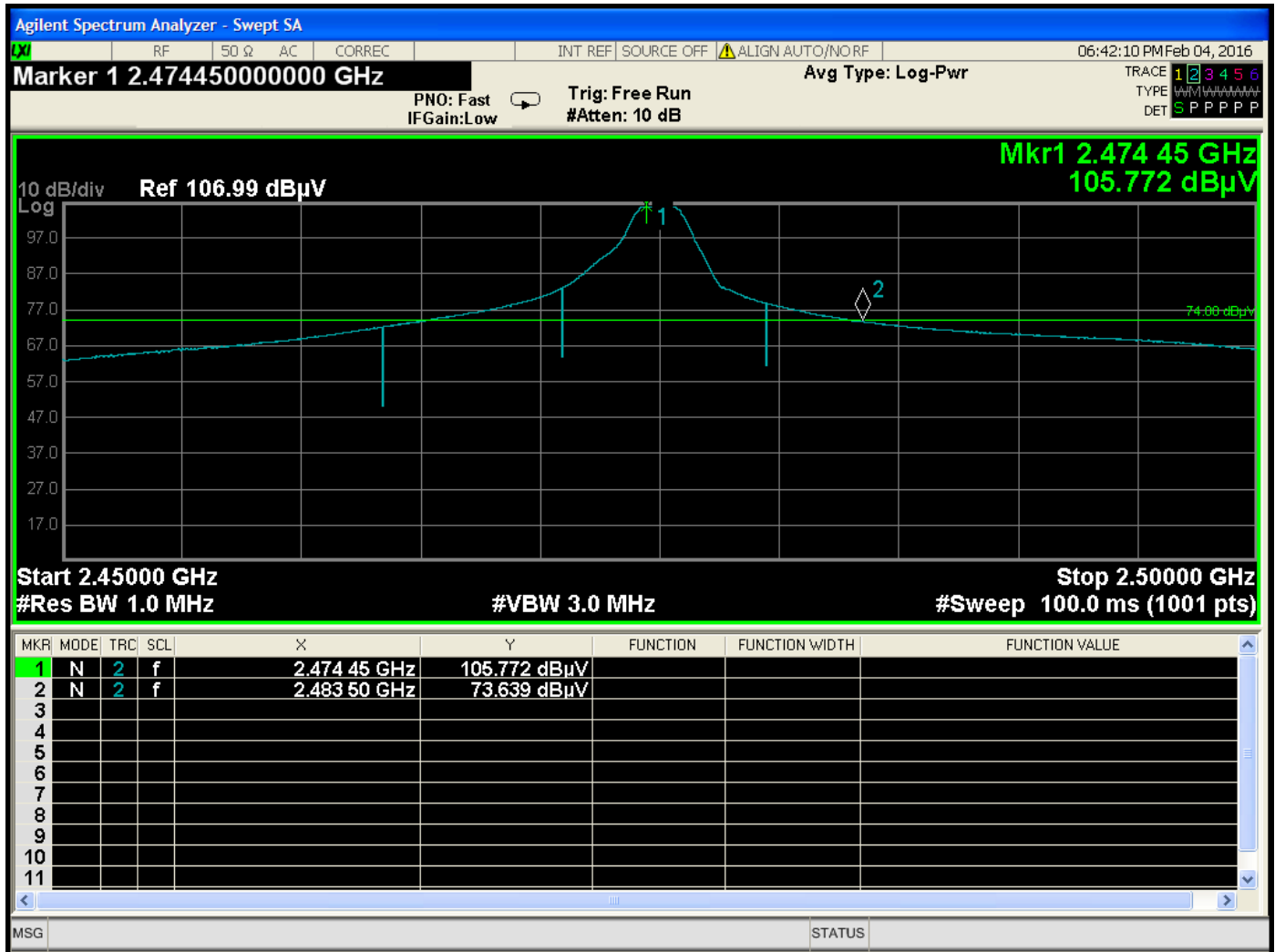
Band Edge – Low Channel – Vertical – X-Axis – Worst Case – Model: IS-301



