

NORTHWEST EMC

LightSPEED Technologies, Inc.

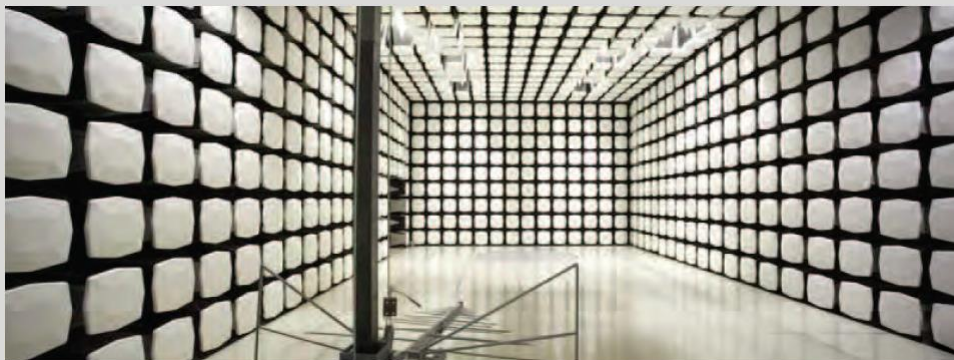
Flexcat Remote

FCC 15.207:2016

FCC 15.247:2016

2.4 GHz DTS Radio

Report # LITS0026.9



NVLAP Lab Code: 200630-0

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America. This Report may only be duplicated in its entirety

CERTIFICATE OF TEST

Last Date of Test: February 04, 2016
LightSPEED Technologies, Inc.
Model: Flexcat Remote

Radio Equipment Testing

Standards

| Specification | Method |
|-----------------|------------------|
| FCC 15.247:2015 | ANSI C63.10:2013 |
| FCC 15.247:2016 | |

Results

| Method Clause | Test Description | Applied | Results | Comments |
|---------------|------------------------------------|---------|---------|---------------------------|
| 3(b) | Duty Cycle | Yes | N/A | Characterization of radio |
| 3(b) | Power Spectral Density | Yes | Pass | |
| 6.6 | Occupied Bandwidth | Yes | Pass | |
| 6.12 | Output Power | Yes | Pass | |
| 6.13 | Band Edge Compliance | Yes | Pass | |
| 6.13 | Spurious Conducted Emissions | Yes | Pass | |
| 6.13 | Spurious Radiated Emissions | Yes | Pass | |
| 8.8 | AC – Powerline Conducted Emissions | Yes | Pass | |

Deviations From Test Standards

None

Approved By:



Kyle Holgate, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test.

REVISION HISTORY

| Revision Number | | Description | Date | Page Number |
|-----------------|--|-------------|------|-------------|
| 00 | | None | | |

ACCREDITATIONS AND AUTHORIZATIONS

United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Accredited by A2LA to ISO / IEC 17065 as a product certifier. This allows Northwest EMC to certify transmitters to FCC and IC specifications.

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025

Canada

IC - Recognized by Industry Canada as a Certification Body (CB). Certification chambers and Open Area Test Sites are filed with IC.

European Union

European Commission – Validated by the European Commission as a Conformity Assessment Body (CAB) under the EMC directive and as a Notified Body under the R&TTE Directive.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

MSIP / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Israel

MOC – Recognized by MOC as a CAB for the acceptance of test data.

Hong Kong

OFCA – Recognized by OFCA as a CAB for the acceptance of test data.

Vietnam

MIC – Recognized by MIC as a CAB for the acceptance of test data.

SCOPE

For details on the Scopes of our Accreditations, please visit:

<http://www.nwemc.com/accreditations/>
<http://gsi.nist.gov/global/docs/cabs/designations.html>

MEASUREMENT UNCERTAINTY

Measurement Uncertainty

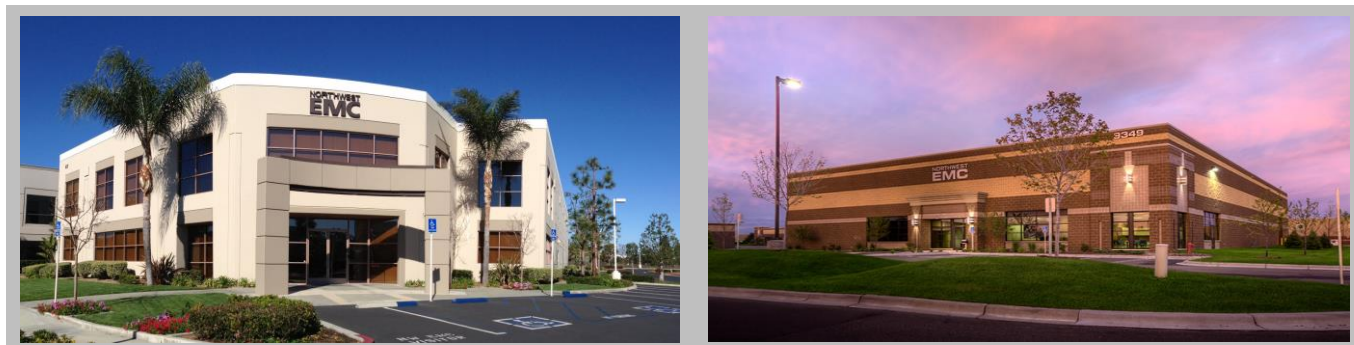
When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) for each test is on each data sheet. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-2 as applicable), and are available upon request.

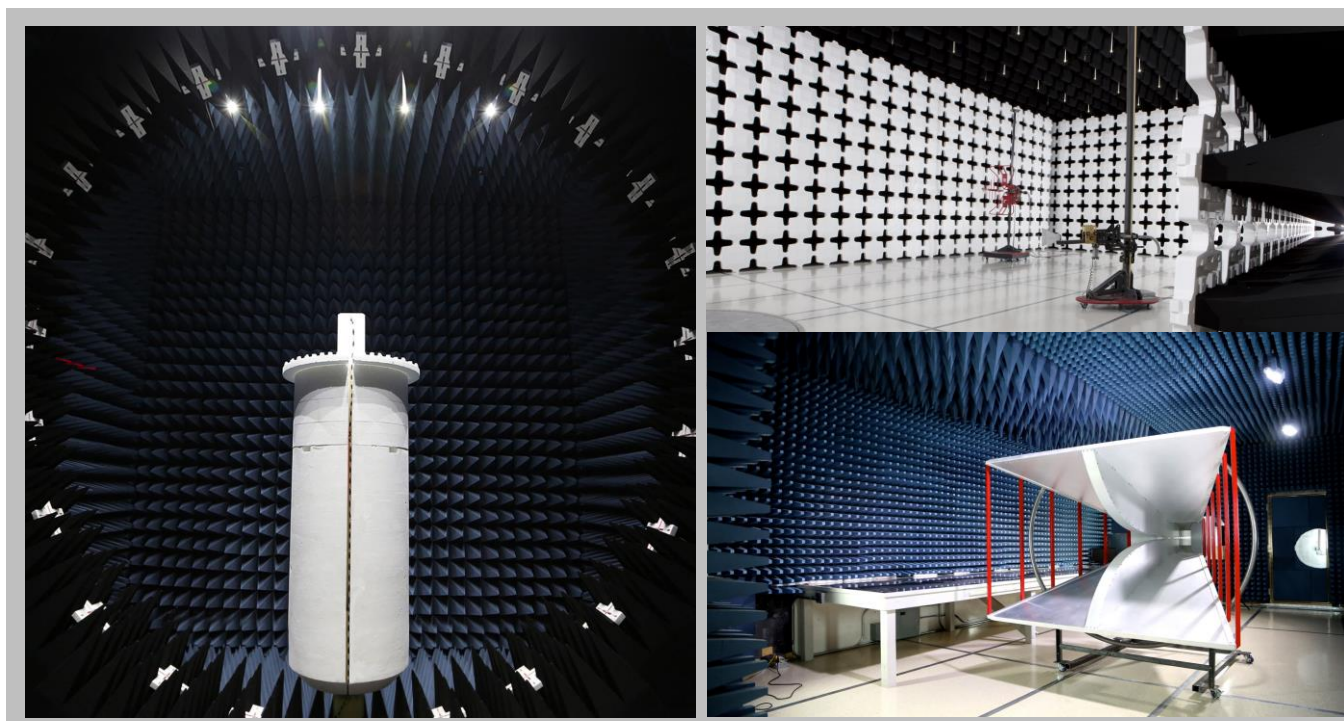
The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

| Test | + MU | - MU |
|---------------------------------------|-------------|-------------|
| Frequency Accuracy (Hz) | 0.0007% | -0.0007% |
| Amplitude Accuracy (dB) | 1.2 dB | -1.2 dB |
| Conducted Power (dB) | 0.3 dB | -0.3 dB |
| Radiated Power via Substitution (dB) | 0.7 dB | -0.7 dB |
| Temperature (degrees C) | 0.7°C | -0.7°C |
| Humidity (% RH) | 2.5% RH | -2.5% RH |
| Voltage (AC) | 1.0% | -1.0% |
| Voltage (DC) | 0.7% | -0.7% |
| Field Strength (dB) | 5.2 dB | -5.2 dB |
| AC Powerline Conducted Emissions (dB) | 2.4 dB | -2.4 dB |

FACILITIES



| | | | | | |
|---|---|--|---|--|---|
| California Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918 | Minnesota Labs MN01-08, MN10 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136 | New York Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 554-8214 | Oregon Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066 | Texas Labs TX01-09 3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255 | Washington Labs NC01-05 19201 120 th Ave NE Bothell, WA 98011 (425)984-6600 |
| NVLAP | | | | | |
| NVLAP Lab Code: 200676-0 | NVLAP Lab Code: 200881-0 | NVLAP Lab Code: 200761-0 | NVLAP Lab Code: 200630-0 | NVLAP Lab Code:201049-0 | NVLAP Lab Code: 200629-0 |
| Industry Canada | | | | | |
| 2834B-1, 2834B-3 | 2834E-1 | N/A | 2834D-1, 2834D-2 | 2834G-1 | 2834F-1 |
| BSMI | | | | | |
| SL2-IN-E-1154R | SL2-IN-E-1152R | N/A | SL2-IN-E-1017 | SL2-IN-E-1158R | SL2-IN-E-1153R |
| VCCI | | | | | |
| A-0029 | A-0109 | N/A | A-0108 | A-0201 | A-0110 |
| Recognized Phase I CAB for ACMA, BSMI, IDA, KCC/RRR, MIC, MOC, NCC, OFCA | | | | | |
| US0158 | US0175 | N/A | US0017 | US0191 | US0157 |



PRODUCT DESCRIPTION

Client and Equipment Under Test (EUT) Information

| | |
|---------------------------------|-------------------------------|
| Company Name: | LightSPEED Technologies, Inc. |
| Address: | 11509 SW Herman Road |
| City, State, Zip: | Tualatin, OR 97062 |
| Test Requested By: | Dave Jordahl |
| Model: | Flexcat Remote |
| First Date of Test: | December 30, 2015 |
| Last Date of Test: | February 04, 2016 |
| Receipt Date of Samples: | December 02, 2015 |
| Equipment Design Stage: | Production |
| Equipment Condition: | No Damage |

Information Provided by the Party Requesting the Test

Functional Description of the EUT:

This is a remote control/bridge that can send control signals to our base unit through Zigbee RF4CE interface. It also allows a BLE device to connect through this remote. The remote receives the command from BLE and retransmits via Zigbee RF4CE to our base unit. It also allows a BLE device to connect through this remote. The remote receives the command from BLE and retransmits via Zigbee RF4CE to our base unit.

Testing Objective:

To demonstrate compliance of the 2.4 GHz DTS Radio to FCC 15.247 requirements.

CONFIGURATIONS

Configuration LITS0026- 4

| EUT | | | |
|-------------|-------------------------------|-------------------|-----------------------|
| Description | Manufacturer | Model/Part Number | Serial Number |
| RF remote | LightSPEED Technologies, Inc. | 334-0041-00 | AC-FCHRC1-131014-0001 |

Configuration LITS0026- 8

| EUT | | | |
|--------------------|-------------------------------|-------------------|---------------|
| Description | Manufacturer | Model/Part Number | Serial Number |
| RF remote (Zigbee) | LightSPEED Technologies, Inc. | 334-0041-00 | AC-FCHRC-0022 |

Configuration LITS0026- 9

| EUT | | | |
|--------------------|-------------------------------|-------------------|---------------|
| Description | Manufacturer | Model/Part Number | Serial Number |
| RF remote (Zigbee) | LightSPEED Technologies, Inc. | 334-0041-00 | AC-FCHRC-0022 |

| Peripherals in test setup boundary | | | |
|------------------------------------|--------------|-------------------|---------------|
| Description | Manufacturer | Model/Part Number | Serial Number |
| AC/DC Adapter | CUI Inc. | SWI5-5-N-I38 | None |

| Cables | | | | | |
|------------|--------|------------|---------|--------------|---------------|
| Cable Type | Shield | Length (m) | Ferrite | Connection 1 | Connection 2 |
| USB Cable | Yes | 0.9m | No | RF Remote | AC/DC Adapter |

MODIFICATIONS

Equipment Modifications

| Item | Date | Test | Modification | Note | Disposition of EUT |
|------|------------|----------------------------------|--------------------------------------|---|---|
| 1 | 12/30/2015 | Occupied Bandwidth | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | EUT remained at Northwest EMC following the test. |
| 2 | 12/30/2015 | Output Power | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | EUT remained at Northwest EMC following the test. |
| 3 | 12/30/2015 | Power Spectral Density | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | EUT remained at Northwest EMC following the test. |
| 4 | 12/30/2015 | Band Edge Compliance | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | EUT remained at Northwest EMC following the test. |
| 5 | 12/30/2015 | Spurious Conducted Emissions | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | EUT remained at Northwest EMC following the test. |
| 6 | 02/01/2016 | Spurious Radiated Emissions | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | EUT remained at Northwest EMC following the test. |
| 7 | 02/04/2016 | AC Powerline Conducted Emissions | Tested as delivered to Test Station. | No EMI suppression devices were added or modified during this test. | Scheduled testing was completed. |

Duty Cycle

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST DESCRIPTION

The Duty Cycle (x) of the single channel operation of the radio as controlled by the provided test software was measured for each of the EUT operating modes.

There is no compliance requirement to be met by this test, so therefore no Pass / Fail criteria.

The measurements were made using a zero span on the spectrum analyzer to see the pulses in the time domain. The transmit power was set to its default maximum. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used

The test software provided for operation in a fixed, single channel mode allows the EUT to operate continuously at 100% Duty Cycle.

OCCUPIED BANDWIDTH

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT


| Description | Manufacturer | Model | ID | Last Cal. | Interval (mo) |
|------------------------------|--------------------|-----------------|-----|-----------|---------------|
| Attenuator | S.M. Electronics | SA18N-06/SM4032 | REE | 10/1/2015 | 12 |
| Generator - Signal | Keysight | 5182B | TFU | NCR | 0 |
| Meter - Power | Gigatronics | 8651A | SPM | 5/25/2015 | 12 |
| Power Sensor | Gigatronics | 80701A | SPL | 5/25/2015 | 12 |
| Cable | ESM Cable Corp. | TT | EV1 | NCR | 0 |
| Block - DC | Fairview Microwave | SD3379 | AMP | 6/18/2015 | 12 |
| Attenuator | S.M. Electronics | SA26B-20 | AUY | 7/14/2015 | 12 |
| Analyzer - Spectrum Analyzer | Agilent | E4446A | AAQ | 3/10/2015 | 12 |

TEST DESCRIPTION

The 6dB occupied bandwidth was measured using 100 kHz resolution bandwidth and 300 kHz video bandwidth. The 99.9% (approximate 26 dB) emission bandwidth (EBW) was also measured at the same time.

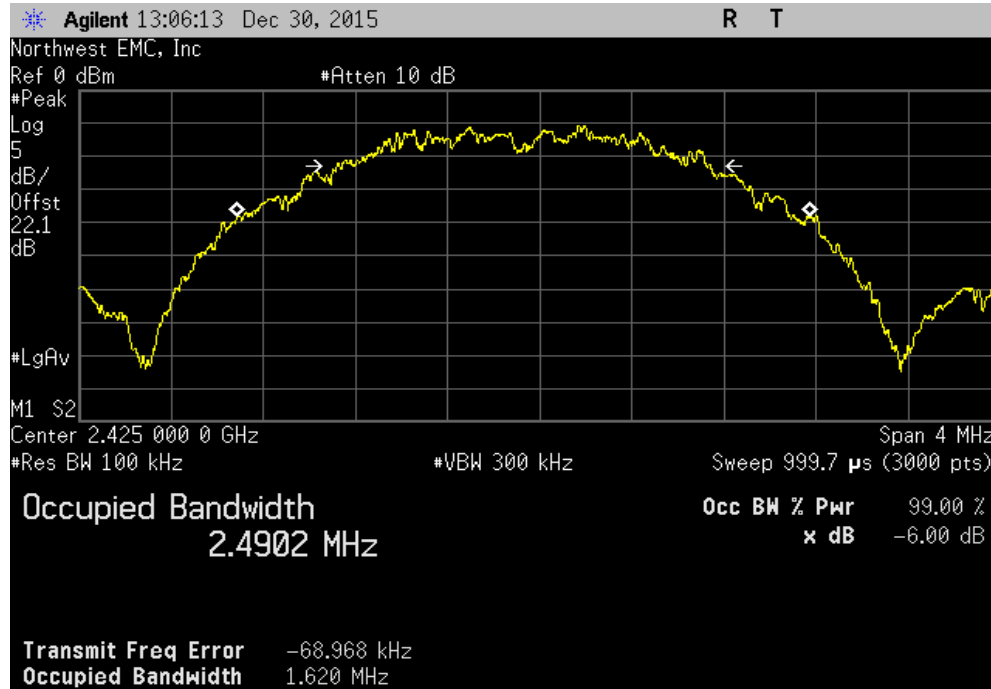
The EUT was set to the channels and modes listed in the datasheet. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer.

