UL LLC
333 Pfingsten Rd.
Northbrook, IL 60062

www.ul.com/emc
(847) 272-8800

Order Number: 10275517

Date: June 4, 2014

Model: SSDB1

# Electromagnetic Compatibility Test Report

## For

# Philips Lighting Electronics N. A.

# Test Report Details

| | |
|---|---|
| Tests Performed By: | **UL LLC**<br>**333 Pfingsten Rd.**<br>**Northbrook, IL 60062** |
| Tests Performed For: | **Philips Lighting Electronics N. A.**<br>**10275 West Higgins Road**<br>**Rosemont, IL 60018** |
| Applicant Contact:<br>Phone:<br>E-mail: | **Richard Haring**<br>**(847) 390-5195**<br>**richard.haring@philips.com** |
| Test Report Date: | **June 4, 2014** |
| Product Type: | **Wireless Device** |
| Product standards | **FCC Part 15, Subpart C, 15.247, RSS-210** |
| Model Number: | **SSDB1** |
| EUT Category: | **Wireless Device** |
| Testing Start Date: | **January 2014** |
| Date Testing Complete: | **April 2014** |
| **Overall Results:** | **Compliant** |

UL LLC reports apply only to the specific samples tested under stated test conditions. All samples tested were in good operating condition throughout the entire test program. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. UL LLC shall have no liability for any deductions, inferences or generalizations drawn by the client or others from UL LLC issued reports. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

This report may contain test results that are not covered by the NVLAP or A2LA accreditation. The scope of accreditation is limited to the specific tests that are listed on the NVLAP and/or A2LA websites referenced at the end of this report.

# Report Directory

Report Revision History

| Revision Date | Description | Revised By | Revision Reviewed By |
|---|---|---|---|
| none | | | |

# 1.0 G E N E R A L - Product Description

## 1.1 Equipment Description

The EUT is a Wireless DTS 902MHz-928MHz Limited Module.

## 1.2 Device Configuration During Test

### 1.2.1 Equipment Used During Test:

| Use | Product Type | Manufacturer | Model | Comments |
|---|---|---|---|---|
| **EUT** | Light Controller | Philips | SSDB1 | Module tested inside various hosts |
| **AE** | StarSense | Philips | Low Voltage On/Off Only | Low voltage host (120V60H and 277V60Hz) with on / off capability only |
| **AE** | StarSense | Philips | Dimming | Dimming host (120V60H and 277V60Hz) |
| **AE** | StarSense | Philips | High Voltage On/Off Only | High voltage host (347V60H and 480V60Hz) with on / off capability only |

Note: **EUT** – Equipment Under Test, **AE** – Auxiliary/Associated Equipment, or **SIM** – Simulator (Not Subjected to Test)

* For antenna port measurements the module was tested while powered directly by external power supply with 5VDC. This was done to protect the spectrum analyzer from high voltages.

### 1.2.2 Input/Output Ports:

| Port # | Name | Type* | Cable Max. >3m (Y/N) | Cable Shielded (Y/N) | Comments |
|---|---|---|---|---|---|
| 0 | Enclosure | N/E | — | — | None |
| 1 | Mains | AC | N | N | Module is Powered by the host |
| 2 | DC Voltage | DC | N | N | 5VDC connected directly to the module, used only for antenna port measurements. |

Note:
AC = AC Power Port DC = DC Power Port N/E = Non-Electrical
I/O = Signal Input or Output Port (Not Involved in Process Control)
TP = Telecommunication Ports

### 1.2.3 Power Interface:

| Mode # /Rated | Voltage (V) | Current (A) | Power (W) | Frequency (DC/AC-Hz) | Phases (#) | Comments |
|---|---|---|---|---|---|---|
| 1 | 120 | - | - | AC | 1 | none |
| 2 | 277 | - | - | AC | 1 | none |
| 3 | 347 | - | - | AC | 1 | none |
| 4 | 480 | - | - | AC | 1 | none |
| 5 | 5 | - | - | DC | 1 | Used for Antenna Port Measurements. |

### 1.3 EUT Configurations

| Mode # | Description |
|---|---|
| 1 | EUT was removed from a host and connected to 5VDC supply (used for antenna port measurements only) |
| 2 | EUT was installed inside a specific host, setup on approximately 80cm support (used for Radiated Emissions and Line conducted emissions) |

### 1.4 EUT Operation Modes

| Mode # | Description |
|---|---|
| 1 | EUT set to transmit continuously on either low, middle or high channels |
| 2 | EUT set to receive on a channel |
| 3 | EUT set to sleep mode (radio transceiver module) |

### 1.5 Rational for EUT Configuration

| Mode # | Description |
|---|---|
| 1 | The selected EUT configuration was chosen as representative for various configurations and were chosen to show that in some cases the host only meets class A limits regardless of the mode the radio device is in. |

## 2.0 Summary

The tests listed in the Summary of Testing section of this report have been performed and the results recorded by UL LLC in accordance with the procedures stated in each test requirement and specification. The applicant determined the list of tests performed were applicable to the Equipment Under Test. As a result, the subject product has been verified to comply or not comply as noted in the Summary of Testing with each test specification. The test results relate only to the items tested.

### 2.1 Deviations from standard test methods

None

### 2.2 Device Modifications Necessary for Compliance

None

### 2.3 Reference Standards

| Standard Number | Standard Name | Standard Date |
|---|---|---|
| FCC Part 15, Subpart C, 15.247 | Code of Federal Regulations, Part 15, Radio Frequency Devices | 2012 |
| RSS-210 | License-exempt Radio Apparatus (All Frequency Bands): Category I Equipment | Issue 8 |
| FCC KDB558074 D01 DTS Meas Guidance v03r01. In addition additional guidance from FCC was used which allows the use of peak measurements and duty cycle correction for Radiated Spurious Emissions. | | |

### 2.4 Results Summary

This end product (transceiver with the host) is considered Class A

| Requirement – Test | Result (Compliant / Non-Compliant)* |
|---|---|
| Mains Terminal - Conducted Emissions | *Compliant |
| Radiated Emissions – Receiver Mode | *Compliant |
| Spurious Emissions (Antenna Conducted and Radiated) | *Compliant |
| Band Edge Compliance | Compliant |
| 6dB Bandwidth Measurement | Compliant |
| Maximum Peak Output Power | Compliant |
| Power Spectral Density | Compliant |
| 99% Power Bandwidth | N/A – Data Only |
| * The end product in which the device will be installed is considered to be class A device. For both radiated emissions and line conducted emissions multiple operating modes/configurations were tested to show that regardless of mode or configuration the end device (host) will only comply with class A limits. Another version of the radio module was certified (with shield) under FCC ID:VBO-SSDB1S. The module with shield is identical to this one, except that the board near antenna is wider to make space for the shield. The module alone fully complies with the class B limits. | |

Test Engineer:

Bartlomiej Mucha (Ext.41216)
Staff Engineer
International EMC Services
UL Verification Services

Reviewer:

Michael Ferrer(Ext.41312)
Program Manager
International EMC Services
UL Verification Services

## 3.0 Calibration of Equipment Used for Measurement

All test equipment and test accessories are calibrated on a regular basis. The maximum time between calibrations is one year or the manufacturers' recommendation, whichever is less.

All test equipment calibrations are traceable to the National Institute of Standards and Technology (NIST); therefore, all test data recorded in this report is traceable to NIST.

## 4.0 EMISSIONS TEST RESULTS

The emissions tests were performed according to following regulations:

---------- United States ----------

| | |
|---|---|
| Code of Federal Regulations Title 47 | Part 15, Subpart C, Radio Frequency Devices |

---------- Canada ----------

| | |
|---|---|
| Spectrum Management and Telecommunications Radio Standards Specification | License-exempt Radio Apparatus (All Frequency Bands): Category I Equipment |

Unless specified otherwise in the individual Methods, the tests shall be conducted under the following ambient conditions. Confirmation of these conditions shall be verified at the time the test is conducted.

| | | | | | |
|---|---|---|---|---|---|
| Ambient Temperature, °C | 22.5 ± 2.5 | Relative Humidity, % | 45 ± 15 | Barometric Pressure, mBar | 950 ± 150 |

**Measurement Uncertainty**

| Test | Range | Equipment | Uncertainty k=2 |
|---|---|---|---|
| Conducted Emissions | 150k-30MHz | LISN | 2.29dB |
| Radiated Emissions | 30-200MHz | Bicon 10m Horz | 4.27dB |
| Radiated Emissions | 30-200MHz | Bicon 10m Vert | 4.28dB |
| Radiated Emissions | 200-1000MHz | LogP 10m Horz | 3.33dB |
| Radiated Emissions | 200-1000MHz | LogP 10m Vert | 3.39dB |

**Sample Calculations**

Radiated Field Strength and Conducted Emissions data contained within this report is calculated on the following basis:

Field Strength (dBuV/m) = Meter Reading (dBuV) + AF (dB/m) - Gain (dB) + Cable Loss (dB)
Conducted Voltage (dBuV) = Meter Reading (dBuV) + Cable Loss (dB) + LISN IL (dB)
Conducted Current (dBuA) = Meter Reading (dBuV) + Cable Loss (dB) - Transducer Factor (dBohms)

### 4.1 Test Conditions and Results – MAINS TERMINAL – CONDUCTED EMISSIONS

| | |
|---|---|
| Test Description | Measurements were made on a ground plane. All power was connected to the system through Artificial Mains Network (AMN). Conducted voltage measurements on mains lines were made at the output of the AMN. The EUT was placed approximately 80cm above horizontal ground plane and 40cm from the vertical ground plane (+/- 10%). |

| | | |
|---|---|---|
| Basic Standard | 47 CFR Part 15.107, 15.207<br>RSS-Gen 7.2.4 | |
| UL LPG | 80-EM-S0026 | |
| | Frequency range on each side of line | Measurement Point |
| Fully configured sample scanned over the following frequency range | 150kHz to 30MHz | Mains |

**Limits - Class B (FCC 15.107(a) and 15.207**

| Frequency (MHz) | Limit (dBµV) | |
|---|---|---|
| | Quasi-Peak | Average |
| 0.15-0.5 | 66 - 56 | 56 - 46 |
| 0.5-5.0 | 56 | 46 |
| 5.0-30 | 60 | 50 |

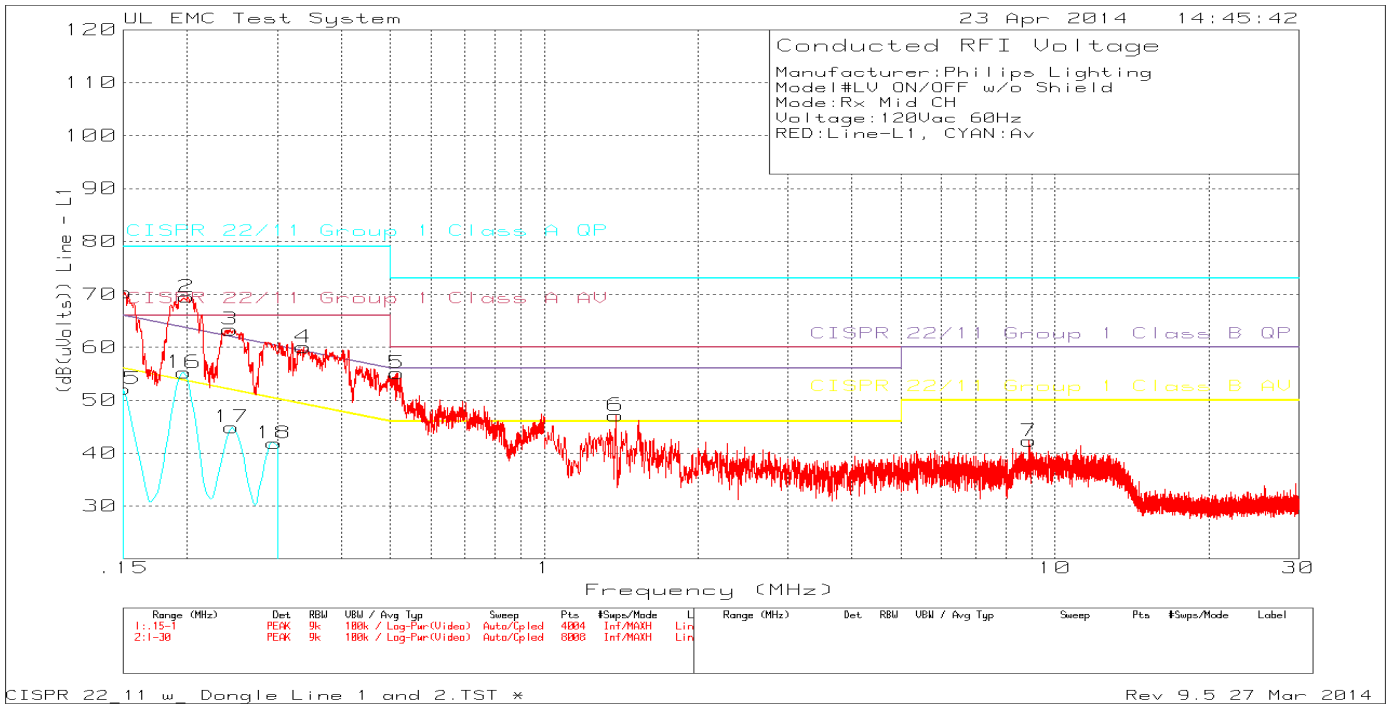
Supplementary information: The module with the host in some cases complies only with the FCC Class A limits. With all the data collected (see below) it was determined that the module does not add to the emission levels and it is the host (LV and HV supply) responsible for the emissions. Another version of the module (FCC ID: VBO-SSDB1S & IC: 135Y-SSDB1S) was tested as stand-alone full-module with shield. The module complies with FCC class B limits.

**Table 1 Conducted Emissions EUT Configuration Settings**

| Power Interface Mode # | EUT Configurations Mode # | EUT Operation Mode # |
|---|---|---|
| 1,2,3,4 | 2 | 1,2,3 |
| Supplementary information: None | | |

### 4.1.1 Low Voltage, On/Off (120V/60Hz)

**Figure 1 Conducted Emissions Graph – Radio RX Mode**



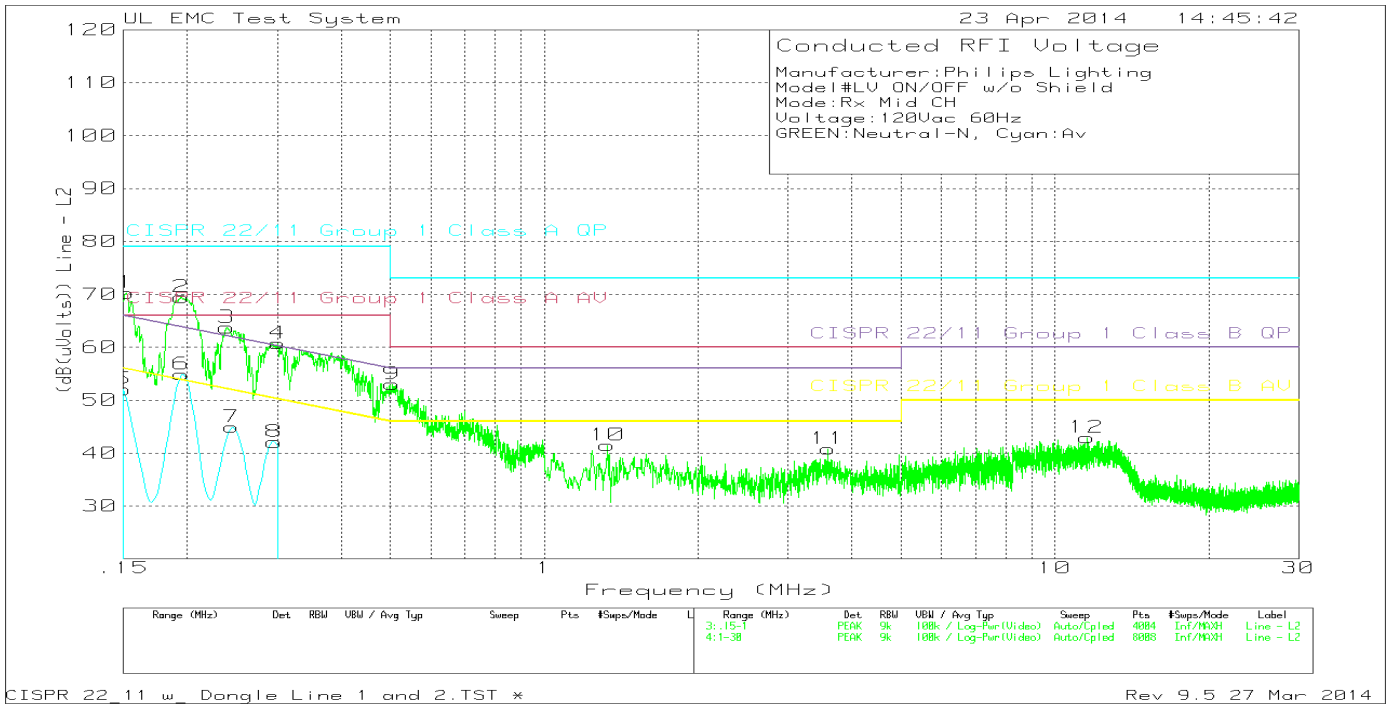



**Table 2 Conducted Emissions Data Points – Radio RX mode**

Manufacturer:Philips Lighting
Model#LV ON/OFF w/o Shield
Mode:Rx Mid CH
Voltage:120Vac 60Hz
RED:Line-L1, CYAN:Av

**Trace Markers for Line**

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .15085 | 55.8dBuV PK | .1 | 14.5 | 70.4 | 79 | 66 | 65.95 | 55.95 | - | - |
| | | | | | Margin (dB) | -8.6 | 4.4 | 4.45 | 14.45 | - | - |
| 2 | .19969 | 57.92dBuV PK | .1 | 11.5 | 69.52 | 79 | 66 | 63.62 | 53.62 | - | - |
| | | | | | Margin (dB) | -9.48 | 3.52 | 5.9 | 15.9 | - | - |
| 3 | .24247 | 51.97dBuV PK | .1 | 11.3 | 63.37 | 79 | 66 | 62.01 | 52.01 | - | - |
| | | | | | Margin (dB) | -15.63 | -2.63 | 1.36 | 11.36 | - | - |
| 4 | .33813 | 49.1dBuV PK | .1 | 10.8 | 60 | 79 | 66 | 59.25 | 49.25 | - | - |
| | | | | | Margin (dB) | -19 | -6 | .75 | 10.75 | - | - |
| 5 | .51523 | 44.4dBuV PK | .1 | 10.6 | 55.1 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -17.9 | -4.9 | -.9 | 9.1 | - | - |
| 15 | .15 | 37.42dBuV Av | .1 | 14.6 | 52.12 | 79 | 66 | 66 | 56 | - | - |
| | | | | | Margin (dB) | -26.88 | -13.88 | -13.88 | -3.88 | - | - |
| 16 | .19725 | 43.62dBuV Av | .1 | 11.5 | 55.22 | 79 | 66 | 63.73 | 53.73 | - | - |
| | | | | | Margin (dB) | -23.78 | -10.78 | -8.51 | 1.49 | - | - |
| 17 | .2445 | 33.5dBuV Av | .1 | 11.3 | 44.9 | 79 | 66 | 61.94 | 51.94 | - | - |
| | | | | | Margin (dB) | -34.1 | -21.1 | -17.04 | -7.04 | - | - |
| 18 | .29625 | 30.88dBuV Av | .1 | 10.9 | 41.88 | 79 | 66 | 60.35 | 50.35 | - | - |
| | | | | | Margin (dB) | -37.12 | -24.12 | -18.47 | -8.47 | - | - |
| 6 | 1.38029 | 36.39dBuV PK | .1 | 10.6 | 47.09 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -25.91 | -12.91 | -8.91 | 1.09 | - | - |
| 7 | 8.90284 | 31.2dBuV PK | .2 | 10.9 | 42.3 | 73 | 60 | 60 | 50 | - | - |
| | | | | | Margin (dB) | -30.7 | -17.7 | -17.7 | -7.7 | - | - |

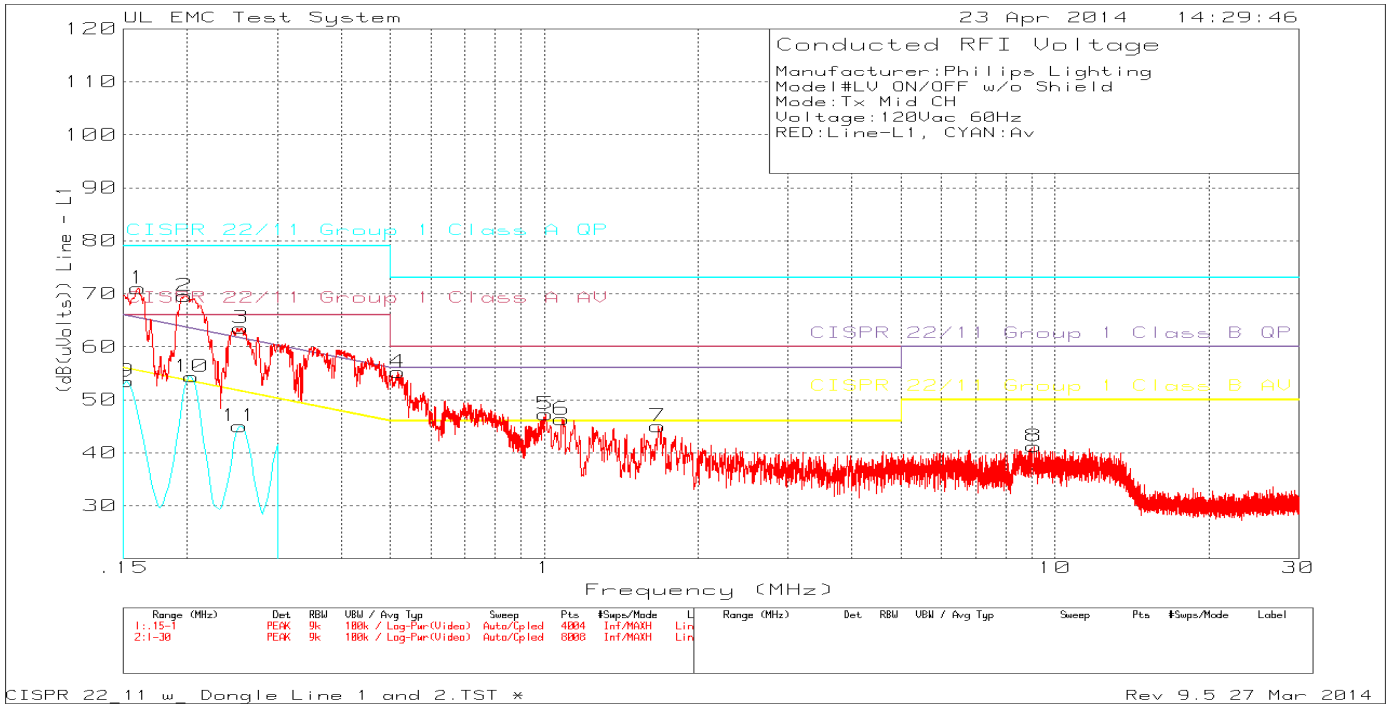
**Trace Markers for Neutral**

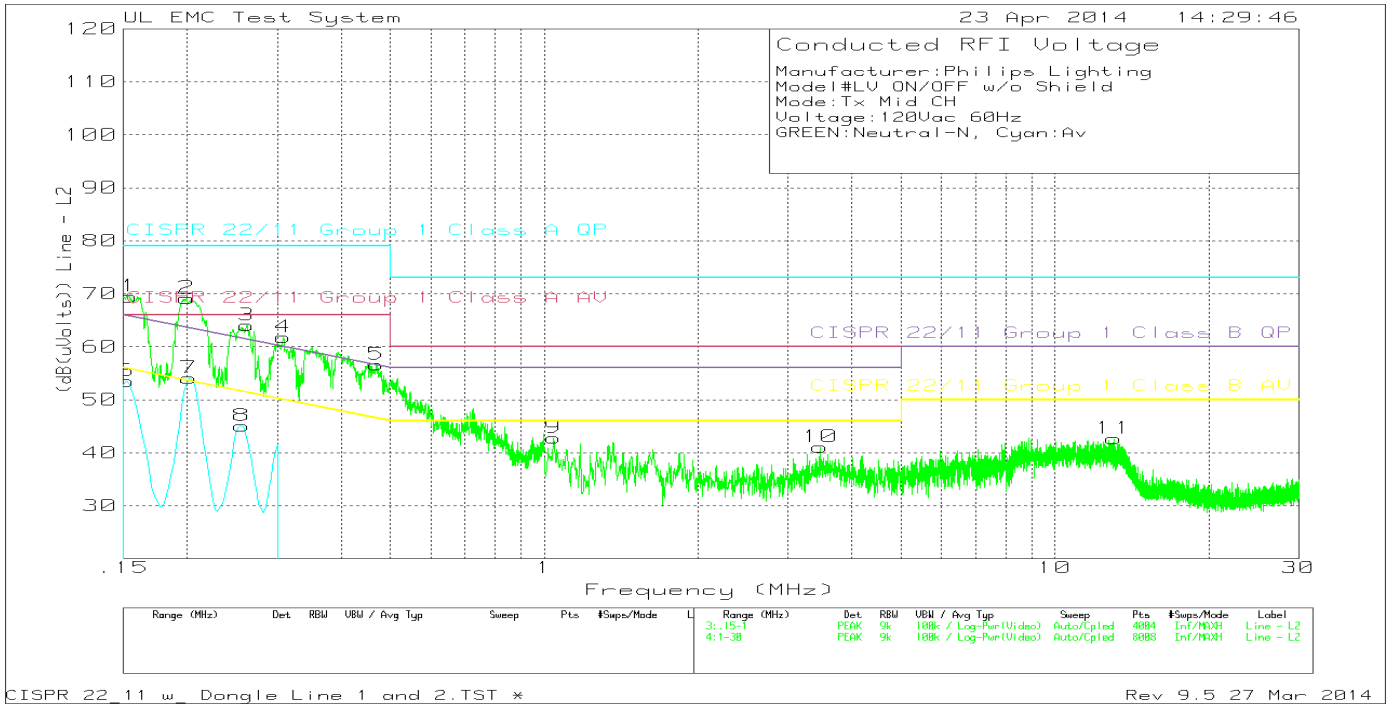
| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .15191 | 55.65dBuV PK | .1 | 14.5 | 70.25 | 79 | 66 | 65.89 | 55.89 | - | - |
| | | | | | Margin (dB) | -8.75 | 4.25 | 4.36 | 14.36 | - | - |
| 2 | .19459 | 57.75dBuV PK | .1 | 11.6 | 69.45 | 79 | 66 | 63.84 | 53.84 | - | - |
| | | | | | Margin (dB) | -9.55 | 3.45 | 5.61 | 15.61 | - | - |
| 3 | .23918 | 52.32dBuV PK | .1 | 11.3 | 63.72 | 79 | 66 | 62.12 | 52.12 | - | - |
| | | | | | Margin (dB) | -15.28 | -2.28 | 1.6 | 11.6 | - | - |
| 4 | .30097 | 49.73dBuV PK | .1 | 10.9 | 60.73 | 79 | 66 | 60.22 | 50.22 | - | - |
| | | | | | Margin (dB) | -18.27 | -5.27 | .51 | 10.51 | - | - |
| 5 | .15 | 37.36dBuV Av | .1 | 14.6 | 52.06 | 79 | 66 | 66 | 56 | - | - |
| | | | | | Margin (dB) | -26.94 | -13.94 | -13.94 | -3.94 | - | - |
| 6 | .195 | 43.19dBuV Av | .1 | 11.6 | 54.89 | 79 | 66 | 63.82 | 53.82 | - | - |
| | | | | | Margin (dB) | -24.11 | -11.11 | -8.93 | 1.07 | - | - |
| 7 | .2445 | 33.53dBuV Av | .1 | 11.3 | 44.93 | 79 | 66 | 61.94 | 51.94 | - | - |
| | | | | | Margin (dB) | -34.07 | -21.07 | -17.01 | -7.01 | - | - |
| 8 | .29625 | 31.1dBuV Av | .1 | 10.9 | 42.1 | 79 | 66 | 60.35 | 50.35 | - | - |
| | | | | | Margin (dB) | -36.9 | -23.9 | -18.25 | -8.25 | - | - |
| 9 | .50397 | 42.25dBuV PK | .1 | 10.7 | 53.05 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -19.95 | -6.95 | -2.95 | 7.05 | - | - |
| 10 | 1.32959 | 30.8dBuV PK | .1 | 10.6 | 41.5 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -31.5 | -18.5 | -14.5 | -4.5 | - | - |
| 11 | 3.59685 | 30.02dBuV PK | .1 | 10.7 | 40.82 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -32.18 | -19.18 | -15.18 | -5.18 | - | - |
| 12 | 11.54677 | 31.65dBuV PK | .2 | 11.1 | 42.95 | 73 | 60 | 60 | 50 | - | - |
| | | | | | Margin (dB) | -30.05 | -17.05 | -17.05 | -7.05 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
Av - CISPR average detection

**Figure 2 Conducted Emissions Graph – Radio TX Mode**



### Table 3 Conducted Emissions Data Points – Radio TX Mode

Manufacturer:Philips Lighting
Model#LV ON/OFF w/o Shield
Mode:Tx Mid CH
Voltage:120Vac 60Hz
RED:Line-L1, CYAN:Av

**Trace Markers for Line**

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .16019 | 57.12dBuV PK | .1 | 13.8 | 71.02 | 79 | 66 | 65.45 | 55.45 | - | - |
| | | | | | Margin (dB) | -7.98 | 5.02 | 5.57 | 15.57 | - | - |
| 2 | .19788 | 58dBuV PK | .1 | 11.5 | 69.6 | 79 | 66 | 63.7 | 53.7 | - | - |
| | | | | | Margin (dB) | -9.4 | 3.6 | 5.9 | 15.9 | - | - |
| 3 | .255 | 52.26dBuV PK | .1 | 11.2 | 63.56 | 79 | 66 | 61.59 | 51.59 | - | - |
| | | | | | Margin (dB) | -15.44 | -2.44 | 1.97 | 11.97 | - | - |
| 4 | .51714 | 44.52dBuV PK | .1 | 10.6 | 55.22 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -17.78 | -4.78 | -.78 | 9.22 | - | - |
| 9 | .15225 | 38.97dBuV Av | .1 | 14.4 | 53.47 | 79 | 66 | 65.88 | 55.88 | - | - |
| | | | | | Margin (dB) | -25.53 | -12.53 | -12.41 | -2.41 | - | - |
| 10 | .204 | 42.75dBuV Av | .1 | 11.5 | 54.35 | 79 | 66 | 63.45 | 53.45 | - | - |
| | | | | | Margin (dB) | -24.65 | -11.65 | -9.1 | .9 | - | - |
| 11 | .2535 | 33.72dBuV Av | .1 | 11.2 | 45.02 | 79 | 66 | 61.64 | 51.64 | - | - |
| | | | | | Margin (dB) | -33.98 | -20.98 | -16.62 | -6.62 | - | - |
| 5 | 1.00724 | 36.56dBuV PK | .1 | 10.6 | 47.26 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -25.74 | -12.74 | -8.74 | 1.26 | - | - |
| 6 | 1.0833 | 35.61dBuV PK | .1 | 10.6 | 46.31 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -26.69 | -13.69 | -9.69 | .31 | - | - |
| 7 | 1.67004 | 34.31dBuV PK | .1 | 10.6 | 45.01 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -27.99 | -14.99 | -10.99 | -.99 | - | - |
| 8 | 9.09479 | 30.11dBuV PK | .2 | 10.9 | 41.21 | 73 | 60 | 60 | 50 | - | - |
| | | | | | Margin (dB) | -31.79 | -18.79 | -18.79 | -8.79 | - | - |

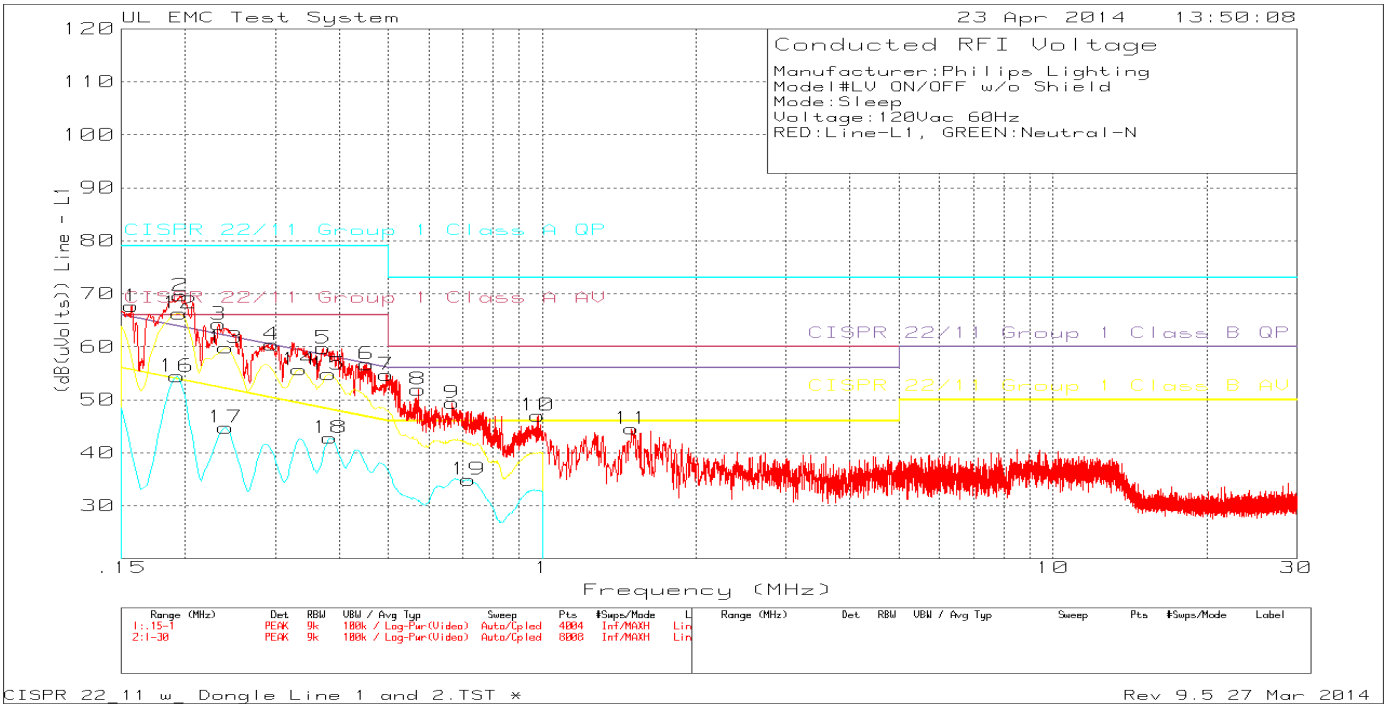
**Trace Markers for Neutral**

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .15403 | 55.07dBuV PK | .1 | 14.3 | 69.47 | 79 | 66 | 65.78 | 55.78 | - | - |
| | | | | | Margin (dB) | -9.53 | 3.47 | 3.69 | 13.69 | - | - |
| 2 | .19948 | 57.55dBuV PK | .1 | 11.5 | 69.15 | 79 | 66 | 63.63 | 53.63 | - | - |
| | | | | | Margin (dB) | -9.85 | 3.15 | 5.52 | 15.52 | - | - |
| 3 | .26159 | 52.85dBuV PK | .1 | 11.1 | 64.05 | 79 | 66 | 61.38 | 51.38 | - | - |
| | | | | | Margin (dB) | -14.95 | -1.95 | 2.67 | 12.67 | - | - |
| 4 | .30841 | 50.83dBuV PK | .1 | 10.9 | 61.83 | 79 | 66 | 60.01 | 50.01 | - | - |
| | | | | | Margin (dB) | -17.17 | -4.17 | 1.82 | 11.82 | - | - |
| 5 | .46936 | 45.83dBuV PK | .1 | 10.7 | 56.63 | 79 | 66 | 56.53 | 46.53 | - | - |
| | | | | | Margin (dB) | -22.37 | -9.37 | .1 | 10.1 | - | - |
| 6 | .15225 | 39.04dBuV Av | .1 | 14.4 | 53.54 | 79 | 66 | 65.88 | 55.88 | - | - |
| | | | | | Margin (dB) | -25.46 | -12.46 | -12.34 | -2.34 | - | - |
| 7 | .20175 | 42.49dBuV Av | .1 | 11.5 | 54.09 | 79 | 66 | 63.54 | 53.54 | - | - |
| | | | | | Margin (dB) | -24.91 | -11.91 | -9.45 | .55 | - | - |
| 8 | .25575 | 33.77dBuV Av | .1 | 11.2 | 45.07 | 79 | 66 | 61.57 | 51.57 | - | - |
| | | | | | Margin (dB) | -33.93 | -20.93 | -16.5 | -6.5 | - | - |
| 9 | 1.04346 | 32.12dBuV PK | .1 | 10.6 | 42.82 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.18 | -17.18 | -13.18 | -3.18 | - | - |
| 10 | 3.47009 | 30.28dBuV PK | .1 | 10.7 | 41.08 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -31.92 | -18.92 | -14.92 | -4.92 | - | - |
| 11 | 13.03897 | 31.29dBuV PK | .3 | 11.1 | 42.69 | 73 | 60 | 60 | 50 | - | - |
| | | | | | Margin (dB) | -30.31 | -17.31 | -17.31 | -7.31 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
Av - CISPR average detection

**Figure 3 Conducted Emissions Graph – Radio Sleep Mode**



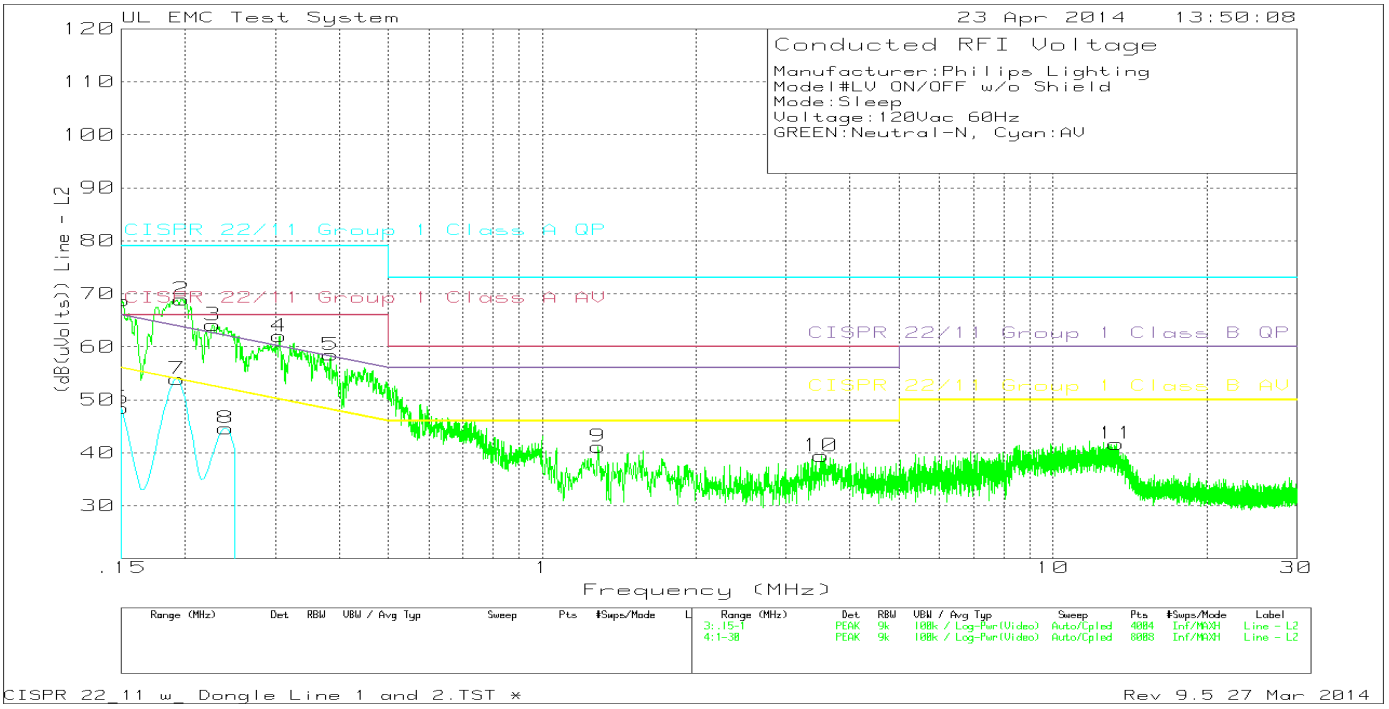



**Table 4 Conducted Emissions Data Points – Radio Sleep Mode**

Manufacturer:Philips Lighting
Model#LV ON/OFF w/o Shield
Mode:Sleep
Voltage:120Vac 60Hz
RED:Line-L1, GREEN:Neutral-N