Band Edge – Low Channel – Horizontal – Z-Axis – Worst Case – Model: IS-301



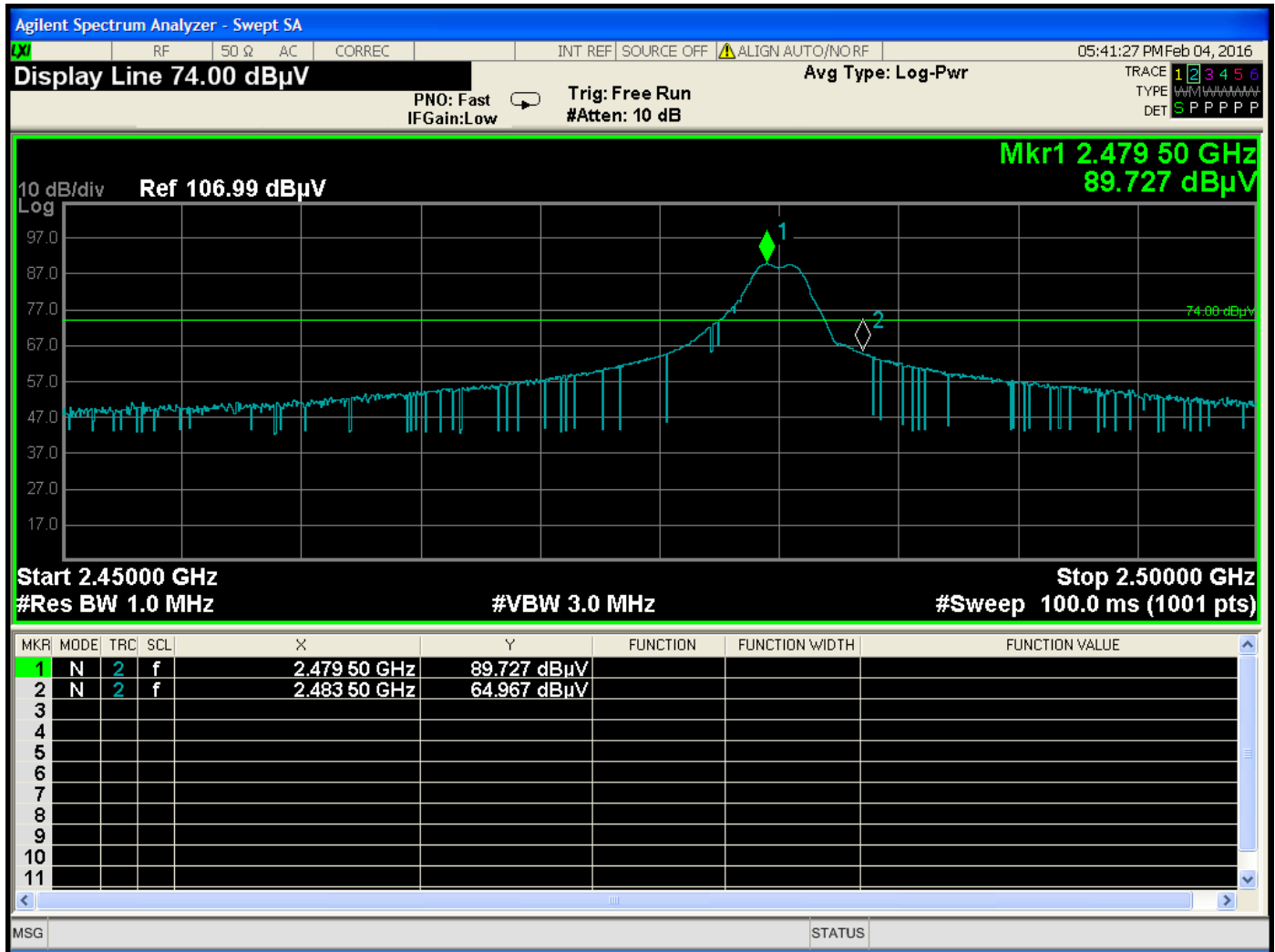
Band Edge – High Channel(2475 MHz) – Vertical – X-Axis – Worst Case – Model: IS-301



Band Edge – High Channel(2475 MHz) – Horizontal – Z-Axis – Worst Case – Model: IS-301



Band Edge – High Channel(2480 MHz) – Vertical – X-Axis – Worst Case – Model: IS-301



Band Edge – High Channel(2480 MHz) – Horizontal – Z-Axis – Worst Case – Model: IS-301