OCCUPIED BANDWIDTH

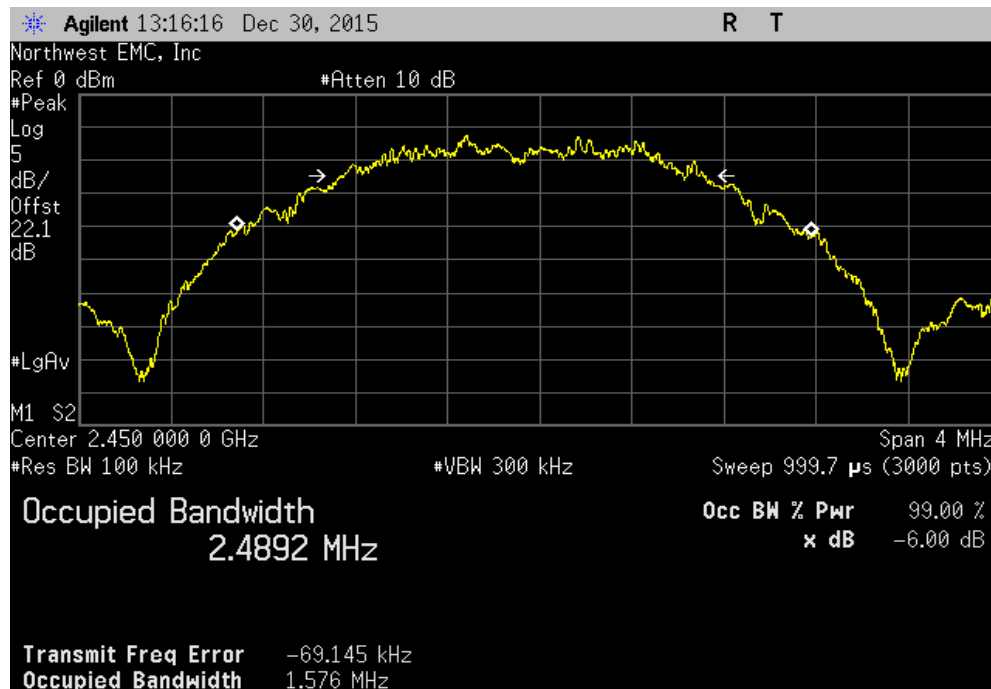
| | | | |
|--|----------------------------------|---|--------------|
| EUT: Flexcat Remote | | Work Order: LITS0026 | |
| Serial Number: AC-FCHRC1-131014-0001 | | Date: 12/30/15 | |
| Customer: LightSPEED Technologies, Inc. | | Temperature: 22°C | |
| Attendees: None | | Humidity: 33% | |
| Project: None | | Barometric Pres.: 1019.9 mbar | |
| Tested by: Brandon Hobbs | Power: Battery (2.4 VDC Nominal) | Job Site: EV06 | |
| TEST SPECIFICATIONS | | Test Method | |
| FCC 15.247:2015 | | ANSI C63.10:2013 | |
| COMMENTS | | | |
| The EUT is operating in a Zigbee mode while at 100% duty cycle. The EUT is using OQPSK modulation. | | | |
| DEVIATIONS FROM TEST STANDARD | | | |
| Configuration # | 4 | Signature  | |
| | | Value | Limit (>) |
| Zigbee | Low Channel, 2425 MHz | 1.62 MHz | 500 kHz |
| | Mid Channel, 2450 MHz | 1.576 MHz | 500 kHz |
| | High Channel, 2475 MHz | 1.599 MHz | 500 kHz |
| | | | Pass |
| | | | Pass |
| | | | Pass |

OCCUPIED BANDWIDTH

| Zigbee, Low Channel, 2425 MHz | | | | | | |
|-------------------------------|--|--|--|----------|--------------|--------|
| | | | | Value | Limit (>) | Result |
| | | | | 1.62 MHz | 500 kHz | Pass |

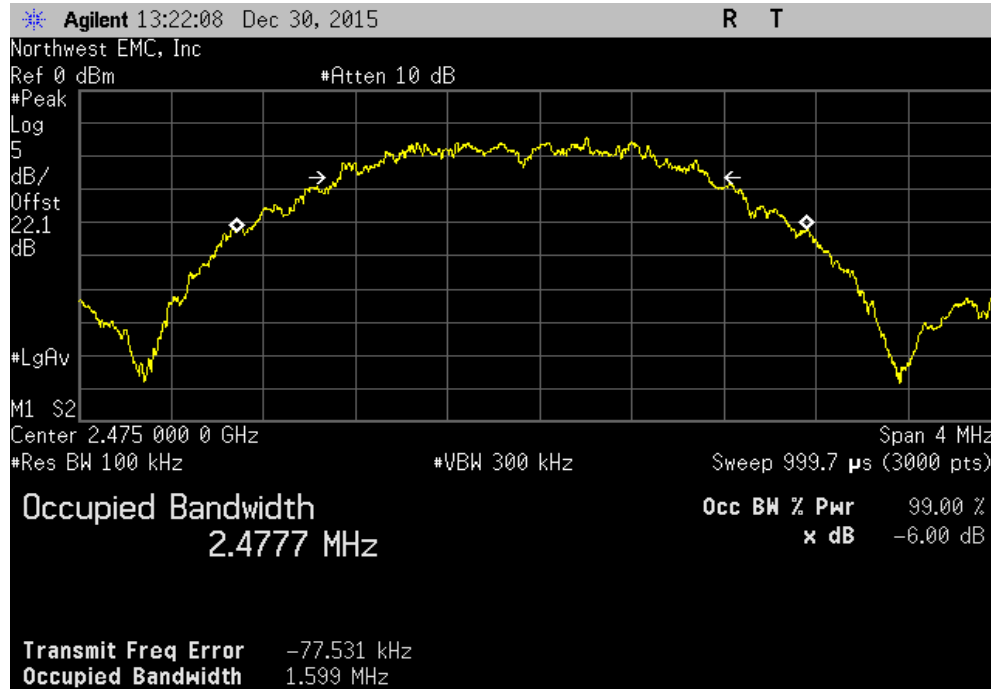


| Zigbee, Mid Channel, 2450 MHz | | | | | | |
|-------------------------------|--|--|--|-----------|--------------|--------|
| | | | | Value | Limit (>) | Result |
| | | | | 1.576 MHz | 500 kHz | Pass |



OCCUPIED BANDWIDTH

| Zigbee, High Channel, 2475 MHz | | | | | | |
|--------------------------------|--|--|--|-----------|--------------|--------|
| | | | | Value | Limit (>) | Result |
| | | | | 1.599 MHz | 500 kHz | Pass |



OUTPUT POWER

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

| Description | Manufacturer | Model | ID | Last Cal. | Interval (mo) |
|------------------------------|--------------------|-----------------|-----|-----------|---------------|
| Attenuator | S.M. Electronics | SA18N-06/SM4032 | REE | 10/1/2015 | 12 |
| Generator - Signal | Keysight | 5182B | TFU | NCR | 0 |
| Meter - Power | Gigatronics | 8651A | SPM | 5/25/2015 | 12 |
| Power Sensor | Gigatronics | 80701A | SPL | 5/25/2015 | 12 |
| Cable | ESM Cable Corp. | TT | EV1 | NCR | 0 |
| Block - DC | Fairview Microwave | SD3379 | AMP | 6/18/2015 | 12 |
| Attenuator | S.M. Electronics | SA26B-20 | AUY | 7/14/2015 | 12 |
| Analyzer - Spectrum Analyzer | Agilent | E4446A | AAQ | 3/10/2015 | 12 |

TEST DESCRIPTION


The transmit frequency was set to the required channels in each band. The transmit power was set to its default maximum. A direct connection was made between the RF output of the EUT and a spectrum analyzer. Attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input.

Prior to measuring peak transmit power the DTS bandwidth (B) and the transmission pulse duration (T) were measured. Both are required to determine the method of measuring Maximum Conducted Output Power. The transmission pulse duration (T) was measured using a zero span on the spectrum analyzer to see the pulses in the time domain.

The method found in ANSI C63.10:2013 Section 11.10.2 was used because the RBW on the analyzer was greater than the DTS Bandwidth of the radio..

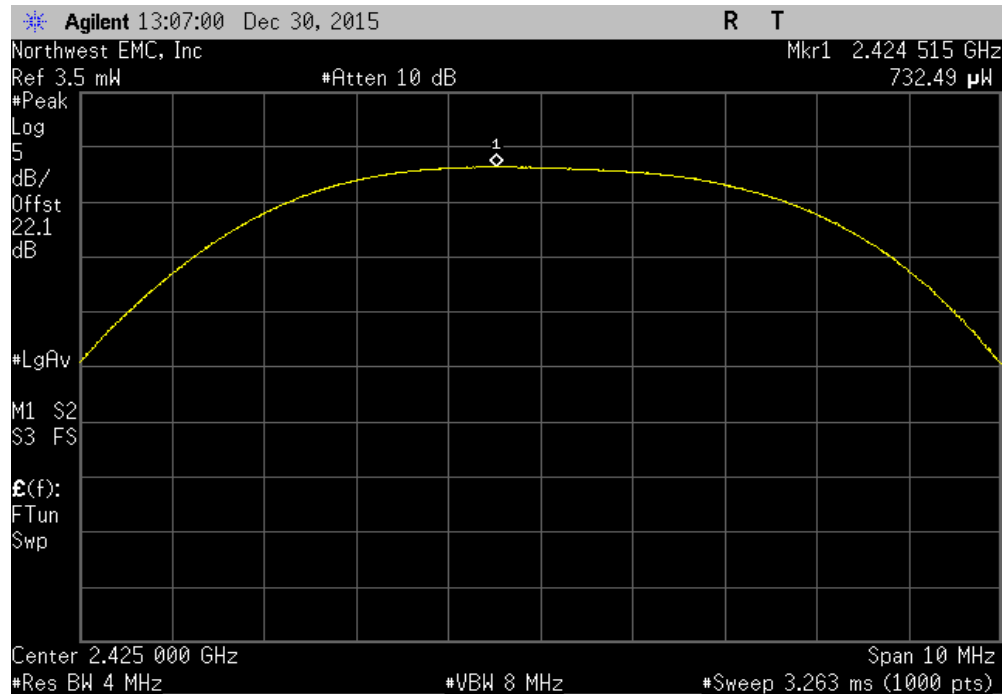
De Facto EIRP Limit: Per 47 CFR 15.247 (b)(1-3), the EUT meets the de facto EIRP limit of +36 dBm.

OUTPUT POWER

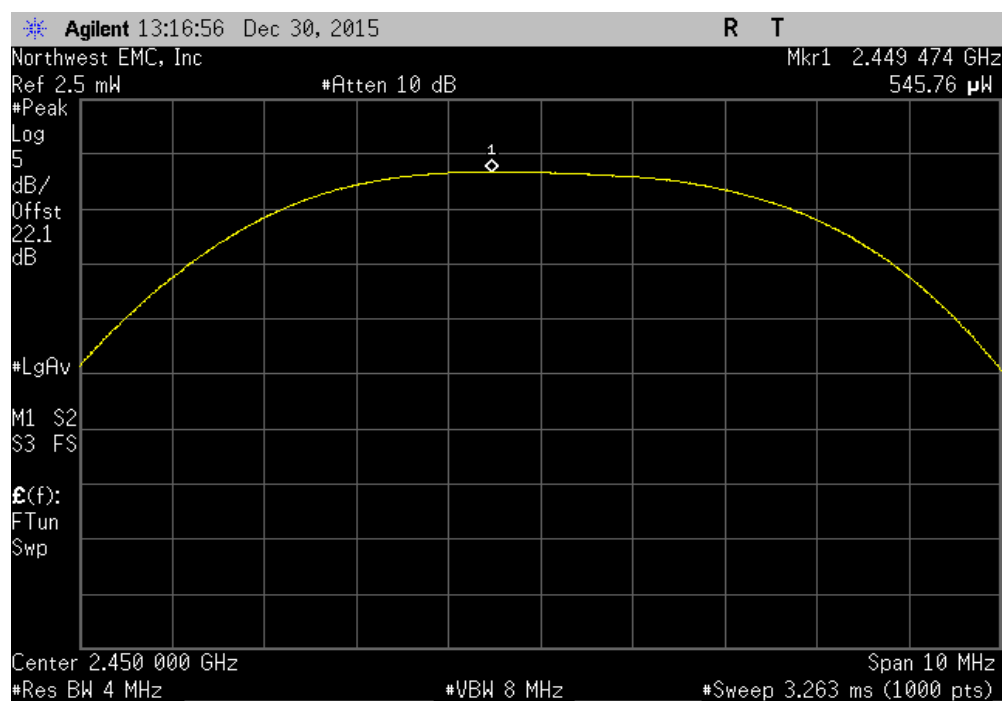
| | | | | |
|--|------------------------|---|------------------|------|
| EUT: Flexcat Remote | | Work Order: LITS0026 | | |
| Serial Number: AC-FCHRC1-131014-0001 | | Date: 12/30/15 | | |
| Customer: LightSPEED Technologies, Inc. | | Temperature: 22°C | | |
| Attendees: None | | Humidity: 33% | | |
| Project: None | | Barometric Pres.: 1019.9 mbar | | |
| Tested by: Brandon Hobbs | | Power: Battery (2.4 VDC Nominal) | Job Site: EV06 | |
| TEST SPECIFICATIONS | | Test Method | | |
| FCC 15.247:2015 | | ANSI C63.10:2013 | | |
| COMMENTS | | | | |
| The EUT is operating in a Zigbee mode while at 100% duty cycle. The EUT is using OQPSK modulation. | | | | |
| DEVIATIONS FROM TEST STANDARD | | | | |
| Configuration # | 4 | Signature  | | |
| | | Value | Limit (<) Result | |
| Zigbee | Low Channel, 2425 MHz | 732.487 uW | 1 W | Pass |
| | Mid Channel, 2450 MHz | 545.758 uW | 1 W | Pass |
| | High Channel, 2475 MHz | 484.507 uW | 1 W | Pass |

OUTPUT POWER

| Zigbee, Low Channel, 2425 MHz | | | | | | |
|-------------------------------|--|--|--|------------|-----------|--------|
| | | | | Value | Limit (<) | Result |
| | | | | 732.487 uW | 1 W | Pass |

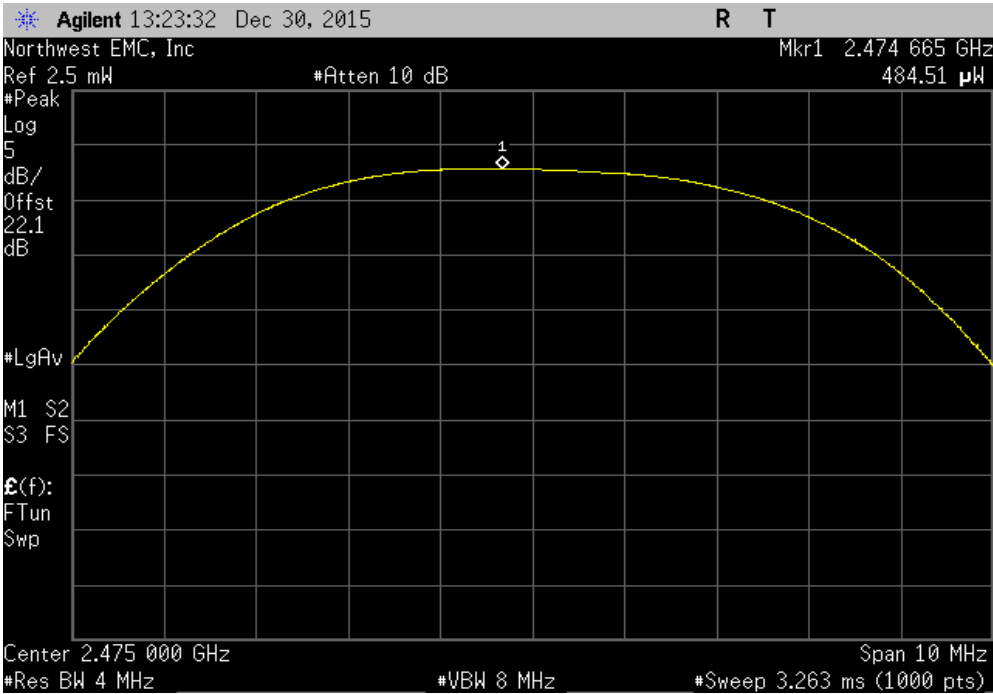


| Zigbee, Mid Channel, 2450 MHz | | | | | | |
|-------------------------------|--|--|--|------------|-----------|--------|
| | | | | Value | Limit (<) | Result |
| | | | | 545.758 uW | 1 W | Pass |



OUTPUT POWER

| Zigbee, High Channel, 2475 MHz | | | | | | |
|--------------------------------|--|--|--|------------|-----------|--------|
| | | | | Value | Limit (<) | Result |
| | | | | 484.507 uW | 1 W | Pass |



POWER SPECTRAL DENSITY

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

| Description | Manufacturer | Model | ID | Last Cal. | Interval (mo) |
|------------------------------|--------------------|-----------------|-----|-----------|---------------|
| Meter - Power | Gigatronics | 8651A | SPM | 5/25/2015 | 12 |
| Power Sensor | Gigatronics | 80701A | SPL | 5/25/2015 | 12 |
| Generator - Signal | Keysight | 5182B | TFU | NCR | 0 |
| Attenuator | S.M. Electronics | SA18N-06/SM4032 | REE | 10/1/2015 | 12 |
| Cable | ESM Cable Corp. | TT | EV1 | NCR | 0 |
| Block - DC | Fairview Microwave | SD3379 | AMP | 6/18/2015 | 12 |
| Attenuator | S.M. Electronics | SA26B-20 | AUY | 7/14/2015 | 12 |
| Analyzer - Spectrum Analyzer | Agilent | E4446A | AAQ | 3/10/2015 | 12 |


TEST DESCRIPTION

The maximum power spectral density measurements was measured using the channels and modes as called out on the following data sheets.

A direct connection was made between the RF output of the EUT and a spectrum analyzer. External attenuation and a DC block were used. The reference level offset on the spectrum analyzer was adjusted to compensate for cable loss and the external attenuation used between the RF output and the spectrum analyzer input.

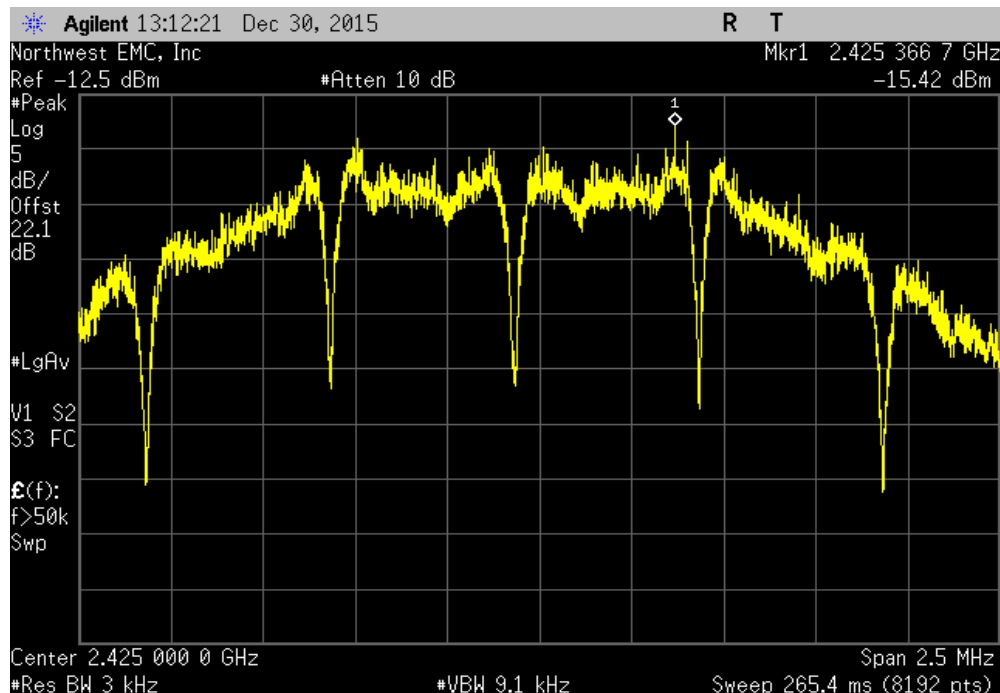
Per the procedure outlined in ANSI C63.10 the peak power spectral density was measured in a 3 kHz RBW.