**Trace Markers for Line**

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading | Limit:1 (dB(uVolts)) | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .15701 | 53.58dBuV PK | .1 | 14 | 67.68 | 79 | 66 | 65.62 | 55.62 | - | - |
| | | | | | Margin (dB) | -11.32 | 1.68 | 2.06 | 12.06 | - | - |
| 2 | .19576 | 58.04dBuV PK | .1 | 11.5 | 69.64 | 79 | 66 | 63.79 | 53.79 | - | - |
| | | | | | Margin (dB) | -9.36 | 3.64 | 5.85 | 15.85 | - | - |
| 3 | .2326 | 52.86dBuV PK | .1 | 11.3 | 64.26 | 79 | 66 | 62.36 | 52.36 | - | - |
| | | | | | Margin (dB) | -14.74 | -1.74 | 1.9 | 11.9 | - | - |
| 4 | .29567 | 49.4dBuV PK | .1 | 10.9 | 60.4 | 79 | 66 | 60.36 | 50.36 | - | - |
| | | | | | Margin (dB) | -18.6 | -5.6 | .04 | 10.04 | - | - |
| 5 | .37296 | 48.83dBuV PK | .1 | 10.8 | 59.73 | 79 | 66 | 58.43 | 48.43 | - | - |
| | | | | | Margin (dB) | -19.27 | -6.27 | 1.3 | 11.3 | - | - |
| 6 | .45322 | 45.92dBuV PK | .1 | 10.7 | 56.72 | 79 | 66 | 56.82 | 46.82 | - | - |
| | | | | | Margin (dB) | -22.28 | -9.28 | -.1 | 9.9 | - | - |
| 7 | .49548 | 43.92dBuV PK | .1 | 10.7 | 54.72 | 79 | 66 | 56.08 | 46.08 | - | - |
| | | | | | Margin (dB) | -24.28 | -11.28 | -1.36 | 8.64 | - | - |
| 8 | .5715 | 41.24dBuV PK | .1 | 10.6 | 51.94 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -21.06 | -8.06 | -4.06 | 5.94 | - | - |
| 9 | .66641 | 38.83dBuV PK | 0 | 10.6 | 49.43 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -23.57 | -10.57 | -6.57 | 3.43 | - | - |
| 10 | .98036 | 36.32dBuV PK | .1 | 10.6 | 47.02 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -25.98 | -12.98 | -8.98 | 1.02 | - | - |
| 12 | .195 | 54.68dBuV QP | .1 | 11.5 | 66.28 | 79 | 66 | 63.82 | 53.82 | - | - |
| | | | | | Margin (dB) | -12.72 | .28 | 2.46 | 12.46 | - | - |
| 13 | .24 | 48.41dBuV QP | .1 | 11.3 | 59.81 | 79 | 66 | 62.1 | 52.1 | - | - |
| | | | | | Margin (dB) | -19.19 | -6.19 | -2.29 | 7.71 | - | - |
| 14 | .3345 | 44.81dBuV QP | .1 | 10.8 | 55.71 | 79 | 66 | 59.34 | 49.34 | - | - |
| | | | | | Margin (dB) | -23.29 | -10.29 | -3.63 | 6.37 | - | - |
| 15 | .38175 | 43.91dBuV QP | .1 | 10.8 | 54.81 | 79 | 66 | 58.24 | 48.24 | - | - |
| | | | | | Margin (dB) | -24.19 | -11.19 | -3.43 | 6.57 | - | - |
| 16 | .19275 | 42.72dBuV Av | .1 | 11.6 | 54.42 | 79 | 66 | 63.92 | 53.92 | - | - |
| | | | | | Margin (dB) | -24.58 | -11.58 | -9.5 | .5 | - | - |
| 17 | .24 | 33.36dBuV Av | .1 | 11.3 | 44.76 | 79 | 66 | 62.1 | 52.1 | - | - |
| | | | | | Margin (dB) | -34.24 | -21.24 | -17.34 | -7.34 | - | - |
| 18 | .384 | 31.92dBuV Av | .1 | 10.8 | 42.82 | 79 | 66 | 58.19 | 48.19 | - | - |
| | | | | | Margin (dB) | -36.18 | -23.18 | -15.37 | -5.37 | - | - |
| 19 | .717 | 24.23dBuV Av | .1 | 10.6 | 34.93 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -38.07 | -25.07 | -21.07 | -11.07 | - | - |
| 11 | 1.49619 | 33.85dBuV PK | .1 | 10.6 | 44.55 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -28.45 | -15.45 | -11.45 | -1.45 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
QP - Quasi-Peak detector
Av - CISPR average detection

Manufacturer:Philips Lighting
Model#LV ON/OFF w/o Shield
Mode:Sleep
Voltage:120Vac 60Hz
GREEN:Neutral-N, Cyan:AV

**Trace Markers for Neutral**

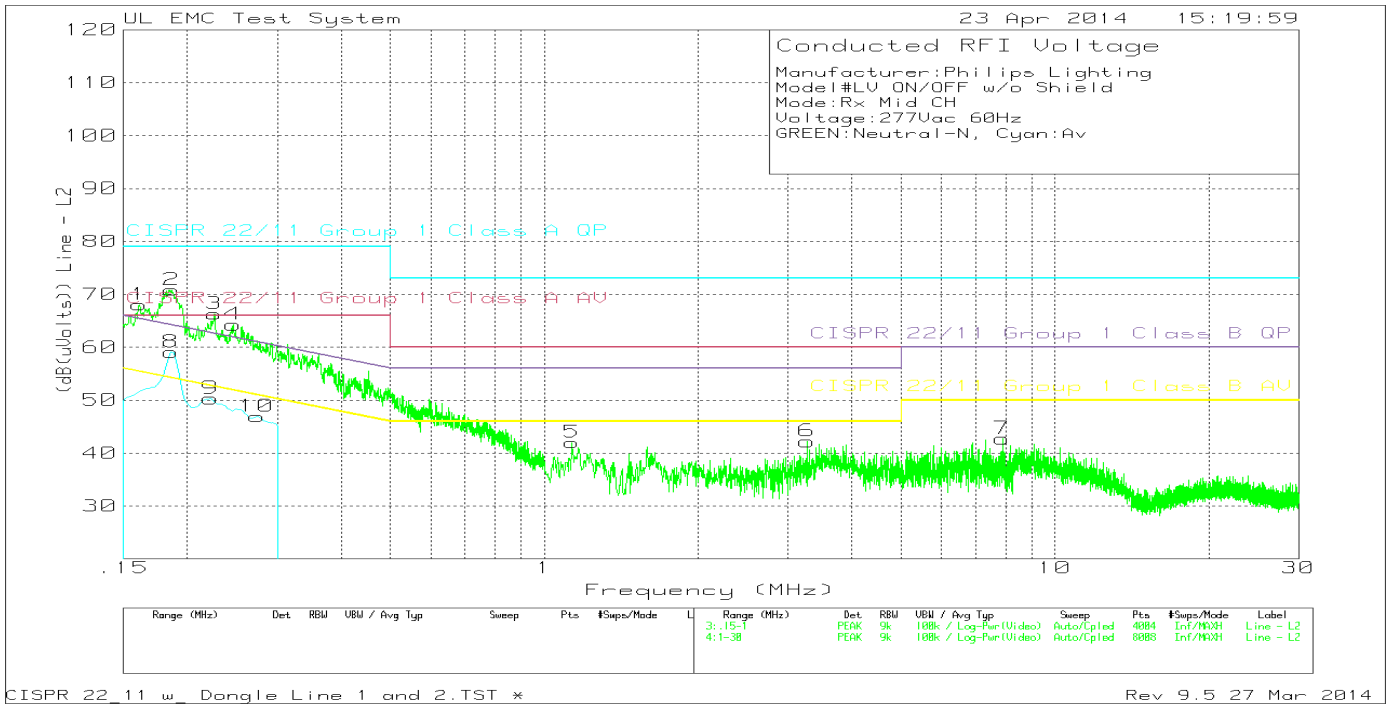
| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .15064 | 54.02dBuV PK | .1 | 14.6 | 68.72 | 79 | 66 | 65.96 | 55.96 | - | - |
| | | | | | Margin (dB) | -10.28 | 2.72 | 2.76 | 12.76 | - | - |
| 2 | .19693 | 57.24dBuV PK | .1 | 11.6 | 68.94 | 79 | 66 | 63.74 | 53.74 | - | - |
| | | | | | Margin (dB) | -10.06 | 2.94 | 5.2 | 15.2 | - | - |
| 3 | .22655 | 52.62dBuV PK | .1 | 11.4 | 64.12 | 79 | 66 | 62.58 | 52.58 | - | - |
| | | | | | Margin (dB) | -14.88 | -1.88 | 1.54 | 11.54 | - | - |
| 4 | .30586 | 51dBuV PK | .1 | 10.9 | 62 | 79 | 66 | 60.08 | 50.08 | - | - |
| | | | | | Margin (dB) | -17 | -4 | 1.92 | 11.92 | - | - |
| 5 | .38506 | 47.61dBuV PK | .1 | 10.8 | 58.51 | 79 | 66 | 58.17 | 48.17 | - | - |
| | | | | | Margin (dB) | -20.49 | -7.49 | .34 | 10.34 | - | - |
| 6 | .15 | 33.75dBuV Av | .1 | 14.6 | 48.45 | 79 | 66 | 66 | 56 | - | - |
| | | | | | Margin (dB) | -30.55 | -17.55 | -17.55 | -7.55 | - | - |
| 7 | .19275 | 42.25dBuV Av | .1 | 11.6 | 53.95 | 79 | 66 | 63.92 | 53.92 | - | - |
| | | | | | Margin (dB) | -25.05 | -12.05 | -9.97 | .03 | - | - |
| 8 | .24 | 33.23dBuV Av | .1 | 11.3 | 44.63 | 79 | 66 | 62.1 | 52.1 | - | - |
| | | | | | Margin (dB) | -34.37 | -21.37 | -17.47 | -7.47 | - | - |
| 9 | 1.28613 | 30.49dBuV PK | .1 | 10.6 | 41.19 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -31.81 | -18.81 | -14.81 | -4.81 | - | - |
| 10 | 3.51717 | 28.59dBuV PK | .1 | 10.7 | 39.39 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -33.61 | -20.61 | -16.61 | -6.61 | - | - |
| 11 | 13.3106 | 30.32dBuV PK | .3 | 11.1 | 41.72 | 73 | 60 | 60 | 50 | - | - |
| | | | | | Margin (dB) | -31.28 | -18.28 | -18.28 | -8.28 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
Av - CISPR average detection

### 4.1.2 Low Voltage, On/Off (277V/60Hz)

**Figure 4 Conducted Emissions Graph – Radio RX Mode**



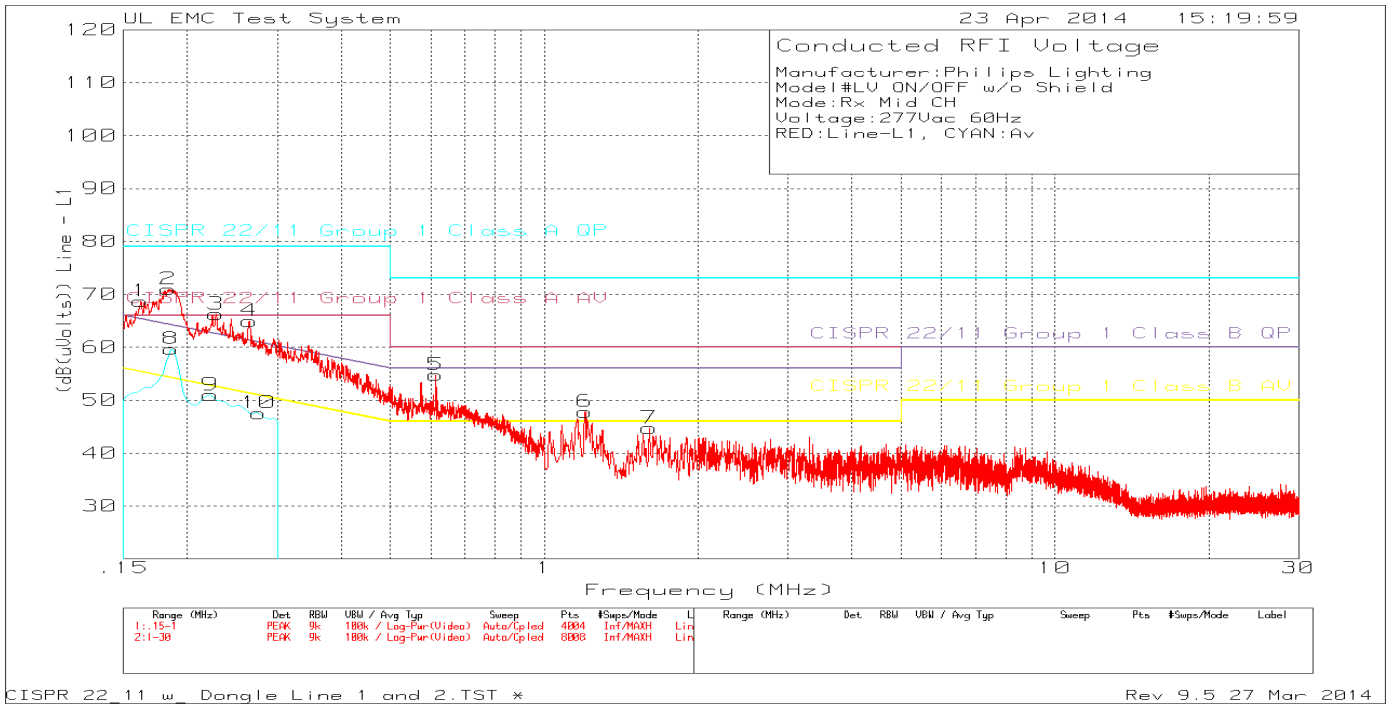



**Table 5 Conducted Emissions Data Points – Radio RX mode**

Manufacturer:Philips Lighting
Model#LV ON/OFF w/o Shield
Mode:Rx Mid CH
Voltage:277Vac 60Hz
RED:Line-L1, CYAN:Av

**Trace Markers for Line**

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) / Margin (dB) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .1621 | 55.04dBuV PK | .1 | 13.6 | 68.74 | 79 | 66 | 65.36 | 55.36 | - | - |
| | | | | | Margin (dB) | -10.26 | 2.74 | 3.38 | 13.38 | - | - |
| 2 | .18376 | 58.98dBuV PK | .1 | 11.9 | 70.98 | 79 | 66 | 64.31 | 54.31 | - | - |
| | | | | | Margin (dB) | -8.02 | 4.98 | 6.67 | 16.67 | - | - |
| 3 | .22772 | 54.75dBuV PK | .1 | 11.4 | 66.25 | 79 | 66 | 62.53 | 52.53 | - | - |
| | | | | | Margin (dB) | -12.75 | .25 | 3.72 | 13.72 | - | - |
| 4 | .26466 | 53.77dBuV PK | .1 | 11.1 | 64.97 | 79 | 66 | 61.28 | 51.28 | - | - |
| | | | | | Margin (dB) | -14.03 | -1.03 | 3.69 | 13.69 | - | - |
| 5 | .61312 | 44.09dBuV PK | .1 | 10.6 | 54.79 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -18.21 | -5.21 | -1.21 | 8.79 | - | - |
| 8 | .186 | 47.87dBuV Av | .1 | 11.7 | 59.67 | 79 | 66 | 64.21 | 54.21 | - | - |
| | | | | | Margin (dB) | -19.33 | -6.33 | -4.54 | 5.46 | - | - |
| 9 | .222 | 39.45dBuV Av | .1 | 11.4 | 50.95 | 79 | 66 | 62.74 | 52.74 | - | - |
| | | | | | Margin (dB) | -28.05 | -15.05 | -11.79 | -1.79 | - | - |
| 10 | .276 | 36.46dBuV Av | .1 | 11 | 47.56 | 79 | 66 | 60.94 | 50.94 | - | - |
| | | | | | Margin (dB) | -31.44 | -18.44 | -13.38 | -3.38 | - | - |
| 6 | 1.20101 | 37.12dBuV PK | .1 | 10.6 | 47.82 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -25.18 | -12.18 | -8.18 | 1.82 | - | - |
| 7 | 1.60485 | 34.03dBuV PK | .1 | 10.6 | 44.73 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -28.27 | -15.27 | -11.27 | -1.27 | - | - |

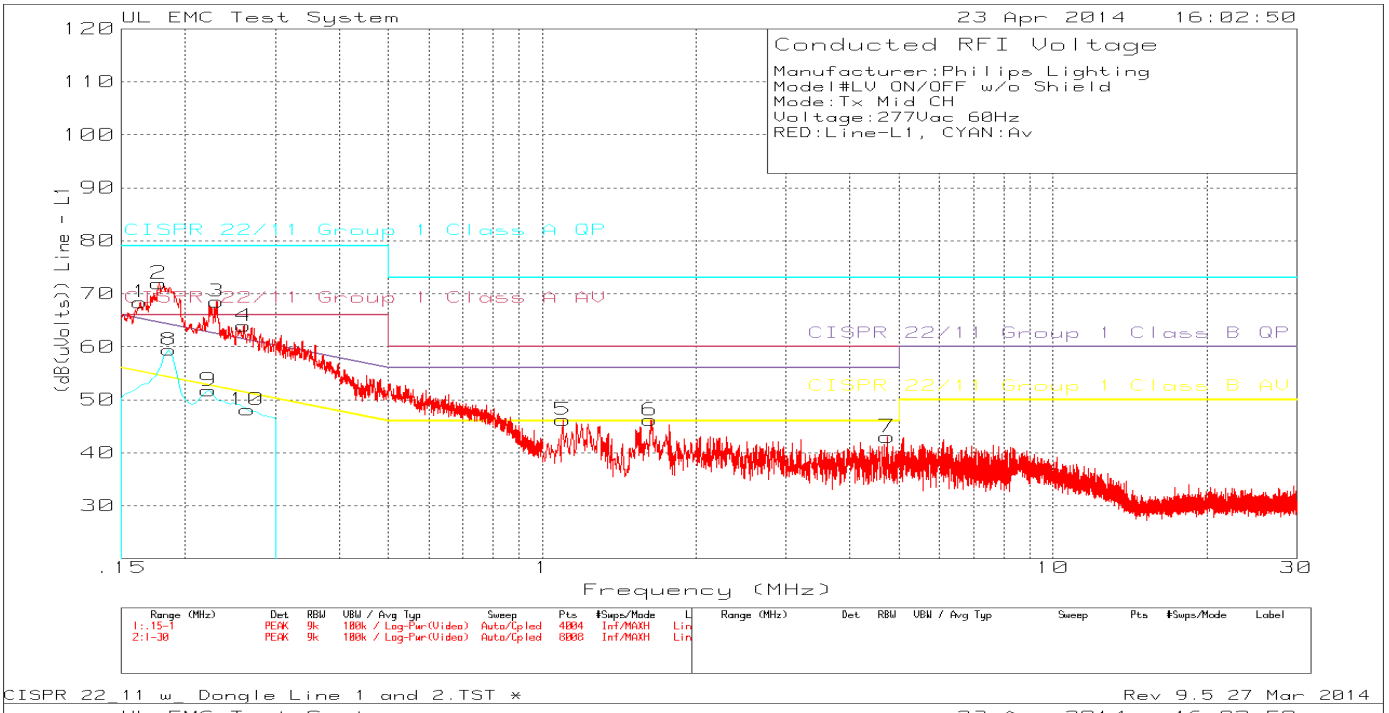
**Trace Markers for Line 2**

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) / Margin (dB) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .16104 | 54.25dBuV PK | .1 | 13.7 | 68.05 | 79 | 66 | 65.41 | 55.41 | - | - |
| | | | | | Margin (dB) | -10.95 | 2.05 | 2.64 | 12.64 | - | - |
| 2 | .18631 | 59.03dBuV PK | .1 | 11.7 | 70.83 | 79 | 66 | 64.2 | 54.2 | - | - |
| | | | | | Margin (dB) | -8.17 | 4.83 | 6.63 | 16.63 | - | - |
| 3 | .22602 | 54.81dBuV PK | .1 | 11.4 | 66.31 | 79 | 66 | 62.59 | 52.59 | - | - |
| | | | | | Margin (dB) | -12.69 | .31 | 3.72 | 13.72 | - | - |
| 4 | .24598 | 52.91dBuV PK | .1 | 11.3 | 64.31 | 79 | 66 | 61.89 | 51.89 | - | - |
| | | | | | Margin (dB) | -14.69 | -1.69 | 2.42 | 12.42 | - | - |
| 8 | .186 | 47.26dBuV Av | .1 | 11.7 | 59.06 | 79 | 66 | 64.21 | 54.21 | - | - |
| | | | | | Margin (dB) | -19.94 | -6.94 | -5.15 | 4.85 | - | - |
| 9 | .222 | 38.79dBuV Av | .1 | 11.4 | 50.29 | 79 | 66 | 62.74 | 52.74 | - | - |
| | | | | | Margin (dB) | -28.71 | -15.71 | -12.45 | -2.45 | - | - |
| 10 | .27375 | 35.73dBuV Av | .1 | 11.1 | 46.93 | 79 | 66 | 61 | 51 | - | - |
| | | | | | Margin (dB) | -32.07 | -19.07 | -14.07 | -4.07 | - | - |
| 5 | 1.13401 | 31.31dBuV PK | .1 | 10.6 | 42.01 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.99 | -17.99 | -13.99 | -3.99 | - | - |
| 6 | 3.27089 | 31.44dBuV PK | .1 | 10.7 | 42.24 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.76 | -17.76 | -13.76 | -3.76 | - | - |
| 7 | 7.88872 | 31.71dBuV PK | .1 | 10.9 | 42.71 | 73 | 60 | 60 | 50 | - | - |
| | | | | | Margin (dB) | -30.29 | -17.29 | -17.29 | -7.29 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
Av - CISPR average detection

**Figure 5 Conducted Emissions Graph – Radio TX Mode**



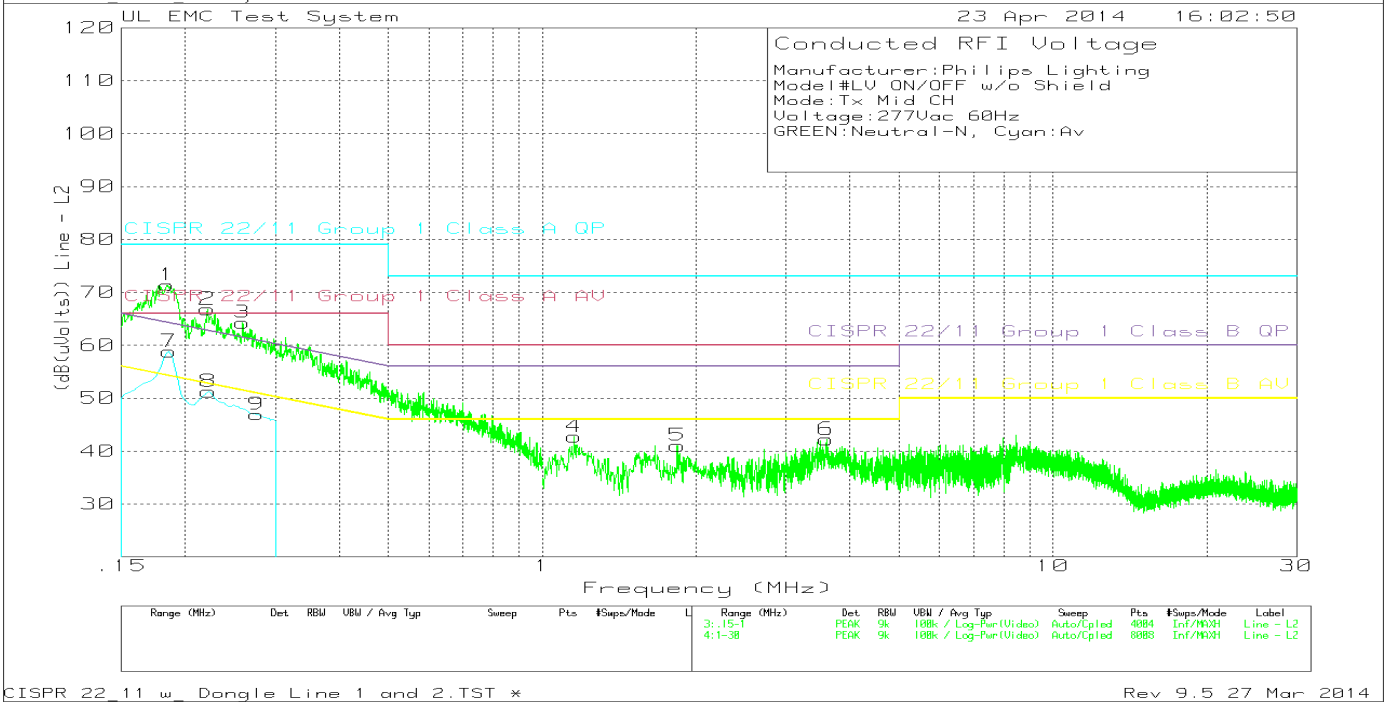



**Table 6 Conducted Emissions Data Points – Radio TX Mode**

Manufacturer:Philips Lighting
Model#LV ON/OFF w/o Shield
Mode:Tx Mid CH
Voltage:277Vac 60Hz
RED:Line-L1, CYAN:Av

Trace Markers for Line

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .16317 | 54.83dBuV PK | .1 | 13.5 | 68.43 | 79 | 66 | 65.3 | 55.3 | - | - |
| | | | | | Margin (dB) | -10.57 | 2.43 | 3.13 | 13.13 | - | - |
| 2 | .17782 | 59.44dBuV PK | .1 | 12.4 | 71.94 | 79 | 66 | 64.59 | 54.59 | - | - |
| | | | | | Margin (dB) | -7.06 | 5.94 | 7.35 | 17.35 | - | - |
| 3 | .23048 | 57.06dBuV PK | .1 | 11.4 | 68.56 | 79 | 66 | 62.43 | 52.43 | - | - |
| | | | | | Margin (dB) | -10.44 | 2.56 | 6.13 | 16.13 | - | - |
| 4 | .26063 | 52.76dBuV PK | .1 | 11.1 | 63.96 | 79 | 66 | 61.41 | 51.41 | - | - |
| | | | | | Margin (dB) | -15.04 | -2.04 | 2.55 | 12.55 | - | - |
| 8 | .186 | 47.62dBuV Av | .1 | 11.7 | 59.42 | 79 | 66 | 64.21 | 54.21 | - | - |
| | | | | | Margin (dB) | -19.58 | -6.58 | -4.79 | 5.21 | - | - |
| 9 | .222 | 40.24dBuV Av | .1 | 11.4 | 51.74 | 79 | 66 | 62.74 | 52.74 | - | - |
| | | | | | Margin (dB) | -27.26 | -14.26 | -11 | -1 | - | - |
| 10 | .26475 | 36.93dBuV Av | .1 | 11.1 | 48.13 | 79 | 66 | 61.28 | 51.28 | - | - |
| | | | | | Margin (dB) | -30.87 | -17.87 | -13.15 | -3.15 | - | - |
| 5 | 1.09779 | 35.53dBuV PK | .1 | 10.6 | 46.23 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -26.77 | -13.77 | -9.77 | .23 | - | - |
| 6 | 1.62658 | 35.47dBuV PK | .1 | 10.6 | 46.17 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -26.83 | -13.83 | -9.83 | .17 | - | - |
| 7 | 4.73773 | 32.18dBuV PK | .1 | 10.7 | 42.98 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.02 | -17.02 | -13.02 | -3.02 | - | - |

Trace Markers for Neutral

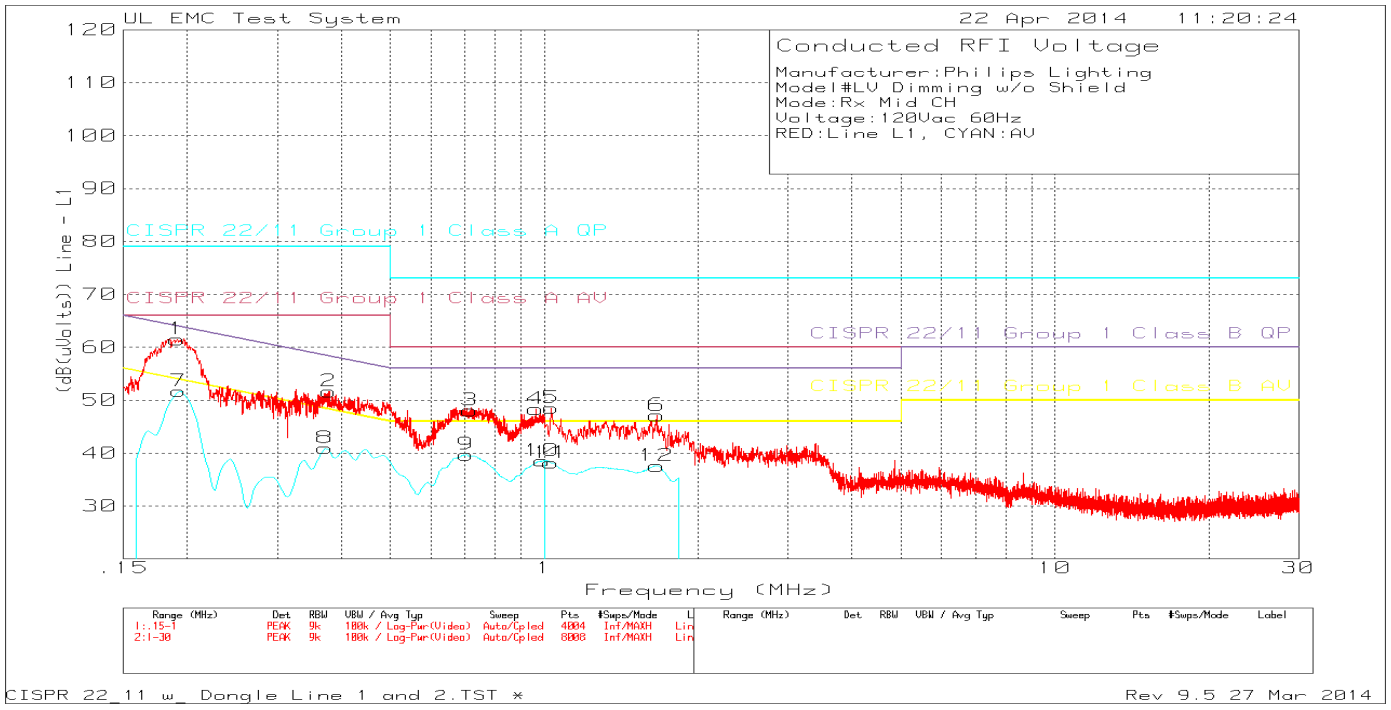
| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .1844 | 59.47dBuV PK | .1 | 11.8 | 71.37 | 79 | 66 | 64.29 | 54.29 | - | - |
| | | | | | Margin (dB) | -7.63 | 5.37 | 7.08 | 17.08 | - | - |
| 2 | .22092 | 55.26dBuV PK | .1 | 11.4 | 66.76 | 79 | 66 | 62.78 | 52.78 | - | - |
| | | | | | Margin (dB) | -12.24 | .76 | 3.98 | 13.98 | - | - |
| 3 | .25893 | 53.01dBuV PK | .1 | 11.2 | 64.31 | 79 | 66 | 61.47 | 51.47 | - | - |
| | | | | | Margin (dB) | -14.69 | -1.69 | 2.84 | 12.84 | - | - |
| 7 | .186 | 47dBuV Av | .1 | 11.7 | 58.8 | 79 | 66 | 64.21 | 54.21 | - | - |
| | | | | | Margin (dB) | -20.2 | -7.2 | -5.41 | 4.59 | - | - |
| 8 | .222 | 39.74dBuV Av | .1 | 11.4 | 51.24 | 79 | 66 | 62.74 | 52.74 | - | - |
| | | | | | Margin (dB) | -27.76 | -14.76 | -11.5 | -1.5 | - | - |
| 9 | .276 | 35.83dBuV Av | .1 | 11 | 46.93 | 79 | 66 | 60.94 | 50.94 | - | - |
| | | | | | Margin (dB) | -32.07 | -19.07 | -14.01 | -4.01 | - | - |
| 4 | 1.15574 | 32.04dBuV PK | .1 | 10.6 | 42.74 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.26 | -17.26 | -13.26 | -3.26 | - | - |
| 5 | 1.84027 | 30.36dBuV PK | .1 | 10.6 | 41.06 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -31.94 | -18.94 | -14.94 | -4.94 | - | - |
| 6 | 3.60048 | 31.39dBuV PK | .1 | 10.7 | 42.19 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.81 | -17.81 | -13.81 | -3.81 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
Av - CISPR average detection

### 4.1.3 Low Voltage, Dimming, (120V/60Hz)

**Figure 6 Conducted Emissions Graph – Radio RX Mode**



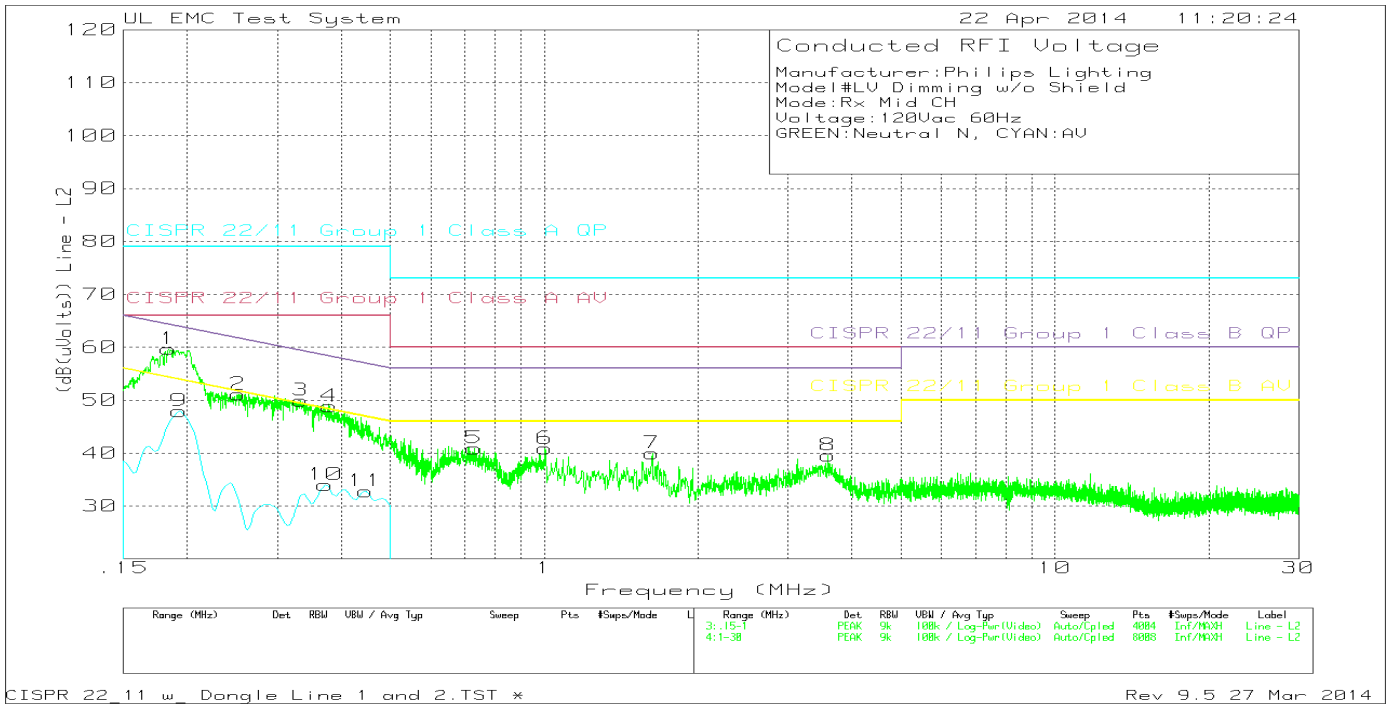



**Table 7 Conducted Emissions Data Points – Radio RX mode**

Manufacturer:Philips Lighting
Model#LV Dimming w/o Shield
Mode:Rx Mid CH
Voltage:120Vac 60Hz
RED:Line L1, CYAN:AV

Trace Markers for Line

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) / Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .19098 | 49.81dBuV PK | .1 | 11.6 | 61.51 | 79 | 66 | 63.99 | 53.99 | - | - |
| | | | | | Margin (dB) | -17.49 | -4.49 | -2.48 | 7.52 | - | - |
| 2 | .3789 | 40.77dBuV PK | .1 | 10.8 | 51.67 | 79 | 66 | 58.3 | 48.3 | - | - |
| | | | | | Margin (dB) | -27.33 | -14.33 | -6.63 | 3.37 | - | - |
| 3 | .7161 | 37.38dBuV PK | .1 | 10.6 | 48.08 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -24.92 | -11.92 | -7.92 | 2.08 | - | - |
| 4 | .96369 | 37.64dBuV PK | .1 | 10.6 | 48.34 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -24.66 | -11.66 | -7.66 | 2.34 | - | - |
| 7 | .19261 | 40.02dBuV Av | .1 | 11.6 | 51.72 | 79 | 66 | 63.92 | 53.92 | - | - |
| | | | | | Margin (dB) | -27.28 | -14.28 | -12.2 | -2.2 | - | - |
| 8 | .37261 | 30.04dBuV Av | .1 | 10.8 | 40.94 | 79 | 66 | 58.44 | 48.44 | - | - |
| | | | | | Margin (dB) | -38.06 | -25.06 | -17.5 | -7.5 | - | - |
| 9 | .70336 | 29dBuV Av | .1 | 10.6 | 39.7 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -33.3 | -20.3 | -16.3 | -6.3 | - | - |
| 10 | .99136 | 27.84dBuV Av | .1 | 10.6 | 38.54 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -34.46 | -21.46 | -17.46 | -7.46 | - | - |
| 5 | 1.0326 | 37.83dBuV PK | .1 | 10.6 | 48.53 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -24.47 | -11.47 | -7.47 | 2.53 | - | - |
| 6 | 1.6628 | 36.42dBuV PK | .1 | 10.6 | 47.12 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -25.88 | -12.88 | -8.88 | 1.12 | - | - |
| 11 | 1.0315 | 27.48dBuV Av | .1 | 10.6 | 38.18 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -34.82 | -21.82 | -17.82 | -7.82 | - | - |
| 12 | 1.6615 | 26.88dBuV Av | .1 | 10.6 | 37.58 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -35.42 | -22.42 | -18.42 | -8.42 | - | - |