***EMISSIONS IN  
NON-RESRTICTED BANDS  
DATA SHEETS***

**FCC 15.247 - Emissions in Non-Restricted Bands**

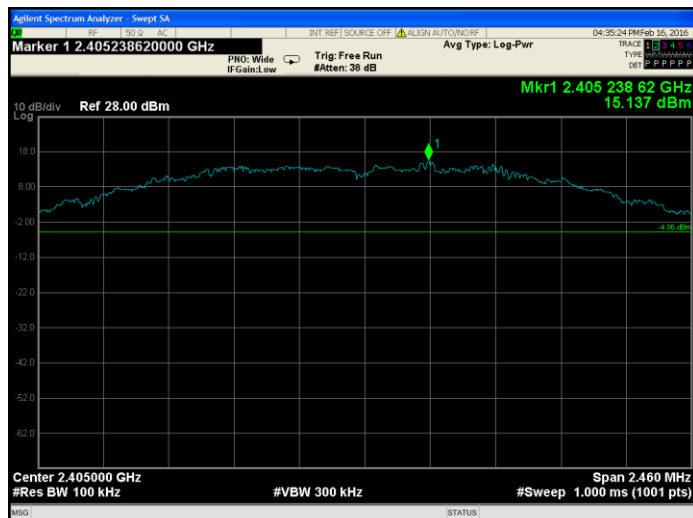
IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Configuration: Continuously  
Transmitting

Date: 03/16/2016  
Lab: D  
Tested By: Kyle Fujimoto

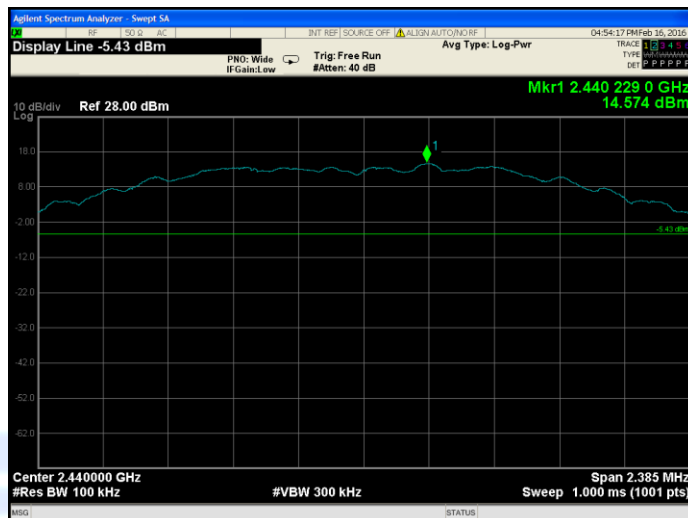
| Freq. (MHz) | Level (dBm) | Limit (dBm) | Margin | Peak / QP / Avg | Comments                |
|-------------|-------------|-------------|--------|-----------------|-------------------------|
| 2306.5      | -50.26      | -21.83      | -28.43 | Peak            | High Channel (2480 MHz) |
| 6046.0      | -50.48      | -21.83      | -28.65 | Peak            | High Channel (2480 MHz) |
| 24145.0     | -39.161     | -21.83      | -17.33 | Peak            | High Channel (2480 MHz) |