POWER SPECTRAL DENSITY

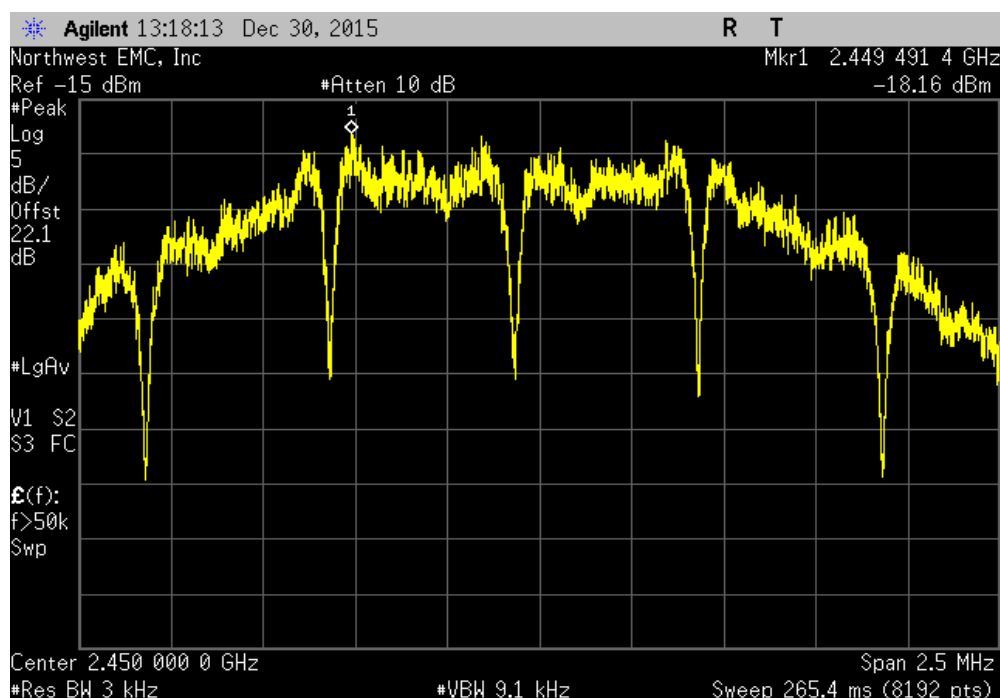
| | | | |
|--|------------------------|---|---------------------|
| EUT: Flexcat Remote | | Work Order: LITS0026 | |
| Serial Number: AC-FCHRC1-131014-0001 | | Date: 12/30/15 | |
| Customer: LightSPEED Technologies, Inc. | | Temperature: 22°C | |
| Attendees: None | | Humidity: 33% | |
| Project: None | | Barometric Pres.: 1019.9 mbar | |
| Tested by: Brandon Hobbs | | Power: Battery (2.4 VDC Nominal) | Job Site: EV06 |
| TEST SPECIFICATIONS | | Test Method | |
| FCC 15.247:2015 | | ANSI C63.10:2013 | |
| COMMENTS | | | |
| The EUT is operating in a Zigbee mode while at 100% duty cycle. The EUT is using OQPSK modulation. | | | |
| DEVIATIONS FROM TEST STANDARD | | | |
| Configuration # | 4 | Signature  | |
| | | Value dBm/3kHz | Limit < dBm/3kHz |
| Zigbee | | | Results |
| | Low Channel, 2425 MHz | -15.419 | 8 Pass |
| | Mid Channel, 2450 MHz | -18.157 | 8 Pass |
| | High Channel, 2475 MHz | -18.234 | 8 Pass |

POWER SPECTRAL DENSITY

| Zigbee, Low Channel, 2425 MHz | | | | | | |
|-------------------------------|--|--|--|-------------------|---------------------|---------|
| | | | | Value dBm/3kHz | Limit < dBm/3kHz | Results |
| | | | | -15.419 | 8 | Pass |

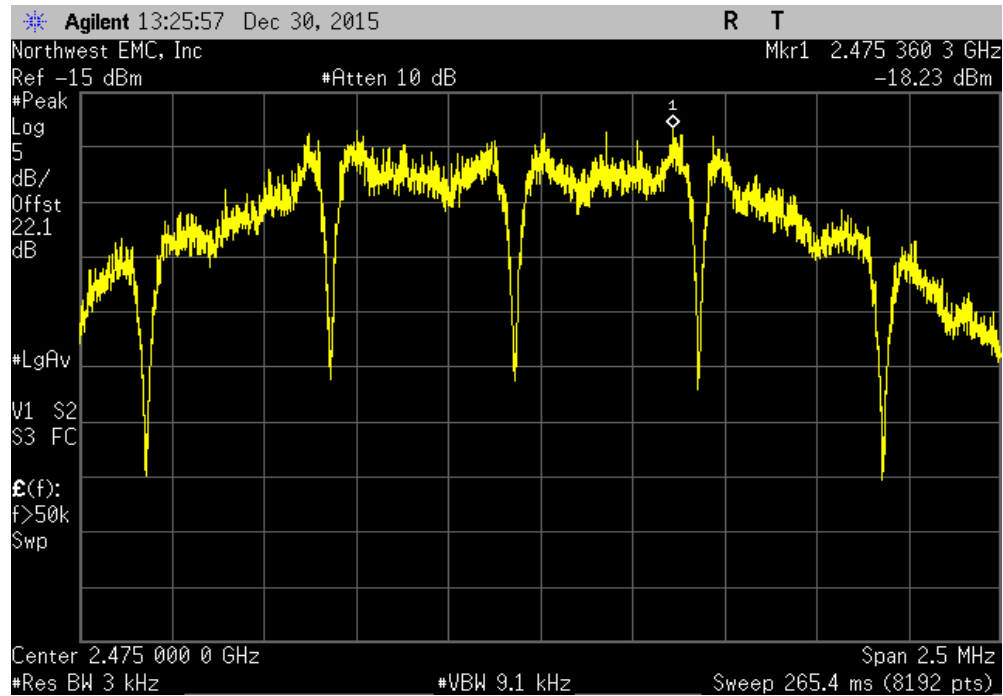


| Zigbee, Mid Channel, 2450 MHz | | | | | | |
|-------------------------------|--|--|--|-------------------|---------------------|---------|
| | | | | Value dBm/3kHz | Limit < dBm/3kHz | Results |
| | | | | -18.157 | 8 | Pass |



POWER SPECTRAL DENSITY

| Zigbee, High Channel, 2475 MHz | | | | | | |
|--------------------------------|--|--|--|-------------------|---------------------|---------|
| | | | | Value dBm/3kHz | Limit < dBm/3kHz | Results |
| | | | | -18.234 | 8 | Pass |



BAND EDGE COMPLIANCE

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

| Description | Manufacturer | Model | ID | Last Cal. | Interval (mo) |
|------------------------------|--------------------|-----------------|-----|-----------|---------------|
| Attenuator | S.M. Electronics | SA18N-06/SM4032 | REE | 10/1/2015 | 12 |
| Generator - Signal | Keysight | 5182B | TFU | NCR | 0 |
| Meter - Power | Gigatronics | 8651A | SPM | 5/25/2015 | 12 |
| Power Sensor | Gigatronics | 80701A | SPL | 5/25/2015 | 12 |
| Cable | ESM Cable Corp. | TT | EV1 | NCR | 0 |
| Block - DC | Fairview Microwave | SD3379 | AMP | 6/18/2015 | 12 |
| Attenuator | S.M. Electronics | SA26B-20 | AUY | 7/14/2015 | 12 |
| Analyzer - Spectrum Analyzer | Agilent | E4446A | AAQ | 3/10/2015 | 12 |

TEST DESCRIPTION


The spurious RF conducted emissions at the edges of the authorized bands were measured with the EUT set to low and high transmit frequencies in each available band. The channels closest to the band edges were selected. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the data rate(s) listed in the datasheet.

The spectrum was scanned below the lower band edge and above the higher band edge.

BAND EDGE COMPLIANCE

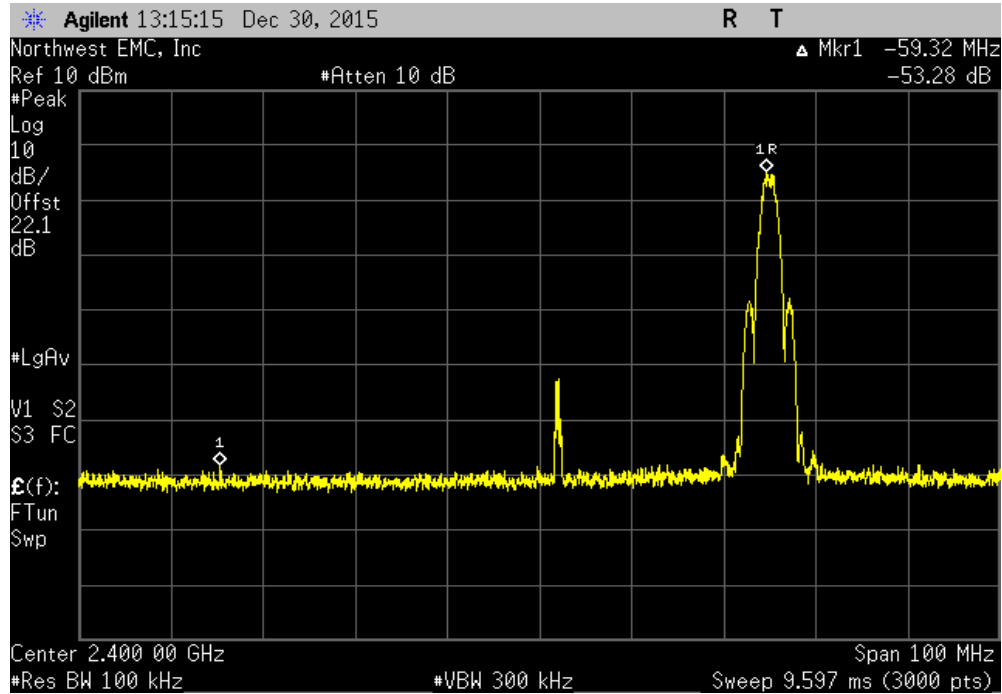


XMR 2015.01.14

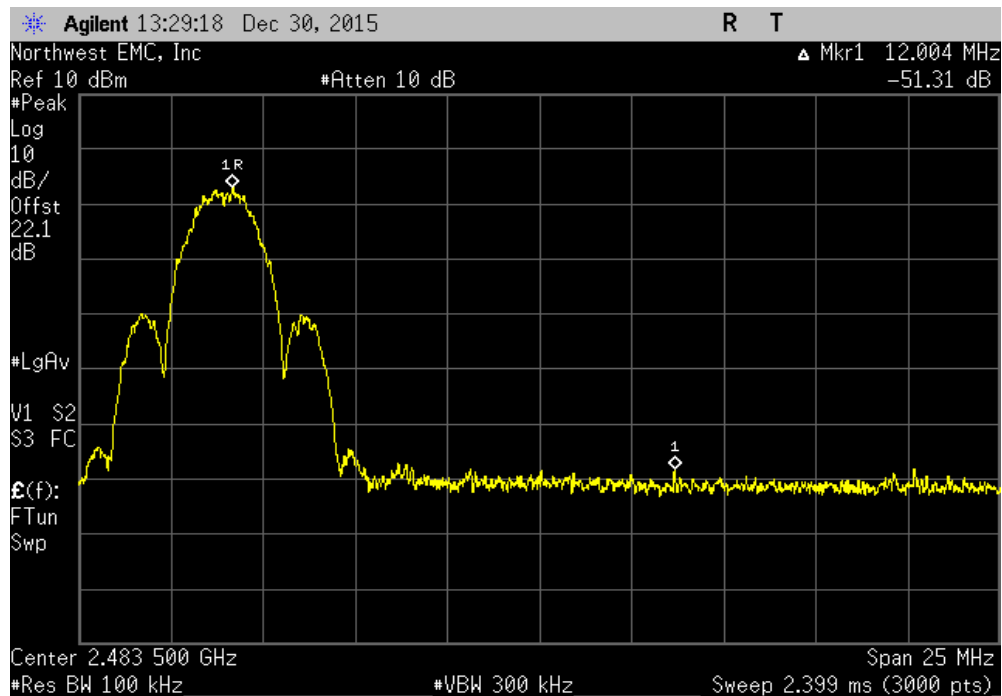
| | | | | |
|--|----------------------------------|---|----------------------|------|
| EUT: Flexcat Remote | | Work Order: LITS0026 | | |
| Serial Number: AC-FCHRC1-131014-0001 | | Date: 12/30/15 | | |
| Customer: LightSPEED Technologies, Inc. | | Temperature: 22°C | | |
| Attendees: None | | Humidity: 33% | | |
| Project: None | | Barometric Pres.: 1019.9 mbar | | |
| Tested by: Brandon Hobbs | Power: Battery (2.4 VDC Nominal) | Job Site: EV06 | | |
| TEST SPECIFICATIONS | | Test Method | | |
| FCC 15.247:2015 | | ANSI C63.10:2013 | | |
| COMMENTS | | | | |
| The EUT is operating in a Zigbee mode while at 100% duty cycle. The EUT is using OQPSK modulation. | | | | |
| DEVIATIONS FROM TEST STANDARD | | | | |
| Configuration # | 4 | Signature  | | |
| | | Value (dBc) | Limit ≤ (dBc) Result | |
| Zigbee | Low Channel, 2425 MHz | -53.28 | -20 | Pass |
| | High Channel, 2475 MHz | -51.31 | -20 | Pass |

BAND EDGE COMPLIANCE

| Zigbee, Low Channel, 2425 MHz | | | | | | |
|-------------------------------|--|--|--|----------------|------------------|--------|
| | | | | Value (dBc) | Limit ≤ (dBc) | Result |
| | | | | -53.28 | -20 | Pass |



| Zigbee, High Channel, 2475 MHz | | | | | | |
|--------------------------------|--|--|--|----------------|------------------|--------|
| | | | | Value (dBc) | Limit ≤ (dBc) | Result |
| | | | | -51.31 | -20 | Pass |



SPURIOUS CONDUCTED EMISSIONS

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.


TEST EQUIPMENT

| Description | Manufacturer | Model | ID | Last Cal. | Interval (mo) |
|------------------------------|--------------------|-----------------|-----|-----------|---------------|
| Attenuator | S.M. Electronics | SA18N-06/SM4032 | REE | 10/1/2015 | 12 |
| Generator - Signal | Keysight | 5182B | TFU | NCR | 0 |
| Meter - Power | Gigatronics | 8651A | SPM | 5/25/2015 | 12 |
| Power Sensor | Gigatronics | 80701A | SPL | 5/25/2015 | 12 |
| Cable | ESM Cable Corp. | TT | EV1 | NCR | 0 |
| Attenuator | S.M. Electronics | SA26B-20 | AUY | 7/14/2015 | 12 |
| Block - DC | Fairview Microwave | SD3379 | AMP | 6/18/2015 | 12 |
| Analyzer - Spectrum Analyzer | Agilent | E4446A | AAQ | 3/10/2015 | 12 |

TEST DESCRIPTION

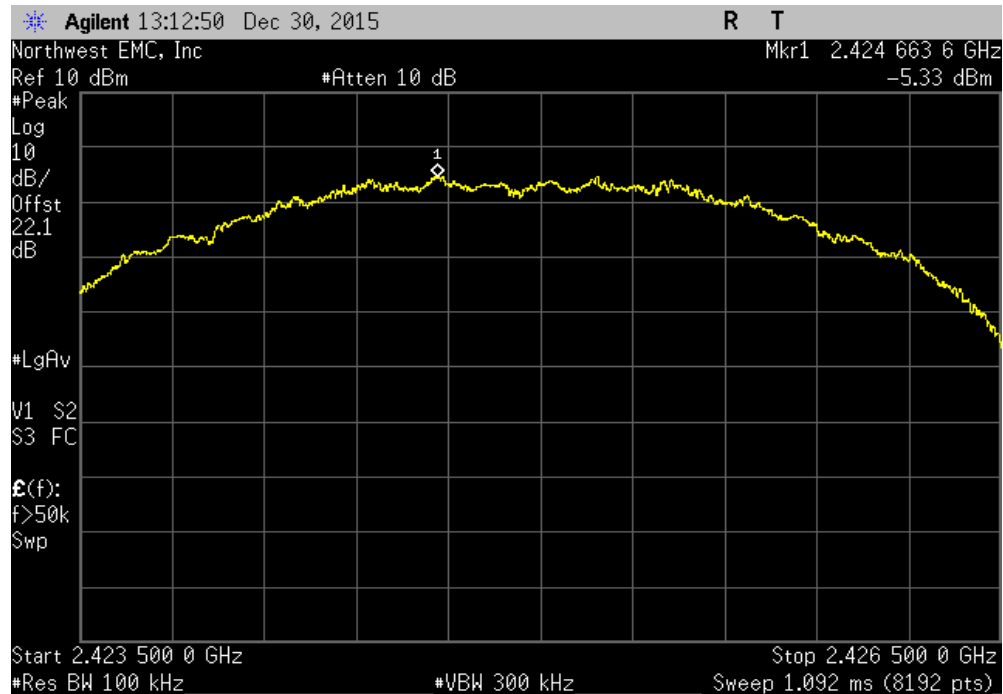
The spurious RF conducted emissions were measured with the EUT set to low, medium and high transmit frequencies. The measurements were made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at the data rate(s) listed in the datasheet. For each transmit frequency, the spectrum was scanned throughout the specified frequency range.