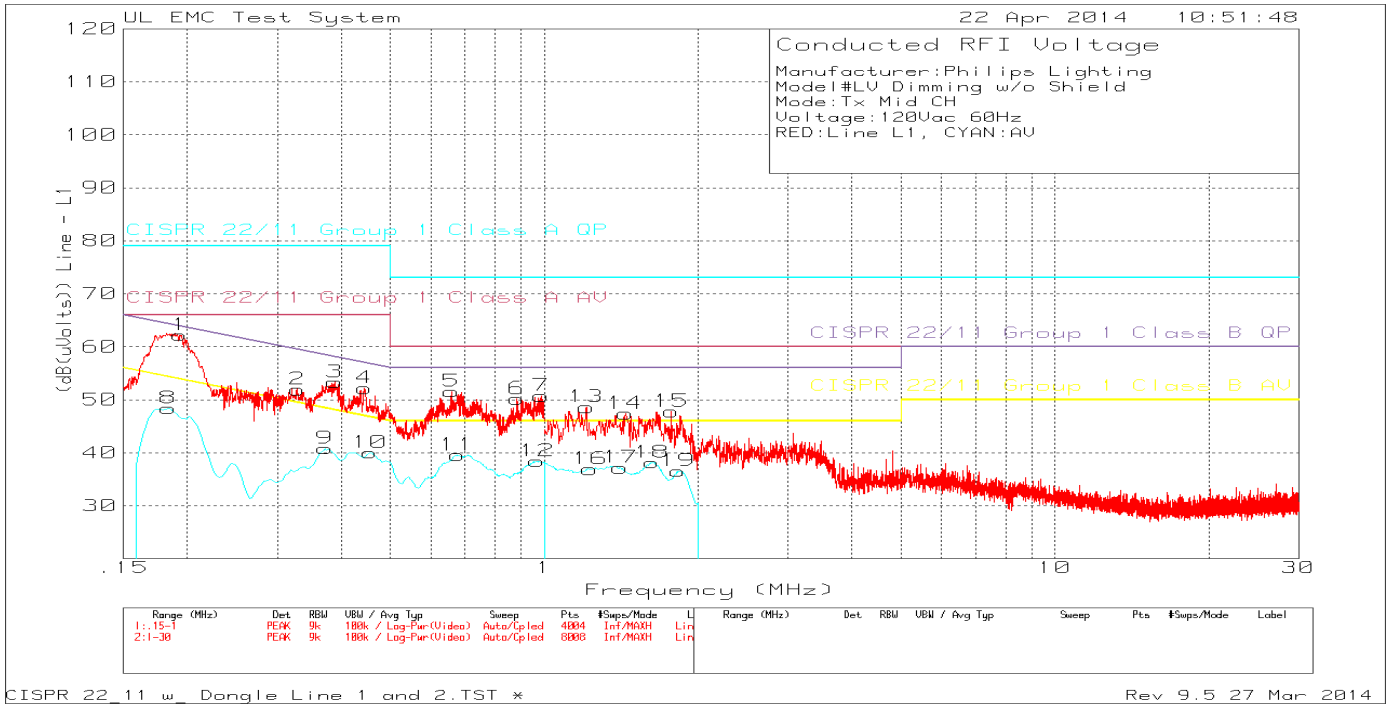
Trace Markers for Neutral

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) / Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .18398 | 47.68dBuV PK | .1 | 11.9 | 59.68 | 79 | 66 | 64.3 | 54.3 | - | - |
| | | | | | Margin (dB) | -19.32 | -6.32 | -4.62 | 5.38 | - | - |
| 2 | .25171 | 39.81dBuV PK | .1 | 11.2 | 51.11 | 79 | 66 | 61.7 | 51.7 | - | - |
| | | | | | Margin (dB) | -27.89 | -14.89 | -10.59 | -.59 | - | - |
| 3 | .33368 | 39.03dBuV PK | .1 | 10.8 | 49.93 | 79 | 66 | 59.36 | 49.36 | - | - |
| | | | | | Margin (dB) | -29.07 | -16.07 | -9.43 | .57 | - | - |
| 4 | .37954 | 37.95dBuV PK | .1 | 10.8 | 48.85 | 79 | 66 | 58.29 | 48.29 | - | - |
| | | | | | Margin (dB) | -30.15 | -17.15 | -9.44 | .56 | - | - |
| 5 | .72905 | 30.22dBuV PK | .1 | 10.6 | 40.92 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -32.08 | -19.08 | -15.08 | -5.08 | - | - |
| 9 | .19275 | 36.23dBuV Av | .1 | 11.6 | 47.93 | 79 | 66 | 63.92 | 53.92 | - | - |
| | | | | | Margin (dB) | -31.07 | -18.07 | -15.99 | -5.99 | - | - |
| 10 | .37275 | 23.09dBuV Av | .1 | 10.8 | 33.99 | 79 | 66 | 58.44 | 48.44 | - | - |
| | | | | | Margin (dB) | -45.01 | -32.01 | -24.45 | -14.45 | - | - |
| 11 | .447 | 22dBuV Av | .1 | 10.7 | 32.8 | 79 | 66 | 56.93 | 46.93 | - | - |
| | | | | | Margin (dB) | -46.2 | -33.2 | -24.13 | -14.13 | - | - |
| 6 | 1.00362 | 30.15dBuV PK | .1 | 10.6 | 40.85 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -32.15 | -19.15 | -15.15 | -5.15 | - | - |
| 7 | 1.62658 | 29.27dBuV PK | .1 | 10.6 | 39.97 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -33.03 | -20.03 | -16.03 | -6.03 | - | - |
| 8 | 3.59685 | 28.76dBuV PK | .1 | 10.7 | 39.56 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -33.44 | -20.44 | -16.44 | -6.44 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
Av - CISPR average detection

**Figure 7 Conducted Emissions Graph – Radio TX Mode**



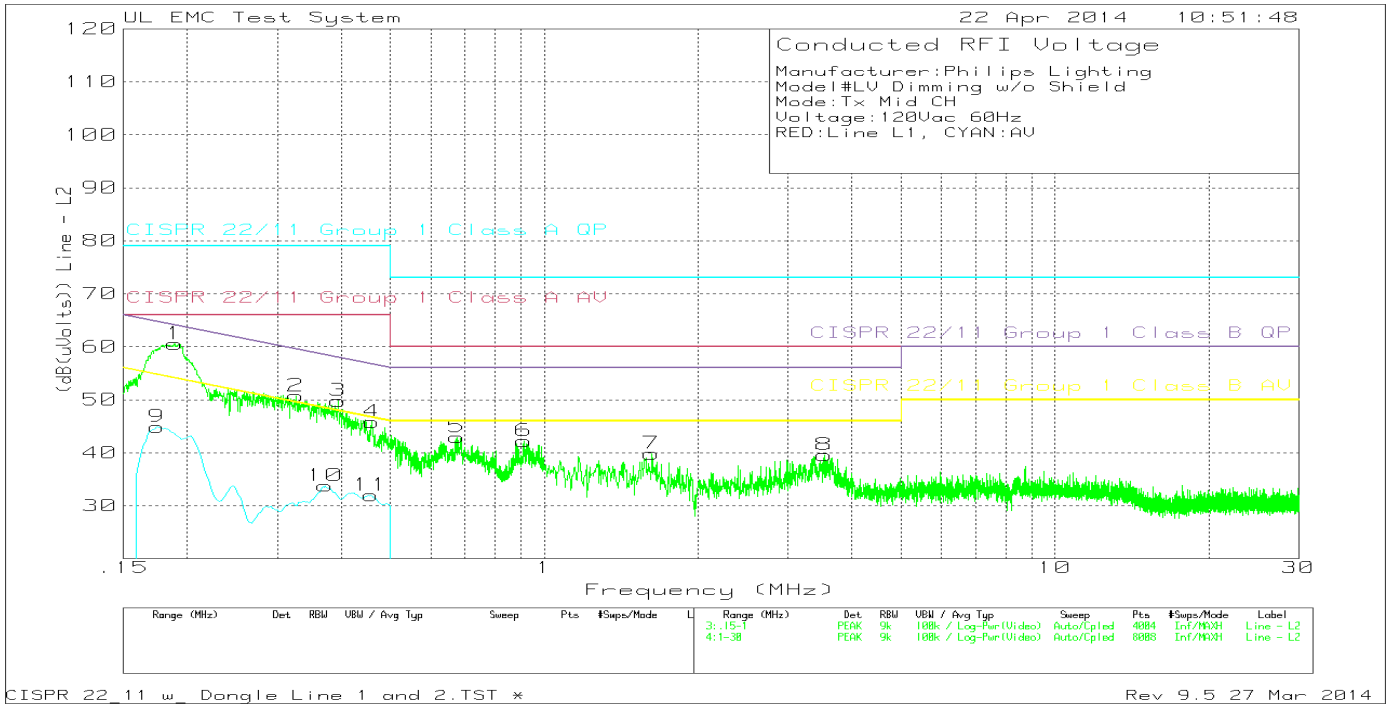



**Table 8 Conducted Emissions Data Points – Radio TX Mode**

Manufacturer:Philips Lighting
Model#LV Dimming w/o Shield
Mode:Tx Mid CH
Voltage:120Vac 60Hz
RED:Line L1, CYAN:AV

**Trace Markers for Line**

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .19353 | 50.53dBuV PK | .1 | 11.6 | 62.23 | 79 | 66 | 63.88 | 53.88 | - | - |
| | | | | | Margin (dB) | -16.77 | -3.77 | -1.65 | 8.35 | - | - |
| 2 | .32879 | 41.04dBuV PK | .1 | 10.8 | 51.94 | 79 | 66 | 59.48 | 49.48 | - | - |
| | | | | | Margin (dB) | -27.06 | -14.06 | -7.54 | 2.46 | - | - |
| 3 | .38888 | 42.53dBuV PK | .1 | 10.7 | 53.33 | 79 | 66 | 58.09 | 48.09 | - | - |
| | | | | | Margin (dB) | -25.67 | -12.67 | -4.76 | 5.24 | - | - |
| 4 | .44473 | 41.4dBuV PK | .1 | 10.7 | 52.2 | 79 | 66 | 56.97 | 46.97 | - | - |
| | | | | | Margin (dB) | -26.8 | -13.8 | -4.77 | 5.23 | - | - |
| 5 | .65919 | 40.86dBuV PK | .1 | 10.6 | 51.56 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -21.44 | -8.44 | -4.44 | 5.56 | - | - |
| 6 | .88406 | 39.47dBuV PK | .1 | 10.6 | 50.17 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -22.83 | -9.83 | -5.83 | 4.17 | - | - |
| 7 | .98705 | 40.05dBuV PK | .1 | 10.6 | 50.75 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -22.25 | -9.25 | -5.25 | 4.75 | - | - |
| 8 | .18361 | 36.39dBuV Av | .1 | 11.9 | 48.39 | 79 | 66 | 64.32 | 54.32 | - | - |
| | | | | | Margin (dB) | -30.61 | -17.61 | -15.93 | -5.93 | - | - |
| 9 | .37261 | 29.91dBuV Av | .1 | 10.8 | 40.81 | 79 | 66 | 58.44 | 48.44 | - | - |
| | | | | | Margin (dB) | -38.19 | -25.19 | -17.63 | -7.63 | - | - |
| 10 | .45586 | 29.23dBuV Av | .1 | 10.7 | 40.03 | 79 | 66 | 56.77 | 46.77 | - | - |
| | | | | | Margin (dB) | -38.97 | -25.97 | -16.74 | -6.74 | - | - |
| 11 | .67636 | 28.84dBuV Av | .1 | 10.6 | 39.54 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -33.46 | -20.46 | -16.46 | -6.46 | - | - |
| 12 | .96886 | 27.72dBuV Av | .1 | 10.6 | 38.42 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -34.58 | -21.58 | -17.58 | -7.58 | - | - |
| 13 | 1.21007 | 37.92dBuV PK | .1 | 10.6 | 48.62 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -24.38 | -11.38 | -7.38 | 2.62 | - | - |
| 14 | 1.44186 | 36.66dBuV PK | .1 | 10.6 | 47.36 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -25.64 | -12.64 | -8.64 | 1.36 | - | - |
| 15 | 1.77507 | 37.08dBuV PK | .1 | 10.6 | 47.78 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -25.22 | -12.22 | -8.22 | 1.78 | - | - |
| 16 | 1.2295 | 26.23dBuV Av | .1 | 10.6 | 36.93 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -36.07 | -23.07 | -19.07 | -9.07 | - | - |
| 17 | 1.4095 | 26.46dBuV Av | .1 | 10.6 | 37.16 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -35.84 | -22.84 | -18.84 | -8.84 | - | - |
| 18 | 1.6255 | 27.45dBuV Av | .1 | 10.6 | 38.15 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -34.85 | -21.85 | -17.85 | -7.85 | - | - |
| 19 | 1.828 | 25.85dBuV Av | .1 | 10.6 | 36.55 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -36.45 | -23.45 | -19.45 | -9.45 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
Av - CISPR average detection

Manufacturer:Philips Lighting
Model#LV Dimming w/o Shield
Mode:Tx Mid CH
Voltage:120Vac 60Hz
RED:Line L1, CYAN:AV

**Trace Markers for Neutral**

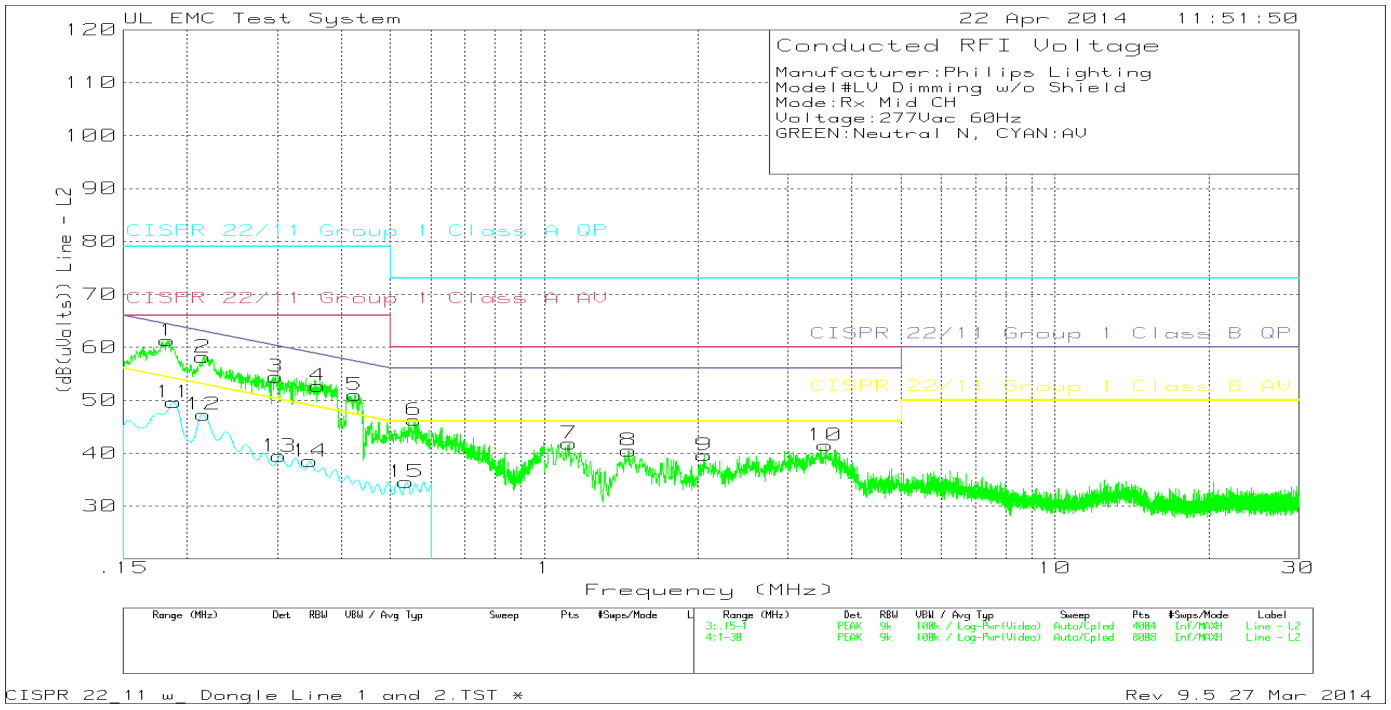
| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .18907 | 48.82dBuV PK | .1 | 11.6 | 60.52 | 79 | 66 | 64.08 | 54.08 | - | - |
| | | | | | Margin (dB) | -18.48 | -5.48 | -3.56 | 6.44 | - | - |
| 2 | .32646 | 39.81dBuV PK | .1 | 10.8 | 50.71 | 79 | 66 | 59.54 | 49.54 | - | - |
| | | | | | Margin (dB) | -28.29 | -15.29 | -8.83 | 1.17 | - | - |
| 3 | .39483 | 38.9dBuV PK | .1 | 10.8 | 49.8 | 79 | 66 | 57.96 | 47.96 | - | - |
| | | | | | Margin (dB) | -29.2 | -16.2 | -8.16 | 1.84 | - | - |
| 4 | .45981 | 35.02dBuV PK | .1 | 10.7 | 45.82 | 79 | 66 | 56.7 | 46.7 | - | - |
| | | | | | Margin (dB) | -33.18 | -20.18 | -10.88 | -.88 | - | - |
| 5 | .67406 | 32.26dBuV PK | .1 | 10.6 | 42.96 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.04 | -17.04 | -13.04 | -3.04 | - | - |
| 6 | .91167 | 31.52dBuV PK | .1 | 10.6 | 42.22 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.78 | -17.78 | -13.78 | -3.78 | - | - |
| 9 | .17461 | 32.19dBuV Av | .1 | 12.6 | 44.89 | 79 | 66 | 64.74 | 54.74 | - | - |
| | | | | | Margin (dB) | -34.11 | -21.11 | -19.85 | -9.85 | - | - |
| 10 | .37261 | 22.88dBuV Av | .1 | 10.8 | 33.78 | 79 | 66 | 58.44 | 48.44 | - | - |
| | | | | | Margin (dB) | -45.22 | -32.22 | -24.66 | -14.66 | - | - |
| 11 | .45811 | 21.17dBuV Av | .1 | 10.7 | 31.97 | 79 | 66 | 56.73 | 46.73 | - | - |
| | | | | | Margin (dB) | -47.03 | -34.03 | -24.76 | -14.76 | - | - |
| 7 | 1.62296 | 29.14dBuV PK | .1 | 10.6 | 39.84 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -33.16 | -20.16 | -16.16 | -6.16 | - | - |
| 8 | 3.53166 | 28.76dBuV PK | .1 | 10.7 | 39.56 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -33.44 | -20.44 | -16.44 | -6.44 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
Av - CISPR average detection

### 4.1.4 Low Voltage, Dimming, (277V/60Hz)

**Figure 8 Conducted Emissions Graph – Radio RX Mode**



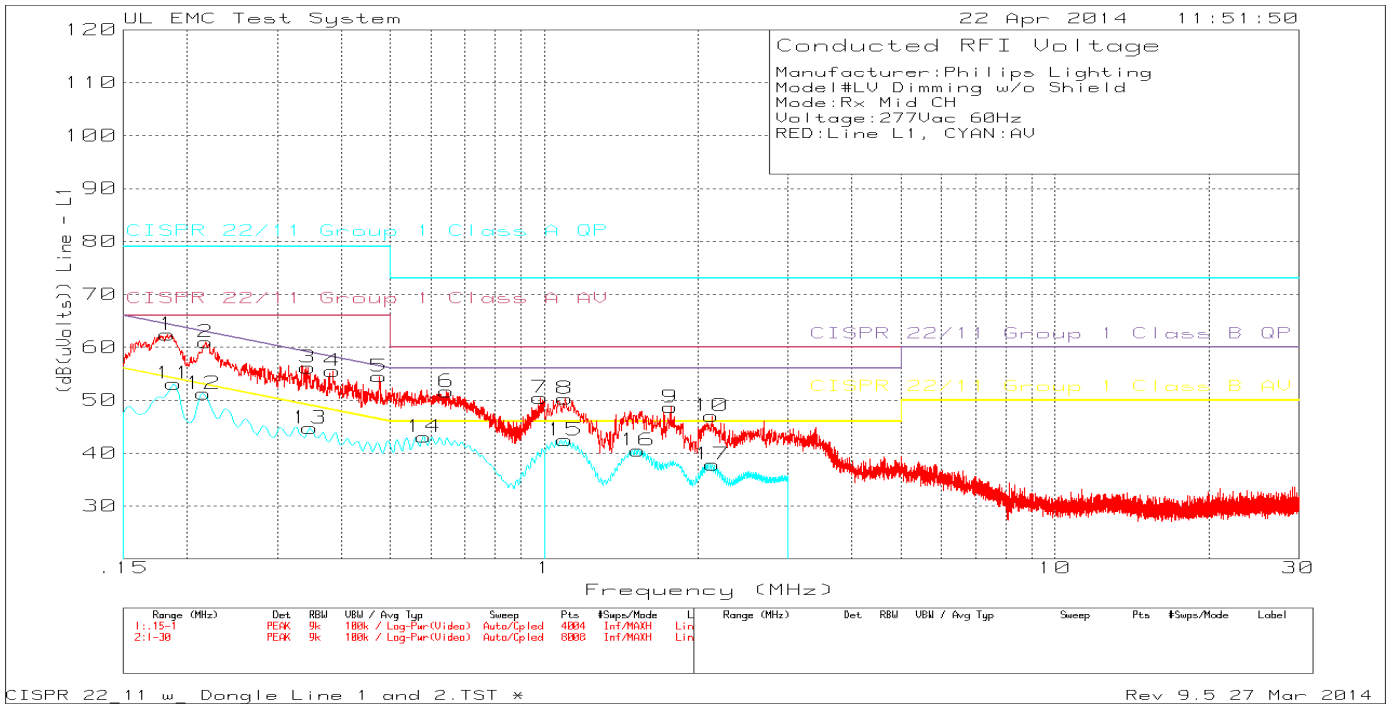



**Table 9 Conducted Emissions Data Points – Radio RX mode**

Manufacturer:Philips Lighting
Model#LV Dimming w/o Shield
Mode:Rx Mid CH
Voltage:277Vac 60Hz
RED:Line L1, CYAN:AV

**Trace Markers for Line**

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .18291 | 50.4dBuV PK | .1 | 11.9 | 62.4 | 79 | 66 | 64.35 | 54.35 | - | - |
| | | | | | Margin (dB) | -16.6 | -3.6 | -1.95 | 8.05 | - | - |
| 2 | .21731 | 49.47dBuV PK | .1 | 11.4 | 60.97 | 79 | 66 | 62.92 | 52.92 | - | - |
| | | | | | Margin (dB) | -18.03 | -5.03 | -1.95 | 8.05 | - | - |
| 3 | .34429 | 45.28dBuV PK | .1 | 10.8 | 56.18 | 79 | 66 | 59.1 | 49.1 | - | - |
| | | | | | Margin (dB) | -22.82 | -9.82 | -2.92 | 7.08 | - | - |
| 4 | .38549 | 44.6dBuV PK | .1 | 10.8 | 55.5 | 79 | 66 | 58.16 | 48.16 | - | - |
| | | | | | Margin (dB) | -23.5 | -10.5 | -2.66 | 7.34 | - | - |
| 5 | .47573 | 43.69dBuV PK | .1 | 10.7 | 54.49 | 79 | 66 | 56.41 | 46.41 | - | - |
| | | | | | Margin (dB) | -24.51 | -11.51 | -1.92 | 8.08 | - | - |
| 6 | .64412 | 41.02dBuV PK | 0 | 10.6 | 51.62 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -21.38 | -8.38 | -4.38 | 5.62 | - | - |
| 7 | .98238 | 39.79dBuV PK | .1 | 10.6 | 50.49 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -22.51 | -9.51 | -5.51 | 4.49 | - | - |
| 11 | .18825 | 41.41dBuV Av | .1 | 11.6 | 53.11 | 79 | 66 | 64.11 | 54.11 | - | - |
| | | | | | Margin (dB) | -25.89 | -12.89 | -11 | -1 | - | - |
| 12 | .21525 | 39.72dBuV Av | .1 | 11.4 | 51.22 | 79 | 66 | 63 | 53 | - | - |
| | | | | | Margin (dB) | -27.78 | -14.78 | -11.78 | -1.78 | - | - |
| 13 | .348 | 33.83dBuV Av | .1 | 10.8 | 44.73 | 79 | 66 | 59.01 | 49.01 | - | - |
| | | | | | Margin (dB) | -34.27 | -21.27 | -14.28 | -4.28 | - | - |
| 14 | .582 | 32.36dBuV Av | .1 | 10.6 | 43.06 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -29.94 | -16.94 | -12.94 | -2.94 | - | - |
| 8 | 1.09779 | 39.58dBuV PK | .1 | 10.6 | 50.28 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -22.72 | -9.72 | -5.72 | 4.28 | - | - |
| 9 | 1.76783 | 37.98dBuV PK | .1 | 10.6 | 48.68 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -24.32 | -11.32 | -7.32 | 2.68 | - | - |
| 10 | 2.12639 | 36.32dBuV PK | .1 | 10.6 | 47.02 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -25.98 | -12.98 | -8.98 | 1.02 | - | - |
| 15 | 1.099 | 31.77dBuV Av | .1 | 10.6 | 42.47 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.53 | -17.53 | -13.53 | -3.53 | - | - |
| 16 | 1.5265 | 29.8dBuV Av | .1 | 10.6 | 40.5 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -32.5 | -19.5 | -15.5 | -5.5 | - | - |
| 17 | 2.134 | 27.17dBuV Av | .1 | 10.6 | 37.87 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -35.13 | -22.13 | -18.13 | -8.13 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
Av - CISPR average detection

Manufacturer:Philips Lighting
Model#LV Dimming w/o Shield
Mode:Rx Mid CH
Voltage:277Vac 60Hz
GREEN:Neutral N, CYAN:AV

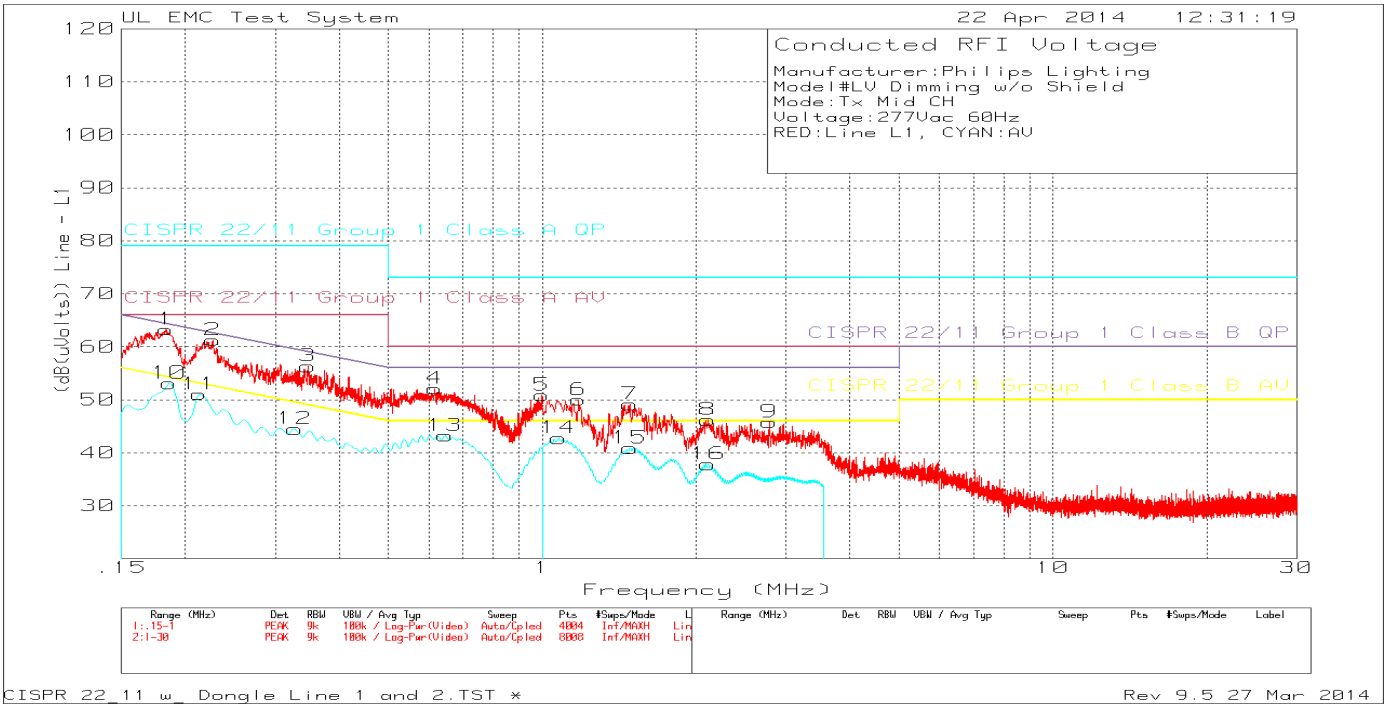
**Trace Markers for Neutral**

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .18291 | 49.17dBuV PK | .1 | 12 | 61.27 | 79 | 66 | 64.35 | 54.35 | - | - |
| | | | | | Margin (dB) | -17.73 | -4.73 | -3.08 | 6.92 | - | - |
| 2 | .21498 | 46.54dBuV PK | .1 | 11.5 | 58.14 | 79 | 66 | 63.01 | 53.01 | - | - |
| | | | | | Margin (dB) | -20.86 | -7.86 | -4.87 | 5.13 | - | - |
| 3 | .29821 | 43.45dBuV PK | .1 | 10.9 | 54.45 | 79 | 66 | 60.29 | 50.29 | - | - |
| | | | | | Margin (dB) | -24.55 | -11.55 | -5.84 | 4.16 | - | - |
| 4 | .36064 | 41.82dBuV PK | .1 | 10.8 | 52.72 | 79 | 66 | 58.71 | 48.71 | - | - |
| | | | | | Margin (dB) | -26.28 | -13.28 | -5.99 | 4.01 | - | - |
| 5 | .42604 | 40.22dBuV PK | .1 | 10.7 | 51.02 | 79 | 66 | 57.33 | 47.33 | - | - |
| | | | | | Margin (dB) | -27.98 | -14.98 | -6.31 | 3.69 | - | - |
| 6 | .55685 | 35.58dBuV PK | .1 | 10.6 | 46.28 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -26.72 | -13.72 | -9.72 | .28 | - | - |
| 11 | .18825 | 37.91dBuV Av | .1 | 11.6 | 49.61 | 79 | 66 | 64.11 | 54.11 | - | - |
| | | | | | Margin (dB) | -29.39 | -16.39 | -14.5 | -4.5 | - | - |
| 12 | .21525 | 35.66dBuV Av | .1 | 11.5 | 47.26 | 79 | 66 | 63 | 53 | - | - |
| | | | | | Margin (dB) | -31.74 | -18.74 | -15.74 | -5.74 | - | - |
| 13 | .303 | 28.41dBuV Av | .1 | 10.9 | 39.41 | 79 | 66 | 60.16 | 50.16 | - | - |
| | | | | | Margin (dB) | -39.59 | -26.59 | -20.75 | -10.75 | - | - |
| 14 | .348 | 27.57dBuV Av | .1 | 10.8 | 38.47 | 79 | 66 | 59.01 | 49.01 | - | - |
| | | | | | Margin (dB) | -40.53 | -27.53 | -20.54 | -10.54 | - | - |
| 15 | .537 | 23.81dBuV Av | .1 | 10.6 | 34.51 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -38.49 | -25.49 | -21.49 | -11.49 | - | - |
| 7 | 1.11952 | 31.12dBuV PK | .1 | 10.6 | 41.82 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -31.18 | -18.18 | -14.18 | -4.18 | - | - |
| 8 | 1.46359 | 29.79dBuV PK | .1 | 10.6 | 40.49 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -32.51 | -19.51 | -15.51 | -5.51 | - | - |
| 9 | 2.05758 | 28.9dBuV PK | .1 | 10.6 | 39.6 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -33.4 | -20.4 | -16.4 | -6.4 | - | - |
| 10 | 3.55339 | 30.68dBuV PK | .1 | 10.7 | 41.48 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -31.52 | -18.52 | -14.52 | -4.52 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
Av - CISPR average detection

**Figure 9 Conducted Emissions Graph – Radio TX Mode**



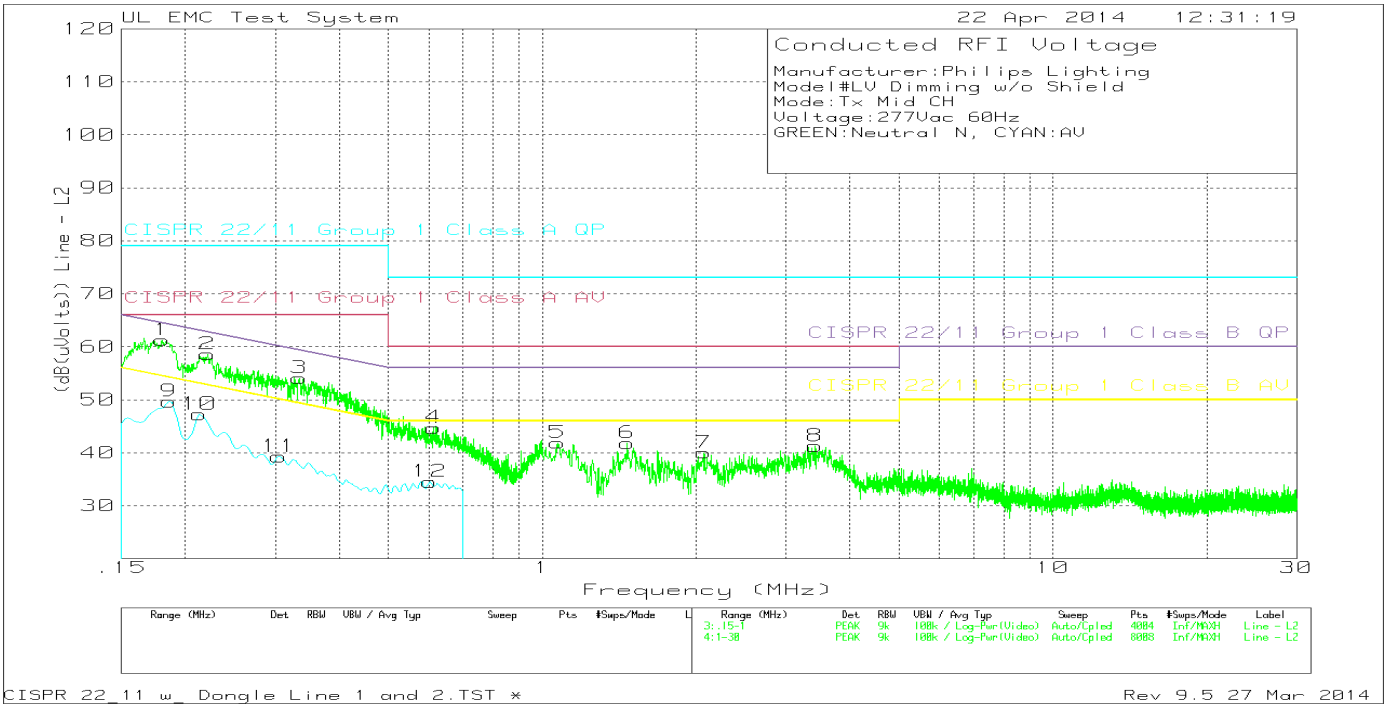



**Table 10 Conducted Emissions Data Points – Radio TX Mode**

Manufacturer:Philips Lighting
Model#LV Dimming w/o Shield
Mode:Tx Mid CH
Voltage:277Vac 60Hz
RED:Line L1, CYAN:AV

Trace Markers for Line

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .18334 | 51.29dBuV PK | .1 | 11.9 | 63.29 | 79 | 66 | 64.33 | 54.33 | - | - |
| | | | | | Margin (dB) | -15.71 | -2.71 | -1.04 | 8.96 | - | - |
| 2 | .22644 | 49.76dBuV PK | .1 | 11.4 | 61.26 | 79 | 66 | 62.58 | 52.58 | - | - |
| | | | | | Margin (dB) | -17.74 | -4.74 | -1.32 | 8.68 | - | - |
| 3 | .34811 | 45.42dBuV PK | .1 | 10.8 | 56.32 | 79 | 66 | 59.01 | 49.01 | - | - |
| | | | | | Margin (dB) | -22.68 | -9.68 | -2.69 | 7.31 | - | - |
| 4 | .61609 | 41.4dBuV PK | .1 | 10.6 | 52.1 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -20.9 | -7.9 | -3.9 | 6.1 | - | - |
| 5 | .99894 | 40.13dBuV PK | .1 | 10.6 | 50.83 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -22.17 | -9.17 | -5.17 | 4.83 | - | - |
| 10 | .186 | 41.28dBuV Av | .1 | 11.7 | 53.08 | 79 | 66 | 64.21 | 54.21 | - | - |
| | | | | | Margin (dB) | -25.92 | -12.92 | -11.13 | -1.13 | - | - |
| 11 | .213 | 39.45dBuV Av | .1 | 11.5 | 51.05 | 79 | 66 | 63.09 | 53.09 | - | - |
| | | | | | Margin (dB) | -27.95 | -14.95 | -12.04 | -2.04 | - | - |
| 12 | .32775 | 33.6dBuV Av | .1 | 10.8 | 44.5 | 79 | 66 | 59.51 | 49.51 | - | - |
| | | | | | Margin (dB) | -34.5 | -21.5 | -15.01 | -5.01 | - | - |
| 13 | .645 | 32.53dBuV Av | .1 | 10.6 | 43.23 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -29.77 | -16.77 | -12.77 | -2.77 | - | - |
| 6 | 1.17747 | 39.28dBuV PK | .1 | 10.6 | 49.98 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -23.02 | -10.02 | -6.02 | 3.98 | - | - |
| 7 | 1.48533 | 38.45dBuV PK | .1 | 10.6 | 49.15 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -23.85 | -10.85 | -6.85 | 3.15 | - | - |
| 8 | 2.1119 | 35.5dBuV PK | .1 | 10.6 | 46.2 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -26.8 | -13.8 | -9.8 | .2 | - | - |
| 9 | 2.78375 | 35.06dBuV PK | .1 | 10.6 | 45.76 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -27.24 | -14.24 | -10.24 | -.24 | - | - |
| 14 | 1.0765 | 32.08dBuV Av | .1 | 10.6 | 42.78 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.22 | -17.22 | -13.22 | -3.22 | - | - |
| 15 | 1.486 | 30.17dBuV Av | .1 | 10.6 | 40.87 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -32.13 | -19.13 | -15.13 | -5.13 | - | - |
| 16 | 2.1115 | 27.16dBuV Av | .1 | 10.6 | 37.86 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -35.14 | -22.14 | -18.14 | -8.14 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
Av - CISPR average detection

Manufacturer:Philips Lighting
Model#LV Dimming w/o Shield
Mode:Tx Mid CH
Voltage:277Vac 60Hz
GREEN:Neutral N, CYAN:AV