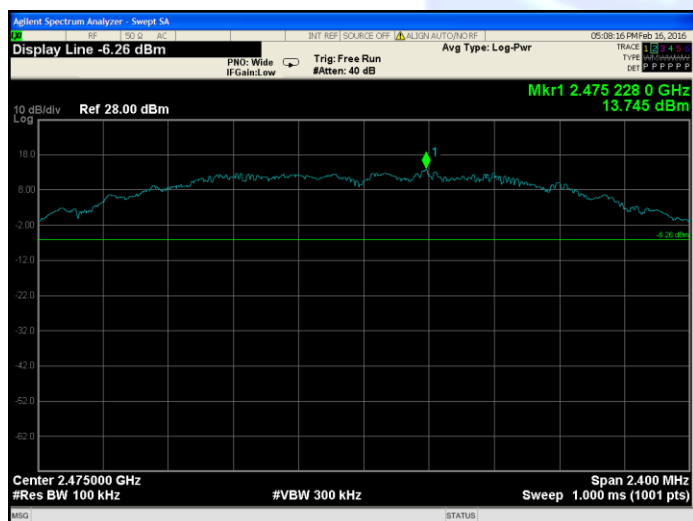
## REFERENCE LEVEL MEASUREMENTS



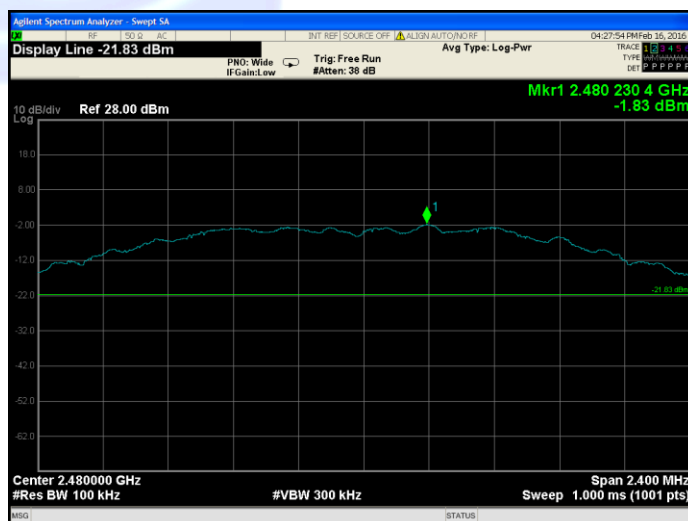
Reference Level – Low Channel(2405 MHz)



Reference Level – Middle Channel(2440 MHz)



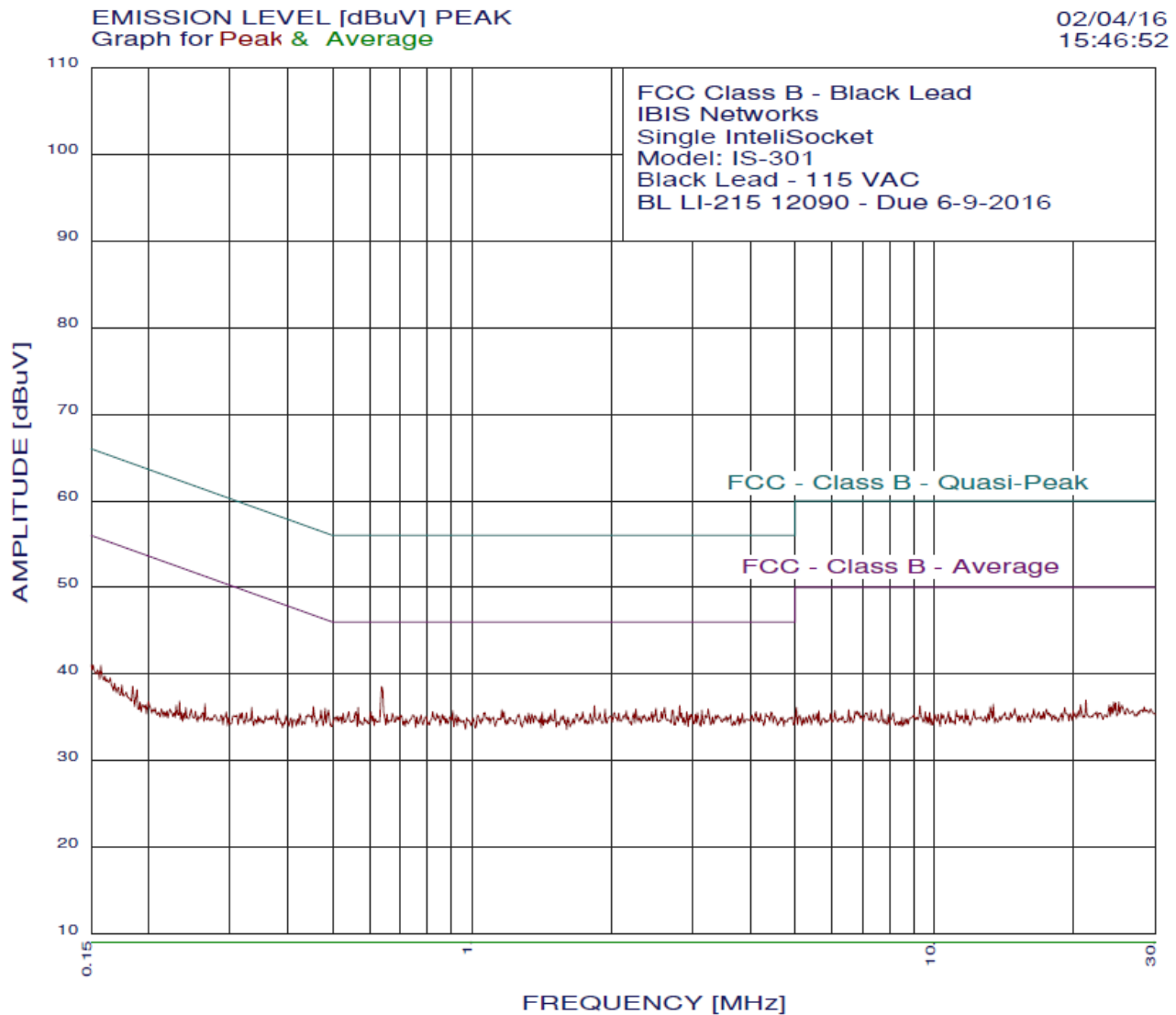
Reference Level – High Channel(2475 MHz)