SPURIOUS CONDUCTED EMISSIONS

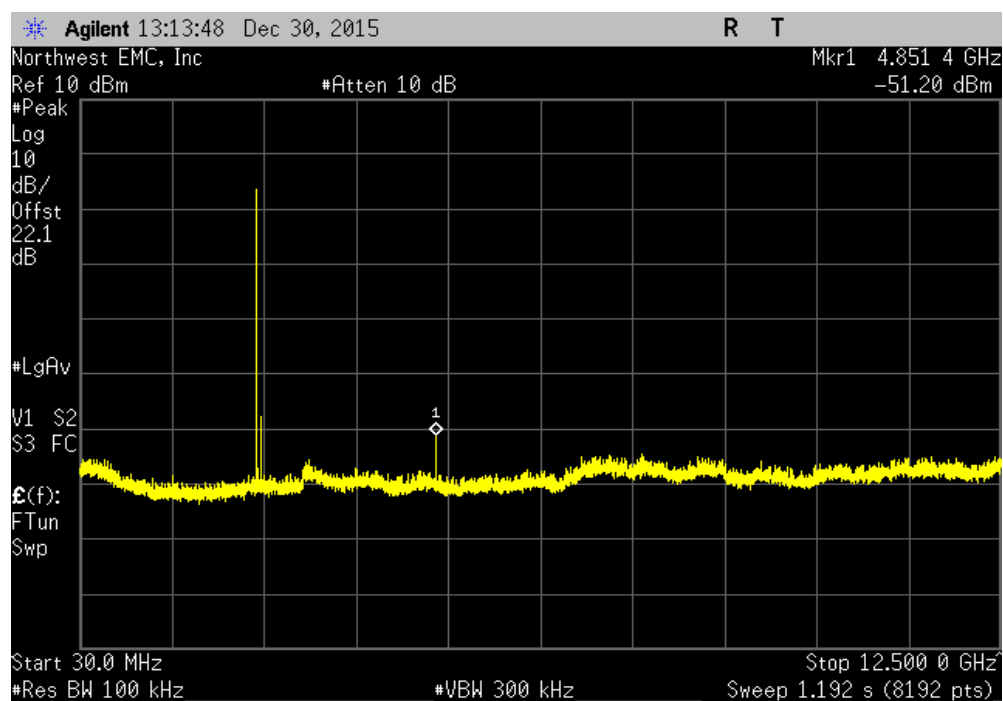
| | | | |
|--|------------------------|---|--------------------------------------|
| EUT: Flexcat Remote | | Work Order: LITS0026 | |
| Serial Number: AC-FCHRC1-131014-0001 | | Date: 12/30/15 | |
| Customer: LightSPEED Technologies, Inc. | | Temperature: 22°C | |
| Attendees: None | | Humidity: 33% | |
| Project: None | | Barometric Pres.: 1019.9 mbar | |
| Tested by: Brandon Hobbs | | Power: Battery (2.4 VDC Nominal) | Job Site: EV06 |
| TEST SPECIFICATIONS | | Test Method | |
| FCC 15.247:2015 | | ANSI C63.10:2013 | |
| COMMENTS | | | |
| The EUT is operating in a Zigbee mode while at 100% duty cycle. The EUT is using OQPSK modulation. | | | |
| DEVIATIONS FROM TEST STANDARD | | | |
| Configuration # | 4 | Signature  | |
| | | Frequency Range | Max Value (dBc) Limit ≤ (dBc) Result |
| Zigbee | | | |
| | Low Channel, 2425 MHz | Fundamental | N/A N/A N/A |
| | Low Channel, 2425 MHz | 30 MHz - 12.5 GHz | -45.87 -20 Pass |
| | Low Channel, 2425 MHz | 12.5 GHz - 25 GHz | -42.62 -20 Pass |
| | Mid Channel, 2450 MHz | Fundamental | N/A N/A N/A |
| | Mid Channel, 2450 MHz | 30 MHz - 12.5 GHz | -46.88 -20 Pass |
| | Mid Channel, 2450 MHz | 12.5 GHz - 25 GHz | -41.87 -20 Pass |
| | High Channel, 2475 MHz | Fundamental | N/A N/A N/A |
| | High Channel, 2475 MHz | 30 MHz - 12.5 GHz | -47.32 -20 Pass |
| | High Channel, 2475 MHz | 12.5 GHz - 25 GHz | -40.56 -20 Pass |

SPURIOUS CONDUCTED EMISSIONS

| Zigbee, Low Channel, 2425 MHz | | | | | | |
|-------------------------------|--|-----------------|--|---------------|--------|--|
| Frequency Range | | Max Value (dBc) | | Limit ≤ (dBc) | Result | |
| Fundamental | | N/A | | N/A | N/A | |

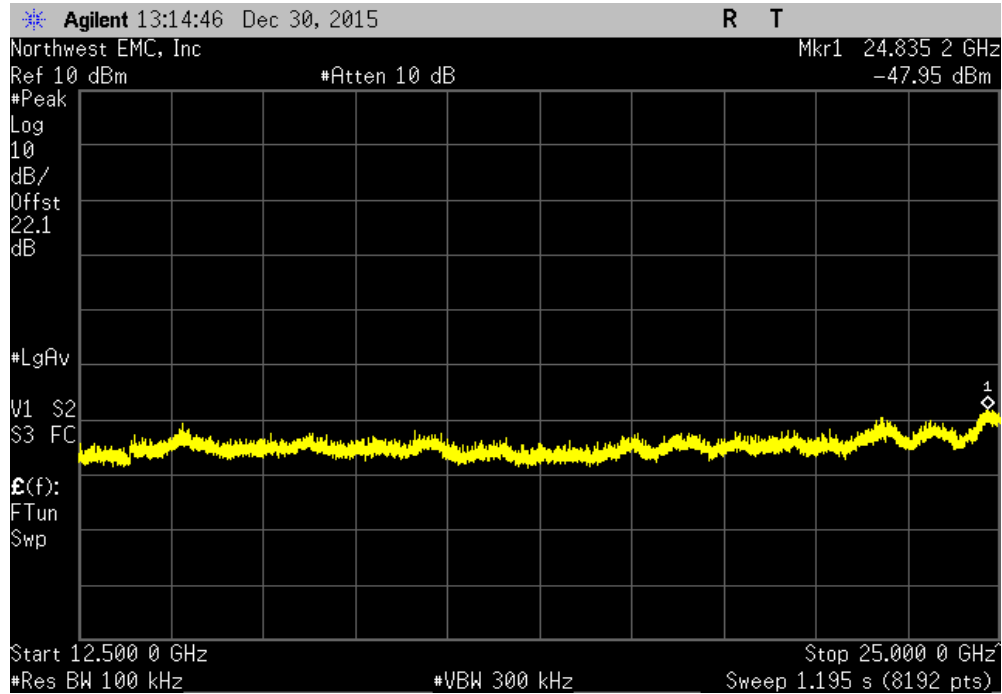


| Zigbee, Low Channel, 2425 MHz | | | | | | |
|-------------------------------|--|-----------------|--|---------------|--------|--|
| Frequency Range | | Max Value (dBc) | | Limit ≤ (dBc) | Result | |
| 30 MHz - 12.5 GHz | | -45.87 | | -20 | Pass | |

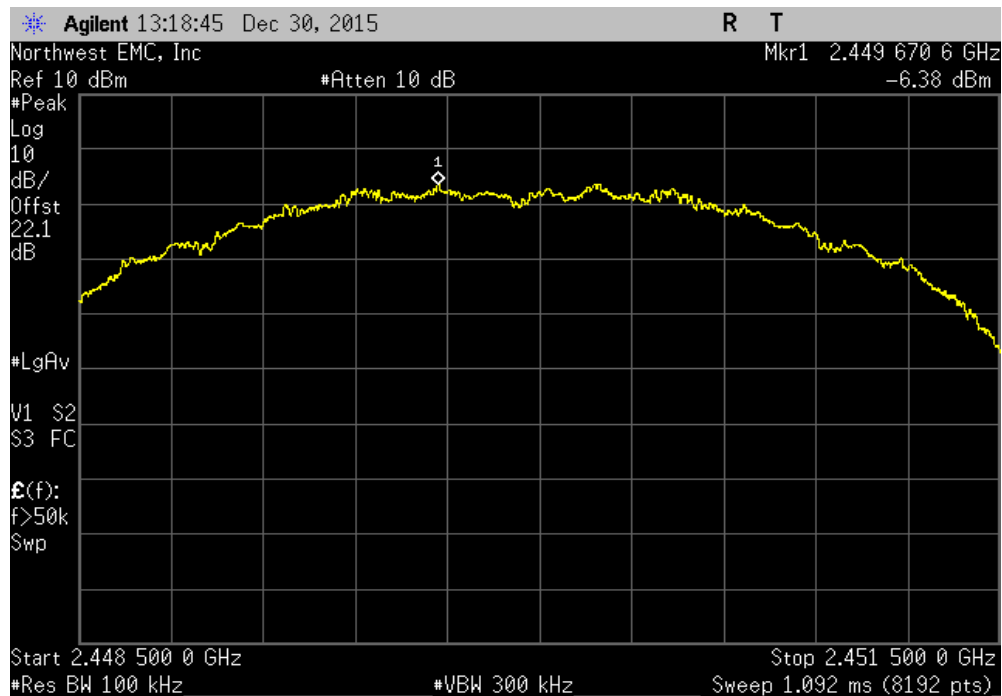


SPURIOUS CONDUCTED EMISSIONS

| Zigbee, Low Channel, 2425 MHz | | | | |
|-------------------------------|-----------------|---------------|--------|--|
| Frequency Range | Max Value (dBc) | Limit ≤ (dBc) | Result | |
| 12.5 GHz - 25 GHz | -42.62 | -20 | Pass | |

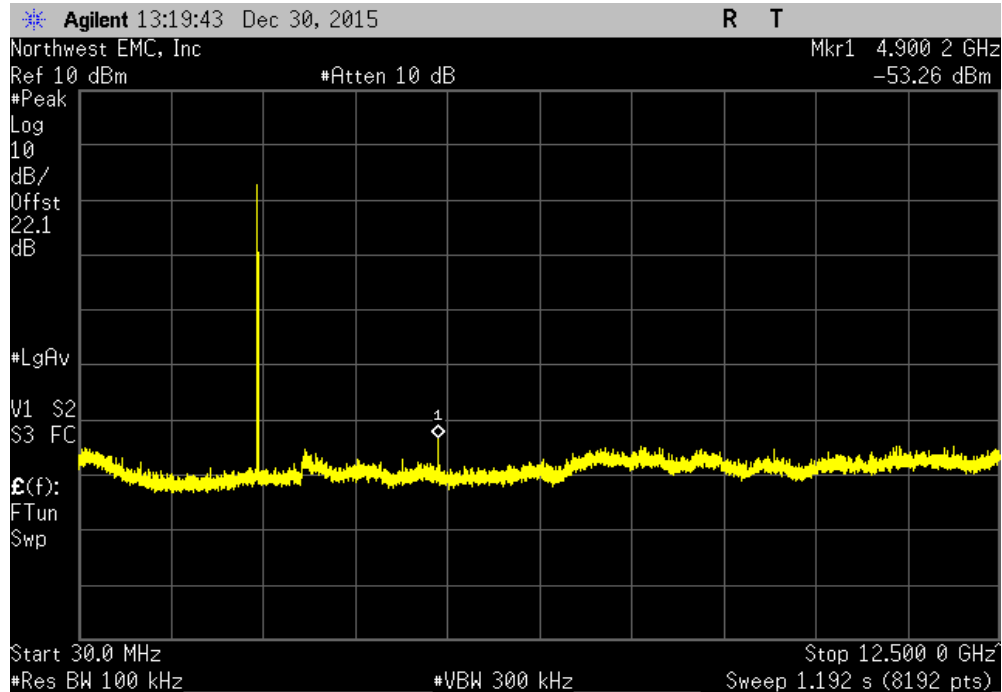


| Zigbee, Mid Channel, 2450 MHz | | | | |
|-------------------------------|-----------------|---------------|--------|--|
| Frequency Range | Max Value (dBc) | Limit ≤ (dBc) | Result | |
| Fundamental | N/A | N/A | N/A | |

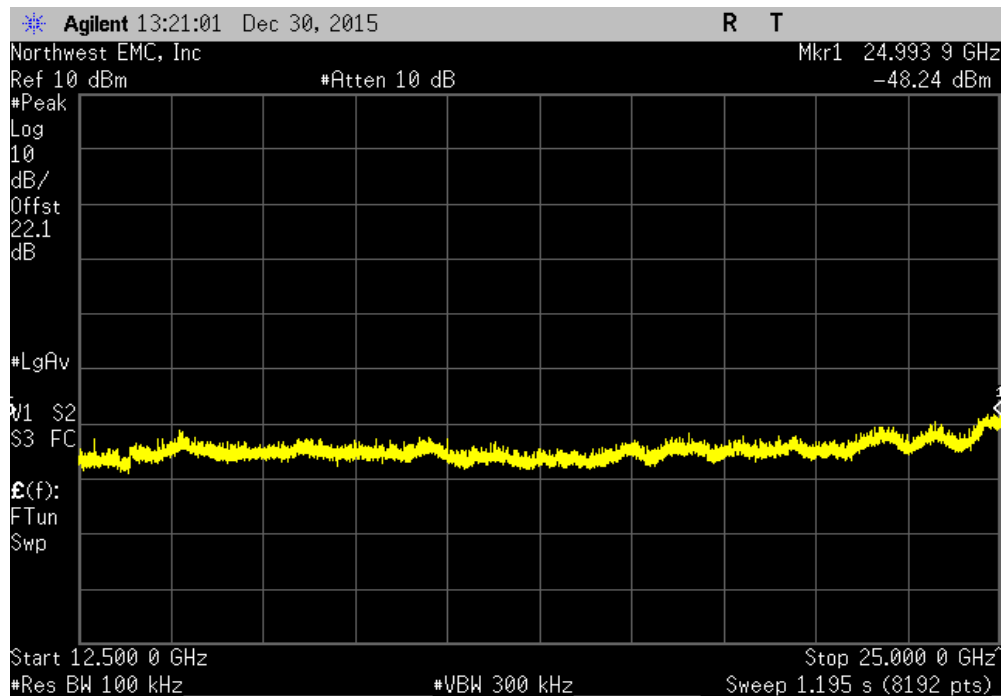


SPURIOUS CONDUCTED EMISSIONS

| Zigbee, Mid Channel, 2450 MHz | | | | |
|-------------------------------|-----------------|---------------|--------|--|
| Frequency Range | Max Value (dBc) | Limit ≤ (dBc) | Result | |
| 30 MHz - 12.5 GHz | -46.88 | -20 | Pass | |

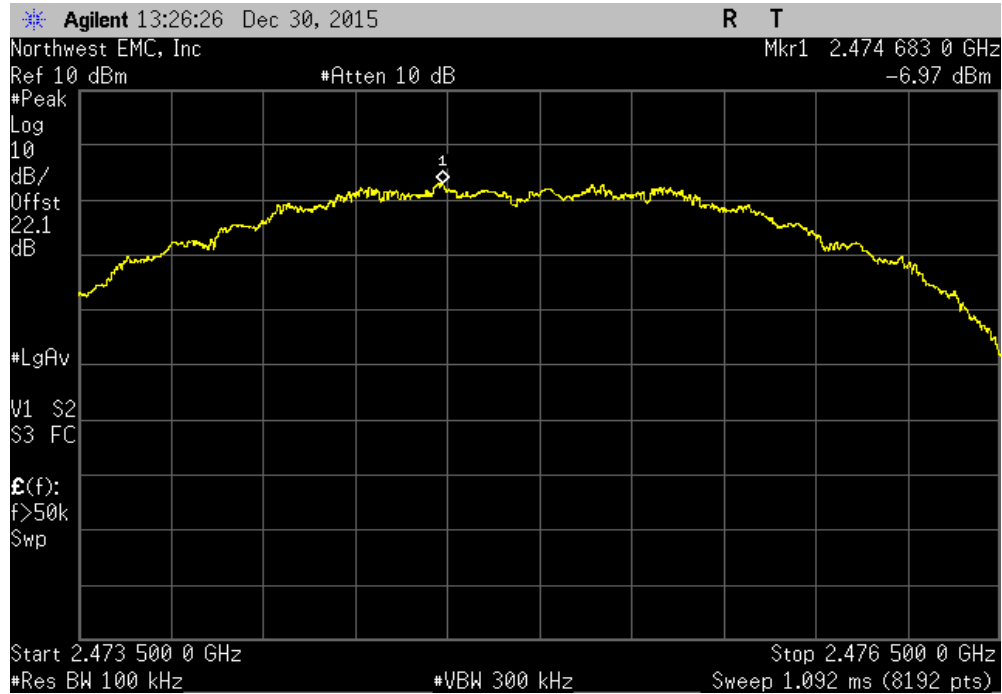


| Zigbee, Mid Channel, 2450 MHz | | | | |
|-------------------------------|-----------------|---------------|--------|--|
| Frequency Range | Max Value (dBc) | Limit ≤ (dBc) | Result | |
| 12.5 GHz - 25 GHz | -41.87 | -20 | Pass | |

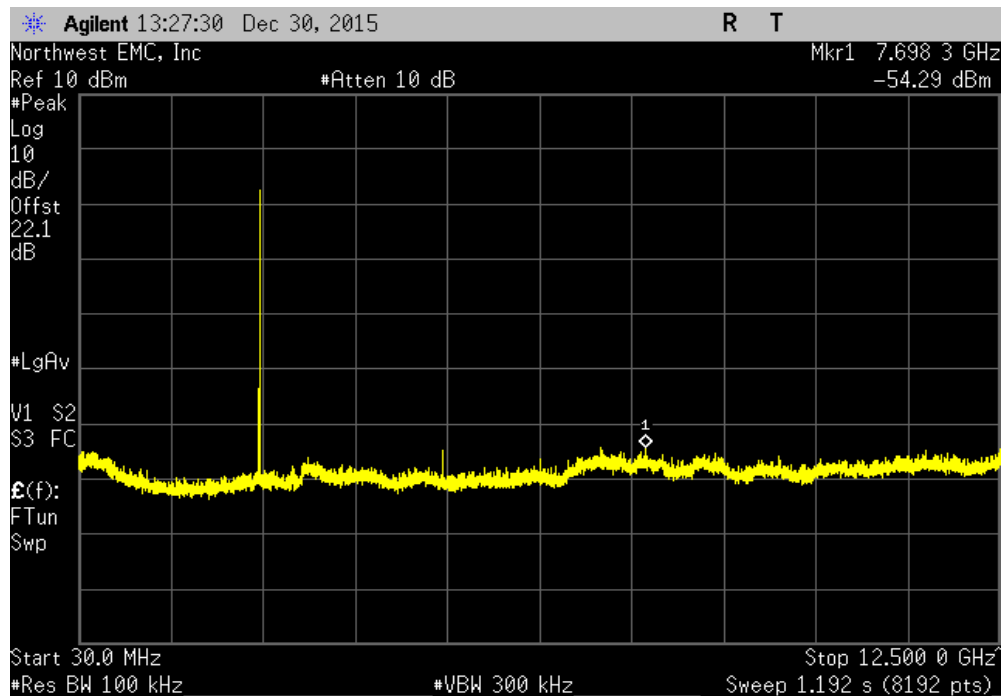


SPURIOUS CONDUCTED EMISSIONS

| Zigbee, High Channel, 2475 MHz | | | | | | |
|--------------------------------|--|-----------------|--|---------------|--------|--|
| Frequency Range | | Max Value (dBc) | | Limit ≤ (dBc) | Result | |
| Fundamental | | N/A | | N/A | N/A | |

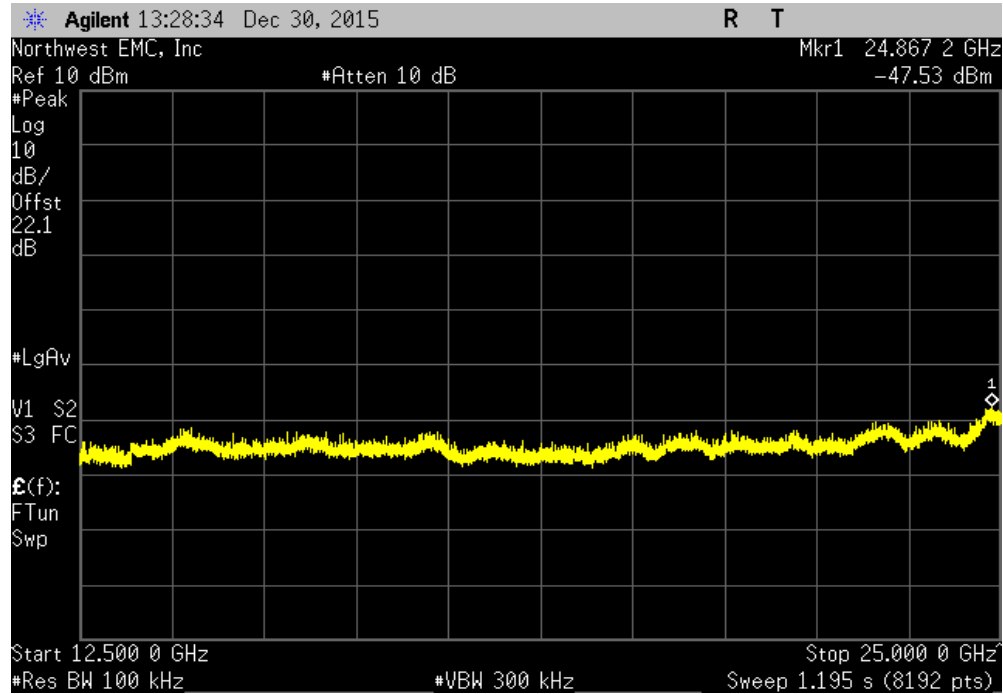


| Zigbee, High Channel, 2475 MHz | | | | | | |
|--------------------------------|--|-----------------|--|---------------|--------|--|
| Frequency Range | | Max Value (dBc) | | Limit ≤ (dBc) | Result | |
| 30 MHz - 12.5 GHz | | -47.32 | | -20 | Pass | |