Trace Markers for Neutral

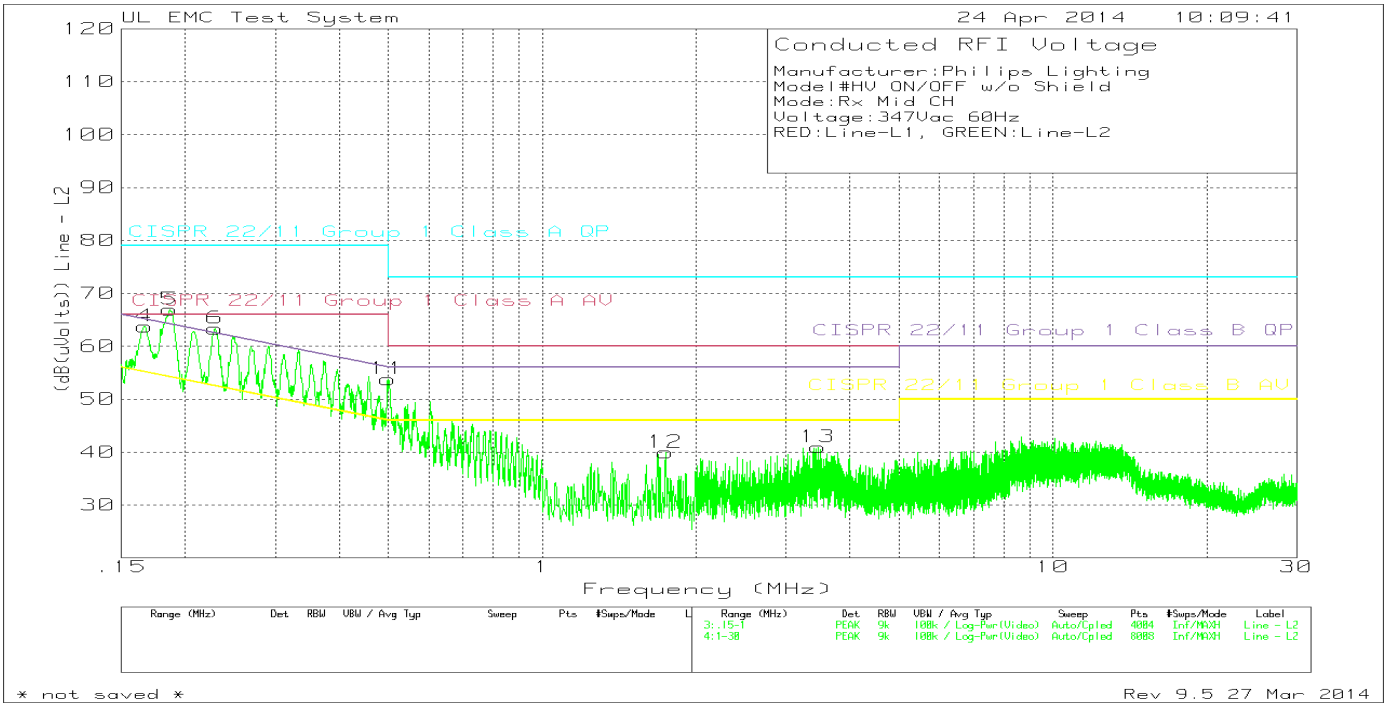
| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | .18015 | 49dBuV PK | .1 | 12.2 | 61.3 | 79 | 66 | 64.48 | 54.48 | - | - |
| | | | | | Margin (dB) | -17.7 | -4.7 | -3.18 | 6.82 | - | - |
| 2 | .22113 | 47.11dBuV PK | .1 | 11.4 | 58.61 | 79 | 66 | 62.78 | 52.78 | - | - |
| | | | | | Margin (dB) | -20.39 | -7.39 | -4.17 | 5.83 | - | - |
| 3 | .33431 | 43.22dBuV PK | .1 | 10.8 | 54.12 | 79 | 66 | 59.34 | 49.34 | - | - |
| | | | | | Margin (dB) | -24.88 | -11.88 | -5.22 | 4.78 | - | - |
| 4 | .61312 | 34dBuV PK | .1 | 10.6 | 44.7 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -28.3 | -15.3 | -11.3 | -1.3 | - | - |
| 9 | .186 | 37.88dBuV Av | .1 | 11.7 | 49.68 | 79 | 66 | 64.21 | 54.21 | - | - |
| | | | | | Margin (dB) | -29.32 | -16.32 | -14.53 | -4.53 | - | - |
| 10 | .213 | 35.64dBuV Av | .1 | 11.5 | 47.24 | 79 | 66 | 63.09 | 53.09 | - | - |
| | | | | | Margin (dB) | -31.76 | -18.76 | -15.85 | -5.85 | - | - |
| 11 | .30525 | 28.26dBuV Av | .1 | 10.9 | 39.26 | 79 | 66 | 60.1 | 50.1 | - | - |
| | | | | | Margin (dB) | -39.74 | -26.74 | -20.84 | -10.84 | - | - |
| 12 | .60225 | 23.84dBuV Av | .1 | 10.6 | 34.54 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -38.46 | -25.46 | -21.46 | -11.46 | - | - |
| 5 | 1.07244 | 31.18dBuV PK | .1 | 10.6 | 41.88 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -31.12 | -18.12 | -14.12 | -4.12 | - | - |
| 6 | 1.46722 | 31.13dBuV PK | .1 | 10.6 | 41.83 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -31.17 | -18.17 | -14.17 | -4.17 | - | - |
| 7 | 2.07206 | 29.33dBuV PK | .1 | 10.6 | 40.03 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -32.97 | -19.97 | -15.97 | -5.97 | - | - |
| 8 | 3.42301 | 30.46dBuV PK | .1 | 10.7 | 41.26 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -31.74 | -18.74 | -14.74 | -4.74 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector
Av - CISPR average detection

### 4.1.5 High Voltage, On/Off (347V/60Hz)

**Figure 10 Conducted Emissions Graph – Radio RX Mode**



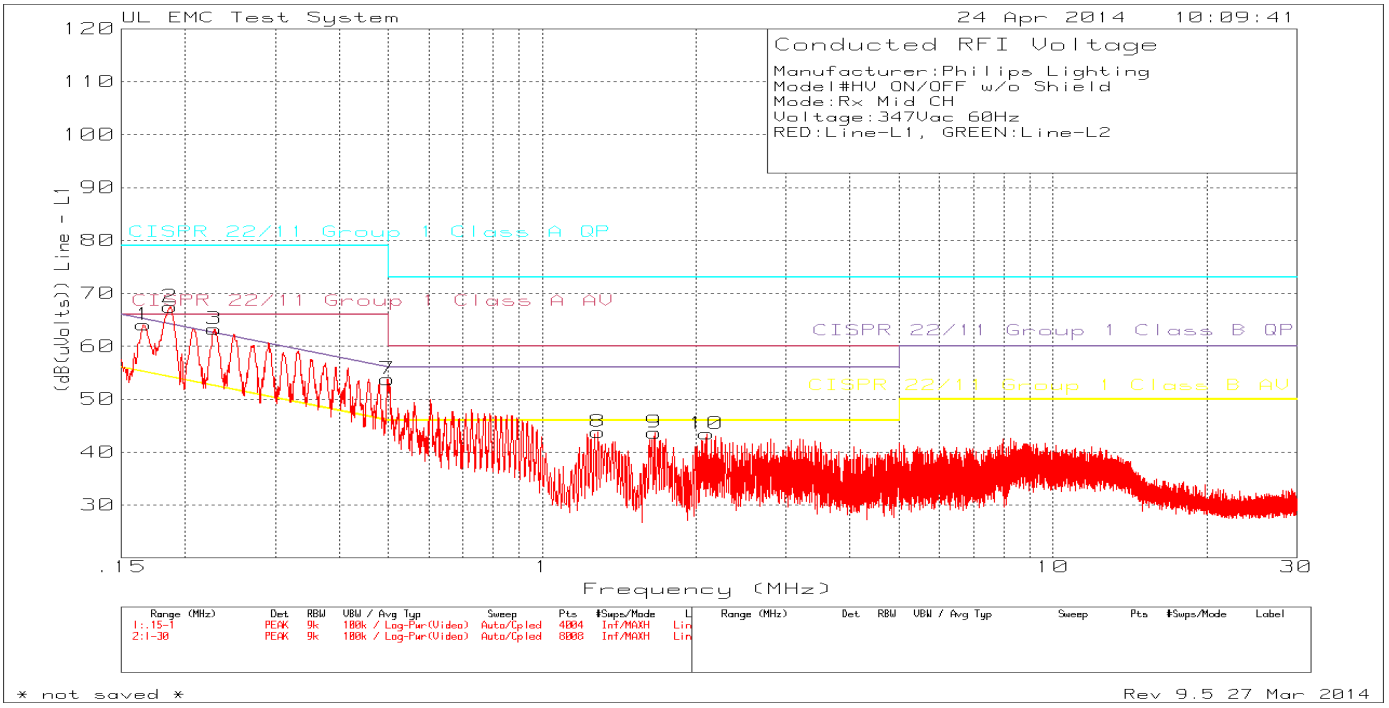



**Table 11 Conducted Emissions Data Points – Radio RX mode**

Manufacturer:Philips Lighting
Model#HV ON/OFF w/o Shield
Mode:Rx Mid CH
Voltage:347Vac 60Hz
RED:Line-L1, GREEN:Line-L2

Trace Markers

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | | |
| 1 | .16593 | 50.66dBuV PK | .1 | 13.3 | 64.06 | 79 | 66 | 65.16 | 55.16 | - | - |
| | | | | | Margin (dB) | -14.94 | -1.94 | -1.1 | 8.9 | - | - |
| 2 | .18695 | 55.85dBuV PK | 0 | 11.6 | 67.45 | 79 | 66 | 64.17 | 54.17 | - | - |
| | | | | | Margin (dB) | -11.55 | 1.45 | 3.28 | 13.28 | - | - |
| 3 | .22804 | 51.86dBuV PK | 0 | 11.4 | 63.26 | 79 | 66 | 62.52 | 52.52 | - | - |
| | | | | | Margin (dB) | -15.74 | -2.74 | .74 | 10.74 | - | - |
| 7 | .49803 | 43.09dBuV PK | 0 | 10.7 | 53.79 | 79 | 66 | 56.03 | 46.03 | - | - |
| | | | | | Margin (dB) | -25.21 | -12.21 | -2.24 | 7.76 | - | - |
| 8 | 1.28613 | 33.23dBuV PK | 0 | 10.6 | 43.83 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -29.17 | -16.17 | -12.17 | -2.17 | - | - |
| 9 | 1.65917 | 33.08dBuV PK | 0 | 10.6 | 43.68 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -29.32 | -16.32 | -12.32 | -2.32 | - | - |
| 10 | 2.09742 | 32.87dBuV PK | 0 | 10.6 | 43.47 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -29.53 | -16.53 | -12.53 | -2.53 | - | - |
| Line - L2 | | | | | | | | | | | |
| 4 | .16656 | 50.34dBuV PK | .1 | 13.3 | 63.74 | 79 | 66 | 65.13 | 55.13 | - | - |
| | | | | | Margin (dB) | -15.26 | -2.26 | -1.39 | 8.61 | - | - |
| 5 | .18642 | 55.16dBuV PK | .1 | 11.7 | 66.96 | 79 | 66 | 64.19 | 54.19 | - | - |
| | | | | | Margin (dB) | -12.04 | .96 | 2.77 | 12.77 | - | - |
| 6 | .22857 | 51.88dBuV PK | .1 | 11.4 | 63.38 | 79 | 66 | 62.5 | 52.5 | - | - |
| | | | | | Margin (dB) | -15.62 | -2.62 | .88 | 10.88 | - | - |
| 11 | .49824 | 42.97dBuV PK | .1 | 10.7 | 53.77 | 79 | 66 | 56.03 | 46.03 | - | - |
| | | | | | Margin (dB) | -25.23 | -12.23 | -2.26 | 7.74 | - | - |
| 12 | 1.74248 | 29.24dBuV PK | .1 | 10.6 | 39.94 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -33.06 | -20.06 | -16.06 | -6.06 | - | - |
| 13 | 3.46647 | 30.17dBuV PK | .1 | 10.7 | 40.97 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -32.03 | -19.03 | -15.03 | -5.03 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector

Manufacturer:Philips Lighting
Model#HV ON/OFF w/o Shield
Mode:Rx Mid CH
Voltage:347Vac 60Hz
RED:Line-L1, GREEN:Line-L2

Quais-peak Data

| Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | |
| .16652 | 49.58dBuV QP | .1 | 13.3 | 62.98 | 79 | 66 | 65.13 | 55.13 | - | - |
| | | | | Margin (dB): | -16.02 | -3.02 | -2.15 | 7.85 | - | - |
| .18595 | 54.95dBuV QP | 0 | 11.7 | 66.65 | 79 | 66 | 64.22 | 54.22 | - | - |
| | | | | Margin (dB): | -12.35 | .65 | 2.43 | 12.43 | - | - |
| .22852 | 50.21dBuV QP | 0 | 11.4 | 61.61 | 79 | 66 | 62.5 | 52.5 | - | - |
| | | | | Margin (dB): | -17.39 | -4.39 | -.89 | 9.11 | - | - |
| Line - L2 | | | | | | | | | | |
| .16653 | 49.2dBuV QP | .1 | 13.3 | 62.6 | 79 | 66 | 65.13 | 55.13 | - | - |
| | | | | Margin (dB): | -16.4 | -3.4 | -2.53 | 7.47 | - | - |
| .18549 | 54.26dBuV QP | .1 | 11.8 | 66.16 | 79 | 66 | 64.24 | 54.24 | - | - |
| | | | | Margin (dB): | -12.84 | .16 | 1.92 | 11.92 | - | - |
| .22813 | 49.6dBuV QP | .1 | 11.4 | 61.1 | 79 | 66 | 62.52 | 52.52 | - | - |
| | | | | Margin (dB): | -17.9 | -4.9 | -1.42 | 8.58 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

NOTE: "+" - Indicates an emission level in excess of the applicable limit(s).

QP - Quasi-Peak detector

Average Data

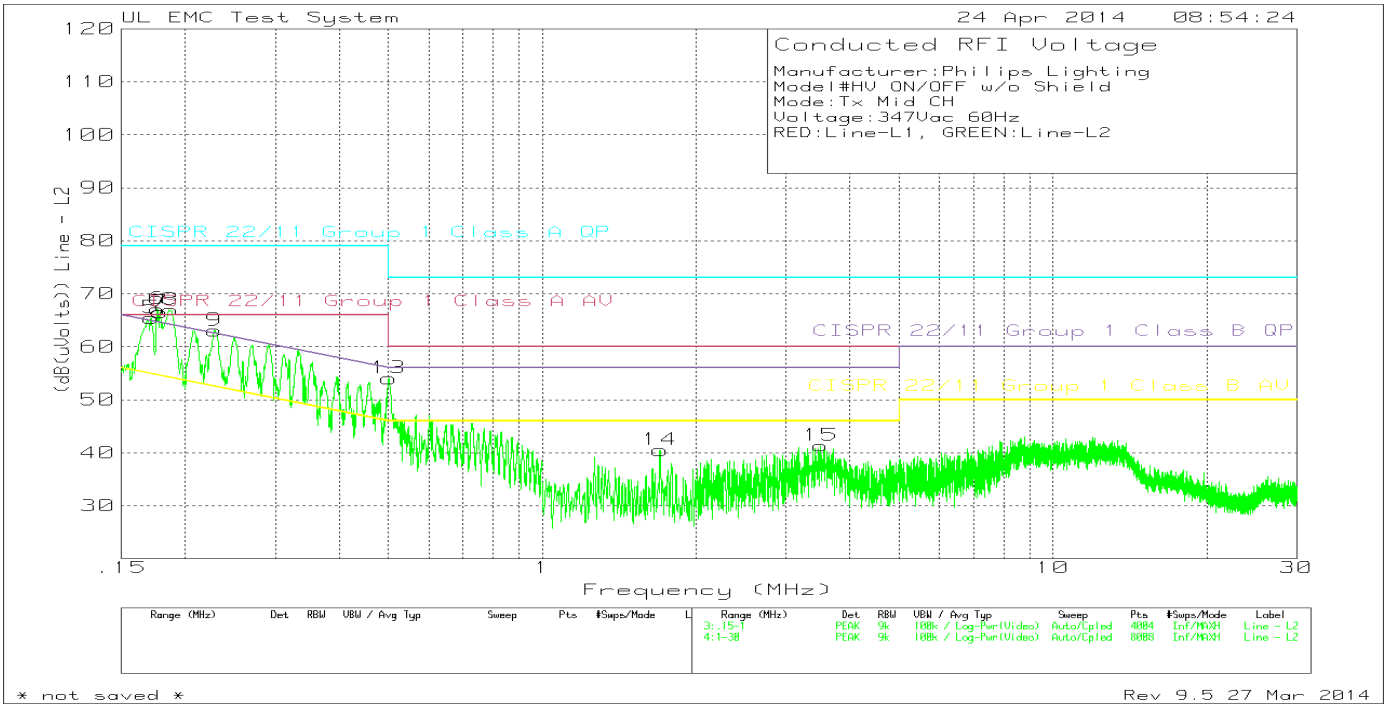
| Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | |
| .16652 | 36.78dBuV Av | .1 | 13.3 | 50.18 | 79 | 66 | 65.13 | 55.13 | - | - |
| | | | | Margin (dB): | -28.82 | -15.82 | -14.95 | -4.95 | - | - |
| .18595 | 44.71dBuV Av | 0 | 11.7 | 56.41 | 79 | 66 | 64.22 | 54.22 | - | - |
| | | | | Margin (dB): | -22.59 | -9.59 | -7.81 | 2.19 | - | - |
| .22852 | 37.32dBuV Av | 0 | 11.4 | 48.72 | 79 | 66 | 62.5 | 52.5 | - | - |
| | | | | Margin (dB): | -30.28 | -17.28 | -13.78 | -3.78 | - | - |
| Line - L2 | | | | | | | | | | |
| .16653 | 36.17dBuV Av | .1 | 13.3 | 49.57 | 79 | 66 | 65.13 | 55.13 | - | - |
| | | | | Margin (dB): | -29.43 | -16.43 | -15.56 | -5.56 | - | - |
| .18549 | 43.92dBuV Av | .1 | 11.8 | 55.82 | 79 | 66 | 64.24 | 54.24 | - | - |
| | | | | Margin (dB): | -23.18 | -10.18 | -8.42 | 1.58 | - | - |
| .22813 | 36.2dBuV Av | .1 | 11.4 | 47.7 | 79 | 66 | 62.52 | 52.52 | - | - |
| | | | | Margin (dB): | -31.3 | -18.3 | -14.82 | -4.82 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

NOTE: "+" - Indicates an emission level in excess of the applicable limit(s).

Av - CISPR average detection

**Figure 11 Conducted Emissions Graph – Radio TX Mode**



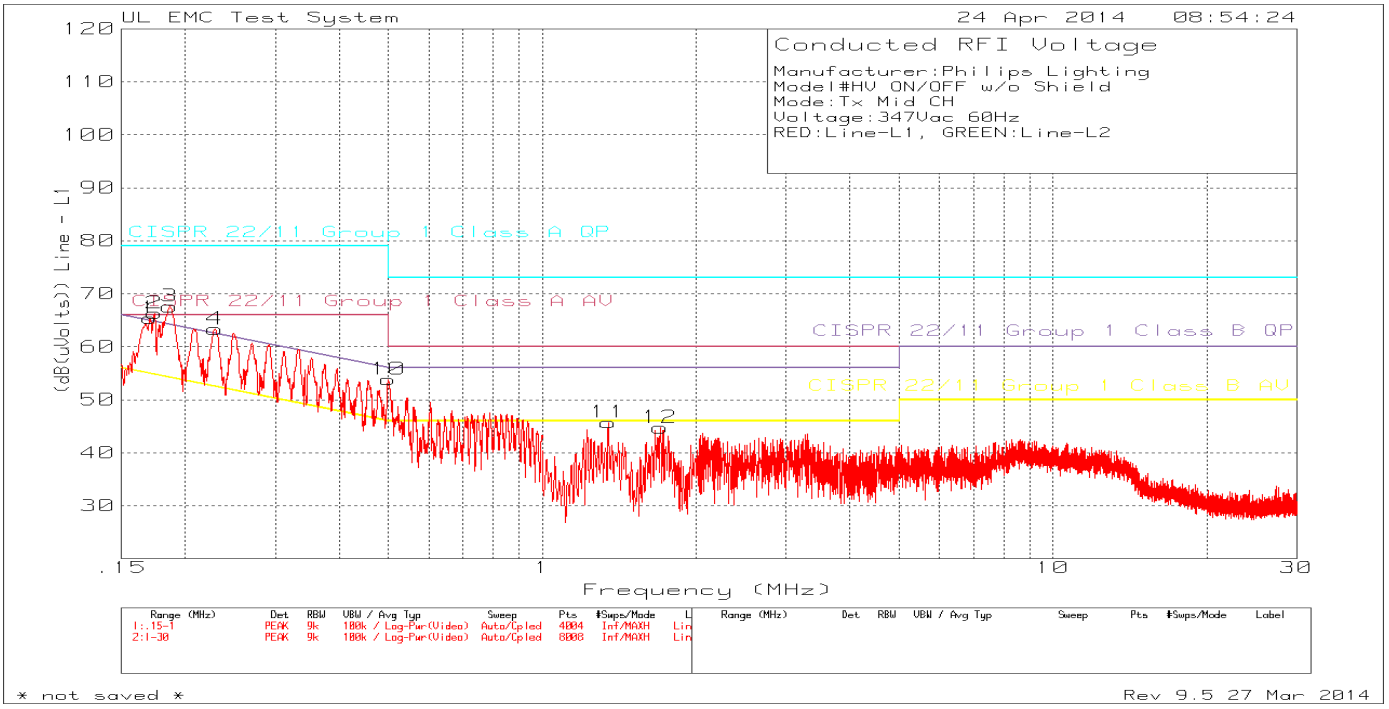



**Table 12 Conducted Emissions Data Points – Radio TX Mode**

Manufacturer:Philips Lighting
Model#HV ON/OFF w/o Shield
Mode:Tx Mid CH
Voltage:347Vac 60Hz
RED:Line-L1, GREEN:Line-L2

Trace Markers

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Line – L1 | | | | | | | | | | | |
| 1 | .17039 | 52.32dBuV PK | .1 | 13 | 65.42 | 79 | 66 | 64.94 | 54.94 | - | - |
| | | | | | Margin (dB) | -13.58 | -.58 | .48 | 10.48 | - | - |
| 2 | .17421 | 53.62dBuV PK | .1 | 12.6 | 66.32 | 79 | 66 | 64.76 | 54.76 | - | - |
| | | | | | Margin (dB) | -12.68 | .32 | 1.56 | 11.56 | - | - |
| 3 | .18652 | 56.03dBuV PK | 0 | 11.6 | 67.63 | 79 | 66 | 64.19 | 54.19 | - | - |
| | | | | | Margin (dB) | -11.37 | 1.63 | 3.44 | 13.44 | - | - |
| 4 | .22888 | 51.91dBuV PK | 0 | 11.4 | 63.31 | 79 | 66 | 62.49 | 52.49 | - | - |
| | | | | | Margin (dB) | -15.69 | -2.69 | .82 | 10.82 | - | - |
| 10 | .49951 | 43.13dBuV PK | 0 | 10.7 | 53.83 | 79 | 66 | 56.01 | 46.01 | - | - |
| | | | | | Margin (dB) | -25.17 | -12.17 | -2.18 | 7.82 | - | - |
| 11 | 1.3477 | 35.12dBuV PK | 0 | 10.6 | 45.72 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -27.28 | -14.28 | -10.28 | -.28 | - | - |
| 12 | 1.70264 | 34.11dBuV PK | 0 | 10.6 | 44.71 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -28.29 | -15.29 | -11.29 | -1.29 | - | - |
| Line - L2 | | | | | | | | | | | |
| 5 | .17145 | 52.46dBuV PK | .1 | 12.9 | 65.46 | 79 | 66 | 64.89 | 54.89 | - | - |
| | | | | | Margin (dB) | -13.54 | -.54 | .57 | 10.57 | - | - |
| 6 | .17633 | 54.53dBuV PK | .1 | 12.5 | 67.13 | 79 | 66 | 64.66 | 54.66 | - | - |
| | | | | | Margin (dB) | -11.87 | 1.13 | 2.47 | 12.47 | - | - |
| 7 | .17845 | 54.11dBuV PK | .1 | 12.3 | 66.51 | 79 | 66 | 64.56 | 54.56 | - | - |
| | | | | | Margin (dB) | -12.49 | .51 | 1.95 | 11.95 | - | - |
| 8 | .18758 | 55.28dBuV PK | .1 | 11.6 | 66.98 | 79 | 66 | 64.14 | 54.14 | - | - |
| | | | | | Margin (dB) | -12.02 | .98 | 2.84 | 12.84 | - | - |
| 9 | .22825 | 51.56dBuV PK | .1 | 11.4 | 63.06 | 79 | 66 | 62.51 | 52.51 | - | - |
| | | | | | Margin (dB) | -15.94 | -2.94 | .55 | 10.55 | - | - |
| 13 | .50068 | 43.25dBuV PK | .1 | 10.7 | 54.05 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -18.95 | -5.95 | -1.95 | 8.05 | - | - |
| 14 | 1.70264 | 29.79dBuV PK | .1 | 10.6 | 40.49 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -32.51 | -19.51 | -15.51 | -5.51 | - | - |
| 15 | 3.50993 | 30.54dBuV PK | .1 | 10.7 | 41.34 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -31.66 | -18.66 | -14.66 | -4.66 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector

Manufacturer:Philips Lighting
Model#HV ON/OFF w/o Shield
Mode:Tx Mid CH
Voltage:347Vac 60Hz
RED:Line-L1, GREEN:Line-L2

Quais-peak Data

| Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | |
| .16957 | 47.99dBuV QP | .1 | 13 | 61.09 | 79 | 66 | 64.98 | 54.98 | - | - |
| | | | | Margin (dB): | -17.91 | -4.91 | -3.89 | 6.11 | - | - |
| .17372 | 44.07dBuV QP | .1 | 12.7 | 56.87 | 79 | 66 | 64.78 | 54.78 | - | - |
| | | | | Margin (dB): | -22.13 | -9.13 | -7.91 | 2.09 | - | - |
| .1857 | 54.85dBuV QP | 0 | 11.7 | 66.55 | 79 | 66 | 64.23 | 54.23 | - | - |
| | | | | Margin (dB): | -12.45 | .55 | 2.32 | 12.32 | - | - |
| .2284 | 50.52dBuV QP | 0 | 11.4 | 61.92 | 79 | 66 | 62.51 | 52.51 | - | - |
| | | | | Margin (dB): | -17.08 | -4.08 | -.59 | 9.41 | - | - |
| Line - L2 | | | | | | | | | | |
| .17071 | 46.47dBuV QP | .1 | 12.9 | 59.47 | 79 | 66 | 64.93 | 54.93 | - | - |
| | | | | Margin (dB): | -19.53 | -6.53 | -5.46 | 4.54 | - | - |
| .17652 | 43.4dBuV QP | .1 | 12.5 | 56 | 79 | 66 | 64.65 | 54.65 | - | - |
| | | | | Margin (dB): | -23 | -10 | -8.65 | 1.35 | - | - |
| .17941 | 46.34dBuV QP | .1 | 12.2 | 58.64 | 79 | 66 | 64.51 | 54.51 | - | - |
| | | | | Margin (dB): | -20.36 | -7.36 | -5.87 | 4.13 | - | - |
| .18665 | 54.67dBuV QP | .1 | 11.7 | 66.47 | 79 | 66 | 64.18 | 54.18 | - | - |
| | | | | Margin (dB): | -12.53 | .47 | 2.29 | 12.29 | - | - |
| .22813 | 49.9dBuV QP | .1 | 11.4 | 61.4 | 79 | 66 | 62.52 | 52.52 | - | - |
| | | | | Margin (dB): | -17.6 | -4.6 | -1.12 | 8.88 | - | - |

QP - Quasi-Peak detector

Average Data

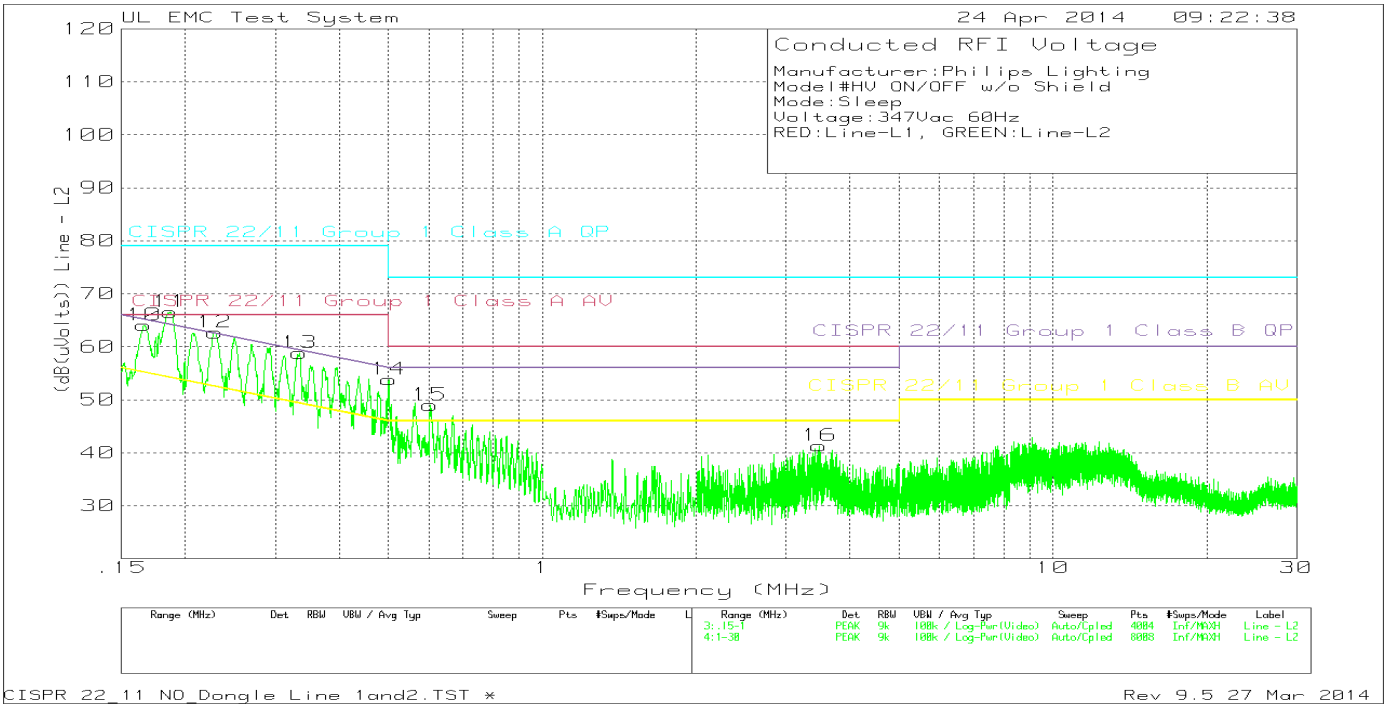
| Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | |
| .16957 | 37.85dBuV Av | .1 | 13 | 50.95 | 79 | 66 | 64.98 | 54.98 | - | - |
| | | | | Margin (dB): | -28.05 | -15.05 | -14.03 | -4.03 | - | - |
| .17372 | 32.7dBuV Av | .1 | 12.7 | 45.5 | 79 | 66 | 64.78 | 54.78 | - | - |
| | | | | Margin (dB): | -33.5 | -20.5 | -19.28 | -9.28 | - | - |
| .1857 | 45.85dBuV Av | 0 | 11.7 | 57.55 | 79 | 66 | 64.23 | 54.23 | - | - |
| | | | | Margin (dB): | -21.45 | -8.45 | -6.68 | 3.32 | - | - |
| .2284 | 39.44dBuV Av | 0 | 11.4 | 50.84 | 79 | 66 | 62.51 | 52.51 | - | - |
| | | | | Margin (dB): | -28.16 | -15.16 | -11.67 | -1.67 | - | - |
| Line - L2 | | | | | | | | | | |
| .17071 | 35.82dBuV Av | .1 | 12.9 | 48.82 | 79 | 66 | 64.93 | 54.93 | - | - |
| | | | | Margin (dB): | -30.18 | -17.18 | -16.11 | -6.11 | - | - |
| .17652 | 31.77dBuV Av | .1 | 12.5 | 44.37 | 79 | 66 | 64.65 | 54.65 | - | - |
| | | | | Margin (dB): | -34.63 | -21.63 | -20.28 | -10.28 | - | - |
| .17941 | 36.94dBuV Av | .1 | 12.2 | 49.24 | 79 | 66 | 64.51 | 54.51 | - | - |
| | | | | Margin (dB): | -29.76 | -16.76 | -15.27 | -5.27 | - | - |
| .18665 | 44.65dBuV Av | .1 | 11.7 | 56.45 | 79 | 66 | 64.18 | 54.18 | - | - |
| | | | | Margin (dB): | -22.55 | -9.55 | -7.73 | 2.27 | - | - |
| .22813 | 38.27dBuV Av | .1 | 11.4 | 49.77 | 79 | 66 | 62.52 | 52.52 | - | - |
| | | | | Margin (dB): | -29.23 | -16.23 | -12.75 | -2.75 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

NOTE: "+" - Indicates an emission level in excess of the applicable limit(s).

Av - CISPR average detection

**Figure 12 Conducted Emissions Graph – Radio Sleep Mode**



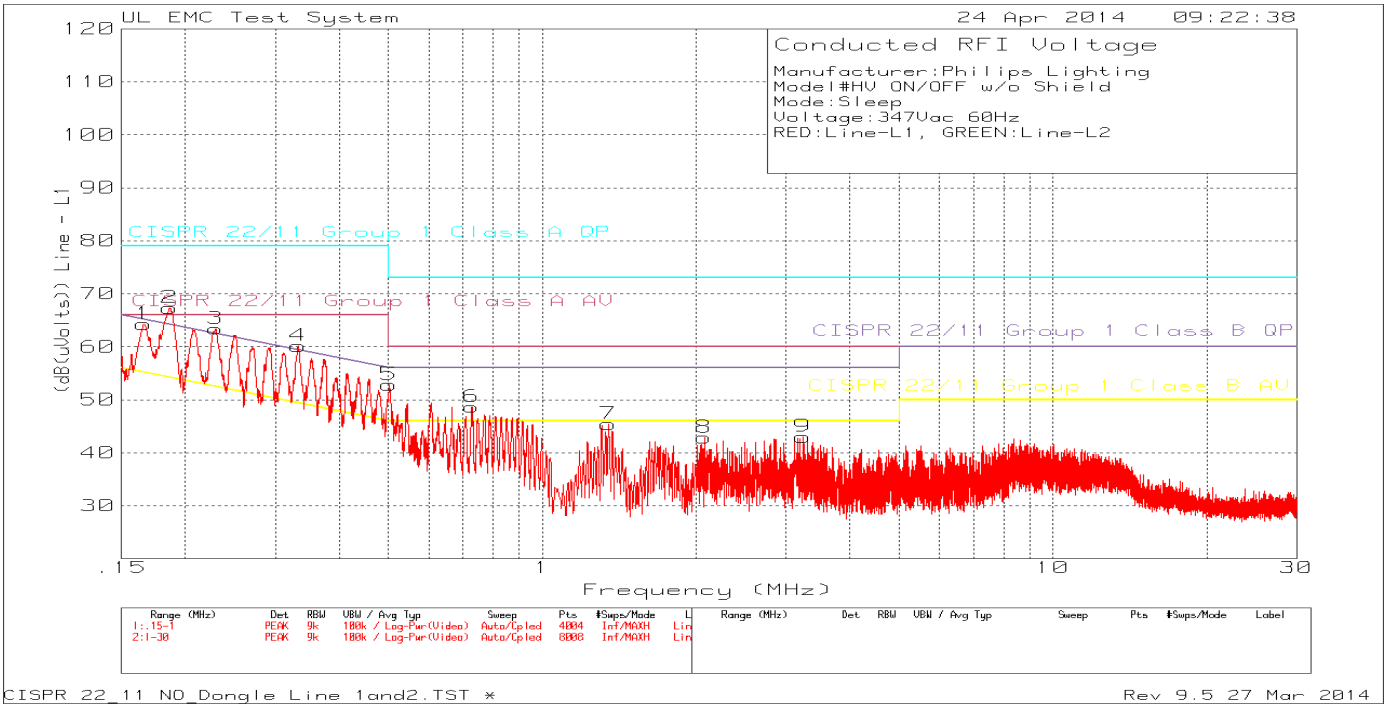



**Table 13 Conducted Emissions Data Points – Radio Sleep Mode**

Manufacturer:Philips Lighting
Model#HV ON/OFF w/o Shield
Mode:Sleep
Voltage:347Vac 60Hz
RED:Line-L1, GREEN:Line-L2

Trace Markers

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | | |
| 1 | .16593 | 50.88dBuV PK | .1 | 13.3 | 64.28 | 79 | 66 | 65.16 | 55.16 | - | - |
| | | | | | Margin (dB) | -14.72 | -1.72 | -.88 | 9.12 | - | - |
| 2 | .18652 | 55.77dBuV PK | 0 | 11.6 | 67.37 | 79 | 66 | 64.19 | 54.19 | - | - |
| | | | | | Margin (dB) | -11.63 | 1.37 | 3.18 | 13.18 | - | - |
| 3 | .22942 | 52.01dBuV PK | 0 | 11.4 | 63.41 | 79 | 66 | 62.47 | 52.47 | - | - |
| | | | | | Margin (dB) | -15.59 | -2.59 | .94 | 10.94 | - | - |
| 4 | .33283 | 49.37dBuV PK | 0 | 10.8 | 60.17 | 79 | 66 | 59.38 | 49.38 | - | - |
| | | | | | Margin (dB) | -18.83 | -5.83 | .79 | 10.79 | - | - |
| 5 | .50142 | 42.23dBuV PK | 0 | 10.6 | 52.83 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -20.17 | -7.17 | -3.17 | 6.83 | - | - |
| 6 | .7282 | 38.07dBuV PK | 0 | 10.6 | 48.67 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -24.33 | -11.33 | -7.33 | 2.67 | - | - |
| 7 | 1.3477 | 34.81dBuV PK | 0 | 10.6 | 45.41 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -27.59 | -14.59 | -10.59 | -.59 | - | - |
| 8 | 2.07568 | 32.25dBuV PK | 0 | 10.6 | 42.85 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.15 | -17.15 | -13.15 | -3.15 | - | - |
| 9 | 3.23829 | 32.41dBuV PK | 0 | 10.6 | 43.01 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -29.99 | -16.99 | -12.99 | -2.99 | - | - |
| Line - L2 | | | | | | | | | | | |
| 10 | .16603 | 50.66dBuV PK | .1 | 13.3 | 64.06 | 79 | 66 | 65.16 | 55.16 | - | - |
| | | | | | Margin (dB) | -14.94 | -1.94 | -1.1 | 8.9 | - | - |
| 11 | .18684 | 54.87dBuV PK | .1 | 11.6 | 66.57 | 79 | 66 | 64.18 | 54.18 | - | - |
| | | | | | Margin (dB) | -12.43 | .57 | 2.39 | 12.39 | - | - |
| 12 | .22857 | 51.22dBuV PK | .1 | 11.4 | 62.72 | 79 | 66 | 62.5 | 52.5 | - | - |
| | | | | | Margin (dB) | -16.28 | -3.28 | .22 | 10.22 | - | - |
| 13 | .33474 | 47.96dBuV PK | .1 | 10.8 | 58.86 | 79 | 66 | 59.33 | 49.33 | - | - |
| | | | | | Margin (dB) | -20.14 | -7.14 | -.47 | 9.53 | - | - |
| 14 | .50079 | 43.02dBuV PK | .1 | 10.7 | 53.82 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -19.18 | -6.18 | -2.18 | 7.82 | - | - |
| 15 | .60292 | 38.28dBuV PK | .1 | 10.6 | 48.98 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -24.02 | -11.02 | -7.02 | 2.98 | - | - |
| 16 | 3.4882 | 30.53dBuV PK | .1 | 10.7 | 41.33 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -31.67 | -18.67 | -14.67 | -4.67 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector

Manufacturer:Philips Lighting
Model#HV ON/OFF w/o Shield
Mode:Sleep
Voltage:347Vac 60Hz
RED:Line-L1, GREEN:Line-L2

Quais-peak Data

| Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | |
| .16671 | 49.27dBuV QP | .1 | 13.3 | 62.67 | 79 | 66 | 65.12 | 55.12 | - | - |
| | | | | Margin (dB): | -16.33 | -3.33 | -2.45 | 7.55 | - | - |
| .1857 | 54.71dBuV QP | 0 | 11.7 | 66.41 | 79 | 66 | 64.23 | 54.23 | - | - |
| | | | | Margin (dB): | -12.59 | .41 | 2.18 | 12.18 | - | - |
| .2285 | 49.75dBuV QP | 0 | 11.4 | 61.15 | 79 | 66 | 62.5 | 52.5 | - | - |
| | | | | Margin (dB): | -17.85 | -4.85 | -1.35 | 8.65 | - | - |
| .33237 | 45.7dBuV QP | 0 | 10.8 | 56.5 | 79 | 66 | 59.39 | 49.39 | - | - |
| | | | | Margin (dB): | -22.5 | -9.5 | -2.89 | 7.11 | - | - |
| .50084 | 36.34dBuV QP | 0 | 10.6 | 46.94 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -26.06 | -13.06 | -9.06 | .94 | - | - |
| .72745 | 33.44dBuV QP | 0 | 10.6 | 44.04 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -28.96 | -15.96 | -11.96 | -1.96 | - | - |
| 1.3499 | 30.79dBuV QP | 0 | 10.6 | 41.39 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -31.61 | -18.61 | -14.61 | -4.61 | - | - |
| 2.07612 | 27.92dBuV QP | 0 | 10.6 | 38.52 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -34.48 | -21.48 | -17.48 | -7.48 | - | - |
| 3.23831 | 26.69dBuV QP | 0 | 10.6 | 37.29 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -35.71 | -22.71 | -18.71 | -8.71 | - | - |
| Line - L2 | | | | | | | | | | |
| .16646 | 48.82dBuV QP | .1 | 13.3 | 62.22 | 79 | 66 | 65.14 | 55.14 | - | - |
| | | | | Margin (dB): | -16.78 | -3.78 | -2.92 | 7.08 | - | - |
| .1859 | 54.22dBuV QP | .1 | 11.7 | 66.02 | 79 | 66 | 64.22 | 54.22 | - | - |
| | | | | Margin (dB): | -12.98 | .02 | 1.8 | 11.8 | - | - |
| .22839 | 49.15dBuV QP | .1 | 11.4 | 60.65 | 79 | 66 | 62.51 | 52.51 | - | - |
| | | | | Margin (dB): | -18.35 | -5.35 | -1.86 | 8.14 | - | - |
| .33389 | 44.49dBuV QP | .1 | 10.8 | 55.39 | 79 | 66 | 59.35 | 49.35 | - | - |
| | | | | Margin (dB): | -23.61 | -10.61 | -3.96 | 6.04 | - | - |
| .50013 | 36.96dBuV QP | .1 | 10.7 | 47.76 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -25.24 | -12.24 | -8.24 | 1.76 | - | - |
| .60365 | 30.74dBuV QP | .1 | 10.6 | 41.44 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -31.56 | -18.56 | -14.56 | -4.56 | - | - |
| 3.48834 | 25.34dBuV QP | .1 | 10.7 | 36.14 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -36.86 | -23.86 | -19.86 | -9.86 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

NOTE: "+" - Indicates an emission level in excess of the applicable limit(s).