Reference Level – High Channel(2480 MHz)



***CONDUCTED EMISSIONS  
DATA SHEETS***

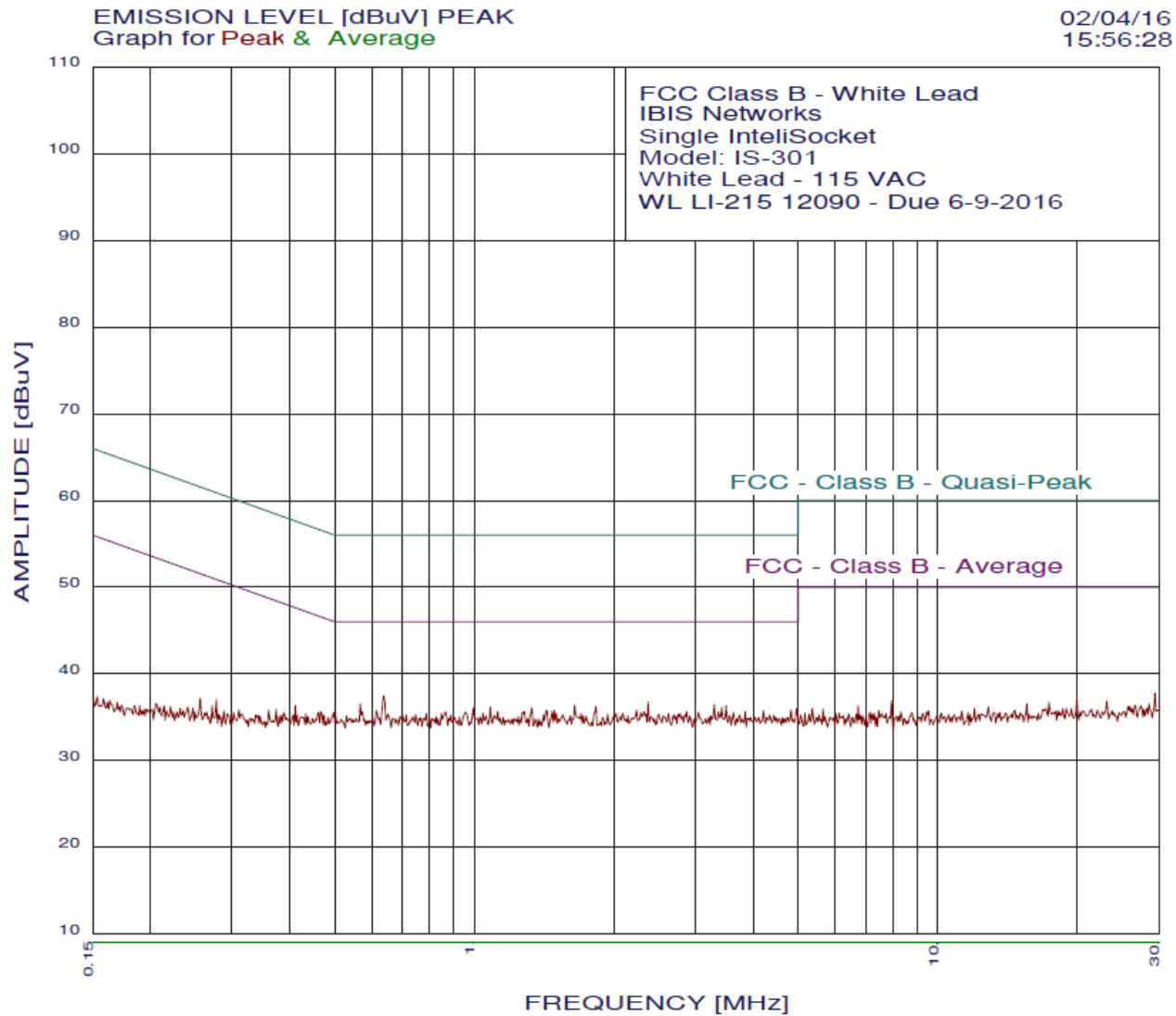


02/04/16 15:48:51

FCC Class B - Black Lead  
IBIS Networks  
Single IntelliSocket  
Model: IS-301  
Black Lead - 115 VAC  
BL LI-215 12090 - Due 6-9-2016  
Test Engineer : Kyle Fujimoto