SPURIOUS CONDUCTED EMISSIONS

| Zigbee, High Channel, 2475 MHz | | | | |
|--------------------------------|-----------------|---------------|--------|--|
| Frequency Range | Max Value (dBc) | Limit ≤ (dBc) | Result | |
| 12.5 GHz - 25 GHz | -40.56 | -20 | Pass | |



Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Continuos Zigbee Tx, Low channel, 2425MHz, charging
 Continuos Zigbee Tx, Mid channel, 2450MHz, charging
 Continuos Zigbee Tx, High channel, 2475MHz, charging
 Continuos Zigbee Tx, Low channel, 2425MHz, stand alone
 Continuos Zigbee Tx, Mid channel, 2450MHz, stand alone
 Continuos Zigbee Tx, High channel, 2475MHz, stand alone

POWER SETTINGS INVESTIGATED

2.4 VDC

CONFIGURATIONS INVESTIGATED

LITS0026 - 8

LITS0026 - 9

FREQUENCY RANGE INVESTIGATED

| | | | |
|-----------------|--------|----------------|-----------|
| Start Frequency | 30 MHz | Stop Frequency | 26500 MHz |
|-----------------|--------|----------------|-----------|

SAMPLE CALCULATIONS


Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

| Description | Manufacturer | Model | ID | Last Cal. | Interval (mo) |
|------------------------------|-----------------|---------------------------|-----|-----------|---------------|
| Cable | ESM Cable Corp. | KMKM-72 | EVY | 11/4/2015 | 12 |
| Amplifier - Pre-Amplifier | Miteq | AMF-6F-18002650-25-10P | AVU | 11/4/2015 | 12 |
| Antenna - Standard Gain | ETS Lindgren | 3160-09 | AIV | NCR | 0 |
| Amplifier - Pre-Amplifier | Miteq | AMF-6F-12001800-30-10P | AVD | 4/16/2015 | 12 |
| Antenna - Standard Gain | ETS Lindgren | 3160-08 | AHV | NCR | 0 |
| Cable | None | Standard Gain Horns Cable | EVF | 4/20/2015 | 12 |
| Amplifier - Pre-Amplifier | Miteq | AMF-6F-08001200-30-10P | AVC | 4/20/2015 | 12 |
| Antenna - Standard Gain | ETS Lindgren | 3160-07 | AHU | NCR | 0 |
| Filter - High Pass | Micro-Tronics | HPM50111 | HFO | 3/31/2015 | 12 |
| Attenuator | Coaxicom | 3910-20 | AXZ | 5/24/2015 | 12 |
| Cable | N/A | Double Ridge Horn Cables | EVB | 4/16/2015 | 12 |
| Amplifier - Pre-Amplifier | Miteq | AMF-3D-00100800-32-13P | PAG | 4/16/2015 | 12 |
| Antenna - Double Ridge | EMCO | 3115 | AHC | 6/13/2014 | 24 |
| Cable | N/A | Bilog Cables | EVA | 2/10/2015 | 12 |
| Amplifier - Pre-Amplifier | Miteq | AM-1616-1000 | AOL | 2/10/2015 | 12 |
| Antenna - Biconilog | EMCO | 3141 | AXE | 8/29/2014 | 24 |
| Analyzer - Spectrum Analyzer | Agilent | E4446A | AAQ | 3/10/2015 | 12 |

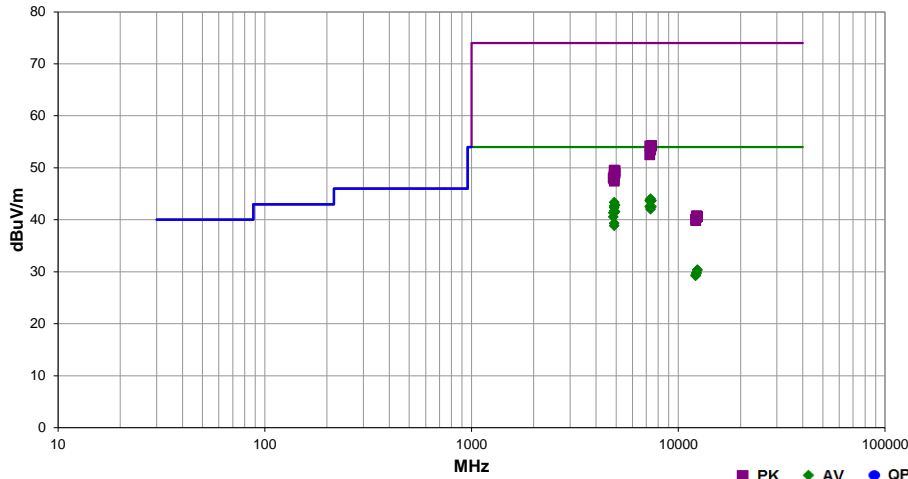
TEST DESCRIPTION

The highest gain of each type of antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high band transmit frequencies. For each configuration, the spectrum was scanned throughout the specified range. In addition, measurements were made in the restricted bands to verify compliance. While scanning, emissions from the EUT were maximized by rotating the EUT on a turntable, adjusting the position of the EUT and the EUT antenna in three orthogonal axis, and adjusting measurement antenna height and polarization. A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.


| | | | | |
|-----------------|--|-------------------|-------------|--|
| Work Order: | LITS0026 | Date: | 02/01/16 |  |
| Project: | None | Temperature: | 20 °C | |
| Job Site: | EV01 | Humidity: | 36.8% RH | |
| Serial Number: | AC-FCHRG-0022 | Barometric Pres.: | 1023.7 mbar | |
| EUT: | Flexcat Remote | | | |
| Configuration: | 8, 9 | | | |
| Customer: | LightSPEED Technologies, Inc. | | | |
| Attendees: | None | | | |
| EUT Power: | 2.4 VDC | | | |
| Operating Mode: | Continuous Zigbee Tx, reference the data comments for channel, frequency and charging/stand alone. | | | |
| Deviations: | None | | | |
| Comments: | See data comments for EUT orientation | | | |

| | |
|---------------------|------------------|
| Test Specifications | Test Method |
| FCC 15.247:2016 | ANSI C63.10:2013 |

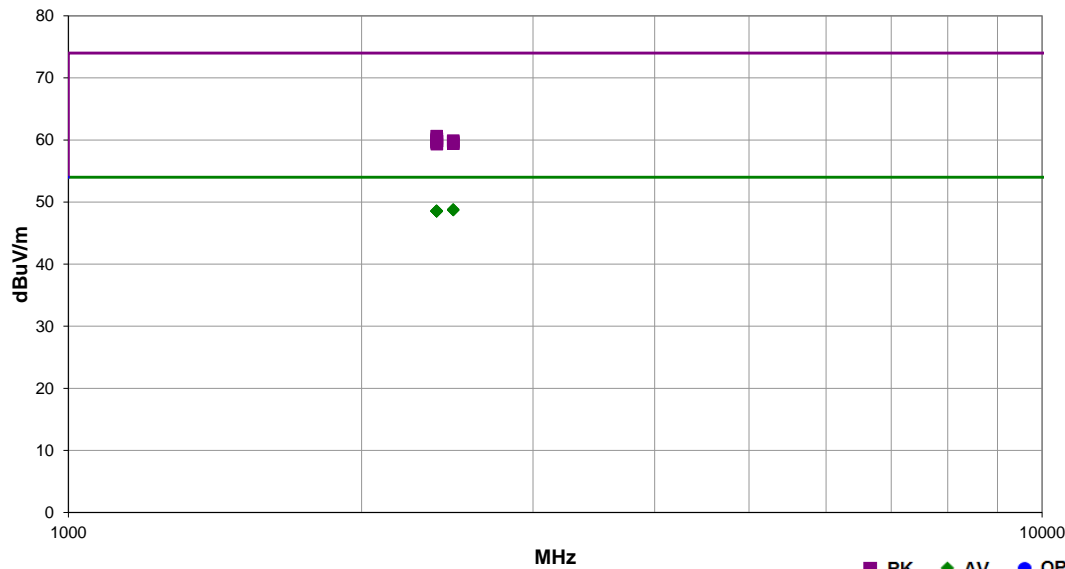
| | | | | | | | |
|-------|----|-------------------|---|-------------------|-----------|---------|------|
| Run # | 96 | Test Distance (m) | 3 | Antenna Height(s) | 1 to 4(m) | Results | Pass |
|-------|----|-------------------|---|-------------------|-----------|---------|------|



| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Antenna Height (meters) | Azimuth (degrees) | Test Distance (meters) | External Attenuation (dB) | Polarity/Transducer Type | Detector | Distance Adjustment (dB) | Adjusted (dBuV/m) | Spec. Limit (dBuV/m) | Compared to Spec. (dB) | Comments |
|------------|------------------|-------------|-------------------------|-------------------|------------------------|---------------------------|--------------------------|----------|--------------------------|-------------------|----------------------|------------------------|--|
| 7351.150 | 29.6 | 14.4 | 1.0 | 142.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 44.0 | 54.0 | -10.0 | Mid channel, 2450MHz, charging, EUT Horz |
| 7276.308 | 29.6 | 14.1 | 1.0 | 168.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 43.7 | 54.0 | -10.3 | Low channel, 2425MHz, charging, EUT Horz |
| 7423.167 | 29.1 | 14.6 | 1.0 | 96.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 43.7 | 54.0 | -10.3 | High channel, 2475MHz, charging, EUT Horz |
| 7348.117 | 29.1 | 14.4 | 1.0 | 173.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 43.5 | 54.0 | -10.5 | Mid channel, 2450MHz, stand alone, EUT Horz |
| 4899.833 | 35.6 | 7.7 | 1.0 | 270.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 43.3 | 54.0 | -10.7 | Mid channel, 2450MHz, charging, EUT Horz |
| 4949.833 | 35.1 | 7.8 | 1.0 | 273.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 42.9 | 54.0 | -11.1 | High channel, 2475MHz, charging, EUT Horz |
| 4899.817 | 34.9 | 7.7 | 1.0 | 216.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 42.6 | 54.0 | -11.4 | Mid channel, 2450MHz, charging, EUT On Side |
| 7276.083 | 28.4 | 14.1 | 3.8 | 280.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 42.5 | 54.0 | -11.5 | Low channel, 2425MHz, charging, EUT On Side |
| 7423.567 | 27.9 | 14.6 | 1.0 | 148.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 42.5 | 54.0 | -11.5 | High channel, 2475MHz, charging, EUT On Side |
| 4899.892 | 34.6 | 7.7 | 1.0 | 235.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 42.3 | 54.0 | -11.7 | Mid channel, 2450MHz, stand alone, EUT On Side |
| 7348.660 | 27.6 | 14.4 | 1.0 | 123.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 42.0 | 54.0 | -12.0 | Mid channel, 2450MHz, charging, EUT On Side |
| 4899.800 | 33.9 | 7.7 | 1.0 | 187.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 41.6 | 54.0 | -12.4 | Mid channel, 2450MHz, charging, EUT Vert |
| 4949.875 | 33.8 | 7.8 | 1.0 | 233.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 41.6 | 54.0 | -12.4 | High channel, 2475MHz, charging, EUT On Side |
| 4899.925 | 33.7 | 7.7 | 1.0 | 315.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 41.4 | 54.0 | -12.6 | Mid channel, 2450MHz, charging, EUT Horz |
| 4849.825 | 33.7 | 7.6 | 1.0 | 158.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 41.3 | 54.0 | -12.7 | Low channel, 2425MHz, charging, EUT On Side |
| 4849.875 | 32.9 | 7.6 | 1.0 | 275.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 40.5 | 54.0 | -13.5 | Low channel, 2425MHz, charging, EUT Horz |
| 4899.850 | 31.6 | 7.7 | 2.2 | 185.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 39.3 | 54.0 | -14.7 | Mid channel, 2450MHz, charging, EUT On Side |
| 4899.825 | 31.1 | 7.7 | 1.0 | 47.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 38.8 | 54.0 | -15.2 | Mid channel, 2450MHz, charging, EUT Vert |
| 7424.500 | 39.7 | 14.6 | 1.0 | 148.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 54.3 | 74.0 | -19.7 | High channel, 2475MHz, charging, EUT On Side |
| 7273.342 | 40.1 | 14.1 | 1.0 | 168.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 54.2 | 74.0 | -19.8 | Low channel, 2425MHz, charging, EUT Horz |
| 7423.550 | 39.6 | 14.6 | 1.0 | 96.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 54.2 | 74.0 | -19.8 | High channel, 2475MHz, charging, EUT Horz |
| 7350.450 | 39.5 | 14.4 | 1.0 | 142.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 53.9 | 74.0 | -20.1 | Mid channel, 2450MHz, charging, EUT Horz |
| 7347.917 | 39.3 | 14.4 | 1.0 | 173.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 53.7 | 74.0 | -20.3 | Mid channel, 2450MHz, stand alone, EUT Horz |
| 7350.630 | 39.0 | 14.4 | 1.0 | 123.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 53.4 | 74.0 | -20.6 | Mid channel, 2450MHz, charging, EUT On Side |
| 7273.108 | 38.4 | 14.1 | 3.8 | 280.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 52.5 | 74.0 | -21.5 | Low channel, 2425MHz, charging, EUT On Side |
| 12374.510 | 28.6 | 1.8 | 1.0 | 343.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 30.4 | 54.0 | -23.6 | High channel, 2475MHz, charging, EUT On Side |
| 12377.060 | 28.5 | 1.8 | 1.0 | 123.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 30.3 | 54.0 | -23.7 | High channel, 2475MHz, charging, EUT Horz |
| 12250.520 | 28.4 | 1.4 | 1.0 | 349.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 29.8 | 54.0 | -24.2 | Mid channel, 2450MHz, charging, EUT On Side |
| 12251.990 | 28.3 | 1.4 | 1.0 | 260.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 29.7 | 54.0 | -24.3 | Mid channel, 2450MHz, charging, EUT Horz |
| 4900.033 | 41.8 | 7.8 | 1.0 | 270.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 49.6 | 74.0 | -24.5 | Mid channel, 2450MHz, charging, EUT Horz |
| 4949.950 | 41.7 | 7.8 | 1.0 | 273.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 49.5 | 74.0 | -24.5 | High channel, 2475MHz, charging, EUT Horz |
| 4899.675 | 41.7 | 7.7 | 1.0 | 216.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 49.4 | 74.0 | -24.6 | Mid channel, 2450MHz, charging, EUT On Side |
| 12125.180 | 28.6 | 0.7 | 1.0 | 30.0 | 3.0 | 0.0 | Vert | AV | 0.0 | 29.3 | 54.0 | -24.7 | Low channel, 2425MHz, charging, EUT On Side |
| 12125.950 | 28.5 | 0.7 | 1.0 | 117.0 | 3.0 | 0.0 | Horz | AV | 0.0 | 29.2 | 54.0 | -24.8 | Low channel, 2425MHz, charging, EUT Horz |
| 4949.875 | 41.2 | 7.8 | 1.0 | 233.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 49.0 | 74.0 | -25.0 | High channel, 2475MHz, charging, EUT On Side |
| 4899.800 | 40.9 | 7.7 | 1.0 | 235.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 48.6 | 74.0 | -25.4 | Mid channel, 2450MHz, stand alone, EUT On Side |
| 4899.942 | 40.8 | 7.7 | 1.0 | 187.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 48.5 | 74.0 | -25.5 | Mid channel, 2450MHz, charging, EUT Vert |
| 4900.025 | 40.7 | 7.7 | 1.0 | 315.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 48.5 | 74.0 | -25.6 | Mid channel, 2450MHz, charging, EUT Horz |
| 4850.042 | 40.4 | 7.6 | 1.0 | 158.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 48.0 | 74.0 | -26.0 | Low channel, 2425MHz, charging, EUT On Side |
| 4849.633 | 40.4 | 7.6 | 1.0 | 275.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 48.0 | 74.0 | -26.0 | Low channel, 2425MHz, charging, EUT Horz |
| 4898.817 | 40.0 | 7.7 | 1.0 | 47.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 47.7 | 74.0 | -26.3 | Mid channel, 2450MHz, charging, EUT Vert |
| 4899.667 | 39.7 | 7.7 | 2.2 | 185.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 47.4 | 74.0 | -26.6 | Mid channel, 2450MHz, charging, EUT On Side |
| 12250.380 | 39.4 | 1.4 | 1.0 | 349.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 40.8 | 74.0 | -33.2 | Mid channel, 2450MHz, charging, EUT On Side |
| 12373.780 | 38.9 | 1.8 | 1.0 | 343.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 40.7 | 74.0 | -33.3 | High channel, 2475MHz, charging, EUT On Side |
| 12373.780 | 38.8 | 1.8 | 1.0 | 123.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 40.6 | 74.0 | -33.4 | High channel, 2475MHz, charging, EUT Horz |
| 12247.600 | 39.1 | 1.4 | 1.0 | 260.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 40.5 | 74.0 | -33.5 | Mid channel, 2450MHz, charging, EUT Horz |
| 12123.280 | 38.4 | 0.7 | 1.0 | 30.0 | 3.0 | 0.0 | Vert | PK | 0.0 | 40.1 | 74.0 | -33.9 | Low channel, 2425MHz, charging, EUT On Side |
| 12126.570 | 39.1 | 0.7 | 1.0 | 117.0 | 3.0 | 0.0 | Horz | PK | 0.0 | 39.8 | 74.0 | -34.2 | Low channel, 2425MHz, charging, EUT Horz |

| | | | | | |
|-----------------|---|-------------------|-------------|--|----------------------------|
| Work Order: | LITS0026 | Date: | 02/01/16 |  | |
| Project: | None | Temperature: | 20 °C | | |
| Job Site: | EV01 | Humidity: | 36.8% RH | | |
| Serial Number: | AC-FCHRC-0022 | Barometric Pres.: | 1023.7 mbar | Tested by: | Cole Ghizzone, Rod Pelouin |
| EUT: | Flexcat Remote | | | | |
| Configuration: | 8, 9 | | | | |
| Customer: | LightSPEED Technologies, Inc. | | | | |
| Attendees: | None | | | | |
| EUT Power: | 2.4 VDC | | | | |
| Operating Mode: | Continuos Zigbee Tx, reference the data comments for channel, frequency and charging/stand alone. | | | | |
| Deviations: | None | | | | |
| Comments: | See data comments for EUT orientation | | | | |

| Test Specifications | Test Method |
|---------------------|------------------|
| FCC 15.247:2016 | ANSI C63.10:2013 |
| Run # | 98 |
| Test Distance (m) | 3 |
| Antenna Height(s) | 1 to 4(m) |
| Results | Pass |