QP - Quasi-Peak detector

Manufacturer:Philips Lighting
Model#HV ON/OFF w/o Shield
Mode:Sleep
Voltage:347Vac 60Hz
RED:Line-L1, GREEN:Line-L2

Average Data

| Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | |
| .1666 | 35.31dBuV Av | .1 | 13.3 | 48.71 | 79 | 66 | 65.13 | 55.13 | - | - |
| | | | | Margin (dB): | -30.29 | -17.29 | -16.42 | -6.42 | - | - |
| .18556 | 43.94dBuV Av | 0 | 11.7 | 55.64 | 79 | 66 | 64.23 | 54.23 | - | - |
| | | | | Margin (dB): | -23.36 | -10.36 | -8.59 | 1.41 | - | - |
| .22884 | 35.8dBuV Av | 0 | 11.4 | 47.2 | 79 | 66 | 62.49 | 52.49 | - | - |
| | | | | Margin (dB): | -31.8 | -18.8 | -15.29 | -5.29 | - | - |
| .33232 | 31.89dBuV Av | 0 | 10.8 | 42.69 | 79 | 66 | 59.39 | 49.39 | - | - |
| | | | | Margin (dB): | -36.31 | -23.31 | -16.7 | -6.7 | - | - |
| .50066 | 20.79dBuV Av | 0 | 10.6 | 31.39 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -41.61 | -28.61 | -24.61 | -14.61 | - | - |
| .72772 | 23.41dBuV Av | 0 | 10.6 | 34.01 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -38.99 | -25.99 | -21.99 | -11.99 | - | - |
| 1.34943 | 21.54dBuV Av | 0 | 10.6 | 32.14 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -40.86 | -27.86 | -23.86 | -13.86 | - | - |
| 2.07645 | 18.08dBuV Av | 0 | 10.6 | 28.68 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -44.32 | -31.32 | -27.32 | -17.32 | - | - |
| 3.2389 | 16.68dBuV Av | 0 | 10.6 | 27.28 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -45.72 | -32.72 | -28.72 | -18.72 | - | - |
| Line - L2 | | | | | | | | | | |
| .16651 | 34.71dBuV Av | .1 | 13.3 | 48.11 | 79 | 66 | 65.13 | 55.13 | - | - |
| | | | | Margin (dB): | -30.89 | -17.89 | -17.02 | -7.02 | - | - |
| .18589 | 42.92dBuV Av | .1 | 11.7 | 54.72 | 79 | 66 | 64.22 | 54.22 | - | - |
| | | | | Margin (dB): | -24.28 | -11.28 | -9.5 | .5 | - | - |
| .22831 | 34.68dBuV Av | .1 | 11.4 | 46.18 | 79 | 66 | 62.51 | 52.51 | - | - |
| | | | | Margin (dB): | -32.82 | -19.82 | -16.33 | -6.33 | - | - |
| .33402 | 29.32dBuV Av | .1 | 10.8 | 40.22 | 79 | 66 | 59.35 | 49.35 | - | - |
| | | | | Margin (dB): | -38.78 | -25.78 | -19.13 | -9.13 | - | - |
| .50022 | 18.41dBuV Av | .1 | 10.7 | 29.21 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -43.79 | -30.79 | -26.79 | -16.79 | - | - |
| .60323 | 11.24dBuV Av | .1 | 10.6 | 21.94 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -51.06 | -38.06 | -34.06 | -24.06 | - | - |
| 3.48723 | 16.24dBuV Av | .1 | 10.7 | 27.04 | 73 | 60 | 56 | 46 | - | - |
| | | | | Margin (dB): | -45.96 | -32.96 | -28.96 | -18.96 | - | - |

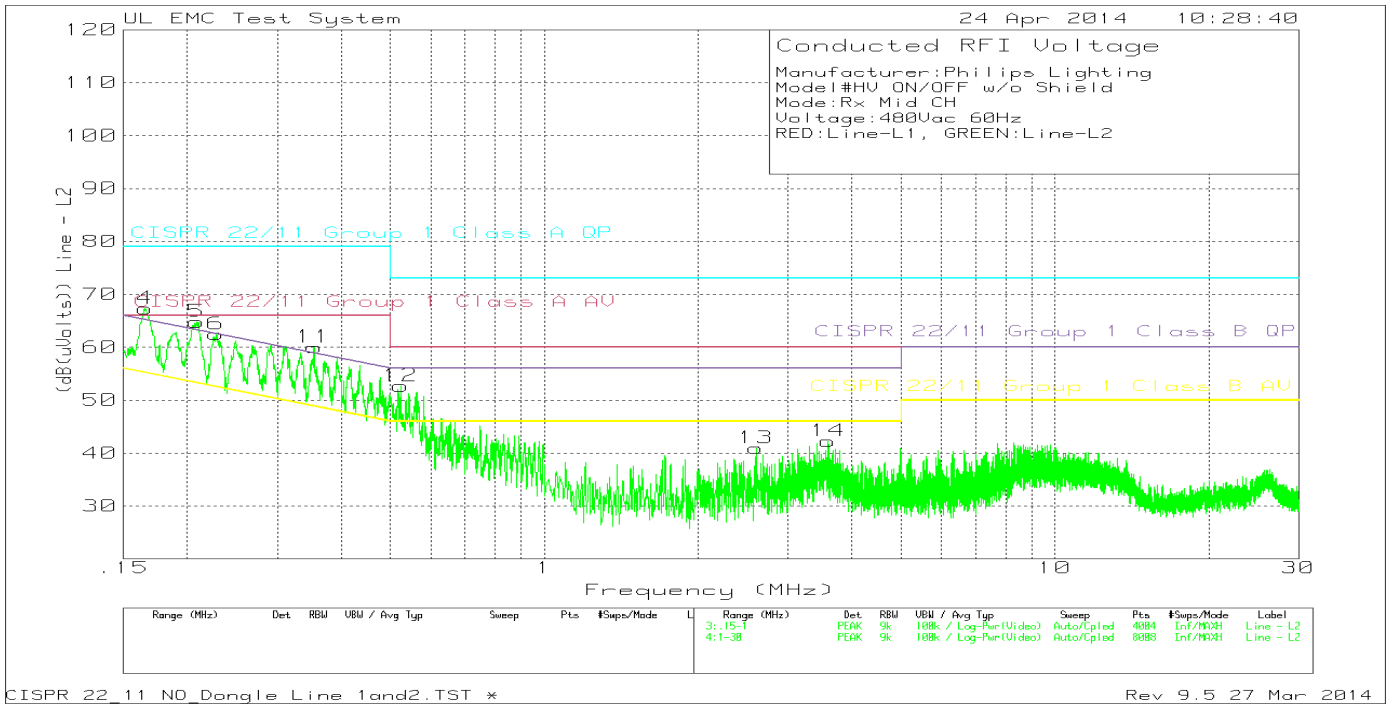
LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

NOTE: "+" - Indicates an emission level in excess of the applicable limit(s).

Av - CISPR average detection

### 4.1.6 High Voltage, On/Off (480V/60Hz)

**Figure 13 Conducted Emissions Graph – Radio RX Mode**



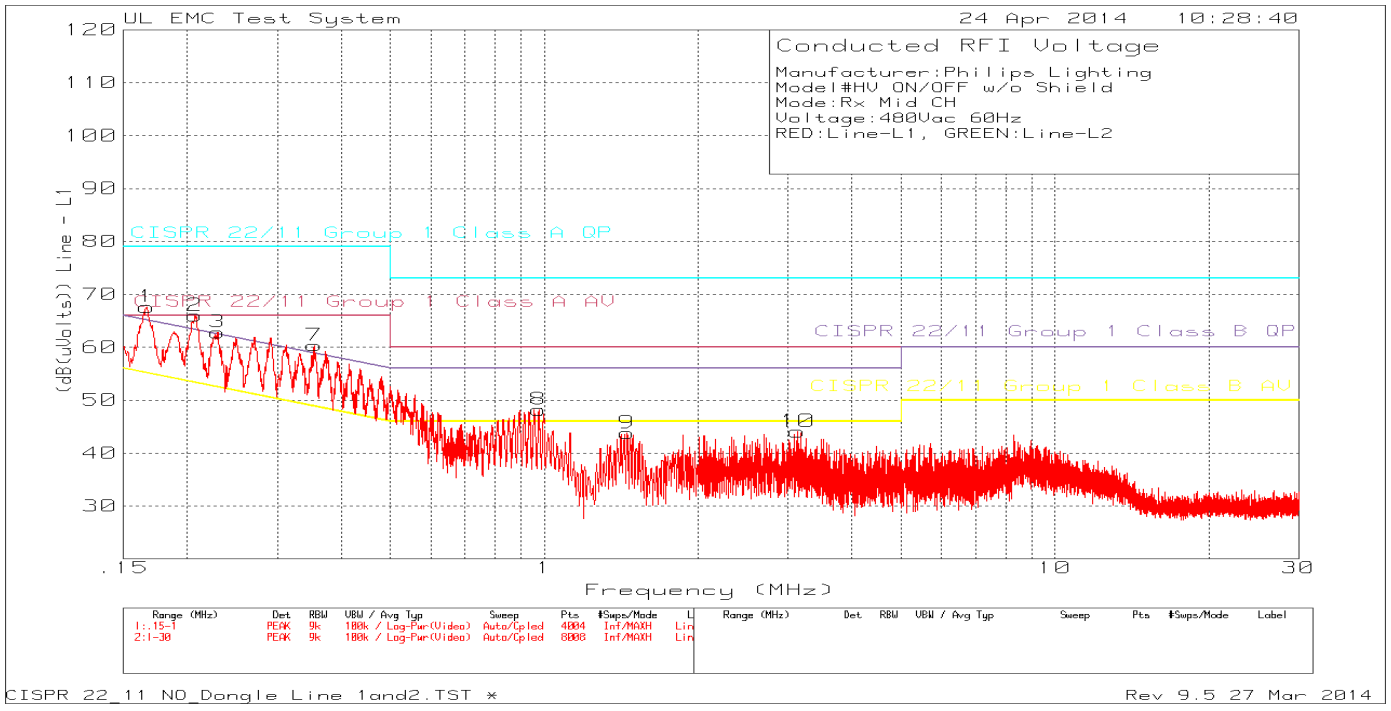



**Table 14 Conducted Emissions Data Points – Radio RX mode**

Manufacturer:Philips Lighting
Model#HV ON/OFF w/o Shield
Mode:Rx Mid CH
Voltage:480Vac 60Hz
RED:Line-L1, GREEN:Line-L2

Trace Markers

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | | |
| 1 | .16656 | 54.22dBuV PK | .1 | 13.3 | 67.62 | 79 | 66 | 65.13 | 55.13 | - | - |
| | | | | | Margin (dB) | -11.38 | 1.62 | 2.49 | 12.49 | - | - |
| 2 | .20712 | 54.47dBuV PK | 0 | 11.5 | 65.97 | 79 | 66 | 63.32 | 53.32 | - | - |
| | | | | | Margin (dB) | -13.03 | -.03 | 2.65 | 12.65 | - | - |
| 3 | .22942 | 51.44dBuV PK | 0 | 11.4 | 62.84 | 79 | 66 | 62.47 | 52.47 | - | - |
| | | | | | Margin (dB) | -16.16 | -3.16 | .37 | 10.37 | - | - |
| 7 | .35427 | 49.54dBuV PK | 0 | 10.8 | 60.34 | 79 | 66 | 58.86 | 48.86 | - | - |
| | | | | | Margin (dB) | -18.66 | -5.66 | 1.48 | 11.48 | - | - |
| 8 | .97579 | 37.61dBuV PK | 0 | 10.6 | 48.21 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -24.79 | -11.79 | -7.79 | 2.21 | - | - |
| 9 | 1.45273 | 33.19dBuV PK | 0 | 10.6 | 43.79 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -29.21 | -16.21 | -12.21 | -2.21 | - | - |
| 10 | 3.13326 | 33.46dBuV PK | 0 | 10.6 | 44.06 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -28.94 | -15.94 | -11.94 | -1.94 | - | - |
| Line - L2 | | | | | | | | | | | |
| 4 | .1655 | 53.8dBuV PK | .1 | 13.4 | 67.3 | 79 | 66 | 65.18 | 55.18 | - | - |
| | | | | | Margin (dB) | -11.7 | 1.3 | 2.12 | 12.12 | - | - |
| 5 | .20861 | 53.2dBuV PK | .1 | 11.5 | 64.8 | 79 | 66 | 63.26 | 53.26 | - | - |
| | | | | | Margin (dB) | -14.2 | -1.2 | 1.54 | 11.54 | - | - |
| 6 | .22793 | 50.99dBuV PK | .1 | 11.4 | 62.49 | 79 | 66 | 62.52 | 52.52 | - | - |
| | | | | | Margin (dB) | -16.51 | -3.51 | -.03 | 9.97 | - | - |
| 11 | .35427 | 49.08dBuV PK | .1 | 10.8 | 59.98 | 79 | 66 | 58.86 | 48.86 | - | - |
| | | | | | Margin (dB) | -19.02 | -6.02 | 1.12 | 11.12 | - | - |
| 12 | .52372 | 41.9dBuV PK | .1 | 10.7 | 52.7 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -20.3 | -7.3 | -3.3 | 6.7 | - | - |
| 13 | 2.59723 | 30.25dBuV PK | .1 | 10.6 | 40.95 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -32.05 | -19.05 | -15.05 | -5.05 | - | - |
| 14 | 3.59323 | 31.46dBuV PK | .1 | 10.7 | 42.26 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.74 | -17.74 | -13.74 | -3.74 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector

Manufacturer:Philips Lighting
Model#HV ON/OFF w/o Shield
Mode:Rx Mid CH
Voltage:480Vac 60Hz
RED:Line-L1, GREEN:Line-L2

Quais-peak Data

| Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | |
| .16697 | 51.41dBuV QP | .1 | 13.2 | 64.71 | 79 | 66 | 65.11 | 55.11 | - | - |
| | | | | Margin (dB): | -14.29 | -1.29 | -.4 | 9.6 | - | - |
| .20742 | 51.05dBuV QP | 0 | 11.5 | 62.55 | 79 | 66 | 63.31 | 53.31 | - | - |
| | | | | Margin (dB): | -16.45 | -3.45 | -.76 | 9.24 | - | - |
| .22895 | 48.2dBuV QP | 0 | 11.4 | 59.6 | 79 | 66 | 62.49 | 52.49 | - | - |
| | | | | Margin (dB): | -19.4 | -6.4 | -2.89 | 7.11 | - | - |
| Line - L2 | | | | | | | | | | |
| .16603 | 51.08dBuV QP | .1 | 13.3 | 64.48 | 79 | 66 | 65.16 | 55.16 | - | - |
| | | | | Margin (dB): | -14.52 | -1.52 | -.68 | 9.32 | - | - |
| .2077 | 50.55dBuV QP | .1 | 11.5 | 62.15 | 79 | 66 | 63.3 | 53.3 | - | - |
| | | | | Margin (dB): | -16.85 | -3.85 | -1.15 | 8.85 | - | - |
| .22817 | 47.81dBuV QP | .1 | 11.4 | 59.31 | 79 | 66 | 62.52 | 52.52 | - | - |
| | | | | Margin (dB): | -19.69 | -6.69 | -3.21 | 6.79 | - | - |

QP - Quasi-Peak detector

Average Data

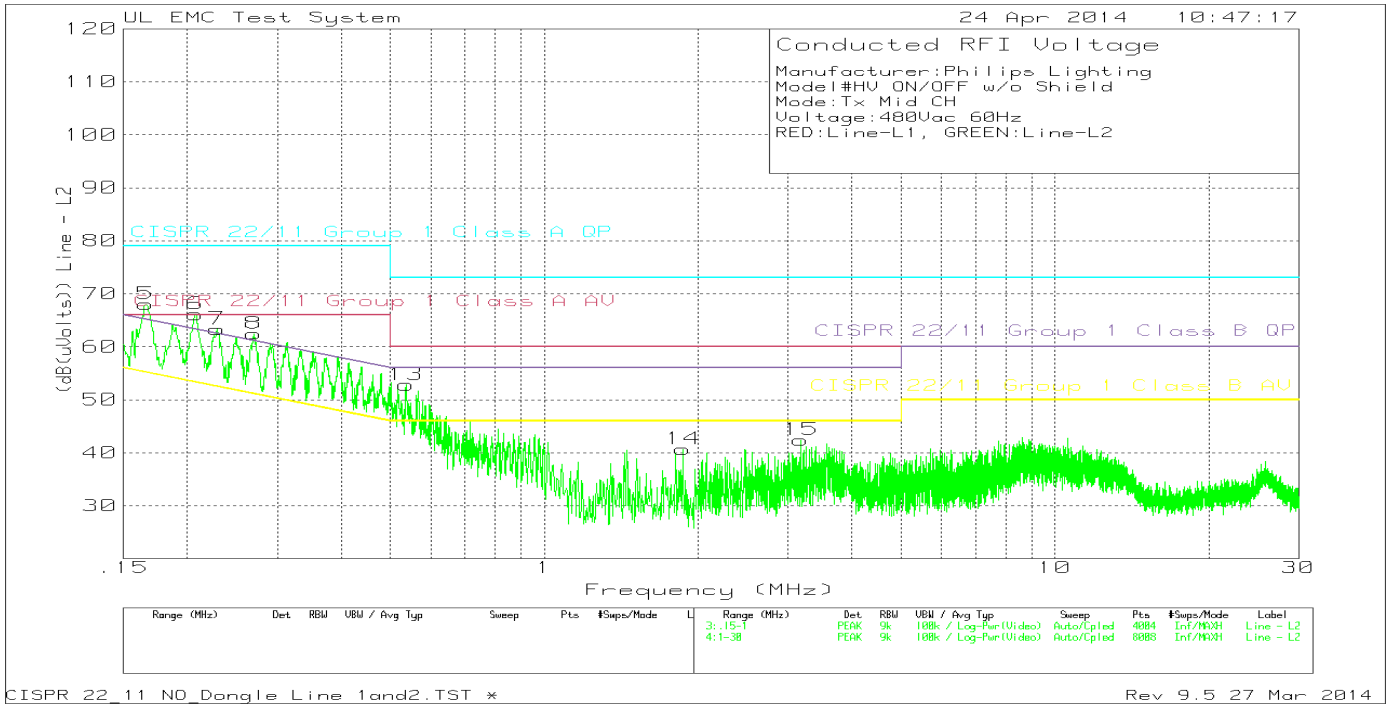
| Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | |
| .16697 | 36.04dBuV Av | .1 | 13.2 | 49.34 | 79 | 66 | 65.11 | 55.11 | - | - |
| | | | | Margin (dB): | -29.66 | -16.66 | -15.77 | -5.77 | - | - |
| .20742 | 35.97dBuV Av | 0 | 11.5 | 47.47 | 79 | 66 | 63.31 | 53.31 | - | - |
| | | | | Margin (dB): | -31.53 | -18.53 | -15.84 | -5.84 | - | - |
| .22895 | 33.31dBuV Av | 0 | 11.4 | 44.71 | 79 | 66 | 62.49 | 52.49 | - | - |
| | | | | Margin (dB): | -34.29 | -21.29 | -17.78 | -7.78 | - | - |
| Line – L2 | | | | | | | | | | |
| .16603 | 35.41dBuV Av | .1 | 13.3 | 48.81 | 79 | 66 | 65.16 | 55.16 | - | - |
| | | | | Margin (dB): | -30.19 | -17.19 | -16.35 | -6.35 | - | - |
| .2077 | 35.04dBuV Av | .1 | 11.5 | 46.64 | 79 | 66 | 63.3 | 53.3 | - | - |
| | | | | Margin (dB): | -32.36 | -19.36 | -16.66 | -6.66 | - | - |
| .22817 | 32.29dBuV Av | .1 | 11.4 | 43.79 | 79 | 66 | 62.52 | 52.52 | - | - |
| | | | | Margin (dB): | -35.21 | -22.21 | -18.73 | -8.73 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

NOTE: "+" - Indicates an emission level in excess of the applicable limit(s).

Av - CISPR average detection

**Figure 14 Conducted Emissions Graph – Radio TX Mode**



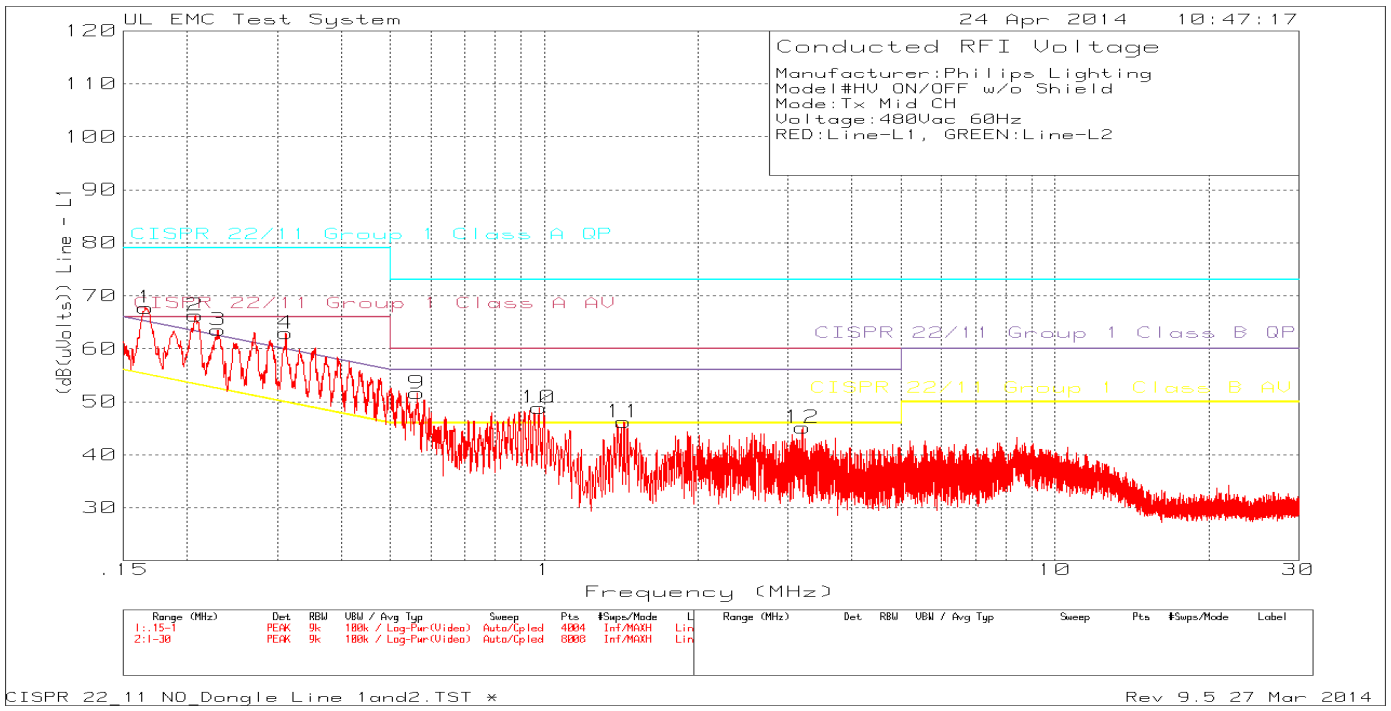



**Table 15 Conducted Emissions Data Points – Radio TX Mode**

Manufacturer:Philips Lighting
Model#HV ON/OFF w/o Shield
Mode:Tx Mid CH
Voltage:480Vac 60Hz
RED:Line-L1, GREEN:Line-L2

Trace Markers

| No. | Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | | |
| 1 | .16571 | 54.36dBuV PK | .1 | 13.3 | 67.76 | 79 | 66 | 65.17 | 55.17 | - | - |
| | | | | | Margin (dB) | -11.24 | 1.76 | 2.59 | 12.59 | - | - |
| 2 | .20733 | 54.77dBuV PK | 0 | 11.5 | 66.27 | 79 | 66 | 63.31 | 53.31 | - | - |
| | | | | | Margin (dB) | -12.73 | .27 | 2.96 | 12.96 | - | - |
| 3 | .22963 | 52.14dBuV PK | 0 | 11.4 | 63.54 | 79 | 66 | 62.46 | 52.46 | - | - |
| | | | | | Margin (dB) | -15.46 | -2.46 | 1.08 | 11.08 | - | - |
| 4 | .3117 | 52.11dBuV PK | 0 | 10.8 | 62.91 | 79 | 66 | 59.93 | 49.93 | - | - |
| | | | | | Margin (dB) | -16.09 | -3.09 | 2.98 | 12.98 | - | - |
| 9 | .56343 | 41.04dBuV PK | 0 | 10.6 | 51.64 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -21.36 | -8.36 | -4.36 | 5.64 | - | - |
| 10 | .97622 | 38.26dBuV PK | 0 | 10.6 | 48.86 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -24.14 | -11.14 | -7.14 | 2.86 | - | - |
| 11 | 1.431 | 35.59dBuV PK | 0 | 10.6 | 46.19 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -26.81 | -13.81 | -9.81 | .19 | - | - |
| 12 | 3.2057 | 34.52dBuV PK | 0 | 10.6 | 45.12 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -27.88 | -14.88 | -10.88 | -.88 | - | - |
| Line - L2 | | | | | | | | | | | |
| 5 | .16593 | 54.66dBuV PK | .1 | 13.3 | 68.06 | 79 | 66 | 65.16 | 55.16 | - | - |
| | | | | | Margin (dB) | -10.94 | 2.06 | 2.9 | 12.9 | - | - |
| 6 | .20754 | 54.57dBuV PK | .1 | 11.5 | 66.17 | 79 | 66 | 63.3 | 53.3 | - | - |
| | | | | | Margin (dB) | -12.83 | .17 | 2.87 | 12.87 | - | - |
| 7 | .22857 | 51.8dBuV PK | .1 | 11.4 | 63.3 | 79 | 66 | 62.5 | 52.5 | - | - |
| | | | | | Margin (dB) | -15.7 | -2.7 | .8 | 10.8 | - | - |
| 8 | .27019 | 51.27dBuV PK | .1 | 11.1 | 62.47 | 79 | 66 | 61.11 | 51.11 | - | - |
| | | | | | Margin (dB) | -16.53 | -3.53 | 1.36 | 11.36 | - | - |
| 13 | .53604 | 42.12dBuV PK | .1 | 10.6 | 52.82 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -20.18 | -7.18 | -3.18 | 6.82 | - | - |
| 14 | 1.86924 | 29.99dBuV PK | .1 | 10.6 | 40.69 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -32.31 | -19.31 | -15.31 | -5.31 | - | - |
| 15 | 3.18034 | 31.63dBuV PK | .1 | 10.7 | 42.43 | 73 | 60 | 56 | 46 | - | - |
| | | | | | Margin (dB) | -30.57 | -17.57 | -13.57 | -3.57 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

PK - Peak detector

Manufacturer:Philips Lighting
Model#HV ON/OFF w/o Shield
Mode:Tx Mid CH
Voltage:480Vac 60Hz
RED:Line-L1, GREEN:Line-L2

Quais-peak Data

| Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | |
| .16608 | 52.28dBuV QP | .1 | 13.3 | 65.68 | 79 | 66 | 65.15 | 55.15 | - | - |
| | | | | Margin (dB): | -13.32 | -.32 | .53 | 10.53 | - | - |
| .20734 | 51.78dBuV QP | 0 | 11.5 | 63.28 | 79 | 66 | 63.31 | 53.31 | - | - |
| | | | | Margin (dB): | -15.72 | -2.72 | -.03 | 9.97 | - | - |
| .22885 | 48.97dBuV QP | 0 | 11.4 | 60.37 | 79 | 66 | 62.49 | 52.49 | - | - |
| | | | | Margin (dB): | -18.63 | -5.63 | -2.12 | 7.88 | - | - |
| .31176 | 46.91dBuV QP | 0 | 10.8 | 57.71 | 79 | 66 | 59.92 | 49.92 | - | - |
| | | | | Margin (dB): | -21.29 | -8.29 | -2.21 | 7.79 | - | - |
| Line - L2 | | | | | | | | | | |
| .16625 | 51.94dBuV QP | .1 | 13.3 | 65.34 | 79 | 66 | 65.15 | 55.15 | - | - |
| | | | | Margin (dB): | -13.66 | -.66 | .19 | 10.19 | - | - |
| .20746 | 51.26dBuV QP | .1 | 11.5 | 62.86 | 79 | 66 | 63.31 | 53.31 | - | - |
| | | | | Margin (dB): | -16.14 | -3.14 | -.45 | 9.55 | - | - |
| .22839 | 48.5dBuV QP | .1 | 11.4 | 60 | 79 | 66 | 62.51 | 52.51 | - | - |
| | | | | Margin (dB): | -19 | -6 | -2.51 | 7.49 | - | - |
| .27045 | 47.2dBuV QP | .1 | 11.1 | 58.4 | 79 | 66 | 61.1 | 51.1 | - | - |
| | | | | Margin (dB): | -20.6 | -7.6 | -2.7 | 7.3 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

NOTE: "+" - Indicates an emission level in excess of the applicable limit(s).

QP - Quasi-Peak detector

Average Data

| Test Frequency (MHz) | Meter Reading | Transducer Factor (dB) | Gain/Loss Factor (dB) | Corrected Reading (dB(uVolts)) | Limit:1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| Line - L1 | | | | | | | | | | |
| .16608 | 38.38dBuV Av | .1 | 13.3 | 51.78 | 79 | 66 | 65.15 | 55.15 | - | - |
| | | | | Margin (dB): | -27.22 | -14.22 | -13.37 | -3.37 | - | - |
| .20734 | 38.09dBuV Av | 0 | 11.5 | 49.59 | 79 | 66 | 63.31 | 53.31 | - | - |
| | | | | Margin (dB): | -29.41 | -16.41 | -13.72 | -3.72 | - | - |
| .22885 | 35.51dBuV Av | 0 | 11.4 | 46.91 | 79 | 66 | 62.49 | 52.49 | - | - |
| | | | | Margin (dB): | -32.09 | -19.09 | -15.58 | -5.58 | - | - |
| .31176 | 33.98dBuV Av | 0 | 10.8 | 44.78 | 79 | 66 | 59.92 | 49.92 | - | - |
| | | | | Margin (dB): | -34.22 | -21.22 | -15.14 | -5.14 | - | - |
| Line - L2 | | | | | | | | | | |
| .16625 | 37.73dBuV Av | .1 | 13.3 | 51.13 | 79 | 66 | 65.15 | 55.15 | - | - |
| | | | | Margin (dB): | -27.87 | -14.87 | -14.02 | -4.02 | - | - |
| .20746 | 37.13dBuV Av | .1 | 11.5 | 48.73 | 79 | 66 | 63.31 | 53.31 | - | - |
| | | | | Margin (dB): | -30.27 | -17.27 | -14.58 | -4.58 | - | - |
| .22839 | 34.31dBuV Av | .1 | 11.4 | 45.81 | 79 | 66 | 62.51 | 52.51 | - | - |
| | | | | Margin (dB): | -33.19 | -20.19 | -16.7 | -6.7 | - | - |
| .27045 | 33.07dBuV Av | .1 | 11.1 | 44.27 | 79 | 66 | 61.1 | 51.1 | - | - |
| | | | | Margin (dB): | -34.73 | -21.73 | -16.83 | -6.83 | - | - |

LIMIT 1: CISPR 22/11 Group 1 Class A QP
LIMIT 2: CISPR 22/11 Group 1 Class A AV
LIMIT 3: CISPR 22/11 Group 1 Class B QP
LIMIT 4: CISPR 22/11 Group 1 Class B AV

NOTE: "+" - Indicates an emission level in excess of the applicable limit(s).