50 highest peaks above -50.00 dB of FCC - Class B - Average limit line  
Peak criteria : 0.01 dB, Curve : Peak

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|-------|-----------|-----------|-----------|-----------|
| 1     | 0.637     | 38.51     | 46.00     | -7.49     |
| 2     | 2.818     | 36.44     | 46.00     | -9.56     |
| 3     | 1.855     | 36.32     | 46.00     | -9.68     |
| 4     | 0.571     | 36.14     | 46.00     | -9.86     |
| 5     | 2.612     | 36.12     | 46.00     | -9.88     |
| 6     | 2.505     | 36.04     | 46.00     | -9.96     |
| 7     | 3.243     | 35.94     | 46.00     | -10.06    |
| 8     | 2.262     | 35.94     | 46.00     | -10.06    |
| 9     | 1.939     | 35.93     | 46.00     | -10.07    |
| 10    | 1.512     | 35.89     | 46.00     | -10.11    |
| 11    | 1.160     | 35.86     | 46.00     | -10.14    |
| 12    | 3.141     | 35.84     | 46.00     | -10.16    |
| 13    | 2.722     | 35.84     | 46.00     | -10.16    |
| 14    | 2.156     | 35.74     | 46.00     | -10.26    |
| 15    | 0.909     | 35.74     | 46.00     | -10.26    |
| 16    | 0.481     | 36.04     | 46.32     | -10.28    |
| 17    | 0.489     | 35.84     | 46.18     | -10.34    |
| 18    | 1.172     | 35.66     | 46.00     | -10.34    |
| 19    | 4.432     | 35.65     | 46.00     | -10.35    |
| 20    | 4.114     | 35.65     | 46.00     | -10.35    |
| 21    | 0.541     | 35.64     | 46.00     | -10.36    |
| 22    | 0.561     | 35.64     | 46.00     | -10.36    |
| 23    | 0.605     | 35.64     | 46.00     | -10.36    |
| 24    | 2.916     | 35.64     | 46.00     | -10.36    |
| 25    | 2.568     | 35.64     | 46.00     | -10.36    |
| 26    | 2.449     | 35.64     | 46.00     | -10.36    |
| 27    | 0.822     | 35.64     | 46.00     | -10.36    |
| 28    | 1.735     | 35.61     | 46.00     | -10.39    |
| 29    | 1.419     | 35.58     | 46.00     | -10.42    |
| 30    | 1.066     | 35.55     | 46.00     | -10.45    |
| 31    | 3.075     | 35.54     | 46.00     | -10.46    |
| 32    | 2.238     | 35.54     | 46.00     | -10.46    |
| 33    | 2.034     | 35.54     | 46.00     | -10.46    |
| 34    | 1.889     | 35.53     | 46.00     | -10.47    |
| 35    | 1.325     | 35.47     | 46.00     | -10.53    |
| 36    | 4.316     | 35.45     | 46.00     | -10.55    |
| 37    | 4.204     | 35.45     | 46.00     | -10.55    |
| 38    | 3.841     | 35.44     | 46.00     | -10.56    |
| 39    | 0.527     | 35.44     | 46.00     | -10.56    |
| 40    | 2.840     | 35.44     | 46.00     | -10.56    |
| 41    | 0.672     | 35.44     | 46.00     | -10.56    |
| 42    | 2.077     | 35.44     | 46.00     | -10.56    |
| 43    | 0.839     | 35.44     | 46.00     | -10.56    |
| 44    | 0.454     | 36.23     | 46.80     | -10.57    |
| 45    | 1.800     | 35.42     | 46.00     | -10.58    |
| 46    | 1.680     | 35.41     | 46.00     | -10.59    |
| 47    | 1.480     | 35.39     | 46.00     | -10.61    |
| 48    | 1.345     | 35.37     | 46.00     | -10.63    |
| 49    | 1.262     | 35.37     | 46.00     | -10.63    |
| 50    | 0.471     | 35.84     | 46.49     | -10.65    |