| Freq (MHz) | Amplitude (dBuV) | Factor (dB) | Antenna Height (meters) | Azimuth (degrees) | Test Distance (meters) | External Attenuation (dB) | Polarity/ Transducer Type | Detector | Distance Adjustment (dB) | Adjusted (dBuV/m) | Spec. Limit (dBuV/m) | Compared to Spec. (dB) | Comments |
|------------|------------------|-------------|-------------------------|-------------------|------------------------|---------------------------|---------------------------|----------|--------------------------|-------------------|----------------------|------------------------|--|
| 2484.137 | 31.3 | -2.5 | 1.0 | 213.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 48.8 | 54.0 | -5.2 | High channel, 2475MHz, charging, EUT Vert |
| 2485.163 | 31.2 | -2.5 | 1.9 | 283.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 48.7 | 54.0 | -5.3 | High channel, 2475MHz, stand alone, EUT Vert |
| 2484.160 | 31.2 | -2.5 | 2.1 | 213.0 | 3.0 | 20.0 | Vert | AV | 0.0 | 48.7 | 54.0 | -5.3 | High channel, 2475MHz, charging, EUT Horz |
| 2388.907 | 31.3 | -2.7 | 1.0 | 268.0 | 3.0 | 20.0 | Vert | AV | 0.0 | 48.6 | 54.0 | -5.4 | Low channel, 2425MHz, charging, EUT Horz |
| 2389.673 | 31.2 | -2.7 | 1.0 | 83.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 48.5 | 54.0 | -5.5 | Low channel, 2425MHz, charging, EUT Vert |
| 2389.650 | 31.2 | -2.7 | 1.0 | 79.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 48.5 | 54.0 | -5.5 | Low channel, 2425MHz, charging, EUT Horz |
| 2389.423 | 31.2 | -2.7 | 1.0 | 238.0 | 3.0 | 20.0 | Vert | AV | 0.0 | 48.5 | 54.0 | -5.5 | Low channel, 2425MHz, charging, EUT On Side |
| 2388.660 | 31.2 | -2.7 | 1.0 | 171.0 | 3.0 | 20.0 | Horz | AV | 0.0 | 48.5 | 54.0 | -5.5 | Low channel, 2425MHz, charging, EUT On Side |
| 2388.660 | 31.2 | -2.7 | 1.0 | 196.0 | 3.0 | 20.0 | Vert | AV | 0.0 | 48.5 | 54.0 | -5.5 | Low channel, 2425MHz, stand alone, EUT Horz |
| 2388.467 | 31.2 | -2.7 | 1.0 | 53.0 | 3.0 | 20.0 | Vert | AV | 0.0 | 48.5 | 54.0 | -5.5 | Low channel, 2425MHz, charging, EUT Vert |
| 2388.853 | 43.3 | -2.7 | 1.0 | 53.0 | 3.0 | 20.0 | Vert | PK | 0.0 | 60.6 | 74.0 | -13.4 | Low channel, 2425MHz, charging, EUT Vert |
| 2389.570 | 42.9 | -2.7 | 1.0 | 196.0 | 3.0 | 20.0 | Vert | PK | 0.0 | 60.2 | 74.0 | -13.8 | Low channel, 2425MHz, stand alone, EUT Horz |
| 2389.330 | 42.7 | -2.7 | 1.0 | 83.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 60.0 | 74.0 | -14.0 | Low channel, 2425MHz, charging, EUT Vert |
| 2484.560 | 42.4 | -2.5 | 1.0 | 213.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 59.9 | 74.0 | -14.1 | High channel, 2475MHz, charging, EUT Vert |
| 2389.977 | 42.5 | -2.7 | 1.0 | 268.0 | 3.0 | 20.0 | Vert | PK | 0.0 | 59.8 | 74.0 | -14.2 | Low channel, 2425MHz, charging, EUT Horz |
| 2389.743 | 42.5 | -2.7 | 1.0 | 171.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 59.8 | 74.0 | -14.2 | Low channel, 2425MHz, charging, EUT On Side |
| 2484.617 | 42.2 | -2.5 | 2.1 | 213.0 | 3.0 | 20.0 | Vert | PK | 0.0 | 59.7 | 74.0 | -14.3 | High channel, 2475MHz, charging, EUT Horz |
| 2388.163 | 42.3 | -2.7 | 1.0 | 79.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 59.6 | 74.0 | -14.4 | Low channel, 2425MHz, charging, EUT Horz |
| 2485.463 | 41.9 | -2.5 | 1.9 | 283.0 | 3.0 | 20.0 | Horz | PK | 0.0 | 59.4 | 74.0 | -14.6 | High channel, 2475MHz, stand alone, EUT Vert |
| 2389.530 | 42.0 | -2.7 | 1.0 | 238.0 | 3.0 | 20.0 | Vert | PK | 0.0 | 59.3 | 74.0 | -14.7 | Low channel, 2425MHz, charging, EUT On Side |

AC POWERLINE CONDUCTED EMISSIONS

TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz to determine the line-to-ground radio-noise voltage that is conducted from the EUT power-input terminals that are directly (or indirectly via separate transformer or power supplies) connected to a public power network. Per the standard, an insulating material was also added to ground plane between the EUT's power and remote I/O cables. Equipment is tested with power cords that are normally used or that have electrical or shielding characteristics that are the same as those cords normally used. Typically those measurements are made using a LISN (Line Impedance Stabilization Network), the 50ohm measuring port is terminated by a 50ohm EMI meter or a 50ohm resistive load. All 50ohm measuring ports of the LISN are terminated by 50ohm. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

TEST EQUIPMENT

| Description | Manufacturer | Model | ID | Last Cal. | Cal. Due |
|----------------------------------|-------------------|------------------|------|-----------|-----------|
| Receiver | Rohde & Schwarz | ESCI | ARH | 3/11/2015 | 3/11/2016 |
| Cable - Conducted Cable Assembly | Northwest EMC | EVG, HHD, RKA | EVGA | 5/12/2015 | 5/12/2016 |
| LISN | Solar Electronics | 9252-50-R-24-BNC | LIP | 1/27/2015 | 1/27/2017 |

MEASUREMENT UNCERTAINTY

| Description | | |
|--------------|--------|---------|
| Expanded k=2 | 2.4 dB | -2.4 dB |

CONFIGURATIONS INVESTIGATED

LITS0026-9

MODES INVESTIGATED

Charging, AC-DC Adapter input voltage 110VAC/60Hz, ZigBee set to Tx High Channel.
Charging, AC-DC Adapter input voltage 110VAC/60Hz, ZigBee set to Tx Low Channel.
Charging, AC-DC Adapter input voltage 110VAC/60Hz, ZigBee set to Tx Mid Channel.

AC POWERLINE CONDUCTED EMISSIONS

| | | | |
|-------------------|-------------------------------|--------------------|------------|
| EUT: | Flexcat Remote | Work Order: | LITS0026 |
| Serial Number: | AC-FCHRC-0022 | Date: | 02/04/2016 |
| Customer: | LightSPEED Technologies, Inc. | Temperature: | 22°C |
| Attendees: | None | Relative Humidity: | 40% |
| Customer Project: | None | Bar. Pressure: | 1015 mb |
| Tested By: | Jeff Alcock | Job Site: | EV07 |
| Power: | 5VDC Via AC-DC adapter | Configuration: | LITS0026-9 |

TEST SPECIFICATIONS

| | |
|-----------------|------------------|
| Specification: | Method: |
| FCC 15.207:2016 | ANSI C63.10:2013 |

TEST PARAMETERS

| | | | | | |
|--------|----|-------|-----------|-----------------------------|---|
| Run #: | 10 | Line: | High Line | Add. Ext. Attenuation (dB): | 0 |
|--------|----|-------|-----------|-----------------------------|---|

COMMENTS

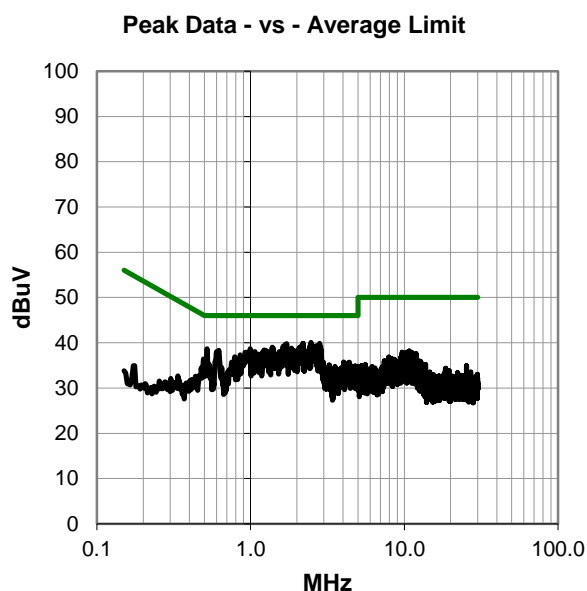
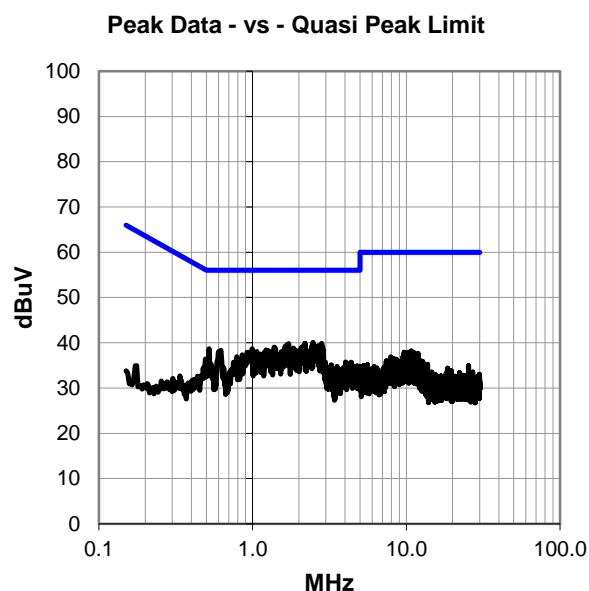
None

EUT OPERATING MODES

Charging, AC-DC Adapter input voltage 110VAC/60Hz, ZigBee set to Tx Low Channel.

DEVIATIONS FROM TEST STANDARD

None



AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #10

Peak Data - vs - Quasi Peak Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 2.467 | 19.9 | 20.2 | 40.1 | 56.0 | -15.9 |
| 2.818 | 19.7 | 20.2 | 39.9 | 56.0 | -16.1 |
| 2.191 | 19.7 | 20.1 | 39.8 | 56.0 | -16.2 |
| 1.713 | 19.7 | 20.1 | 39.8 | 56.0 | -16.2 |
| 1.672 | 19.5 | 20.1 | 39.6 | 56.0 | -16.4 |
| 2.691 | 19.2 | 20.2 | 39.4 | 56.0 | -16.6 |
| 2.135 | 19.1 | 20.1 | 39.2 | 56.0 | -16.8 |
| 2.430 | 19.0 | 20.2 | 39.2 | 56.0 | -16.8 |
| 2.601 | 19.0 | 20.2 | 39.2 | 56.0 | -16.8 |
| 2.851 | 18.9 | 20.2 | 39.1 | 56.0 | -16.9 |
| 1.381 | 18.9 | 20.1 | 39.0 | 56.0 | -17.0 |
| 1.848 | 18.7 | 20.1 | 38.8 | 56.0 | -17.2 |
| 2.060 | 18.7 | 20.1 | 38.8 | 56.0 | -17.2 |
| 0.519 | 18.7 | 20.0 | 38.7 | 56.0 | -17.3 |
| 0.993 | 18.6 | 20.1 | 38.7 | 56.0 | -17.3 |
| 2.396 | 18.4 | 20.2 | 38.6 | 56.0 | -17.4 |
| 2.769 | 18.4 | 20.2 | 38.6 | 56.0 | -17.4 |
| 1.221 | 18.3 | 20.1 | 38.4 | 56.0 | -17.6 |
| 0.620 | 18.3 | 20.0 | 38.3 | 56.0 | -17.7 |
| 1.765 | 18.2 | 20.1 | 38.3 | 56.0 | -17.7 |
| 1.892 | 18.2 | 20.1 | 38.3 | 56.0 | -17.7 |
| 1.262 | 18.1 | 20.1 | 38.2 | 56.0 | -17.8 |
| 1.982 | 18.1 | 20.1 | 38.2 | 56.0 | -17.8 |
| 1.590 | 18.0 | 20.1 | 38.1 | 56.0 | -17.9 |
| 1.064 | 17.9 | 20.1 | 38.0 | 56.0 | -18.0 |
| 1.538 | 17.9 | 20.1 | 38.0 | 56.0 | -18.0 |

Peak Data - vs - Average Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 2.467 | 19.9 | 20.2 | 40.1 | 46.0 | -5.9 |
| 2.818 | 19.7 | 20.2 | 39.9 | 46.0 | -6.1 |
| 2.191 | 19.7 | 20.1 | 39.8 | 46.0 | -6.2 |
| 1.713 | 19.7 | 20.1 | 39.8 | 46.0 | -6.2 |
| 1.672 | 19.5 | 20.1 | 39.6 | 46.0 | -6.4 |
| 2.691 | 19.2 | 20.2 | 39.4 | 46.0 | -6.6 |
| 2.135 | 19.1 | 20.1 | 39.2 | 46.0 | -6.8 |
| 2.430 | 19.0 | 20.2 | 39.2 | 46.0 | -6.8 |
| 2.601 | 19.0 | 20.2 | 39.2 | 46.0 | -6.8 |
| 2.851 | 18.9 | 20.2 | 39.1 | 46.0 | -6.9 |
| 1.381 | 18.9 | 20.1 | 39.0 | 46.0 | -7.0 |
| 1.848 | 18.7 | 20.1 | 38.8 | 46.0 | -7.2 |
| 2.060 | 18.7 | 20.1 | 38.8 | 46.0 | -7.2 |
| 0.519 | 18.7 | 20.0 | 38.7 | 46.0 | -7.3 |
| 0.993 | 18.6 | 20.1 | 38.7 | 46.0 | -7.3 |
| 2.396 | 18.4 | 20.2 | 38.6 | 46.0 | -7.4 |
| 2.769 | 18.4 | 20.2 | 38.6 | 46.0 | -7.4 |
| 1.221 | 18.3 | 20.1 | 38.4 | 46.0 | -7.6 |
| 0.620 | 18.3 | 20.0 | 38.3 | 46.0 | -7.7 |
| 1.765 | 18.2 | 20.1 | 38.3 | 46.0 | -7.7 |
| 1.892 | 18.2 | 20.1 | 38.3 | 46.0 | -7.7 |
| 1.262 | 18.1 | 20.1 | 38.2 | 46.0 | -7.8 |
| 1.982 | 18.1 | 20.1 | 38.2 | 46.0 | -7.8 |
| 1.590 | 18.0 | 20.1 | 38.1 | 46.0 | -7.9 |
| 1.064 | 17.9 | 20.1 | 38.0 | 46.0 | -8.0 |
| 1.538 | 17.9 | 20.1 | 38.0 | 46.0 | -8.0 |

CONCLUSION

Pass



Tested By

AC POWERLINE CONDUCTED EMISSIONS

| | | | |
|-------------------|-------------------------------|--------------------|------------|
| EUT: | Flexcat Remote | Work Order: | LITS0026 |
| Serial Number: | AC-FCHRC-0022 | Date: | 02/04/2016 |
| Customer: | LightSPEED Technologies, Inc. | Temperature: | 22°C |
| Attendees: | None | Relative Humidity: | 40% |
| Customer Project: | None | Bar. Pressure: | 1015 mb |
| Tested By: | Jeff Alcoke | Job Site: | EV07 |
| Power: | 5VDC Via AC-DC adapter | Configuration: | LITS0026-9 |

TEST SPECIFICATIONS

| | |
|-----------------|------------------|
| Specification: | Method: |
| FCC 15.207:2016 | ANSI C63.10:2013 |

TEST PARAMETERS

| | | | | | |
|--------|----|-------|---------|-----------------------------|---|
| Run #: | 11 | Line: | Neutral | Add. Ext. Attenuation (dB): | 0 |
|--------|----|-------|---------|-----------------------------|---|

COMMENTS

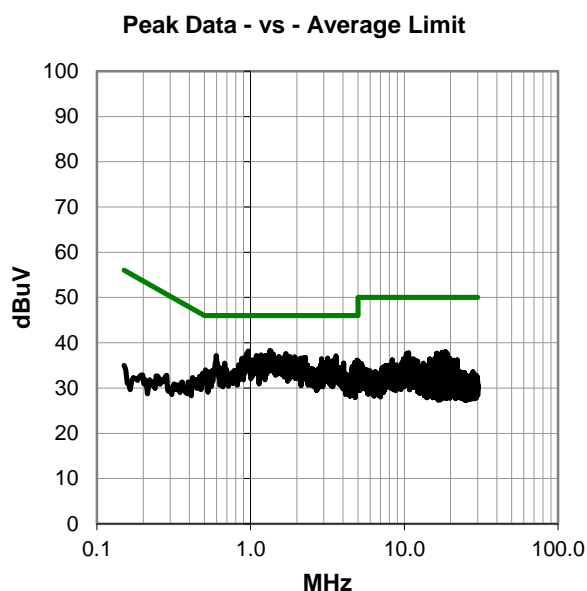
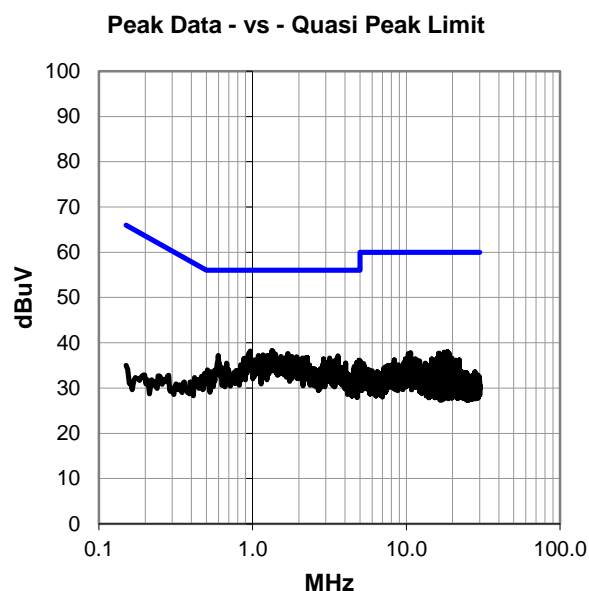
None

EUT OPERATING MODES

Charging, AC-DC Adapter input voltage 110VAC/60Hz, ZigBee set to Tx Low Channel.