Av - CISPR average detection

## 4.2 Test Conditions and Results – RADIATED EMISSIONS Receiver Mode

| | |
|---|---|
| Test Description | Measurements were made in a 10-meter semi-anechoic chamber that complies to CISPR 16/ANSI C63.4:2003. Preliminary (peak) measurements were performed at an antenna to EUT separation distance of 10-meter or 3-meter as noted. The EUT was rotated 360° about its azimuth with the receive antenna located at various heights in both horizontal and vertical polarities. Final measurements (quasi-peak or average as noted) were then performed by rotating the EUT 360° and adjusting the receive antenna height from 1 to 4-meters. All frequencies were investigated in both horizontal and vertical antenna polarity, where applicable. |

| | | |
|---|---|---|
| Basic Standard | FCC Part 15, Subpart B | |
| UL LPG | 80-EM-S0029 | |
| | Frequency range | Measurement Point |
| Fully configured sample scanned over the following frequency range | 30MHz – 5GHz | 3 meter |

**Limits – Class A**

| Frequency (MHz) | Limit (dBµV/m) | |
|---|---|---|
| | Quasi-Peak | Average |
| 30 - 88 | 49.54 | NA |
| 88 - 216 | 53.98 | NA |
| 216 - 960 | 56.90 | NA |
| 960 - 40000 | 60 | 60 |

**Limits - Class B**

| Frequency (MHz) | Limit (dBµV/m) | |
|---|---|---|
| | Quasi-Peak | Average |
| 30 - 88 | 40 | NA |
| 88 - 216 | 43 | NA |
| 216 - 960 | 46.02 | NA |
| 960 - 40000 | 54 | 54 |

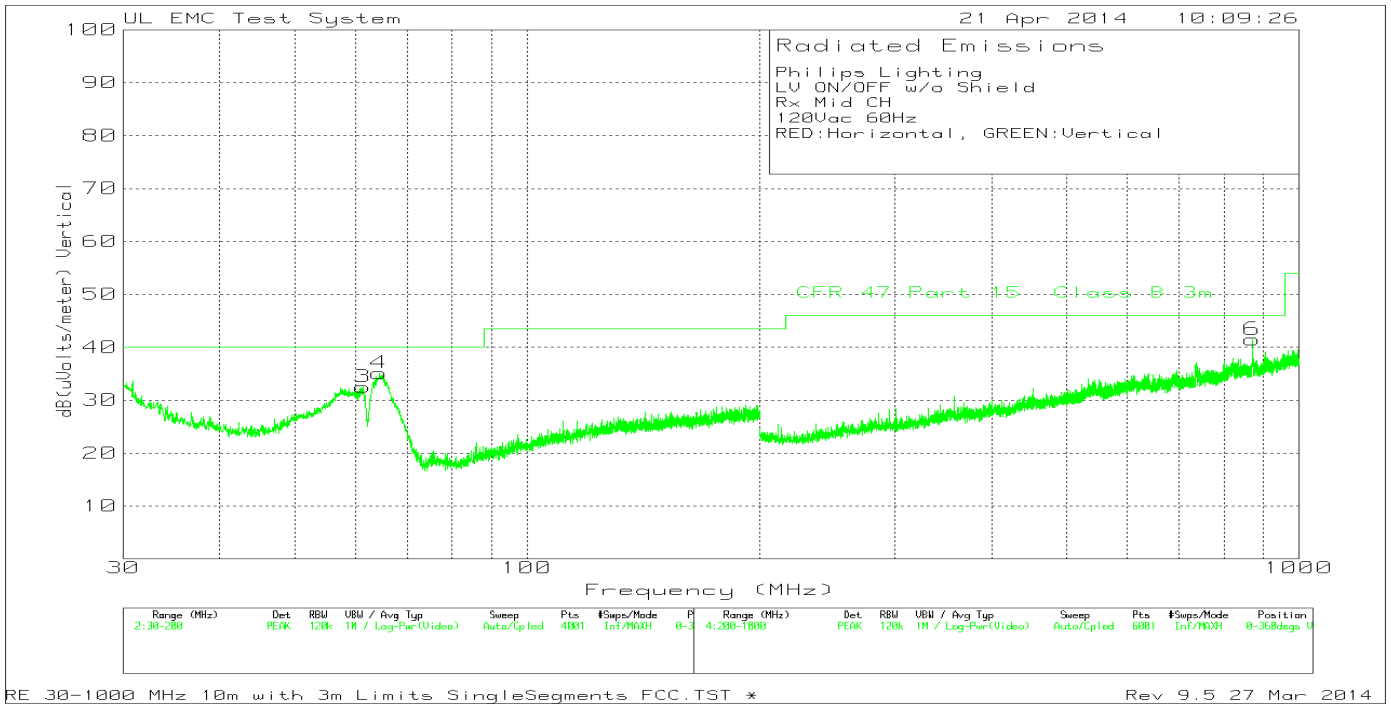
Supplementary information: None

**Table 16 Radiated Emissions EUT Configuration Settings**

| Power Interface Mode # | EUT Configurations Mode # | EUT Operation Mode # |
|---|---|---|
| 1,2,3,4 | 2 | 2,3 |
| Supplementary information: None | | |

### 4.2.1 Low Voltage On/Off (120V/60Hz)

**Figure 15 Radiated Emissions Graph Below 1GHz, RX Mode**



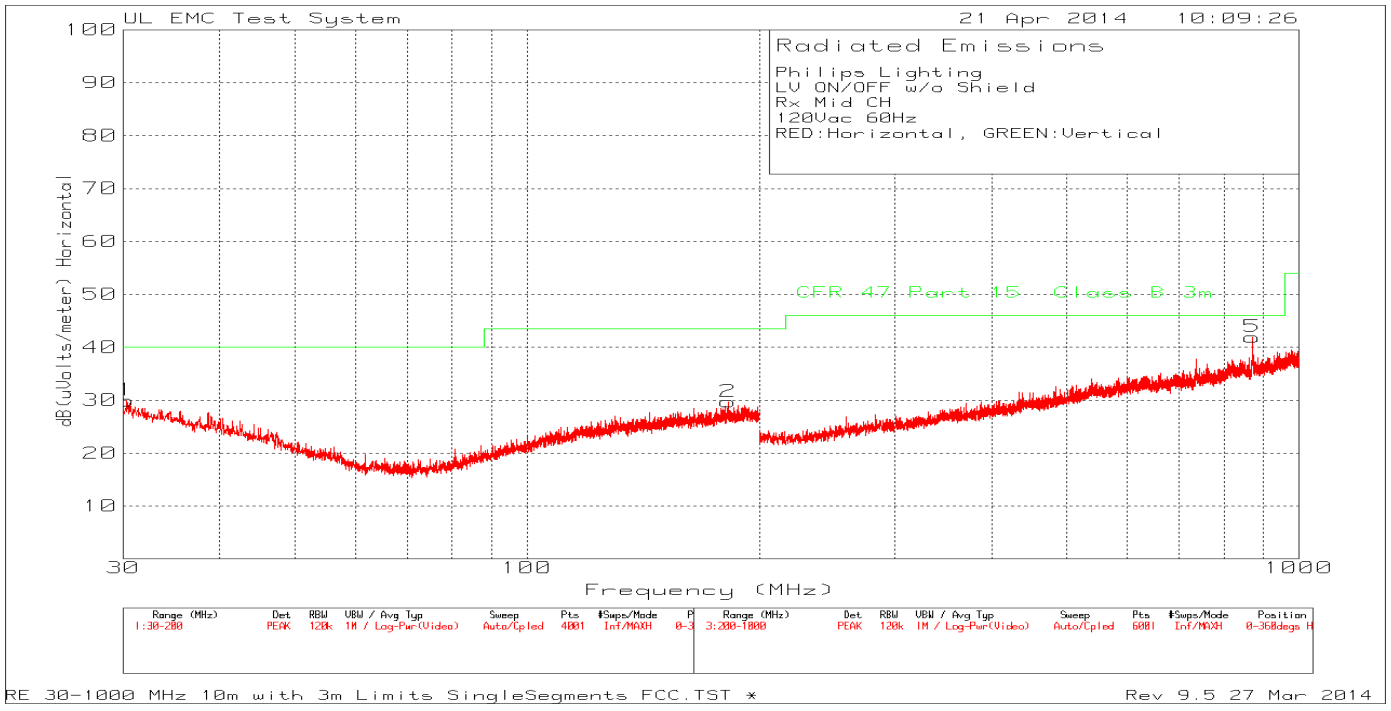
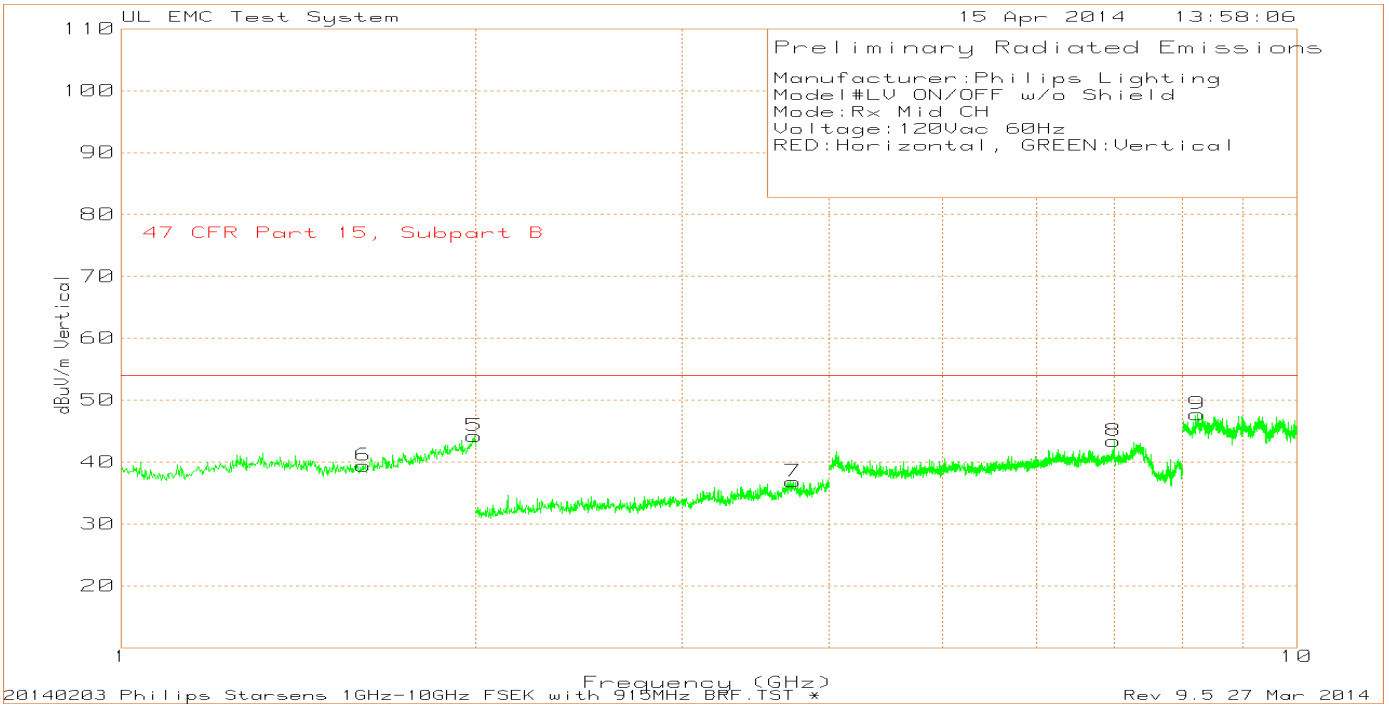



**Table 17 Radiated Emissions Data Below 1GHz, RX Mode**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philips Lighting | | | | | | | | | | | | |
| LV ON/OFF w/o Shield | | | | | | | | | | | | |
| Rx Mid CH | | | | | | | | | | | | |
| 120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.109 Class B dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 30.2975 | 31.85 | PK | 17.7 | -30.1 | 10.5 | 29.95 | 40 | -10.05 | 0-360 | 99 | H |
| 2 | 182.32 | 32.32 | PK | 16.1 | -29.2 | 10.5 | 29.72 | 43.52 | -13.8 | 0-360 | 400 | H |
| 3 | 61.28 | 45.31 | PK | 6.7 | -30 | 10.5 | 32.51 | 40 | -7.49 | 0-360 | 249 | V |
| 4 | 64.34 | 48.33 | PK | 6.3 | -30 | 10.5 | 35.13 | 40 | -4.87 | 0-360 | 249 | V |
| 5 | 870.4 | 33.43 | PK | 22.5 | -24.5 | 10.5 | 41.93 | 46.02 | -4.09 | 0-360 | 299 | H |
| 6 | 870.4 | 32.96 | PK | 22.5 | -24.5 | 10.5 | 41.46 | 46.02 | -4.56 | 0-360 | 99 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.109 Class B dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 64.587276 | 44.52 | QP | 6.3 | -30 | 10.5 | 31.32 | 40 | -8.68 | 15 | 249 | V |
| QP - Quasi-Peak detector | | | | | | | | | | | | |

**Figure 16 Radiated Emissions Graph Above 1GHz, RX Mode**



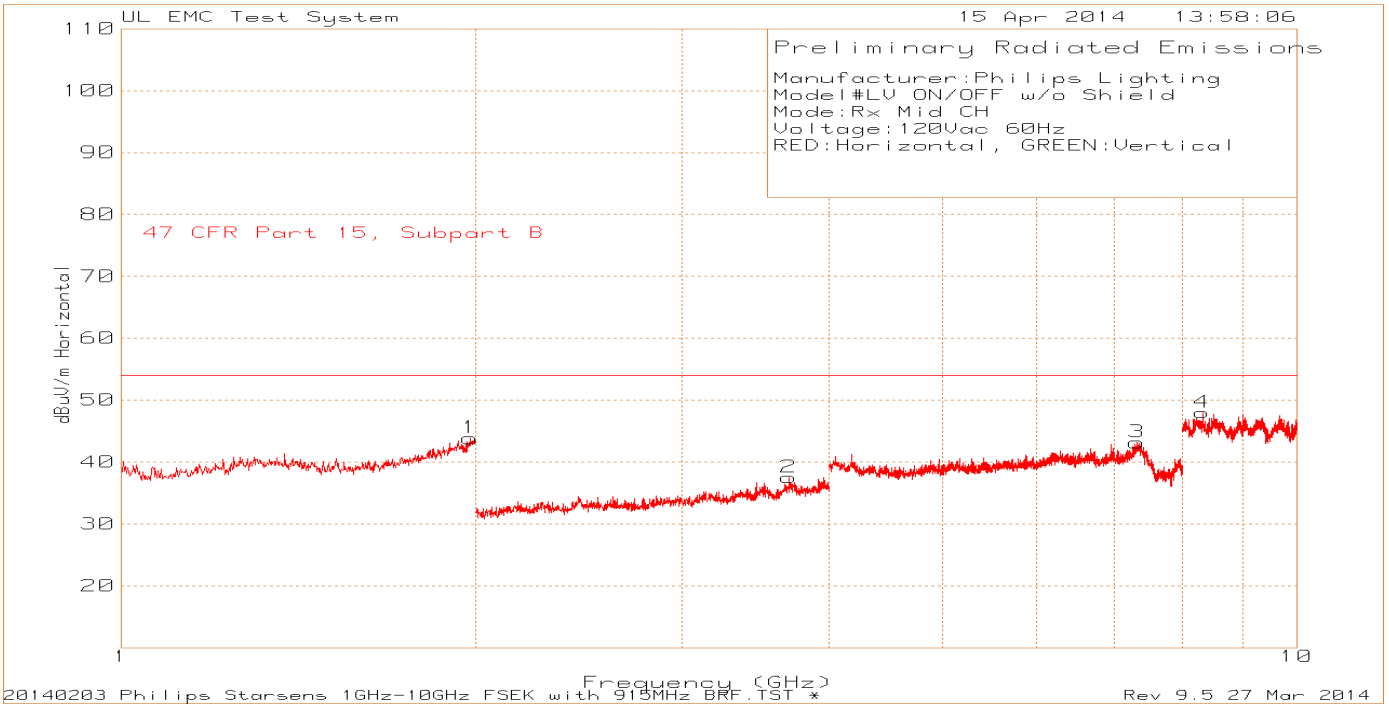
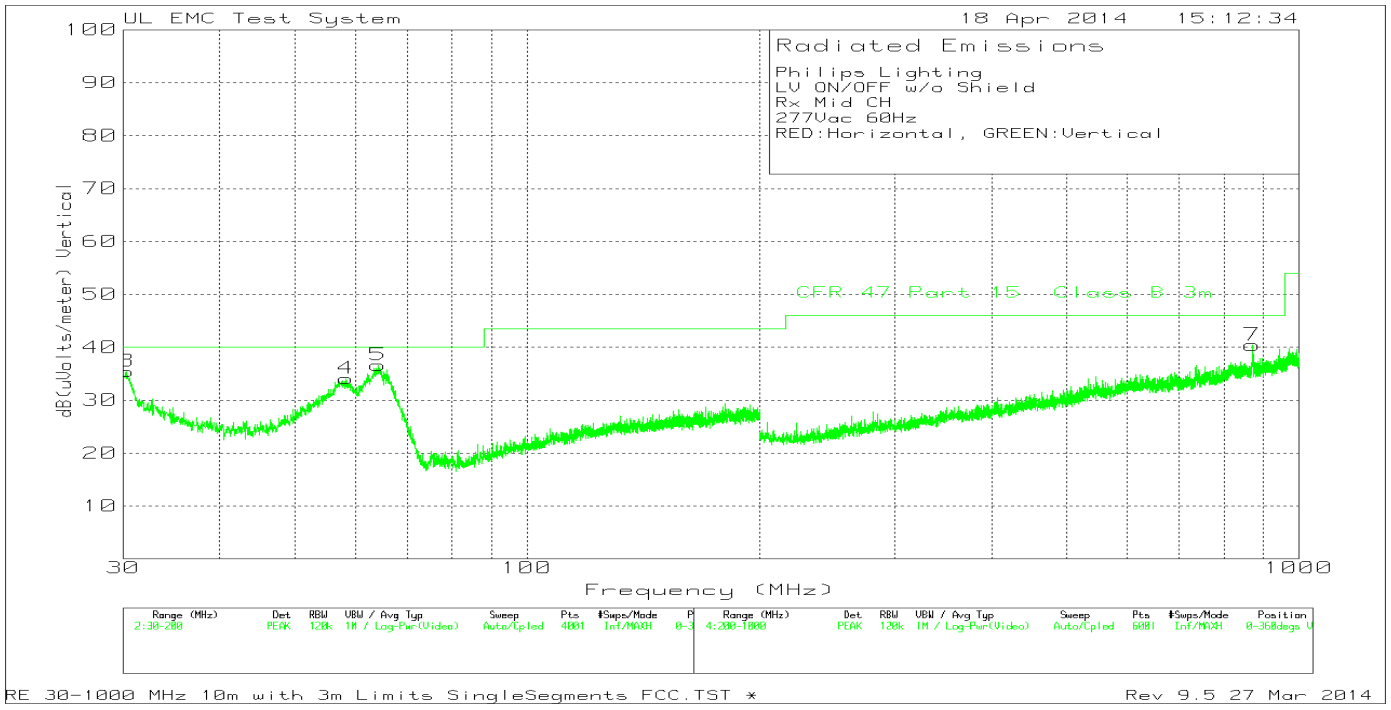



**Table 18 Radiated Emissions Data Above 1GHz, RX Mode**

| Manufacturer:Philips Lighting | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model#LV ON/OFF w/o Shield | | | | | | | | | | | | |
| Mode:Rx Mid CH | | | | | | | | | | | | |
| Voltage:120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | FCC 15.109 Class B dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 1.98 | 64.64 | PK | 31.6 | 0.5 | -52.87 | 43.87 | 54 | -10.13 | 0-360 | 149 | H |
| 2 | 3.6977 | 62.8 | PK | 23.5 | 0 | -48.77 | 37.53 | 54 | -16.47 | 0-360 | 150 | H |
| 3 | 7.3117 | 58.38 | PK | 30.5 | 0 | -45.71 | 43.17 | 54 | -10.83 | 0-360 | 150 | H |
| 4 | 8.3123 | 59.57 | PK | 36.5 | 0 | -48.06 | 48.01 | 54 | -5.99 | 0-360 | 150 | H |
| 5 | 1.998 | 64.17 | PK | 31.8 | 1 | -52.75 | 44.22 | 54 | -9.78 | 0-360 | 150 | V |
| 6 | 1.6072 | 64.74 | PK | 28.4 | 0.2 | -53.91 | 39.43 | 54 | -14.57 | 0-360 | 150 | V |
| 7 | 3.7277 | 62.62 | PK | 23.7 | 0 | -49.47 | 36.85 | 54 | -17.15 | 0-360 | 150 | V |
| 8 | 6.9875 | 59.77 | PK | 29.3 | 0 | -45.66 | 43.41 | 54 | -10.59 | 0-360 | 150 | V |
| 9 | 8.2282 | 58.3 | PK | 36.4 | 0 | -46.99 | 47.71 | 54 | -6.29 | 0-360 | 150 | V |
| PK - Peak detector | | | | | | | | | | | | |

### 4.2.2 Low Voltage On/Off (277V/60Hz)

**Figure 17 Radiated Emissions Graph Below 1GHz, RX Mode**



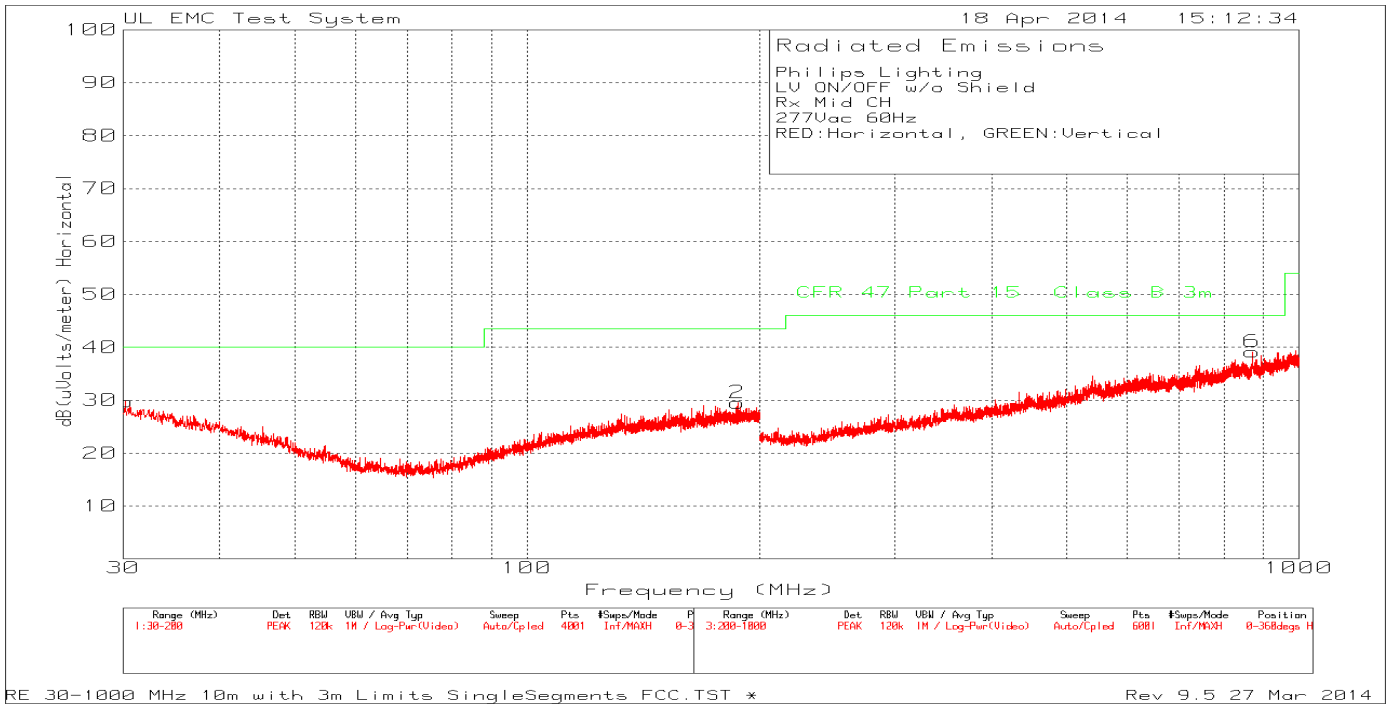
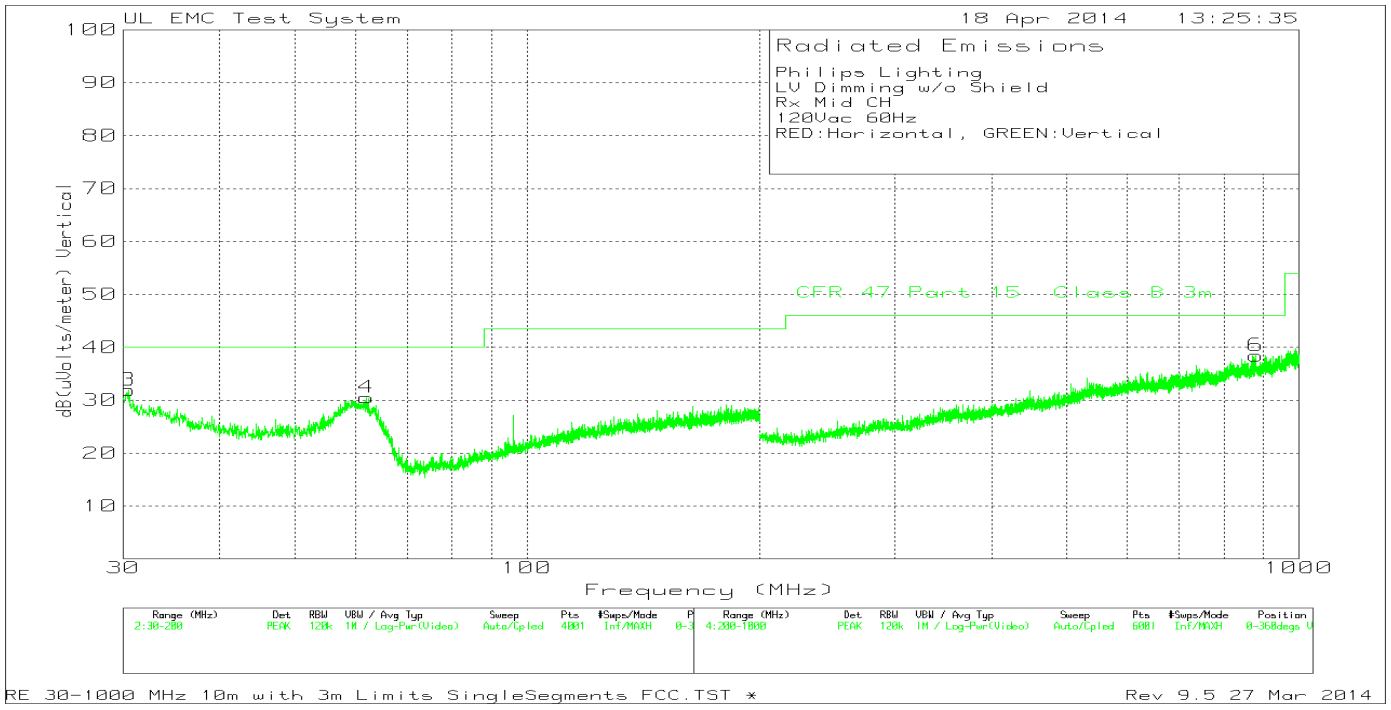



**Table 19 Radiated Emissions Data Below 1GHz, RX Mode**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philips Lighting | | | | | | | | | | | | |
| LV ON/OFF w/o Shield | | | | | | | | | | | | |
| Rx Mid CH | | | | | | | | | | | | |
| 277Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.109 Class B dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 30.17 | 31.55 | PK | 17.8 | -30.1 | 10.5 | 29.75 | 40 | -10.25 | 0-360 | 100 | H |
| 2 | 187.42 | 32.09 | PK | 15.9 | -29 | 10.5 | 29.49 | 43.52 | -14.03 | 0-360 | 100 | H |
| 3 | 30.2975 | 37.35 | PK | 17.7 | -30.1 | 10.5 | 35.45 | 40 | -4.55 | 0-360 | 99 | V |
| 4 | 58.305 | 46.41 | PK | 7.3 | -30.1 | 10.5 | 34.11 | 40 | -5.89 | 0-360 | 249 | V |
| 5 | 64.1275 | 49.82 | PK | 6.3 | -30 | 10.5 | 36.62 | 40 | -3.38 | 0-360 | 249 | V |
| 6 | 870.6667 | 30.65 | PK | 22.5 | -24.5 | 10.5 | 39.15 | 46.02 | -6.87 | 0-360 | 99 | H |
| 7 | 870.6667 | 31.89 | PK | 22.5 | -24.5 | 10.5 | 40.39 | 46.02 | -5.63 | 0-360 | 299 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.109 Class B dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 64.063397 | 46.23 | QP | 6.3 | -30 | 10.5 | 33.03 | 40 | -6.97 | 275 | 266 | V |
| | 30.159641 | 33.64 | QP | 17.8 | -30.1 | 10.5 | 31.84 | 40 | -8.16 | 359 | 100 | V |
| QP - Quasi-Peak detector | | | | | | | | | | | | |

### 4.2.3 Low Voltage Dimming (120V/60Hz)

**Figure 18 Radiated Emissions Graph Below 1GHz, RX Mode**



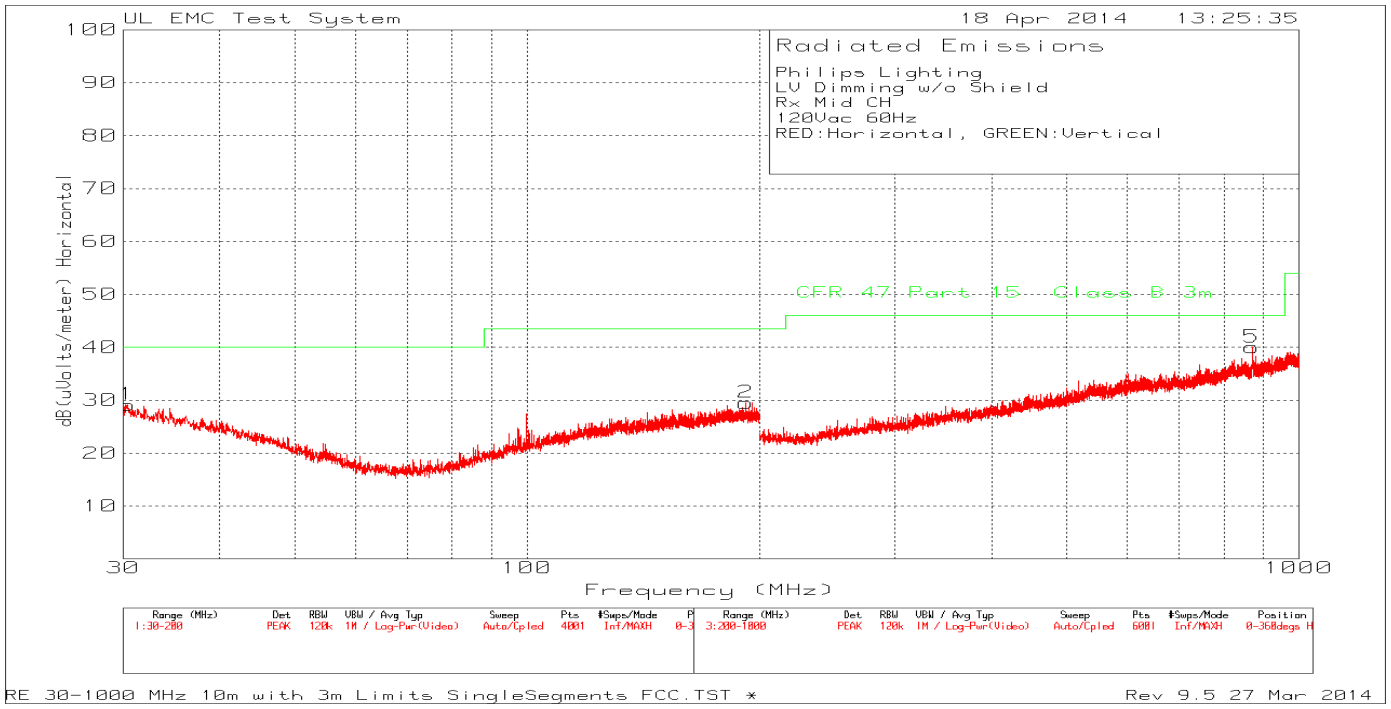
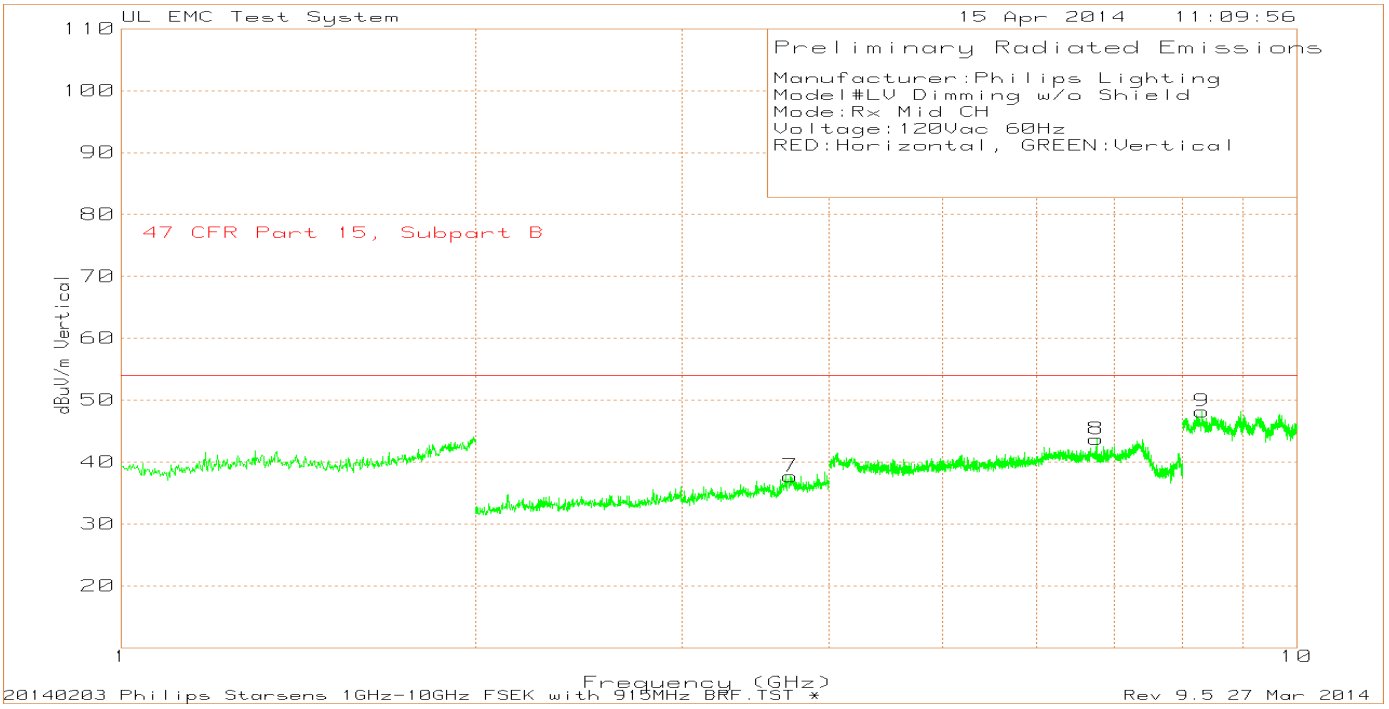



**Table 20 Radiated Emissions Data Below 1GHz, RX Mode**

| Philips Lighting | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LV Dimming w/o Shield | | | | | | | | | | | | |
| Rx Mid CH | | | | | | | | | | | | |
| 120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | FCC 15.109 Class B dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 30.3825 | 31.06 | PK | 17.7 | -30.1 | 10.5 | 29.16 | 40 | -10.84 | 0-360 | 249 | H |
| 2 | 192.1375 | 31.84 | PK | 16.1 | -28.9 | 10.5 | 29.54 | 43.52 | -13.98 | 0-360 | 249 | H |
| 3 | 30.425 | 33.88 | PK | 17.6 | -30.1 | 10.5 | 31.88 | 40 | -8.12 | 0-360 | 99 | V |
| 4 | 61.96 | 43.4 | PK | 6.5 | -29.9 | 10.5 | 30.5 | 40 | -9.5 | 0-360 | 249 | V |
| 5 | 870 | 31.5 | PK | 22.5 | -24.5 | 10.5 | 40 | 46.02 | -6.02 | 0-360 | 199 | H |
| 6 | 880.4 | 30.02 | PK | 22.8 | -24.9 | 10.5 | 38.42 | 46.02 | -7.6 | 0-360 | 99 | V |
| PK - Peak detector | | | | | | | | | | | | |

**Figure 19 Radiated Emissions Graph Above 1GHz, RX Mode**



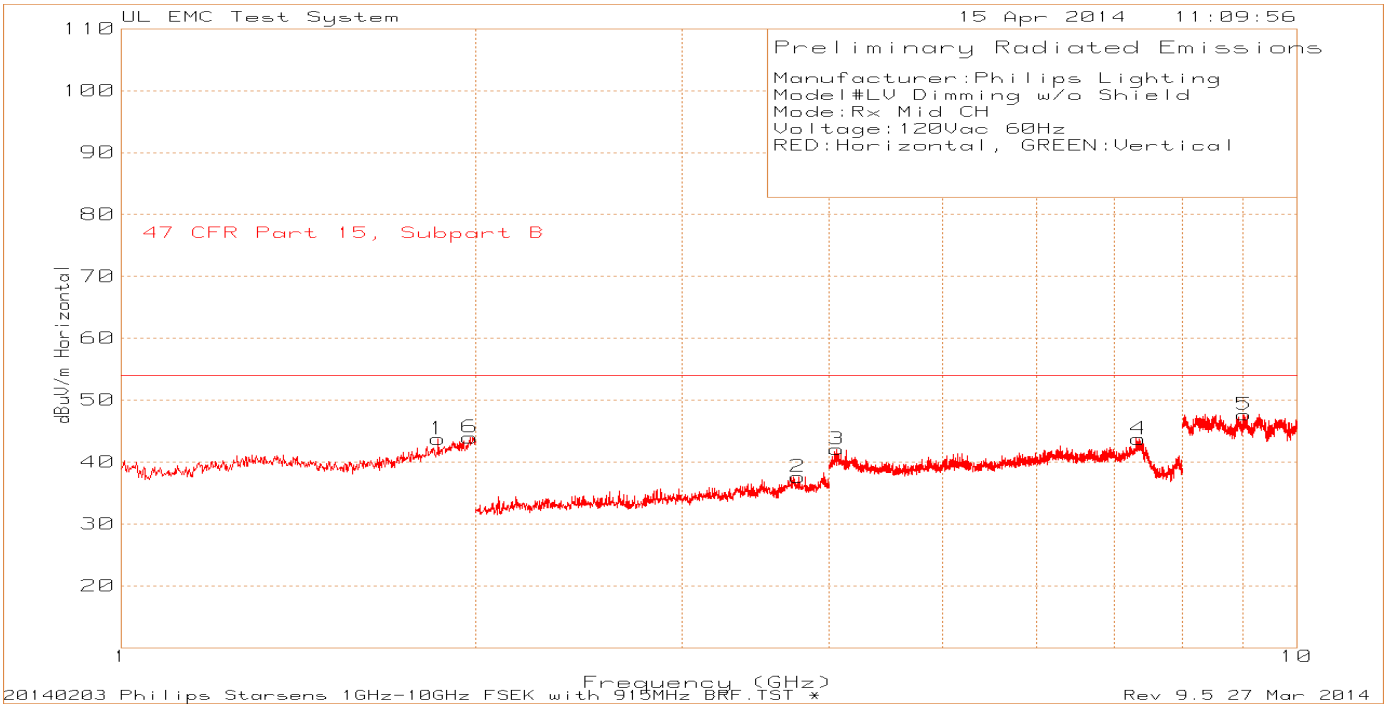
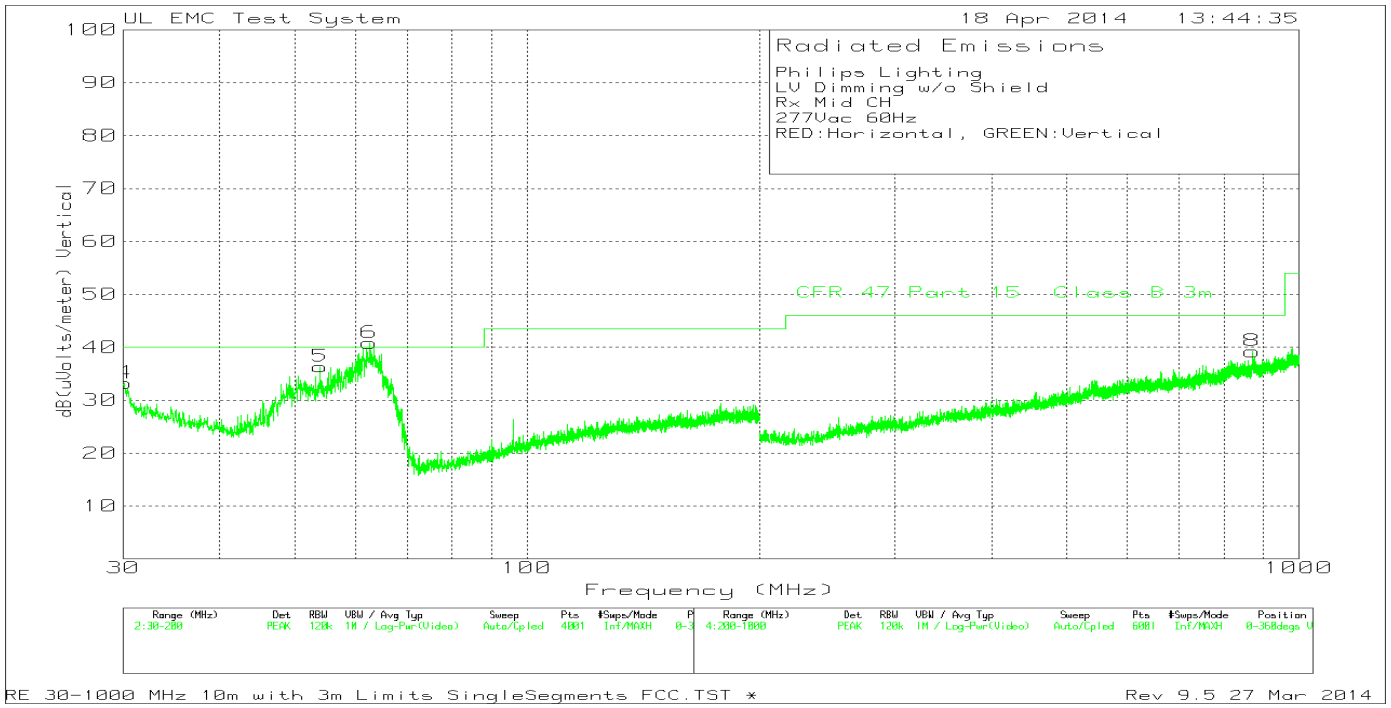



**Table 21 Radiated Emissions Data Above 1GHz, RX Mode**

| Manufacturer:Philips Lighting | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model#LV Dimming w/o Shield | | | | | | | | | | | | |
| Mode:Rx Mid CH | | | | | | | | | | | | |
| Voltage:120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit FCC 15.109 Class B dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 1.8597 | 66.19 | PK | 30.6 | 0.3 | -53.38 | 43.71 | 54 | -10.29 | 0-360 | 149 | H |
| 6 | 1.98 | 64.75 | PK | 31.6 | 0.5 | -52.87 | 43.98 | 54 | -10.02 | 0-360 | 149 | H |
| 2 | 3.7658 | 64.29 | PK | 23.9 | | -50.59 | 37.6 | 54 | -16.4 | 0-360 | 150 | H |
| 3 | 4.062 | 64.2 | PK | 28.4 | | -50.54 | 42.06 | 54 | -11.94 | 0-360 | 150 | H |
| 4 | 7.3377 | 58.75 | PK | 30.7 | | -45.75 | 43.7 | 54 | -10.3 | 0-360 | 150 | H |
| 5 | 9.027 | 59.58 | PK | 36.1 | | -48.02 | 47.66 | 54 | -6.34 | 0-360 | 150 | H |
| 7 | 3.7097 | 63.04 | PK | 23.6 | | -48.95 | 37.69 | 54 | -16.31 | 0-360 | 150 | V |
| 8 | 6.7554 | 61.06 | PK | 28.9 | | -46.27 | 43.69 | 54 | -10.31 | 0-360 | 150 | V |
| 9 | 8.3103 | 59.75 | PK | 36.5 | | -48.05 | 48.2 | 54 | -5.8 | 0-360 | 150 | V |
| PK - Peak detector | | | | | | | | | | | | |
| | | | | | | | | | | | | |