02/04/16 15:59:46

FCC Class B - White Lead  
IBIS Networks  
Single IntelliSocket  
Model: IS-301  
White Lead - 115 VAC  
WL LI-215 12090 - Due 6-9-2016  
Test Engineer : Kyle Fujimoto

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50 highest peaks above -50.00 dB of FCC - Class B - Average limit line  
Peak criteria : 0.01 dB, Curve : Peak

| Peak# | Freq(MHz) | Amp(dBuV) | Limit(dB) | Delta(dB) |
|-------|-----------|-----------|-----------|-----------|
| 1     | 0.641     | 37.94     | 46.00     | -8.06     |
| 2     | 2.379     | 36.64     | 46.00     | -9.36     |
| 3     | 0.573     | 36.51     | 46.00     | -9.49     |
| 4     | 3.298     | 36.41     | 46.00     | -9.59     |
| 5     | 1.643     | 36.39     | 46.00     | -9.61     |
| 6     | 3.492     | 36.34     | 46.00     | -9.66     |
| 7     | 1.830     | 36.22     | 46.00     | -9.78     |
| 8     | 1.083     | 36.15     | 46.00     | -9.85     |
| 9     | 3.419     | 36.14     | 46.00     | -9.86     |
| 10    | 1.331     | 36.07     | 46.00     | -9.93     |
| 11    | 0.995     | 36.04     | 46.00     | -9.96     |
| 12    | 4.954     | 35.94     | 46.00     | -10.06    |
| 13    | 4.825     | 35.84     | 46.00     | -10.16    |
| 14    | 2.238     | 35.84     | 46.00     | -10.16    |
| 15    | 1.488     | 35.79     | 46.00     | -10.21    |
| 16    | 1.434     | 35.78     | 46.00     | -10.22    |
| 17    | 0.614     | 35.74     | 46.00     | -10.26    |
| 18    | 4.204     | 35.74     | 46.00     | -10.26    |
| 19    | 1.472     | 35.69     | 46.00     | -10.31    |
| 20    | 1.283     | 35.67     | 46.00     | -10.33    |
| 21    | 1.124     | 35.65     | 46.00     | -10.35    |
| 22    | 0.573     | 35.64     | 46.00     | -10.36    |
| 23    | 3.841     | 35.64     | 46.00     | -10.36    |
| 24    | 3.365     | 35.64     | 46.00     | -10.36    |
| 25    | 2.870     | 35.64     | 46.00     | -10.36    |
| 26    | 2.322     | 35.64     | 46.00     | -10.36    |
| 27    | 0.867     | 35.64     | 46.00     | -10.36    |
| 28    | 1.269     | 35.57     | 46.00     | -10.43    |
| 29    | 3.624     | 35.54     | 46.00     | -10.46    |
| 30    | 3.043     | 35.54     | 46.00     | -10.46    |
| 31    | 2.286     | 35.54     | 46.00     | -10.46    |
| 32    | 0.958     | 35.54     | 46.00     | -10.46    |
| 33    | 0.497     | 35.55     | 46.05     | -10.50    |
| 34    | 1.043     | 35.44     | 46.00     | -10.56    |
| 35    | 2.781     | 35.44     | 46.00     | -10.56    |
| 36    | 2.624     | 35.44     | 46.00     | -10.56    |
| 37    | 2.089     | 35.44     | 46.00     | -10.56    |
| 38    | 2.023     | 35.44     | 46.00     | -10.56    |
| 39    | 0.849     | 35.44     | 46.00     | -10.56    |
| 40    | 0.788     | 35.44     | 46.00     | -10.56    |
| 41    | 1.699     | 35.41     | 46.00     | -10.59    |
| 42    | 1.504     | 35.39     | 46.00     | -10.61    |
| 43    | 0.651     | 35.34     | 46.00     | -10.66    |
| 44    | 2.751     | 35.34     | 46.00     | -10.66    |
| 45    | 2.501     | 35.34     | 46.00     | -10.66    |
| 46    | 2.346     | 35.34     | 46.00     | -10.66    |
| 47    | 2.002     | 35.34     | 46.00     | -10.66    |
| 48    | 0.747     | 35.34     | 46.00     | -10.66    |
| 49    | 1.939     | 35.33     | 46.00     | -10.67    |
| 50    | 1.552     | 35.29     | 46.00     | -10.71    |

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