DEVIATIONS FROM TEST STANDARD

None



AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #11

Peak Data - vs - Quasi Peak Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 1.336 | 18.2 | 20.1 | 38.3 | 56.0 | -17.7 |
| 0.967 | 18.1 | 20.1 | 38.2 | 56.0 | -17.8 |
| 1.351 | 18.0 | 20.1 | 38.1 | 56.0 | -17.9 |
| 0.945 | 17.5 | 20.1 | 37.6 | 56.0 | -18.4 |
| 1.695 | 17.5 | 20.1 | 37.6 | 56.0 | -18.4 |
| 1.172 | 17.2 | 20.1 | 37.3 | 56.0 | -18.7 |
| 0.598 | 17.2 | 20.0 | 37.2 | 56.0 | -18.8 |
| 1.094 | 17.1 | 20.1 | 37.2 | 56.0 | -18.8 |
| 1.243 | 17.1 | 20.1 | 37.2 | 56.0 | -18.8 |
| 1.303 | 17.1 | 20.1 | 37.2 | 56.0 | -18.8 |
| 3.597 | 16.9 | 20.2 | 37.1 | 56.0 | -18.9 |
| 1.527 | 16.9 | 20.1 | 37.0 | 56.0 | -19.0 |
| 1.799 | 16.9 | 20.1 | 37.0 | 56.0 | -19.0 |
| 1.933 | 16.8 | 20.1 | 36.9 | 56.0 | -19.1 |
| 2.265 | 16.6 | 20.2 | 36.8 | 56.0 | -19.2 |
| 1.631 | 16.6 | 20.1 | 36.7 | 56.0 | -19.3 |
| 0.907 | 16.6 | 20.1 | 36.7 | 56.0 | -19.3 |
| 2.180 | 16.5 | 20.1 | 36.6 | 56.0 | -19.4 |
| 2.105 | 16.5 | 20.1 | 36.6 | 56.0 | -19.4 |
| 1.948 | 16.5 | 20.1 | 36.6 | 56.0 | -19.4 |
| 3.164 | 16.4 | 20.2 | 36.6 | 56.0 | -19.4 |
| 0.881 | 16.5 | 20.1 | 36.6 | 56.0 | -19.4 |
| 3.541 | 16.3 | 20.2 | 36.5 | 56.0 | -19.5 |
| 1.974 | 16.3 | 20.1 | 36.4 | 56.0 | -19.6 |
| 2.892 | 16.2 | 20.2 | 36.4 | 56.0 | -19.6 |
| 1.665 | 16.2 | 20.1 | 36.3 | 56.0 | -19.7 |

Peak Data - vs - Average Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 1.336 | 18.2 | 20.1 | 38.3 | 46.0 | -7.7 |
| 0.967 | 18.1 | 20.1 | 38.2 | 46.0 | -7.8 |
| 1.351 | 18.0 | 20.1 | 38.1 | 46.0 | -7.9 |
| 0.945 | 17.5 | 20.1 | 37.6 | 46.0 | -8.4 |
| 1.695 | 17.5 | 20.1 | 37.6 | 46.0 | -8.4 |
| 1.172 | 17.2 | 20.1 | 37.3 | 46.0 | -8.7 |
| 0.598 | 17.2 | 20.0 | 37.2 | 46.0 | -8.8 |
| 1.094 | 17.1 | 20.1 | 37.2 | 46.0 | -8.8 |
| 1.243 | 17.1 | 20.1 | 37.2 | 46.0 | -8.8 |
| 1.303 | 17.1 | 20.1 | 37.2 | 46.0 | -8.8 |
| 3.597 | 16.9 | 20.2 | 37.1 | 46.0 | -8.9 |
| 1.527 | 16.9 | 20.1 | 37.0 | 46.0 | -9.0 |
| 1.799 | 16.9 | 20.1 | 37.0 | 46.0 | -9.0 |
| 1.933 | 16.8 | 20.1 | 36.9 | 46.0 | -9.1 |
| 2.265 | 16.6 | 20.2 | 36.8 | 46.0 | -9.2 |
| 1.631 | 16.6 | 20.1 | 36.7 | 46.0 | -9.3 |
| 0.907 | 16.6 | 20.1 | 36.7 | 46.0 | -9.3 |
| 2.180 | 16.5 | 20.1 | 36.6 | 46.0 | -9.4 |
| 2.105 | 16.5 | 20.1 | 36.6 | 46.0 | -9.4 |
| 1.948 | 16.5 | 20.1 | 36.6 | 46.0 | -9.4 |
| 3.164 | 16.4 | 20.2 | 36.6 | 46.0 | -9.4 |
| 0.881 | 16.5 | 20.1 | 36.6 | 46.0 | -9.4 |
| 3.541 | 16.3 | 20.2 | 36.5 | 46.0 | -9.5 |
| 1.974 | 16.3 | 20.1 | 36.4 | 46.0 | -9.6 |
| 2.892 | 16.2 | 20.2 | 36.4 | 46.0 | -9.6 |
| 1.665 | 16.2 | 20.1 | 36.3 | 46.0 | -9.7 |

CONCLUSION

Pass



Tested By

AC POWERLINE CONDUCTED EMISSIONS

| | | | |
|-------------------|-------------------------------|--------------------|------------|
| EUT: | Flexcat Remote | Work Order: | LITS0026 |
| Serial Number: | AC-FCHRC-0022 | Date: | 02/04/2016 |
| Customer: | LightSPEED Technologies, Inc. | Temperature: | 22°C |
| Attendees: | None | Relative Humidity: | 40% |
| Customer Project: | None | Bar. Pressure: | 1015 mb |
| Tested By: | Jeff Alcoke | Job Site: | EV07 |
| Power: | 5VDC Via AC-DC adapter | Configuration: | LITS0026-9 |

TEST SPECIFICATIONS

| | |
|-----------------|------------------|
| Specification: | Method: |
| FCC 15.207:2016 | ANSI C63.10:2013 |

TEST PARAMETERS

| | | | | | |
|--------|----|-------|---------|-----------------------------|---|
| Run #: | 12 | Line: | Neutral | Add. Ext. Attenuation (dB): | 0 |
|--------|----|-------|---------|-----------------------------|---|

COMMENTS

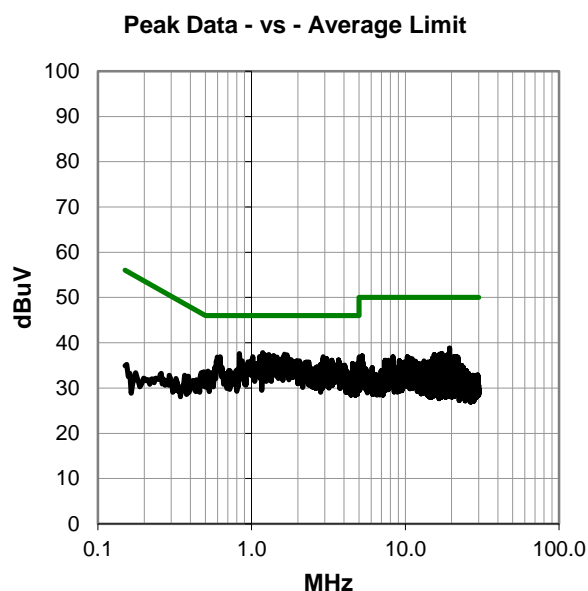
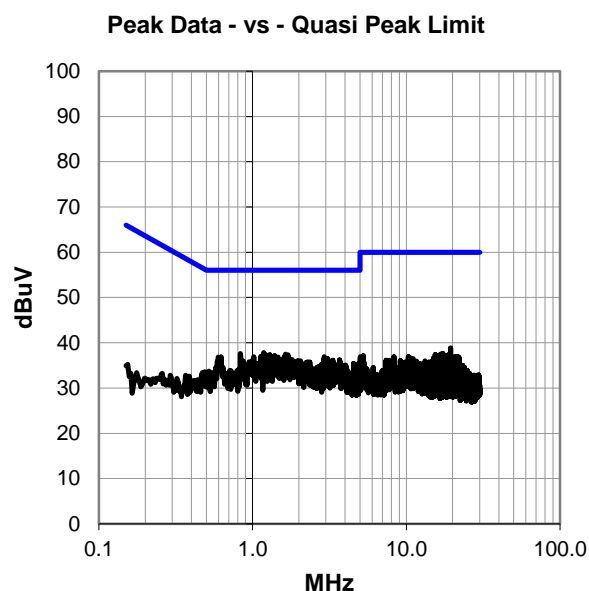
None

EUT OPERATING MODES

Charging, AC-DC Adapter input voltage 110VAC/60Hz, ZigBee set to Tx Mid Channel.

DEVIATIONS FROM TEST STANDARD

None



AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #12

Peak Data - vs - Quasi Peak Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 1.183 | 17.7 | 20.1 | 37.8 | 56.0 | -18.2 |
| 0.833 | 17.6 | 20.0 | 37.6 | 56.0 | -18.4 |
| 1.639 | 17.4 | 20.1 | 37.5 | 56.0 | -18.5 |
| 1.295 | 17.3 | 20.1 | 37.4 | 56.0 | -18.6 |
| 1.221 | 17.2 | 20.1 | 37.3 | 56.0 | -18.7 |
| 1.698 | 17.2 | 20.1 | 37.3 | 56.0 | -18.7 |
| 1.389 | 17.1 | 20.1 | 37.2 | 56.0 | -18.8 |
| 1.131 | 16.9 | 20.1 | 37.0 | 56.0 | -19.0 |
| 1.616 | 16.9 | 20.1 | 37.0 | 56.0 | -19.0 |
| 0.624 | 16.9 | 20.0 | 36.9 | 56.0 | -19.1 |
| 1.019 | 16.8 | 20.1 | 36.9 | 56.0 | -19.1 |
| 1.407 | 16.8 | 20.1 | 36.9 | 56.0 | -19.1 |
| 2.929 | 16.7 | 20.2 | 36.9 | 56.0 | -19.1 |
| 1.463 | 16.7 | 20.1 | 36.8 | 56.0 | -19.2 |
| 1.142 | 16.5 | 20.1 | 36.6 | 56.0 | -19.4 |
| 3.079 | 16.3 | 20.2 | 36.5 | 56.0 | -19.5 |
| 1.568 | 16.3 | 20.1 | 36.4 | 56.0 | -19.6 |
| 1.430 | 16.2 | 20.1 | 36.3 | 56.0 | -19.7 |
| 1.594 | 16.2 | 20.1 | 36.3 | 56.0 | -19.7 |
| 1.806 | 16.2 | 20.1 | 36.3 | 56.0 | -19.7 |
| 1.254 | 16.1 | 20.1 | 36.2 | 56.0 | -19.8 |
| 3.679 | 16.0 | 20.2 | 36.2 | 56.0 | -19.8 |
| 0.997 | 16.0 | 20.1 | 36.1 | 56.0 | -19.9 |
| 1.333 | 16.0 | 20.1 | 36.1 | 56.0 | -19.9 |
| 3.329 | 15.9 | 20.2 | 36.1 | 56.0 | -19.9 |
| 1.952 | 15.9 | 20.1 | 36.0 | 56.0 | -20.0 |

Peak Data - vs - Average Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 1.183 | 17.7 | 20.1 | 37.8 | 46.0 | -8.2 |
| 0.833 | 17.6 | 20.0 | 37.6 | 46.0 | -8.4 |
| 1.639 | 17.4 | 20.1 | 37.5 | 46.0 | -8.5 |
| 1.295 | 17.3 | 20.1 | 37.4 | 46.0 | -8.6 |
| 1.221 | 17.2 | 20.1 | 37.3 | 46.0 | -8.7 |
| 1.698 | 17.2 | 20.1 | 37.3 | 46.0 | -8.7 |
| 1.389 | 17.1 | 20.1 | 37.2 | 46.0 | -8.8 |
| 1.131 | 16.9 | 20.1 | 37.0 | 46.0 | -9.0 |
| 1.616 | 16.9 | 20.1 | 37.0 | 46.0 | -9.0 |
| 0.624 | 16.9 | 20.0 | 36.9 | 46.0 | -9.1 |
| 1.019 | 16.8 | 20.1 | 36.9 | 46.0 | -9.1 |
| 1.407 | 16.8 | 20.1 | 36.9 | 46.0 | -9.1 |
| 2.929 | 16.7 | 20.2 | 36.9 | 46.0 | -9.1 |
| 1.463 | 16.7 | 20.1 | 36.8 | 46.0 | -9.2 |
| 1.142 | 16.5 | 20.1 | 36.6 | 46.0 | -9.4 |
| 3.079 | 16.3 | 20.2 | 36.5 | 46.0 | -9.5 |
| 1.568 | 16.3 | 20.1 | 36.4 | 46.0 | -9.6 |
| 1.430 | 16.2 | 20.1 | 36.3 | 46.0 | -9.7 |
| 1.594 | 16.2 | 20.1 | 36.3 | 46.0 | -9.7 |
| 1.806 | 16.2 | 20.1 | 36.3 | 46.0 | -9.7 |
| 1.254 | 16.1 | 20.1 | 36.2 | 46.0 | -9.8 |
| 3.679 | 16.0 | 20.2 | 36.2 | 46.0 | -9.8 |
| 0.997 | 16.0 | 20.1 | 36.1 | 46.0 | -9.9 |
| 1.333 | 16.0 | 20.1 | 36.1 | 46.0 | -9.9 |
| 3.329 | 15.9 | 20.2 | 36.1 | 46.0 | -9.9 |
| 1.952 | 15.9 | 20.1 | 36.0 | 46.0 | -10.0 |

CONCLUSION

Pass



Tested By

AC POWERLINE CONDUCTED EMISSIONS

| | | | |
|-------------------|-------------------------------|--------------------|------------|
| EUT: | Flexcat Remote | Work Order: | LITS0026 |
| Serial Number: | AC-FCHRC-0022 | Date: | 02/04/2016 |
| Customer: | LightSPEED Technologies, Inc. | Temperature: | 22°C |
| Attendees: | None | Relative Humidity: | 40% |
| Customer Project: | None | Bar. Pressure: | 1015 mb |
| Tested By: | Jeff Alcock | Job Site: | EV07 |
| Power: | 5VDC Via AC-DC adapter | Configuration: | LITS0026-9 |

TEST SPECIFICATIONS

| | |
|-----------------|------------------|
| Specification: | Method: |
| FCC 15.207:2016 | ANSI C63.10:2013 |

TEST PARAMETERS

| | | | | | |
|--------|----|-------|------|-----------------------------|---|
| Run #: | 13 | Line: | High | Add. Ext. Attenuation (dB): | 0 |
|--------|----|-------|------|-----------------------------|---|

COMMENTS

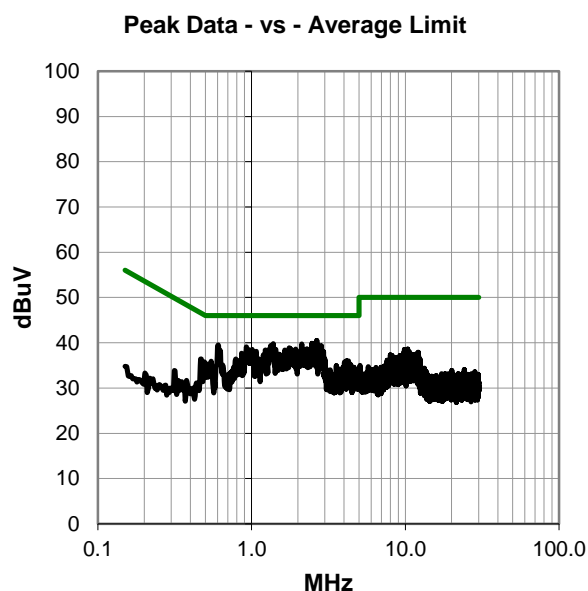
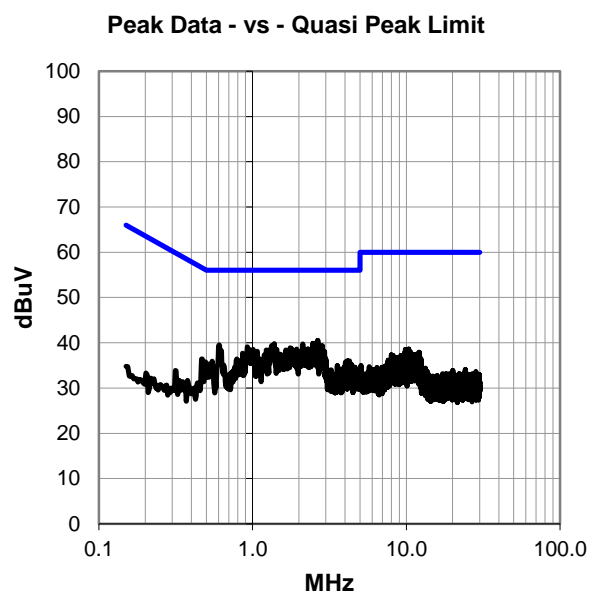
None

EUT OPERATING MODES

Charging, AC-DC Adapter input voltage 110VAC/60Hz, ZigBee set to Tx Mid Channel.

DEVIATIONS FROM TEST STANDARD

None



AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #13

Peak Data - vs - Quasi Peak Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 2.653 | 20.3 | 20.2 | 40.5 | 56.0 | -15.5 |
| 2.471 | 19.7 | 20.2 | 39.9 | 56.0 | -16.1 |
| 2.560 | 19.7 | 20.2 | 39.9 | 56.0 | -16.1 |
| 1.385 | 19.7 | 20.1 | 39.8 | 56.0 | -16.2 |
| 2.124 | 19.6 | 20.1 | 39.7 | 56.0 | -16.3 |
| 2.691 | 19.4 | 20.2 | 39.6 | 56.0 | -16.4 |
| 0.605 | 19.5 | 20.0 | 39.5 | 56.0 | -16.5 |
| 1.333 | 19.3 | 20.1 | 39.4 | 56.0 | -16.6 |
| 2.840 | 19.1 | 20.2 | 39.3 | 56.0 | -16.7 |
| 0.926 | 19.0 | 20.1 | 39.1 | 56.0 | -16.9 |
| 2.504 | 18.9 | 20.2 | 39.1 | 56.0 | -16.9 |
| 1.754 | 18.8 | 20.1 | 38.9 | 56.0 | -17.1 |
| 1.784 | 18.6 | 20.1 | 38.7 | 56.0 | -17.3 |
| 2.291 | 18.5 | 20.2 | 38.7 | 56.0 | -17.3 |
| 1.933 | 18.5 | 20.1 | 38.6 | 56.0 | -17.4 |
| 2.172 | 18.4 | 20.1 | 38.5 | 56.0 | -17.5 |
| 1.008 | 18.4 | 20.1 | 38.5 | 56.0 | -17.5 |
| 1.437 | 18.4 | 20.1 | 38.5 | 56.0 | -17.5 |
| 1.228 | 18.3 | 20.1 | 38.4 | 56.0 | -17.6 |
| 1.646 | 18.3 | 20.1 | 38.4 | 56.0 | -17.6 |
| 2.351 | 18.2 | 20.2 | 38.4 | 56.0 | -17.6 |
| 2.717 | 18.1 | 20.2 | 38.3 | 56.0 | -17.7 |
| 1.072 | 18.0 | 20.1 | 38.1 | 56.0 | -17.9 |
| 1.415 | 18.0 | 20.1 | 38.1 | 56.0 | -17.9 |
| 1.724 | 18.0 | 20.1 | 38.1 | 56.0 | -17.9 |
| 2.937 | 17.8 | 20.2 | 38.0 | 56.0 | -18.0 |