### 4.2.4 Low Voltage Dimming (277V/60Hz)

**Figure 20 Radiated Emissions Graph Below 1GHz, RX Mode**



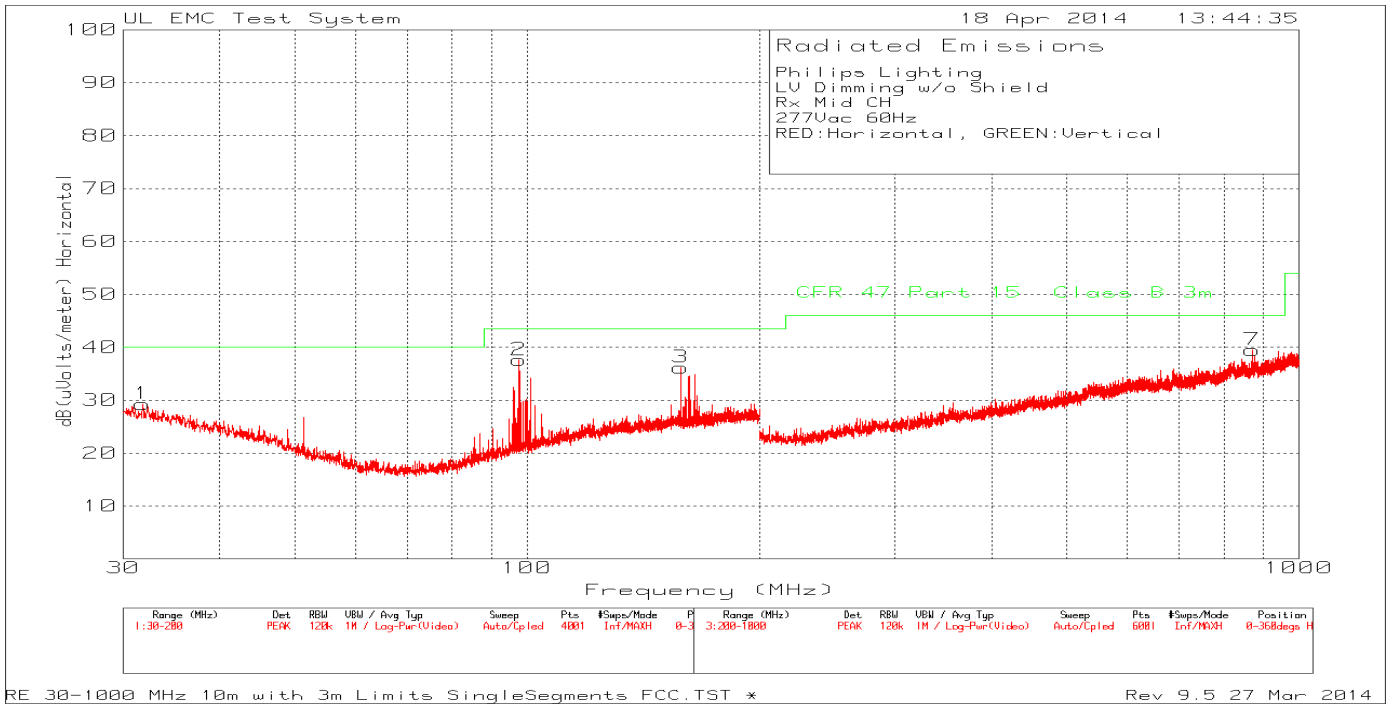



**Table 22 Radiated Emissions Data Below 1GHz, RX Mode**

Philips Lighting
LV Dimming w/o Shield
Rx Mid CH
277Vac 60Hz
RED:Horizontal, GREEN:Vertical
Trace Markers

| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.109 Class B dBuV/m | Margin dB | Limit FCC 15.109 Class A dBuV/m | Margin dB | Azimuth [Degs] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 31.785 | 31.76 | PK | 17.1 | -30.1 | 10.5 | 29.26 | 40 | -10.74 | 49.54 | -20.28 | 0-360 |
| 2 | 97.66 | 46.62 | PK | 10.3 | -29.8 | 10.5 | 37.62 | 43.52 | -5.9 | 53.98 | -16.36 | 0-360 |
| 3 | 158.18 | 40.29 | PK | 15 | -29.6 | 10.5 | 36.19 | 43.52 | -7.33 | 53.98 | -17.79 | 0-360 |
| 4 | 30.0425 | 34.91 | PK | 17.9 | -30.1 | 10.5 | 33.21 | 40 | -6.79 | 49.54 | -16.33 | 0-360 |
| 5 | 53.97 | 47.25 | PK | 8.6 | -30 | 10.5 | 36.35 | 40 | -3.65 | 49.54 | -13.19 | 0-360 |
| 6 | 62.555 | 53.85 | PK | 6.5 | -30 | 10.5 | 40.85 | 40 | 0.85 | 49.54 | -8.69 | 0-360 |
| 7 | 870.1333 | 31.03 | PK | 22.5 | -24.5 | 10.5 | 39.53 | 46.02 | -6.49 | 56.9 | -17.37 | 0-360 |
| 8 | 870.1333 | 30.75 | PK | 22.5 | -24.5 | 10.5 | 39.25 | 46.02 | -6.77 | 56 | -16.75 | 0-360 |

PK - Peak detector

### 4.2.5 High Voltage On/Off (347V/60Hz)

**Figure 21 Radiated Emissions Graph Below 1GHz, RX Mode**

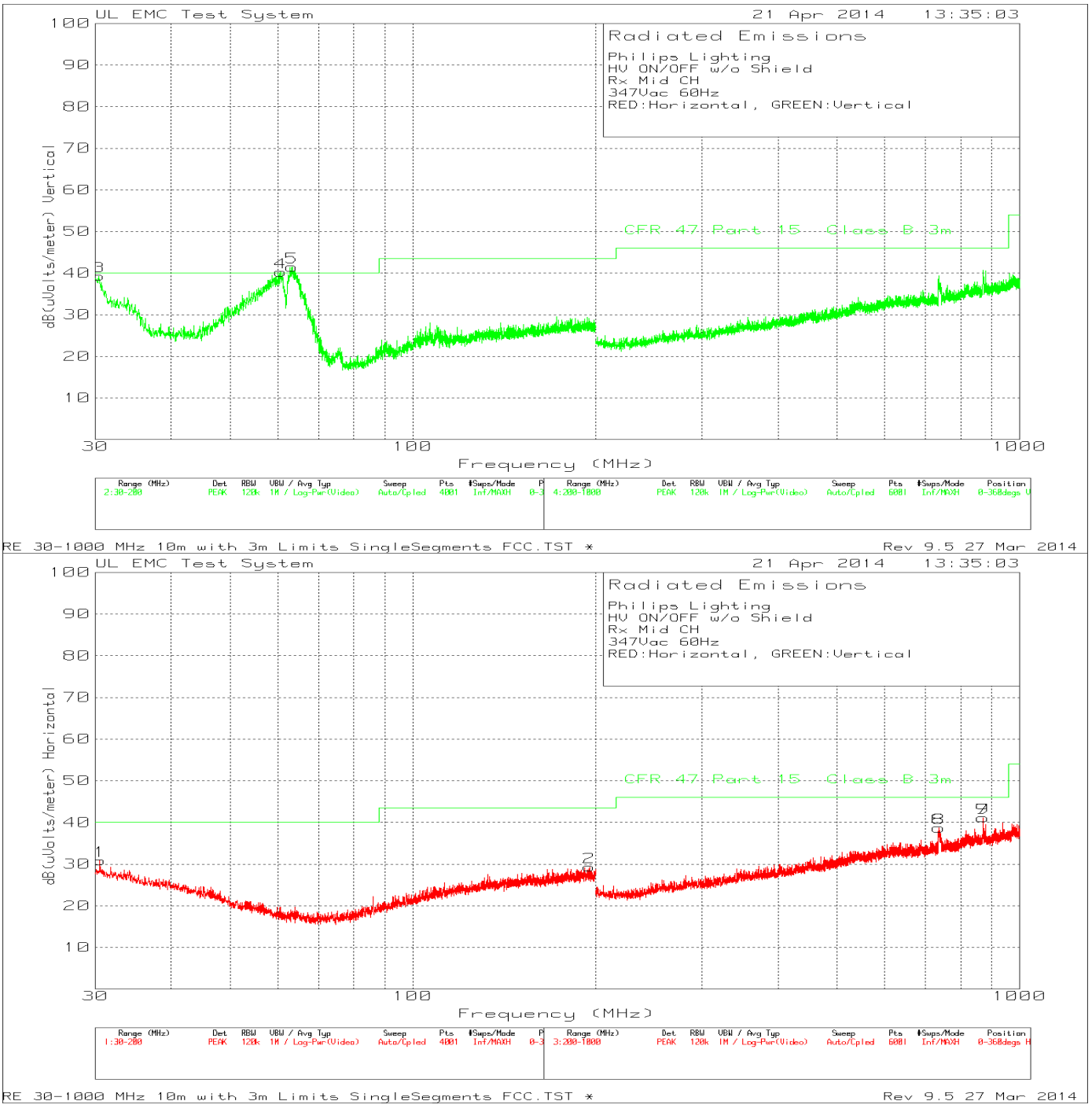


**Table 23 Radiated Emissions Data Below 1GHz, RX Mode**

| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.109 Class B dBuV/m | Margin dB | Limit FCC 15.109 Class A dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 30.51 | 32.81 | PK | 17.6 | -30.1 | 10.5 | 30.81 | 40 | -9.19 | 49.54 | -18.73 | 0-360 | 400 | H |
| 2 | 195.4525 | 31.64 | PK | 16 | -28.8 | 10.5 | 29.34 | 43.52 | -14.18 | 53.98 | -24.64 | 0-360 | 99 | H |
| 3 | 30.34 | 41.18 | PK | 17.7 | -30.1 | 10.5 | 39.28 | 40 | -0.72 | 49.54 | -10.26 | 0-360 | 99 | V |
| 4 | 60.6 | 52.94 | PK | 6.8 | -30 | 10.5 | 40.24 | 40 | 0.24 | 49.54 | -9.3 | 0-360 | 249 | V |
| 5 | 63.235 | 54.47 | PK | 6.5 | -30 | 10.5 | 41.47 | 40 | 1.47 | 49.54 | -8.07 | 0-360 | 249 | V |
| 6 | 736.4 | 32.21 | PK | 20.3 | -24.3 | 10.5 | 38.71 | 46.02 | -7.31 | 56.9 | -18.19 | 0-360 | 399 | H |
| 7 | 871.4667 | 32.73 | PK | 22.5 | -24.6 | 10.5 | 41.13 | 46.02 | -4.89 | 56.9 | -15.77 | 0-360 | 399 | H |
| 8 | 736.4 | 32.21 | PK | 20.3 | -24.3 | 10.5 | 38.71 | 46.02 | -7.31 | 56.9 | -18.19 | 0-360 | 399 | H |
| 9 | 871.4667 | 32.73 | PK | 22.5 | -24.6 | 10.5 | 41.13 | 46.02 | -4.89 | 56.9 | -15.77 | 0-360 | 399 | H |

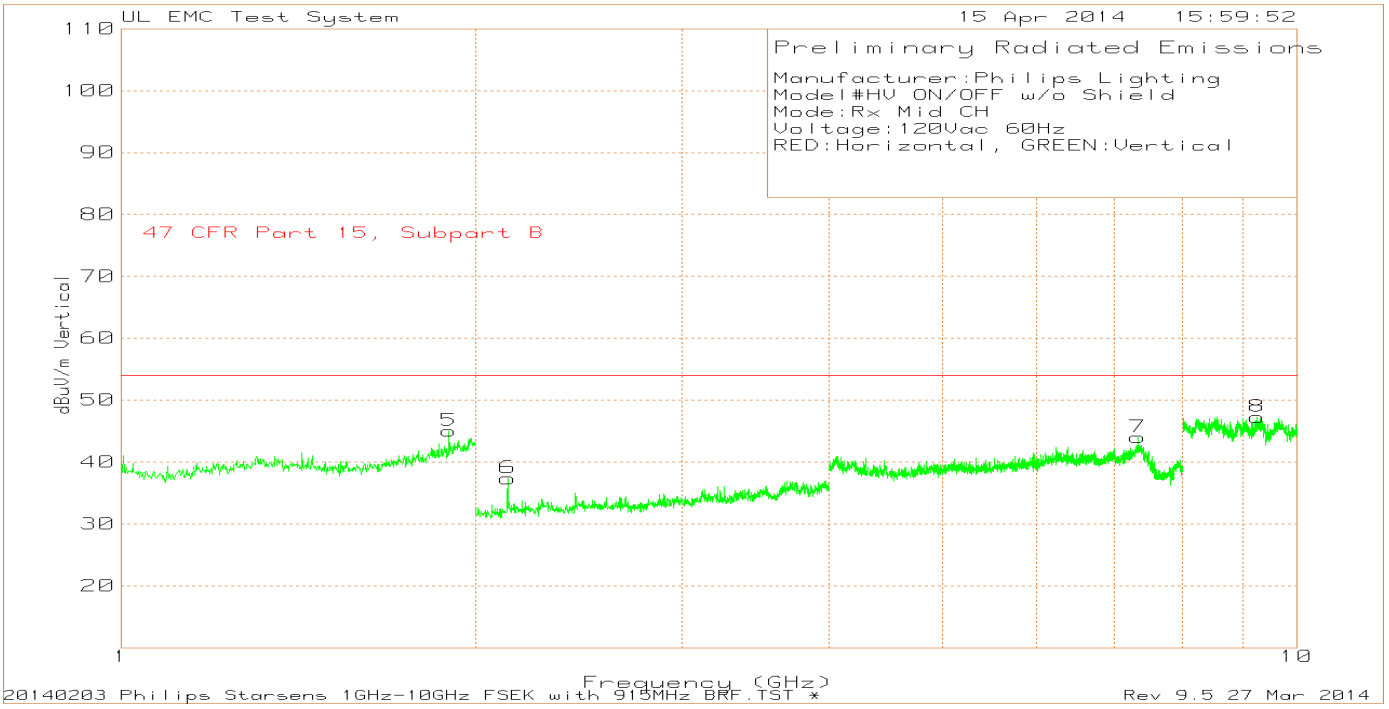
PK - Peak detector

Radiated Emission Data

| Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.109 dBuV/m | Margin dB | Limit FCC 15.109 Class A dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 62.951026 | 49.57 | QP | 6.5 | -30 | 10.5 | 36.57 | 40 | -3.43 | 49.54 | -12.97 | 104 | 233 | V |
| 60.909556 | 47.42 | QP | 6.8 | -30 | 10.5 | 34.72 | 40 | -5.28 | 49.54 | -14.82 | 0 | 255 | V |
| 30.413553 | 36.47 | QP | 17.7 | -30.1 | 10.5 | 34.57 | 40 | -5.43 | 49.54 | -14.97 | 210 | 101 | V |

QP - Quasi-Peak detector

**Figure 22 Radiated Emissions Graph Above 1GHz, RX Mode**



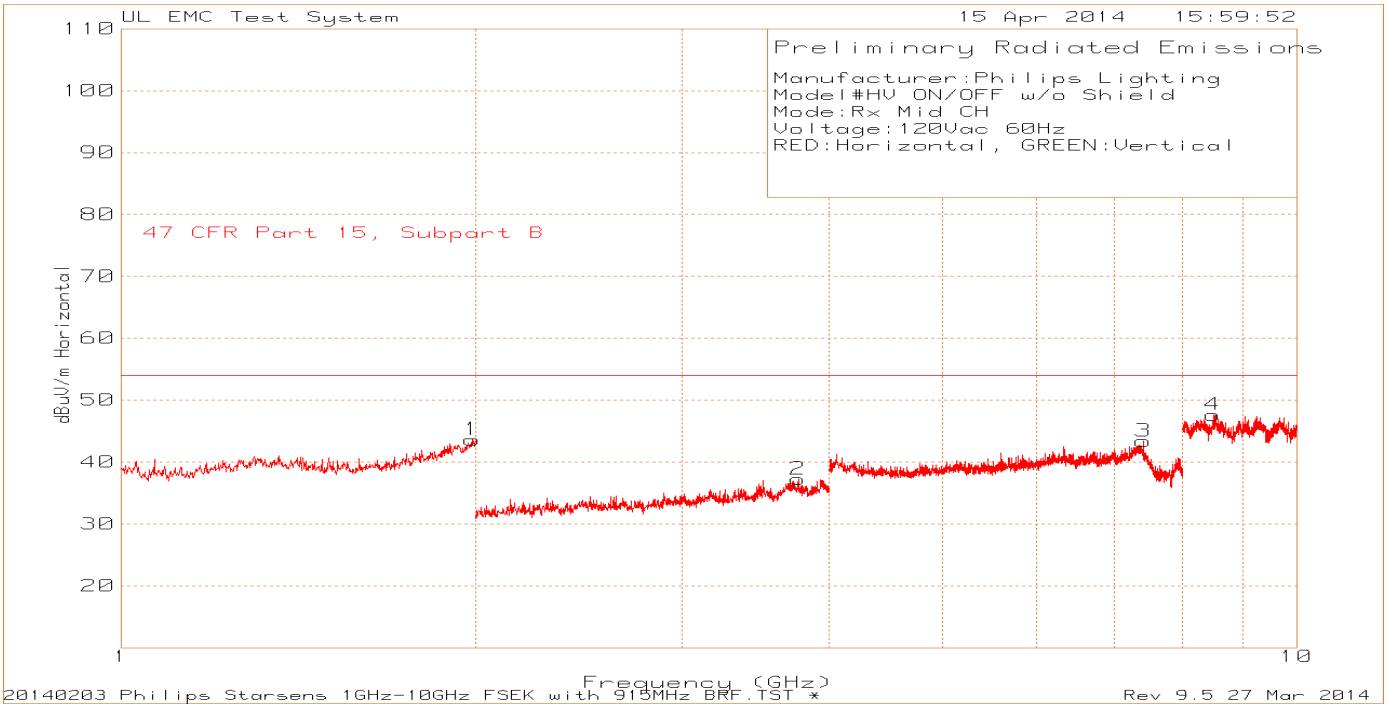
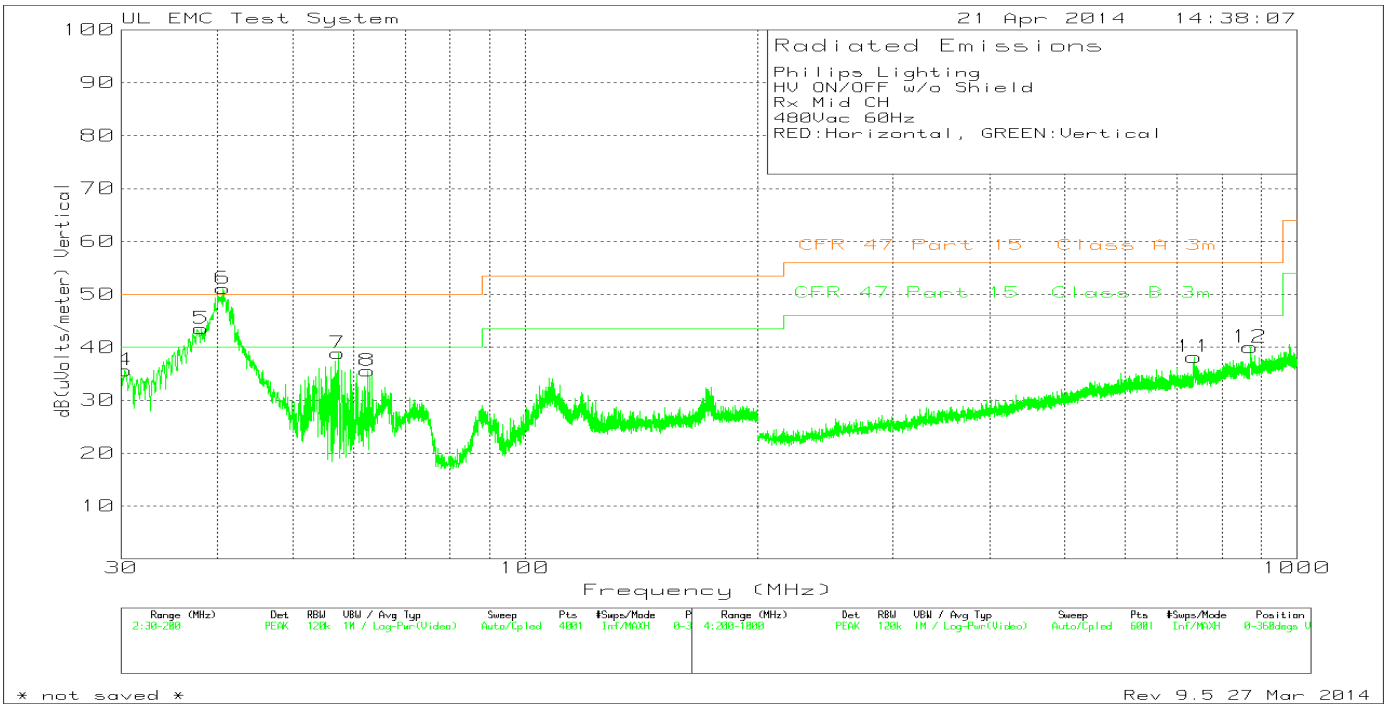



**Table 24 Radiated Emissions Data Above 1GHz, RX Mode**

| Manufacturer:Philips Lighting | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model#HV ON/OFF w/o Shield | | | | | | | | | | | | |
| Mode:Rx Mid CH | | | | | | | | | | | | |
| Voltage:120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit FCC 15.109 Class B dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 1.988 | 63.89 | PK | 31.7 | 0.8 | -52.81 | 43.58 | 54 | -10.42 | 0-360 | 149 | H |
| 2 | 3.7658 | 63.92 | PK | 23.9 | | -50.59 | 37.23 | 54 | -16.77 | 0-360 | 150 | H |
| 3 | 7.4037 | 58.64 | PK | 31.1 | | -46.36 | 43.38 | 54 | -10.62 | 0-360 | 150 | H |
| 4 | 8.4905 | 59.15 | PK | 36.7 | | -48.23 | 47.62 | 54 | -6.38 | 0-360 | 150 | H |
| 5 | 1.8998 | 66.48 | PK | 31.1 | 0.5 | -53.05 | 45.03 | 54 | -8.97 | 0-360 | 150 | V |
| 6 | 2.1321 | 67.98 | PK | 21.5 | | -52.09 | 37.39 | 54 | -16.61 | 0-360 | 150 | V |
| 7 | 7.3257 | 59.12 | PK | 30.6 | | -45.71 | 44.01 | 54 | -9.99 | 0-360 | 150 | V |
| 8 | 9.2573 | 58.73 | PK | 36.4 | | -47.84 | 47.29 | 54 | -6.71 | 0-360 | 150 | V |
| PK - Peak detector | | | | | | | | | | | | |

### 4.2.6 High Voltage On/Off (480V/60Hz)

**Figure 23 Radiated Emissions Graph Below 1GHz, RX Mode**



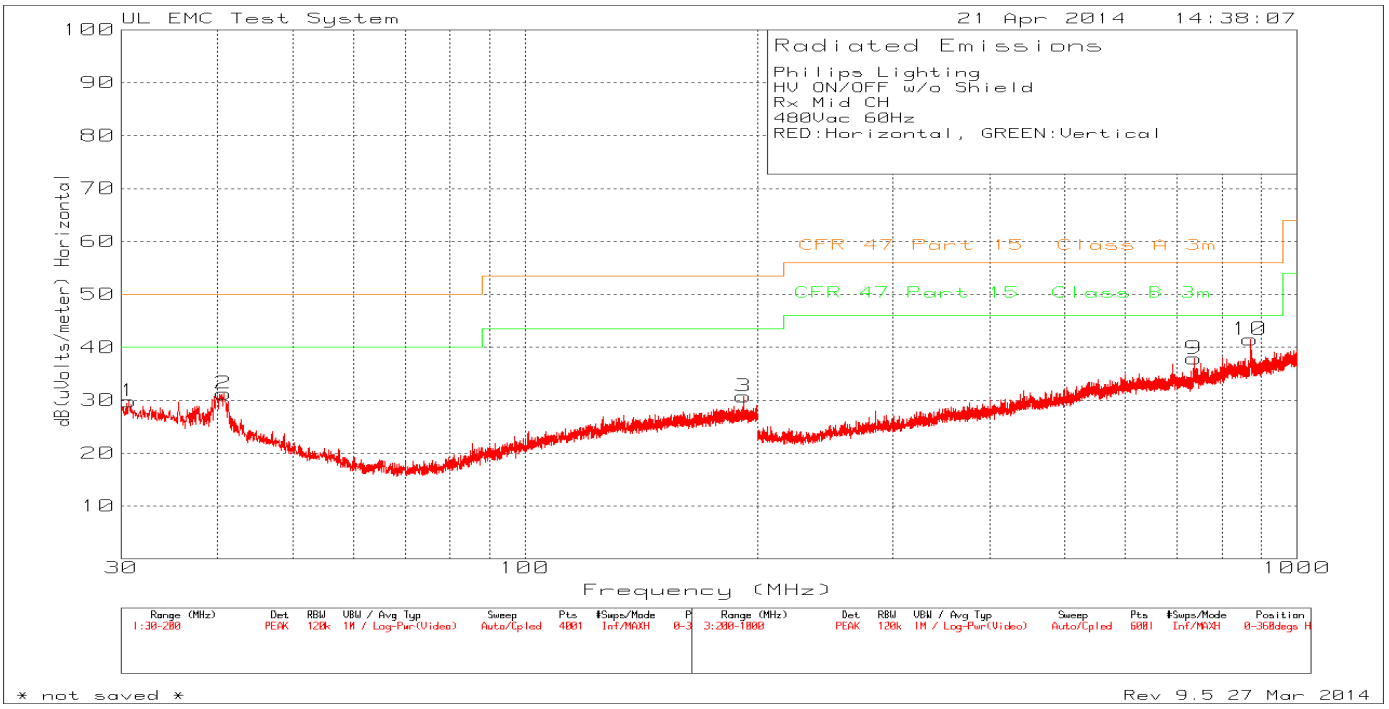



**Table 25 Radiated Emissions Data Below 1GHz, RX Mode**

| Philips Lighting | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| HV ON/OFF w/o Shield | | | | | | | | | | | | | | |
| Rx Mid CH | | | | | | | | | | | | | | |
| 480Vac 60Hz | | | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.109 Class B dBuV/m | Margin dB | Limit FCC 15.109 Class A dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 30.6375 | 31.89 | PK | 17.5 | -30.1 | 10.5 | 29.79 | 40 | -10.21 | 50 | -20.21 | 0-360 | 399 | H |
| 2 | 40.71 | 37.18 | PK | 13.7 | -30.1 | 10.5 | 31.28 | 40 | -8.72 | 50 | -18.72 | 0-360 | 250 | H |
| 3 | 192.095 | 33.02 | PK | 16.1 | -28.9 | 10.5 | 30.72 | 43.52 | -12.8 | 53.52 | -22.8 | 0-360 | 250 | H |
| 4 | 30.2975 | 37.55 | PK | 17.7 | -30.1 | 10.5 | 35.65 | 40 | -4.35 | 50 | -14.35 | 0-360 | 99 | V |
| 5 | 38.075 | 48.24 | PK | 14.8 | -30 | 10.5 | 43.54 | 40 | 3.54 | 50 | -6.46 | 0-360 | 99 | V |
| 6 | 40.625 | 56.92 | PK | 13.8 | -30.1 | 10.5 | 51.12 | 40 | 11.12 | 50 | 1.12 | 0-360 | 99 | V |
| 7 | 57.2425 | 50.89 | PK | 7.6 | -30.1 | 10.5 | 38.89 | 40 | -1.11 | 50 | -11.11 | 0-360 | 99 | V |
| 8 | 62.5125 | 48.58 | PK | 6.5 | -30 | 10.5 | 35.58 | 40 | -4.42 | 50 | -14.42 | 0-360 | 99 | V |
| 9 | 736 | 31.37 | PK | 20.3 | -24.3 | 10.5 | 37.87 | 46.02 | -8.15 | 56.02 | -18.15 | 0-360 | 200 | H |
| 10 | 870.6667 | 32.97 | PK | 22.5 | -24.5 | 10.5 | 41.47 | 46.02 | -4.55 | 56.02 | -14.55 | 0-360 | 200 | H |
| 11 | 736.5333 | 31.77 | PK | 20.3 | -24.4 | 10.5 | 38.17 | 46.02 | -7.85 | 56.02 | -17.85 | 0-360 | 199 | V |
| 12 | 870.2667 | 31.49 | PK | 22.5 | -24.5 | 10.5 | 39.99 | 46.02 | -6.03 | 56.02 | -16.03 | 0-360 | 199 | V |
| PK - Peak detector | | | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | | | |
| | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.109 Class B dBuV/m | Margin dB | Limit FCC 15.109 Class A dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 40.310032 | 52.38 | QP | 13.9 | -30.1 | 10.5 | 46.68 | 40 | 6.68 | 50 | -3.32 | 208 | 100 | V |
| QP - Quasi-Peak detector | | | | | | | | | | | | | | |

### 4.3 Test Conditions and Results – SPURIOUS EMISSIONS (Antenna Conducted and Radiated)

| | |
|---|---|
| Test Description | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section15.205(c)). |

| Basic Standard | 47 CFR Part 15.247(d)<br>RSS-210, A8.5<br>RSS-Gen 7.2.5 |
|---|---|

| | Frequency range | Measurement Point |
|---|---|---|
| Fully configured sample scanned over the following frequency range | 30MHz – 1GHz | 10 meter distance and / or antenna port |
| Fully configured sample scanned over the following frequency range | 1GHz – 10GHz | 3 meter distance and / or antenna port |

**Limits (Antenna Conducted)**

All emissions must be 20dB below the level of the fundamental frequency.

**Limits (Radiated – Restricted Bands Only)**

| Frequency (MHz) | Limit (dBµV/m) | | |
|---|---|---|---|
| | Quasi-Peak | Average | |
| | General Emissions | Fundamental | Spurious |
| 30 – 88 | 40.0 | - | - |
| 88 – 216 | 43.52 | - | - |
| 216 - 960 | 46.02 | - | - |
| 960 - 1000 | 54 | - | - |
| 1,000-25,000 | - | - | 54 |

Supplementary information: Radiated Spurious Emissions levels (below) were extrapolated to 3m distance. The host of the EUT is a power supply therefore there is no emissions above 1GHz. Data at 120V above 1GHz can be used to represent all other voltages above 1GHz.

The module with the host in some cases complies only with the FCC Class A limits. With all the data collected (see below) it was determined that the module does not add to the emission levels and it is the host (LV and HV supply) responsible for the emissions. Another version of the module (FCC ID: VBO-SSDB1S & IC: 135Y-SSDB1S) was tested as stand-alone full-module with shield. The module complies with FCC class B limits.

**Table 26 SPURIOUS EMISSIONS EUT Configuration Settings**

| Power Interface Mode # | EUT Configurations Mode # | EUT Operation Mode # |
|---|---|---|
| 1,2,3,4 | 1,2 | 1,3 |
| Supplementary information: None | | |

**Figure 24 30MHz-10GHz Antenna Port Spurious Emissions Plots TX Mode, Low, Middle, High Channels.**

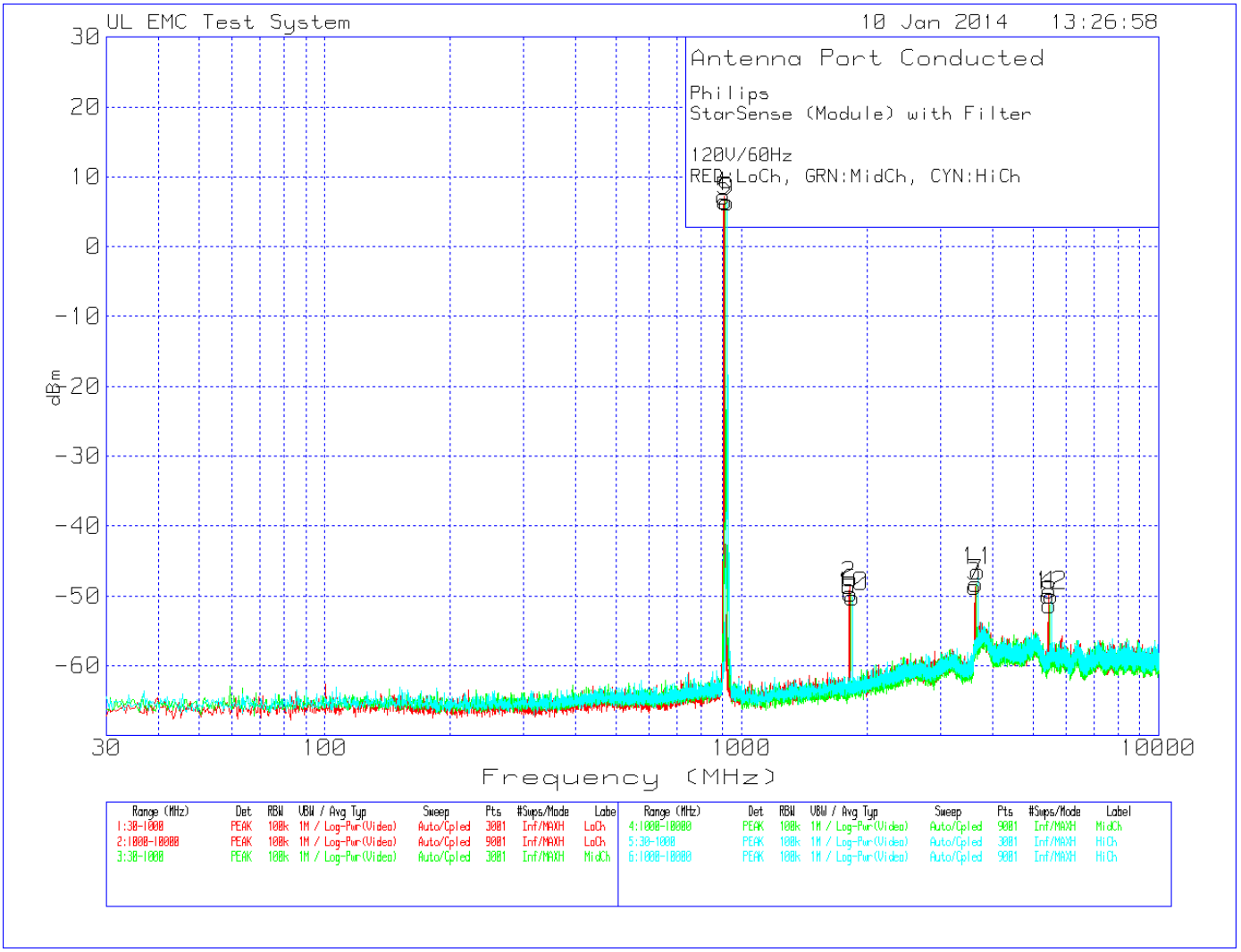


**Table 27 Antenna Port Conducted Spurious Emissions 30MHz - 10GHz, Low, Middle, High Channels**

| | | | | | |
|---|---|---|---|---|---|
| Philips | | | | | |
| StarSense (Module) with Filter | | | | | |
| 120V/60Hz | | | | | |
| RED:LoCh, GRN:MidCh, CYN:HiCh | | | | | |
| Trace Markers | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBm | Detector | Cable and Attenuator dB | Corrected Reading dBm |
| Low Channel | | | | | |
| 1 | 905.91 | -3.04 | PK | 10.2 | 7.16 |
| 2 | 1812 | -58.81 | PK | 10.2 | -48.61 |
| 3 | 3624 | -58.86 | PK | 10.2 | -48.66 |
| 4 | 5436 | -60.1 | PK | 10.2 | -49.9 |
| Middle Channel | | | | | |
| 5 | 913.9933 | -3.71 | PK | 10.2 | 6.49 |
| 6 | 1827 | -59.84 | PK | 10.2 | -49.64 |
| 7 | 3656 | -58.5 | PK | 10.2 | -48.3 |
| 8 | 5484 | -61.54 | PK | 10.2 | -51.34 |
| High Channel | | | | | |
| 9 | 924.0167 | -3.85 | PK | 10.2 | 6.35 |
| 10 | 1848 | -60.35 | PK | 10.2 | -50.15 |
| 11 | 3696 | -56.66 | PK | 10.2 | -46.46 |
| 12 | 5544 | -60.19 | PK | 10.2 | -49.99 |
| PK - Peak detector | | | | | |

* All spurious emissions are 20dB or more under the level of the fundamental.