Peak Data - vs - Average Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 2.653 | 20.3 | 20.2 | 40.5 | 46.0 | -5.5 |
| 2.471 | 19.7 | 20.2 | 39.9 | 46.0 | -6.1 |
| 2.560 | 19.7 | 20.2 | 39.9 | 46.0 | -6.1 |
| 1.385 | 19.7 | 20.1 | 39.8 | 46.0 | -6.2 |
| 2.124 | 19.6 | 20.1 | 39.7 | 46.0 | -6.3 |
| 2.691 | 19.4 | 20.2 | 39.6 | 46.0 | -6.4 |
| 0.605 | 19.5 | 20.0 | 39.5 | 46.0 | -6.5 |
| 1.333 | 19.3 | 20.1 | 39.4 | 46.0 | -6.6 |
| 2.840 | 19.1 | 20.2 | 39.3 | 46.0 | -6.7 |
| 0.926 | 19.0 | 20.1 | 39.1 | 46.0 | -6.9 |
| 2.504 | 18.9 | 20.2 | 39.1 | 46.0 | -6.9 |
| 1.754 | 18.8 | 20.1 | 38.9 | 46.0 | -7.1 |
| 1.784 | 18.6 | 20.1 | 38.7 | 46.0 | -7.3 |
| 2.291 | 18.5 | 20.2 | 38.7 | 46.0 | -7.3 |
| 1.933 | 18.5 | 20.1 | 38.6 | 46.0 | -7.4 |
| 2.172 | 18.4 | 20.1 | 38.5 | 46.0 | -7.5 |
| 1.008 | 18.4 | 20.1 | 38.5 | 46.0 | -7.5 |
| 1.437 | 18.4 | 20.1 | 38.5 | 46.0 | -7.5 |
| 1.228 | 18.3 | 20.1 | 38.4 | 46.0 | -7.6 |
| 1.646 | 18.3 | 20.1 | 38.4 | 46.0 | -7.6 |
| 2.351 | 18.2 | 20.2 | 38.4 | 46.0 | -7.6 |
| 2.717 | 18.1 | 20.2 | 38.3 | 46.0 | -7.7 |
| 1.072 | 18.0 | 20.1 | 38.1 | 46.0 | -7.9 |
| 1.415 | 18.0 | 20.1 | 38.1 | 46.0 | -7.9 |
| 1.724 | 18.0 | 20.1 | 38.1 | 46.0 | -7.9 |
| 2.937 | 17.8 | 20.2 | 38.0 | 46.0 | -8.0 |

CONCLUSION

Pass



Tested By

AC POWERLINE CONDUCTED EMISSIONS

| | | | |
|-------------------|-------------------------------|--------------------|------------|
| EUT: | Flexcat Remote | Work Order: | LITS0026 |
| Serial Number: | AC-FCHRC-0022 | Date: | 02/04/2016 |
| Customer: | LightSPEED Technologies, Inc. | Temperature: | 22°C |
| Attendees: | None | Relative Humidity: | 40% |
| Customer Project: | None | Bar. Pressure: | 1015 mb |
| Tested By: | Jeff Alcock | Job Site: | EV07 |
| Power: | 5VDC Via AC-DC adapter | Configuration: | LITS0026-9 |

TEST SPECIFICATIONS

| | |
|-----------------|------------------|
| Specification: | Method: |
| FCC 15.207:2016 | ANSI C63.10:2013 |

TEST PARAMETERS

| | | | | | |
|--------|----|-------|-----------|-----------------------------|---|
| Run #: | 14 | Line: | High Line | Add. Ext. Attenuation (dB): | 0 |
|--------|----|-------|-----------|-----------------------------|---|

COMMENTS

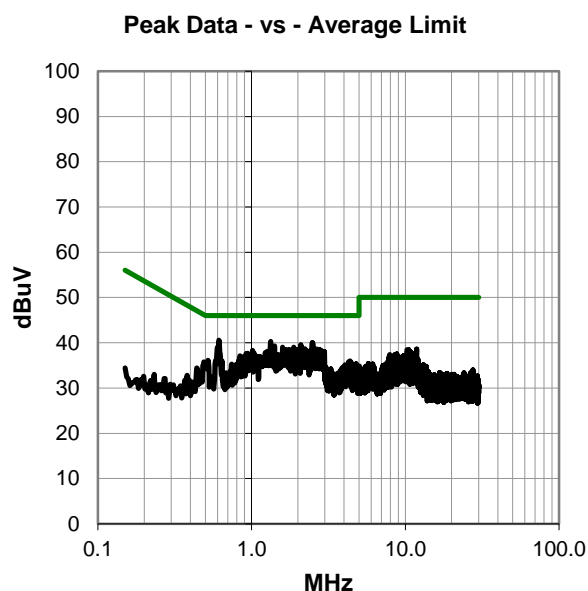
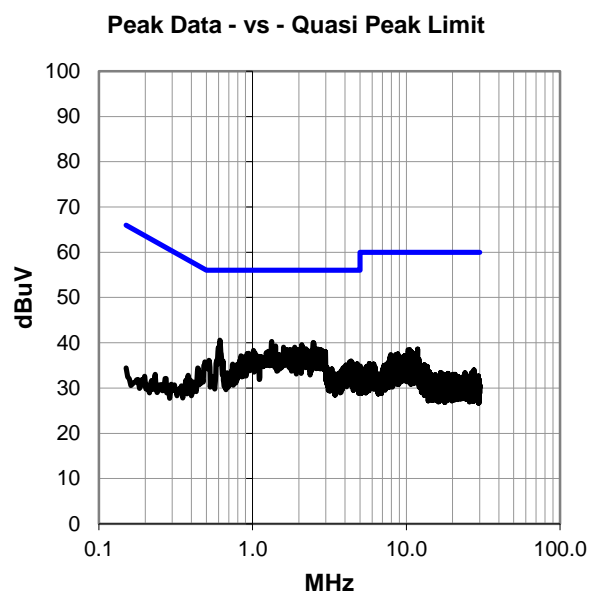
None

EUT OPERATING MODES

Charging, AC-DC Adapter input voltage 110VAC/60Hz, ZigBee set to Tx High Channel.

DEVIATIONS FROM TEST STANDARD

None



AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #14

Peak Data - vs - Quasi Peak Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 0.613 | 20.6 | 20.0 | 40.6 | 56.0 | -15.4 |
| 1.329 | 20.2 | 20.1 | 40.3 | 56.0 | -15.7 |
| 2.478 | 19.9 | 20.2 | 40.1 | 56.0 | -15.9 |
| 2.086 | 19.5 | 20.1 | 39.6 | 56.0 | -16.4 |
| 1.411 | 19.2 | 20.1 | 39.3 | 56.0 | -16.7 |
| 2.116 | 18.9 | 20.1 | 39.0 | 56.0 | -17.0 |
| 1.586 | 18.9 | 20.1 | 39.0 | 56.0 | -17.0 |
| 1.885 | 18.9 | 20.1 | 39.0 | 56.0 | -17.0 |
| 2.221 | 18.5 | 20.1 | 38.6 | 56.0 | -17.4 |
| 2.601 | 18.4 | 20.2 | 38.6 | 56.0 | -17.4 |
| 2.665 | 18.4 | 20.2 | 38.6 | 56.0 | -17.4 |
| 1.657 | 18.4 | 20.1 | 38.5 | 56.0 | -17.5 |
| 1.751 | 18.4 | 20.1 | 38.5 | 56.0 | -17.5 |
| 2.015 | 18.4 | 20.1 | 38.5 | 56.0 | -17.5 |
| 2.769 | 18.3 | 20.2 | 38.5 | 56.0 | -17.5 |
| 1.810 | 18.3 | 20.1 | 38.4 | 56.0 | -17.6 |
| 2.430 | 18.2 | 20.2 | 38.4 | 56.0 | -17.6 |
| 2.814 | 18.1 | 20.2 | 38.3 | 56.0 | -17.7 |
| 1.016 | 18.2 | 20.1 | 38.3 | 56.0 | -17.7 |
| 2.859 | 18.0 | 20.2 | 38.2 | 56.0 | -17.8 |
| 1.266 | 18.0 | 20.1 | 38.1 | 56.0 | -17.9 |
| 2.948 | 17.8 | 20.2 | 38.0 | 56.0 | -18.0 |
| 2.982 | 17.8 | 20.2 | 38.0 | 56.0 | -18.0 |
| 1.780 | 17.8 | 20.1 | 37.9 | 56.0 | -18.1 |
| 2.038 | 17.8 | 20.1 | 37.9 | 56.0 | -18.1 |
| 0.945 | 17.6 | 20.1 | 37.7 | 56.0 | -18.3 |

Peak Data - vs - Average Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 0.613 | 20.6 | 20.0 | 40.6 | 46.0 | -5.4 |
| 1.329 | 20.2 | 20.1 | 40.3 | 46.0 | -5.7 |
| 2.478 | 19.9 | 20.2 | 40.1 | 46.0 | -5.9 |
| 2.086 | 19.5 | 20.1 | 39.6 | 46.0 | -6.4 |
| 1.411 | 19.2 | 20.1 | 39.3 | 46.0 | -6.7 |
| 2.116 | 18.9 | 20.1 | 39.0 | 46.0 | -7.0 |
| 1.586 | 18.9 | 20.1 | 39.0 | 46.0 | -7.0 |
| 1.885 | 18.9 | 20.1 | 39.0 | 46.0 | -7.0 |
| 2.221 | 18.5 | 20.1 | 38.6 | 46.0 | -7.4 |
| 2.601 | 18.4 | 20.2 | 38.6 | 46.0 | -7.4 |
| 2.665 | 18.4 | 20.2 | 38.6 | 46.0 | -7.4 |
| 1.657 | 18.4 | 20.1 | 38.5 | 46.0 | -7.5 |
| 1.751 | 18.4 | 20.1 | 38.5 | 46.0 | -7.5 |
| 2.015 | 18.4 | 20.1 | 38.5 | 46.0 | -7.5 |
| 2.769 | 18.3 | 20.2 | 38.5 | 46.0 | -7.5 |
| 1.810 | 18.3 | 20.1 | 38.4 | 46.0 | -7.6 |
| 2.430 | 18.2 | 20.2 | 38.4 | 46.0 | -7.6 |
| 2.814 | 18.1 | 20.2 | 38.3 | 46.0 | -7.7 |
| 1.016 | 18.2 | 20.1 | 38.3 | 46.0 | -7.7 |
| 2.859 | 18.0 | 20.2 | 38.2 | 46.0 | -7.8 |
| 1.266 | 18.0 | 20.1 | 38.1 | 46.0 | -7.9 |
| 2.948 | 17.8 | 20.2 | 38.0 | 46.0 | -8.0 |
| 2.982 | 17.8 | 20.2 | 38.0 | 46.0 | -8.0 |
| 1.780 | 17.8 | 20.1 | 37.9 | 46.0 | -8.1 |
| 2.038 | 17.8 | 20.1 | 37.9 | 46.0 | -8.1 |
| 0.945 | 17.6 | 20.1 | 37.7 | 46.0 | -8.3 |

CONCLUSION

Pass



Tested By

AC POWERLINE CONDUCTED EMISSIONS

| | | | |
|-------------------|-------------------------------|--------------------|------------|
| EUT: | Flexcat Remote | Work Order: | LITS0026 |
| Serial Number: | AC-FCHRC-0022 | Date: | 02/04/2016 |
| Customer: | LightSPEED Technologies, Inc. | Temperature: | 22°C |
| Attendees: | None | Relative Humidity: | 40% |
| Customer Project: | None | Bar. Pressure: | 1015 mb |
| Tested By: | Jeff Alcoke | Job Site: | EV07 |
| Power: | 5VDC Via AC-DC adapter | Configuration: | LITS0026-9 |

TEST SPECIFICATIONS

| | |
|-----------------|------------------|
| Specification: | Method: |
| FCC 15.207:2016 | ANSI C63.10:2013 |

TEST PARAMETERS

| | | | | | |
|--------|----|-------|---------|-----------------------------|---|
| Run #: | 15 | Line: | Neutral | Add. Ext. Attenuation (dB): | 0 |
|--------|----|-------|---------|-----------------------------|---|

COMMENTS

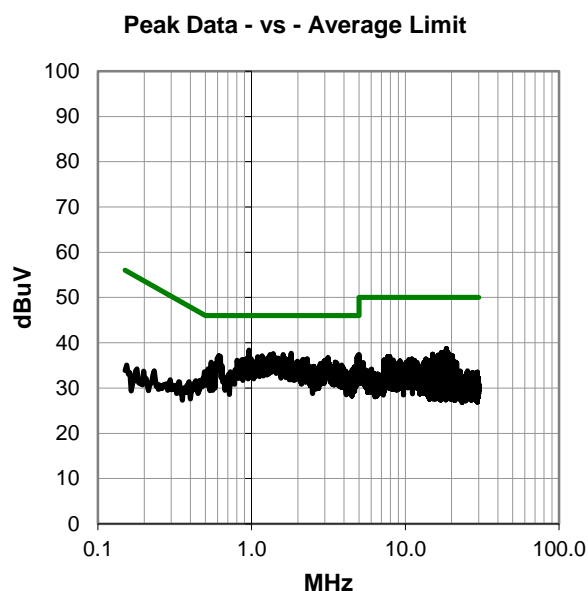
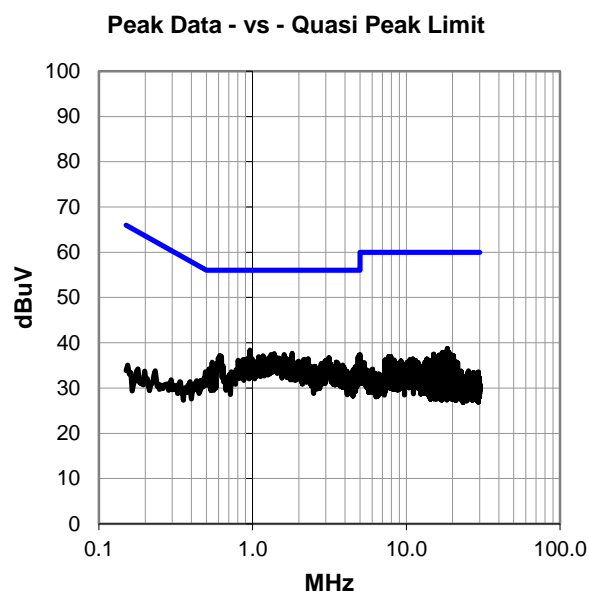
None

EUT OPERATING MODES

Charging, AC-DC Adapter input voltage 110VAC/60Hz, ZigBee set to Tx High Channel.

DEVIATIONS FROM TEST STANDARD

None



AC POWERLINE CONDUCTED EMISSIONS

RESULTS - Run #15

Peak Data - vs - Quasi Peak Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 0.963 | 18.3 | 20.1 | 38.4 | 56.0 | -17.6 |
| 1.806 | 17.6 | 20.1 | 37.7 | 56.0 | -18.3 |
| 1.385 | 17.5 | 20.1 | 37.6 | 56.0 | -18.4 |
| 1.318 | 17.3 | 20.1 | 37.4 | 56.0 | -18.6 |
| 1.609 | 17.3 | 20.1 | 37.4 | 56.0 | -18.6 |
| 4.989 | 17.1 | 20.3 | 37.4 | 56.0 | -18.6 |
| 4.940 | 17.0 | 20.3 | 37.3 | 56.0 | -18.7 |
| 0.613 | 17.2 | 20.0 | 37.2 | 56.0 | -18.8 |
| 1.172 | 17.0 | 20.1 | 37.1 | 56.0 | -18.9 |
| 1.094 | 16.8 | 20.1 | 36.9 | 56.0 | -19.1 |
| 4.858 | 16.6 | 20.2 | 36.8 | 56.0 | -19.2 |
| 0.941 | 16.6 | 20.1 | 36.7 | 56.0 | -19.3 |
| 1.273 | 16.6 | 20.1 | 36.7 | 56.0 | -19.3 |
| 3.138 | 16.5 | 20.2 | 36.7 | 56.0 | -19.3 |
| 1.489 | 16.5 | 20.1 | 36.6 | 56.0 | -19.4 |
| 0.989 | 16.4 | 20.1 | 36.5 | 56.0 | -19.5 |
| 2.303 | 16.3 | 20.2 | 36.5 | 56.0 | -19.5 |
| 0.922 | 16.3 | 20.1 | 36.4 | 56.0 | -19.6 |
| 1.676 | 16.3 | 20.1 | 36.4 | 56.0 | -19.6 |
| 2.168 | 16.2 | 20.1 | 36.3 | 56.0 | -19.7 |
| 1.202 | 16.2 | 20.1 | 36.3 | 56.0 | -19.7 |
| 0.866 | 16.2 | 20.1 | 36.3 | 56.0 | -19.7 |
| 2.142 | 16.1 | 20.1 | 36.2 | 56.0 | -19.8 |
| 1.777 | 16.1 | 20.1 | 36.2 | 56.0 | -19.8 |
| 0.807 | 16.1 | 20.0 | 36.1 | 56.0 | -19.9 |
| 2.967 | 15.8 | 20.2 | 36.0 | 56.0 | -20.0 |

Peak Data - vs - Average Limit

| Freq (MHz) | Amp. (dBuV) | Factor (dB) | Adjusted (dBuV) | Spec. Limit (dBuV) | Margin (dB) |
|------------|-------------|-------------|-----------------|--------------------|-------------|
| 0.963 | 18.3 | 20.1 | 38.4 | 46.0 | -7.6 |
| 1.806 | 17.6 | 20.1 | 37.7 | 46.0 | -8.3 |
| 1.385 | 17.5 | 20.1 | 37.6 | 46.0 | -8.4 |
| 1.318 | 17.3 | 20.1 | 37.4 | 46.0 | -8.6 |
| 1.609 | 17.3 | 20.1 | 37.4 | 46.0 | -8.6 |
| 4.989 | 17.1 | 20.3 | 37.4 | 46.0 | -8.6 |
| 4.940 | 17.0 | 20.3 | 37.3 | 46.0 | -8.7 |
| 0.613 | 17.2 | 20.0 | 37.2 | 46.0 | -8.8 |
| 1.172 | 17.0 | 20.1 | 37.1 | 46.0 | -8.9 |
| 1.094 | 16.8 | 20.1 | 36.9 | 46.0 | -9.1 |
| 4.858 | 16.6 | 20.2 | 36.8 | 46.0 | -9.2 |
| 0.941 | 16.6 | 20.1 | 36.7 | 46.0 | -9.3 |
| 1.273 | 16.6 | 20.1 | 36.7 | 46.0 | -9.3 |
| 3.138 | 16.5 | 20.2 | 36.7 | 46.0 | -9.3 |
| 1.489 | 16.5 | 20.1 | 36.6 | 46.0 | -9.4 |
| 0.989 | 16.4 | 20.1 | 36.5 | 46.0 | -9.5 |
| 2.303 | 16.3 | 20.2 | 36.5 | 46.0 | -9.5 |
| 0.922 | 16.3 | 20.1 | 36.4 | 46.0 | -9.6 |
| 1.676 | 16.3 | 20.1 | 36.4 | 46.0 | -9.6 |
| 2.168 | 16.2 | 20.1 | 36.3 | 46.0 | -9.7 |
| 1.202 | 16.2 | 20.1 | 36.3 | 46.0 | -9.7 |
| 0.866 | 16.2 | 20.1 | 36.3 | 46.0 | -9.7 |
| 2.142 | 16.1 | 20.1 | 36.2 | 46.0 | -9.8 |
| 1.777 | 16.1 | 20.1 | 36.2 | 46.0 | -9.8 |
| 0.807 | 16.1 | 20.0 | 36.1 | 46.0 | -9.9 |
| 2.967 | 15.8 | 20.2 | 36.0 | 46.0 | -10.0 |

CONCLUSION

Pass



Tested By