**Figure 25 Antenna Port Bandedge Spurious Emissions Plots TX Mode, Low, Middle, High Channels.**

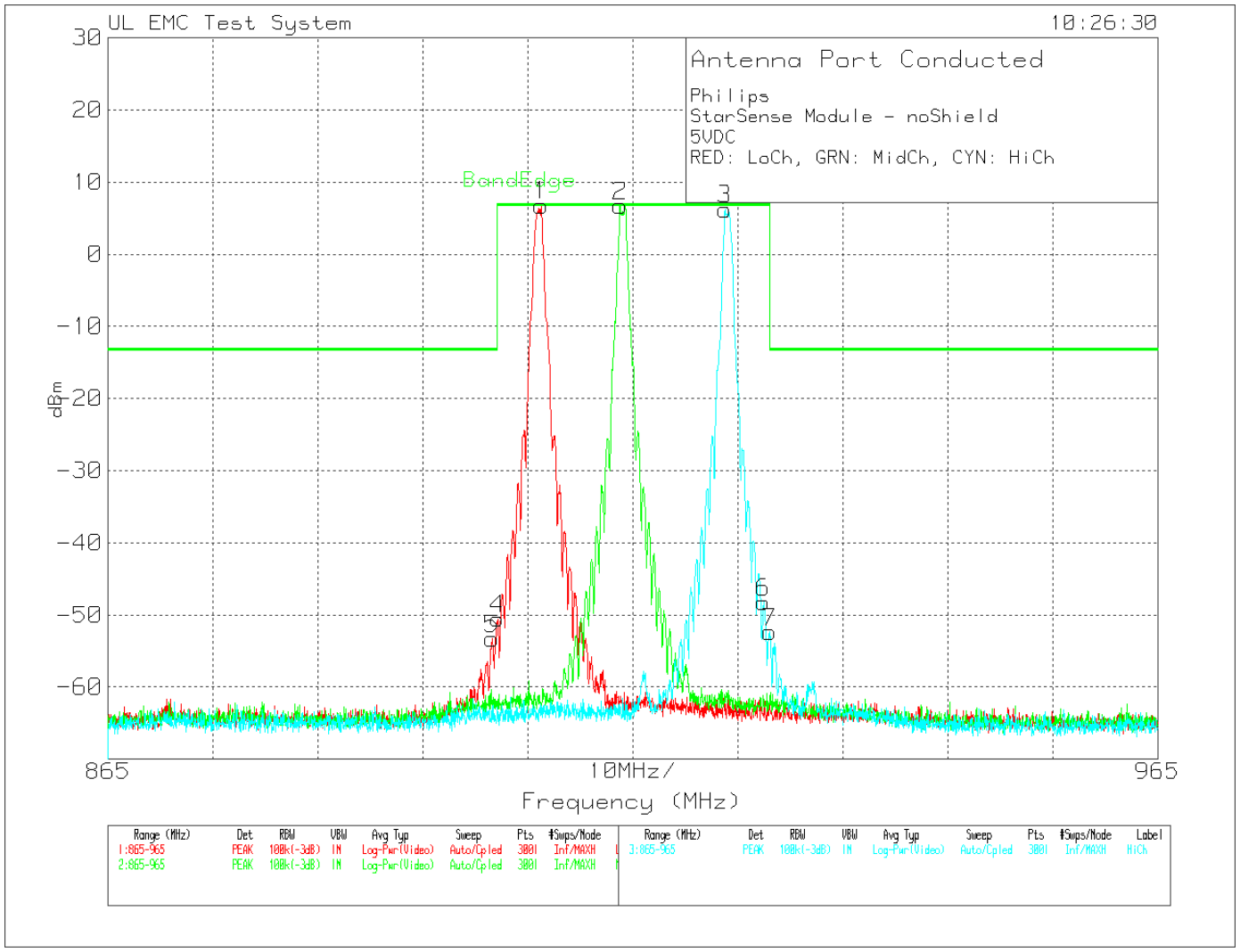
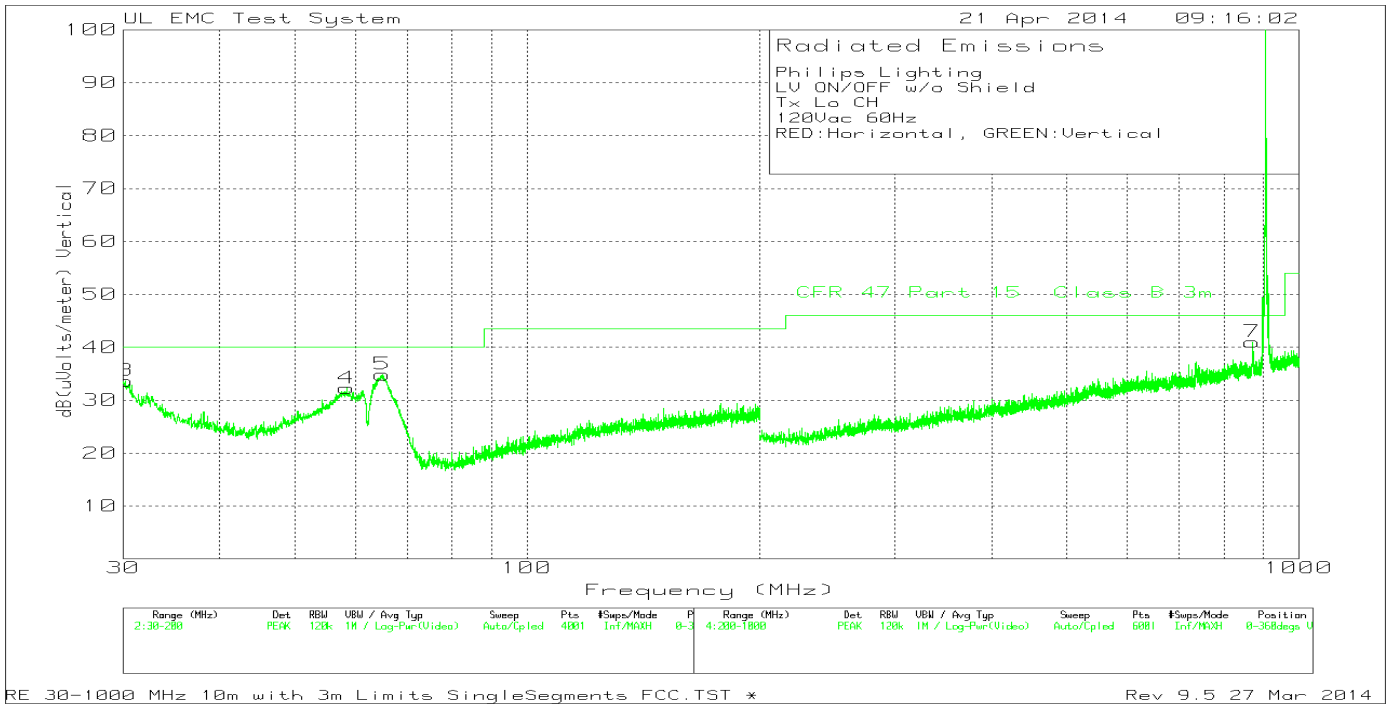


**Table 28 Antenna Port Band-edge Spurious Emissions, Low, Middle, High Channels**

| Philips | | | | | | | |
|---|---|---|---|---|---|---|---|
| StarSense Module - noShield | | | | | | | |
| 5VDC | | | | | | | |
| RED: LoCh, GRN: MidCh, CYN: HiCh | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBm | Detector | Path Factor dB | Level dBm | Limit dBm | Margin (dB) |
| Low Channel | | | | | | | |
| 1 | 906.2663 | -3.43 | PK | 10.2 | 6.77 | 6.77 | 0.00 |
| 4 | 902.0996 | -60.76 | PK | 10.2 | -50.56 | 6.77 | -57.33 |
| 5 | 901.5663 | -63.47 | PK | 10.2 | -53.27 | -13.23 | -40.04 |
| Middle Channel | | | | | | | |
| 2 | 913.7662 | -3.45 | PK | 10.2 | 6.75 | 6.77 | -0.02 |
| High Channel | | | | | | | |
| 3 | 923.7661 | -3.97 | PK | 10.2 | 6.23 | 6.77 | -0.54 |
| 6 | 927.4327 | -58.43 | PK | 10.2 | -48.23 | 6.77 | -55 |
| 7 | 928.0327 | -62.56 | PK | 10.2 | -52.36 | -13.23 | -39.13 |
| PK - Peak detector | | | | | | | |

### 4.3.1 Low Voltage On/Off (120V/60Hz)

**Figure 26 Radiated Spurious Emissions below 1GHz, Low Channel**



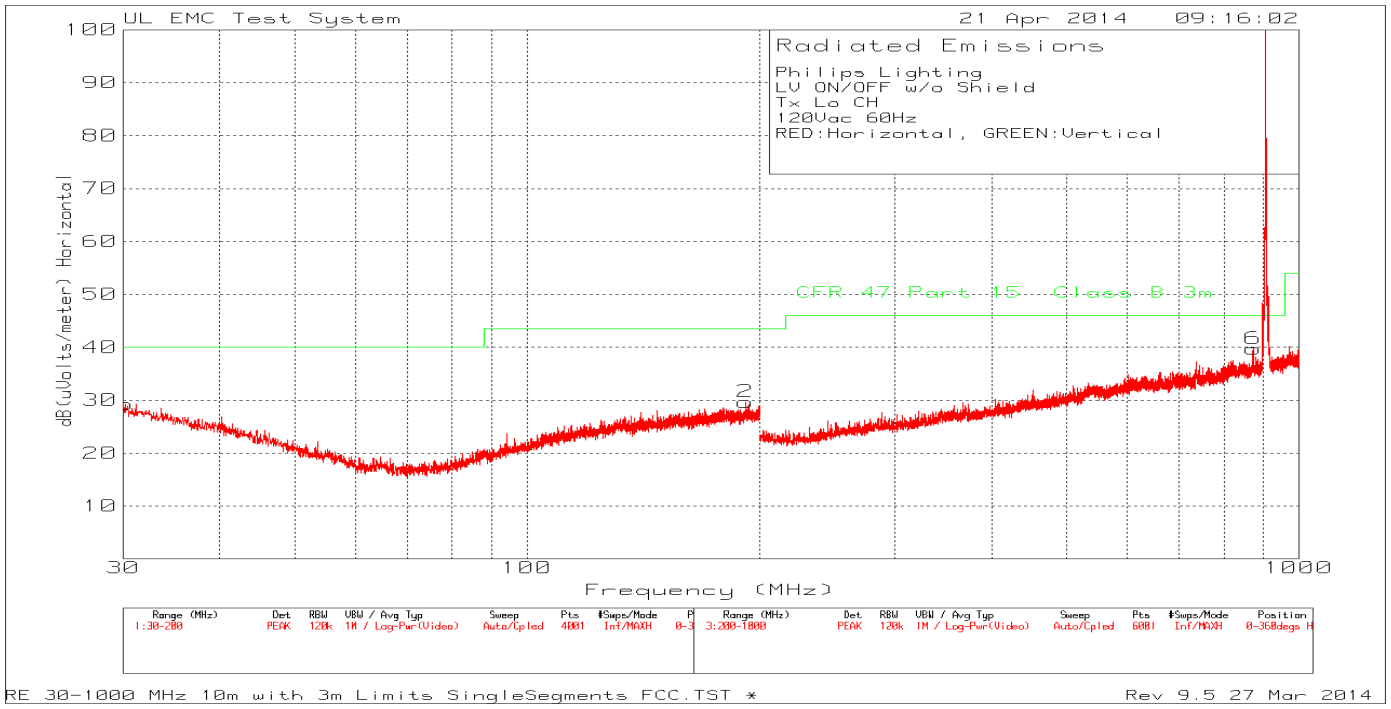
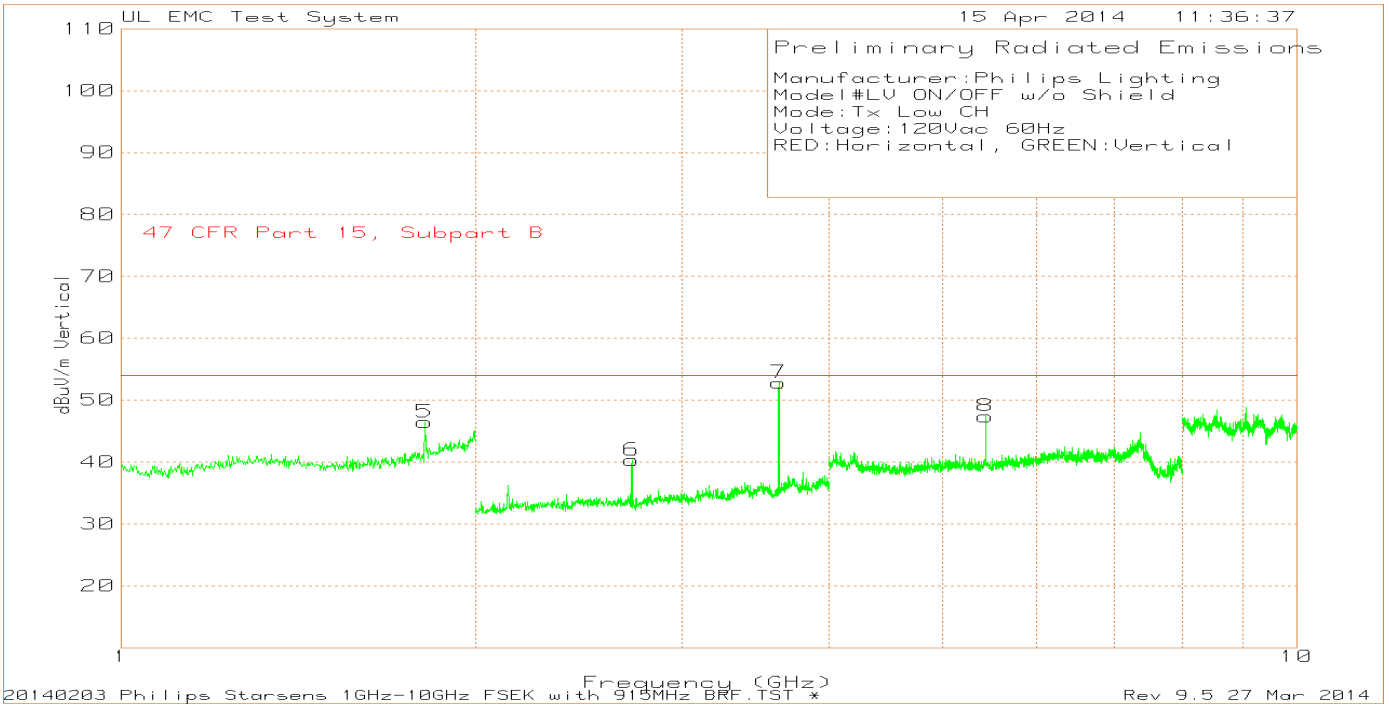



**Table 29 Radiated Spurious Emissions below 1GHz, Low Channel**

| Philips Lighting | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LV ON/OFF w/o Shield | | | | | | | | | | | | |
| Tx Lo CH | | | | | | | | | | | | |
| 120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 Limit dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 30.17 | 31.03 | PK | 17.8 | -30.1 | 10.5 | 29.23 | 40 | -10.77 | 0-360 | 249 | H |
| 2 | 192.095 | 31.98 | PK | 16.1 | -28.9 | 10.5 | 29.68 | 43.52 | -13.84 | 0-360 | 249 | H |
| 3 | 30.2125 | 35.48 | PK | 17.8 | -30.1 | 10.5 | 33.68 | 40 | -6.32 | 0-360 | 99 | V |
| 4 | 58.39 | 44.57 | PK | 7.3 | -30.1 | 10.5 | 32.27 | 40 | -7.73 | 0-360 | 250 | V |
| 5 | 64.9775 | 48.04 | PK | 6.3 | -30 | 10.5 | 34.84 | 40 | -5.16 | 0-360 | 250 | V |
| 6 | 873.4667 | 31.51 | PK | 22.5 | -24.8 | 10.5 | 39.71 | 46.02 | -6.31 | 0-360 | 199 | H |
| 7 | 871.2 | 32.6 | PK | 22.5 | -24.6 | 10.5 | 41 | 46.02 | -5.02 | 0-360 | 399 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |

**Figure 27 Radiated Spurious Emissions above 1GHz, Low Channel**



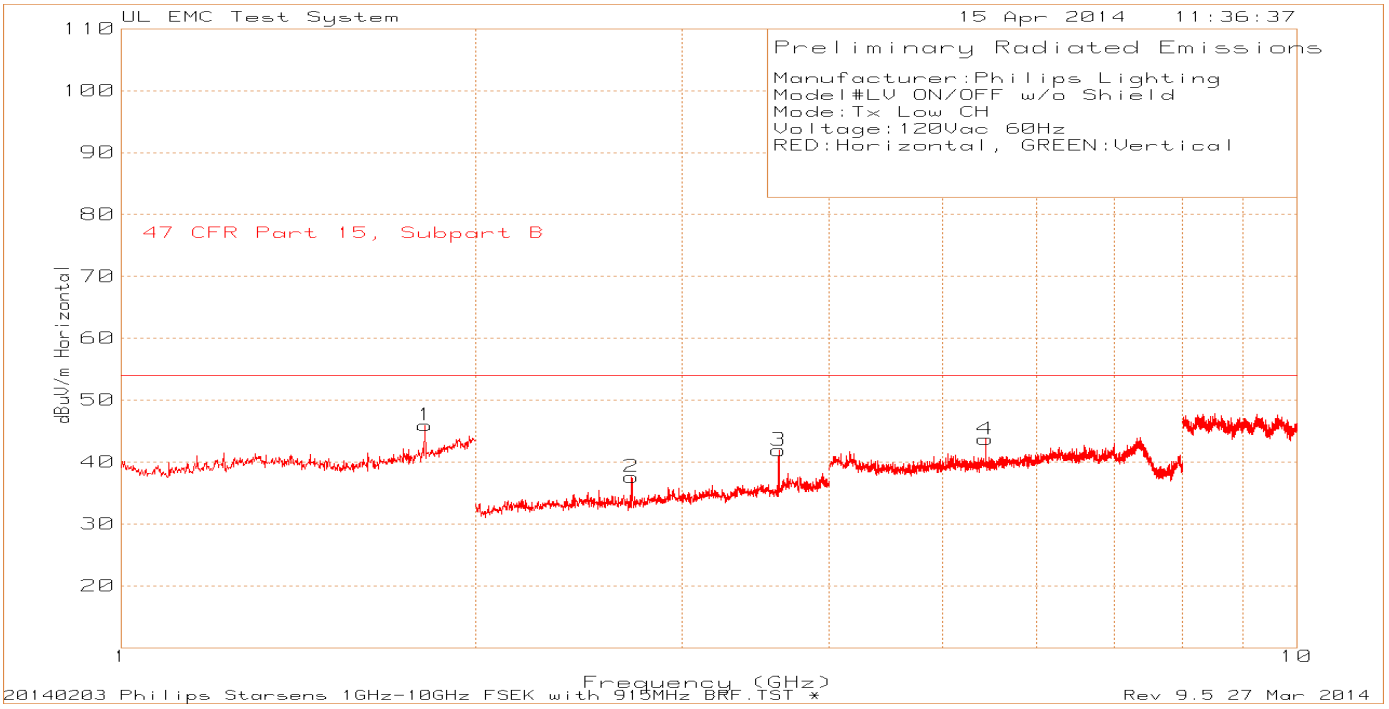
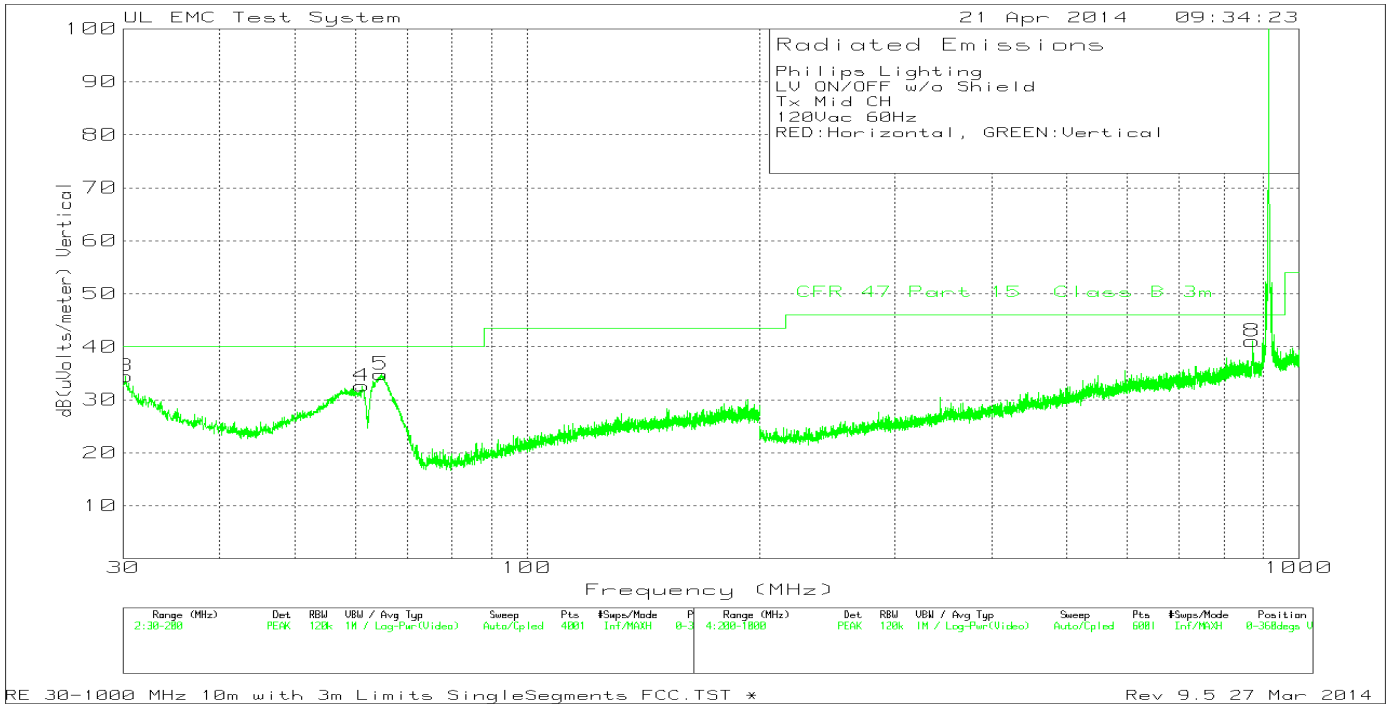



**Table 30 Radiated Spurious Emissions above 1GHz, Low Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manufacturer:Philips Lighting | | | | | | | | | | | | |
| Model#LV ON/OFF w/o Shield | | | | | | | | | | | | |
| Mode:Tx Low CH | | | | | | | | | | | | |
| Voltage:120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 1.8136 | 69.07 | PK | 30 | 0.4 | -53.54 | 45.93 | 54 | -8.07 | 0-360 | 149 | H |
| 2 | 2.7167 | 66.16 | PK | 22.1 | - | -50.67 | 37.59 | 54 | -16.41 | 0-360 | 150 | H |
| 3 | 3.6256 | 68.58 | PK | 23.3 | - | -49.98 | 41.9 | 54 | -12.1 | 0-360 | 150 | H |
| 4 | 5.4347 | 64.74 | PK | 28 | - | -49.05 | 43.69 | 54 | -10.31 | 0-360 | 150 | H |
| 5 | 1.8116 | 69.57 | PK | 30 | 0.4 | -53.53 | 46.44 | 54 | -7.56 | 0-360 | 150 | V |
| 6 | 2.7187 | 68.85 | PK | 22.1 | - | -50.66 | 40.29 | 54 | -13.71 | 0-360 | 150 | V |
| 7 | 3.6256 | 79.48 | PK | 23.3 | - | -49.98 | 52.8 | 54 | -1.2 | 0-360 | 150 | V |
| 8 | 5.4367 | 68.44 | PK | 28 | - | -49.04 | 47.4 | 54 | -6.6 | 0-360 | 150 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 3.6241 | 82.9 | PK | 23.3 | - | -50.03 | 56.17 | 74 | -17.83 | 345 | 117 | V |
| | | Level with -12.65dB Duty Cycle Correction | | | | | 43.52 | 54 | -10.48 | | | |
| PK - Peak detector | | | | | | | | | | | | |

**Figure 28 Radiated Spurious Emissions below 1GHz, Middle Channel**



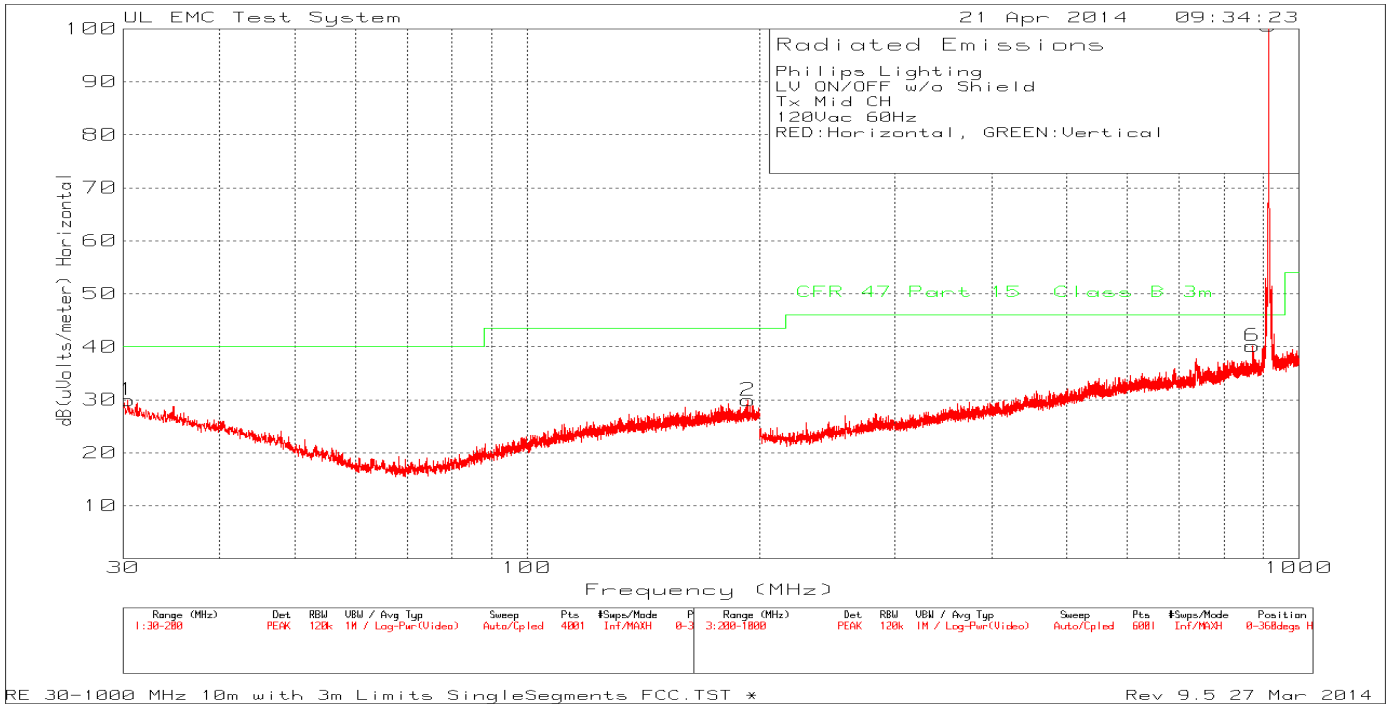
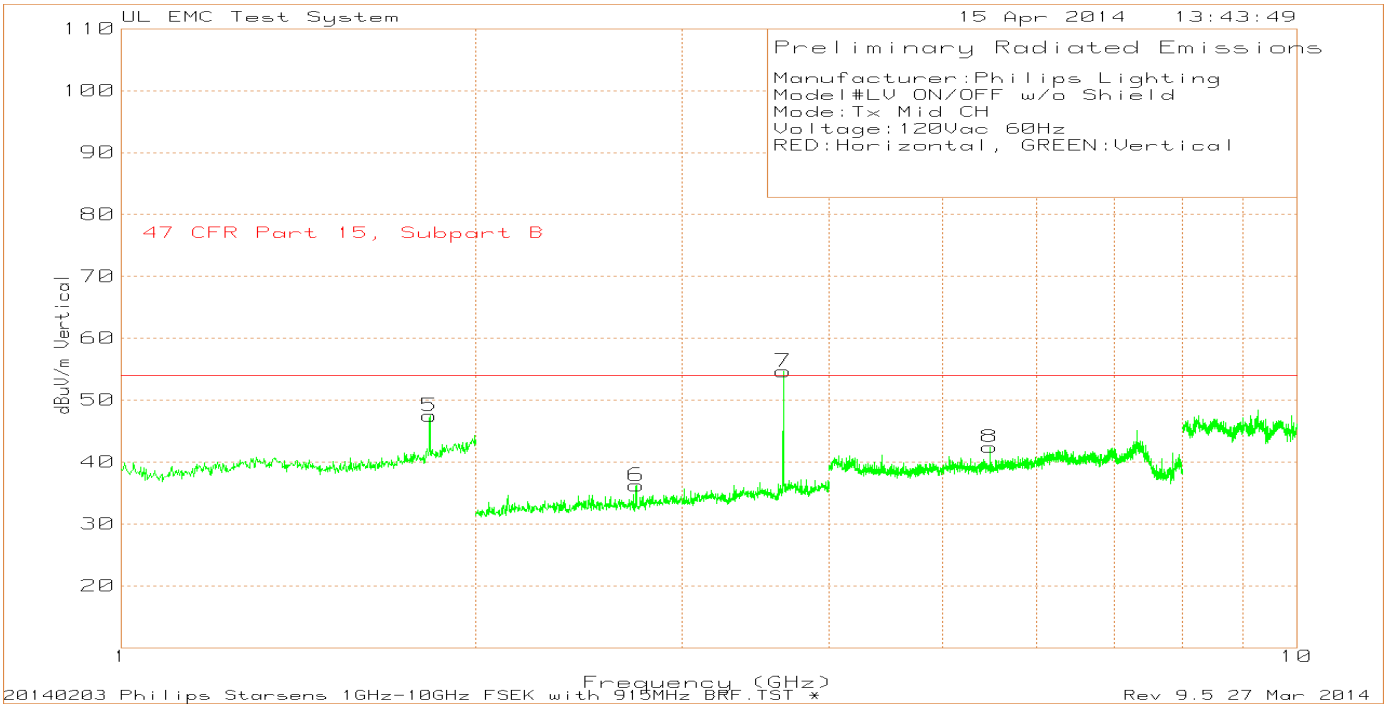



**Table 31 Radiated Spurious Emissions below 1GHz, Middle Channel**

| Philips Lighting | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LV ON/OFF w/o Shield | | | | | | | | | | | | |
| Tx Mid CH | | | | | | | | | | | | |
| 120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 Limit dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 30.3825 | 31.85 | PK | 17.7 | -30.1 | 10.5 | 29.95 | 40 | -10.05 | 0-360 | 399 | H |
| 2 | 193.4125 | 32.3 | PK | 16 | -28.9 | 10.5 | 29.9 | 43.52 | -13.62 | 0-360 | 99 | H |
| 3 | 30.17 | 36.25 | PK | 17.8 | -30.1 | 10.5 | 34.45 | 40 | -5.55 | 0-360 | 99 | V |
| 4 | 61.0675 | 45.35 | PK | 6.8 | -30 | 10.5 | 32.65 | 40 | -7.35 | 0-360 | 249 | V |
| 5 | 64.68 | 48 | PK | 6.3 | -30 | 10.5 | 34.8 | 40 | -5.2 | 0-360 | 249 | V |
| 6 | 871.7333 | 31.79 | PK | 22.5 | -24.6 | 10.5 | 40.19 | 46.02 | -5.83 | 0-360 | 399 | H |
| 7 | 914.1333 | 91.61 | PK | 23.1 | -24.6 | 10.5 | - | - | - | 0-360 | 100 | H |
| 8 | 870.4 | 32.57 | PK | 22.5 | -24.5 | 10.5 | 41.07 | 46.02 | -4.95 | 0-360 | 99 | V |
| 9 | 913.8667 | 92.89 | PK | 23.1 | -24.6 | 10.5 | - | - | - | 0-360 | 399 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |

**Figure 29 Radiated Spurious Emissions above 1GHz, Middle Channel**



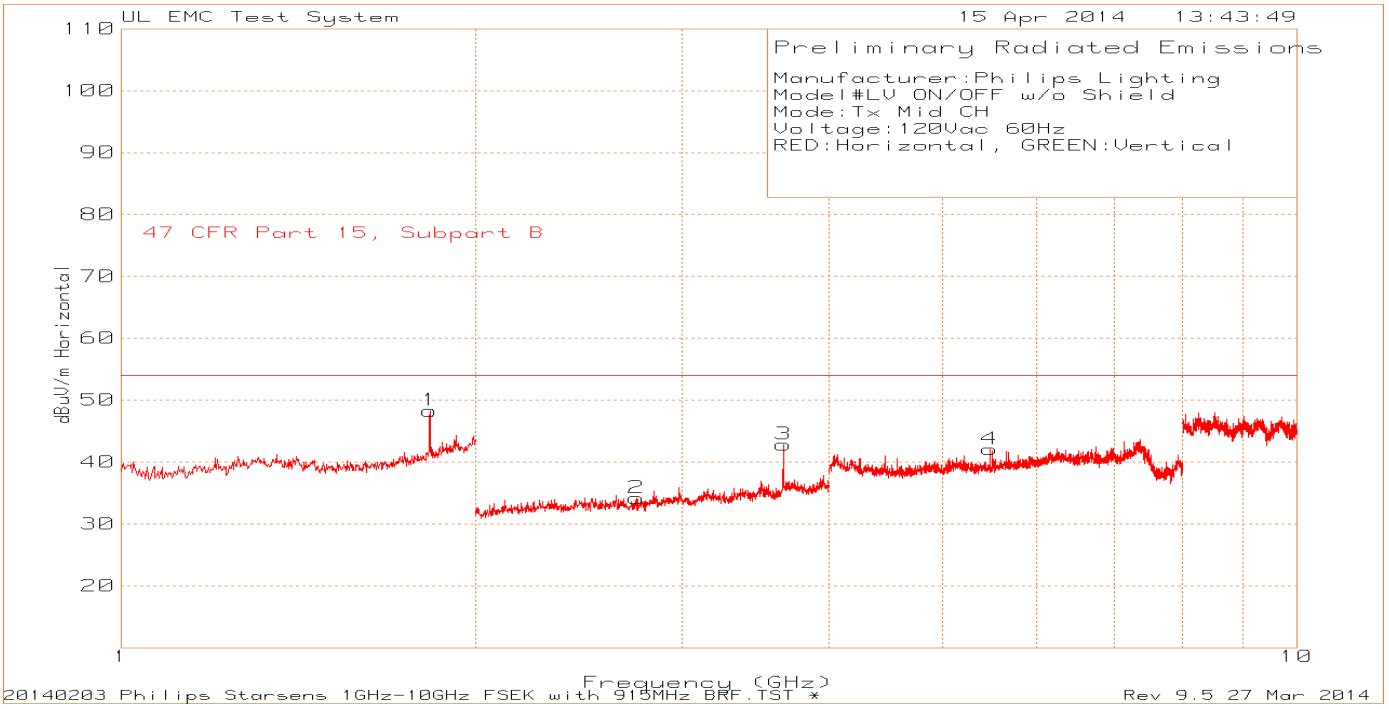
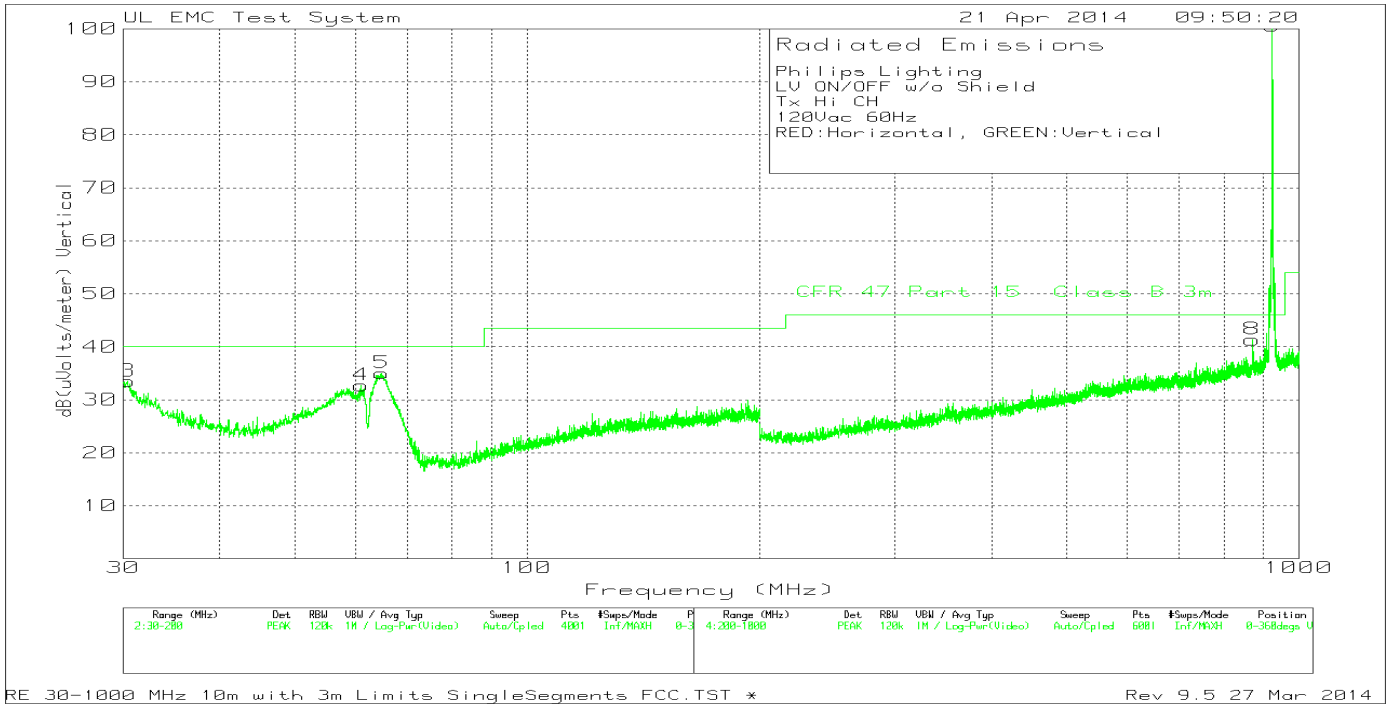



**Table 32 Radiated Spurious Emissions above 1GHz, Middle Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manufacturer:Philips Lighting | | | | | | | | | | | | |
| Model#LV ON/OFF w/o Shield | | | | | | | | | | | | |
| Mode:Tx Mid CH | | | | | | | | | | | | |
| Voltage:120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 1.8297 | 71.22 | PK | 30.2 | 0.4 | -53.52 | 48.3 | 54 | -5.7 | 0-360 | 149 | H |
| 2 | 2.7427 | 62.77 | PK | 22.1 | 0 | -50.67 | 34.2 | 54 | -19.8 | 0-360 | 150 | H |
| 3 | 3.6577 | 68.47 | PK | 23.4 | 0 | -49.04 | 42.83 | 54 | -11.17 | 0-360 | 150 | H |
| 4 | 5.4847 | 63.14 | PK | 28.1 | 0 | -49.17 | 42.07 | 54 | -11.93 | 0-360 | 101 | H |
| 5 | 1.8297 | 70.38 | PK | 30.2 | 0.4 | -53.52 | 47.46 | 54 | -6.54 | 0-360 | 150 | V |
| 6 | 2.7427 | 64.78 | PK | 22.1 | 0 | -50.67 | 36.21 | 54 | -17.79 | 0-360 | 150 | V |
| 7 | 3.6577 | 80.28 | PK | 23.4 | 0 | -49.04 | 54.64 | 54 | 0.64 | 0-360 | 150 | V |
| 8 | 5.4847 | 63.49 | PK | 28.1 | 0 | -49.17 | 42.42 | 54 | -11.58 | 0-360 | 150 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 3.656 | 83.91 | PK | 23.4 | 0 | -49.08 | 58.23 | 74 | -15.77 | 168 | 116 | V |
| | | Level with -12.65dB Duty Cycle Correction | | | | | 45.58 | 54 | -8.42 | | | |
| PK - Peak detector | | | | | | | | | | | | |

**Figure 30 Radiated Spurious Emissions below 1GHz, High Channel**



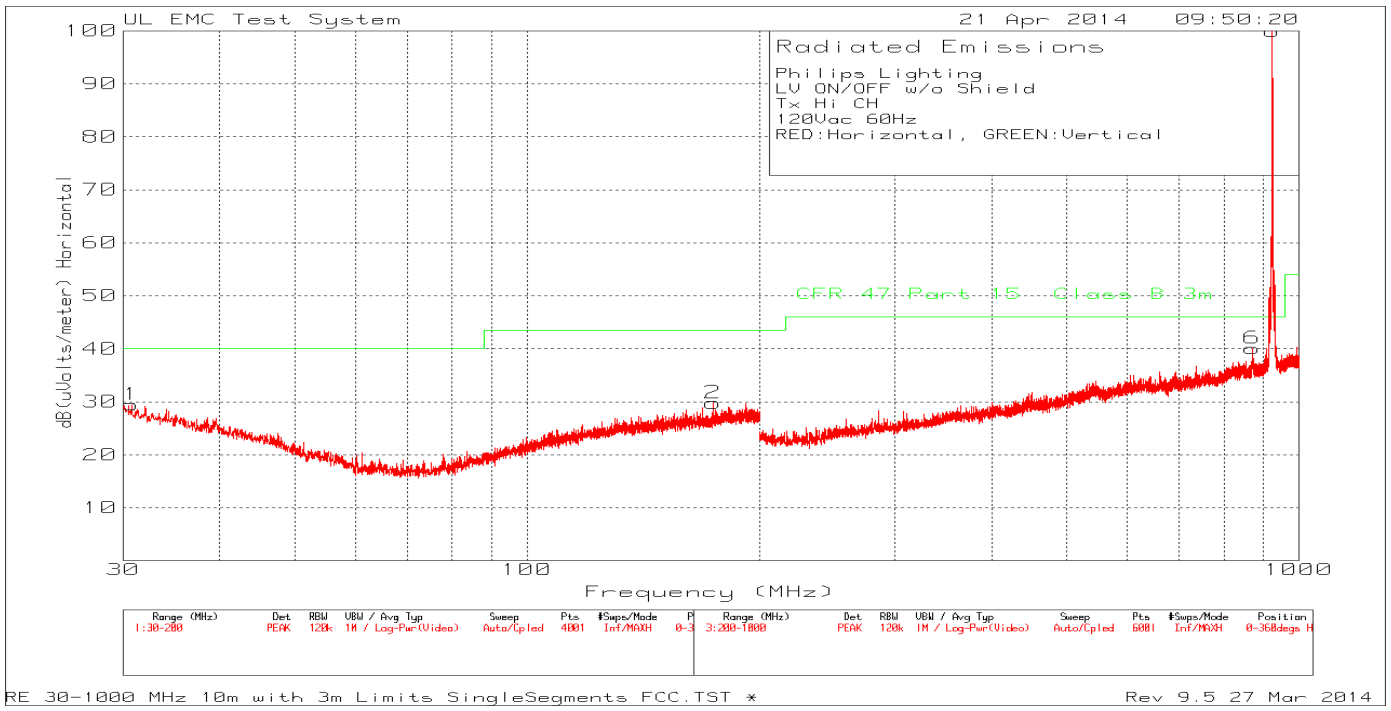
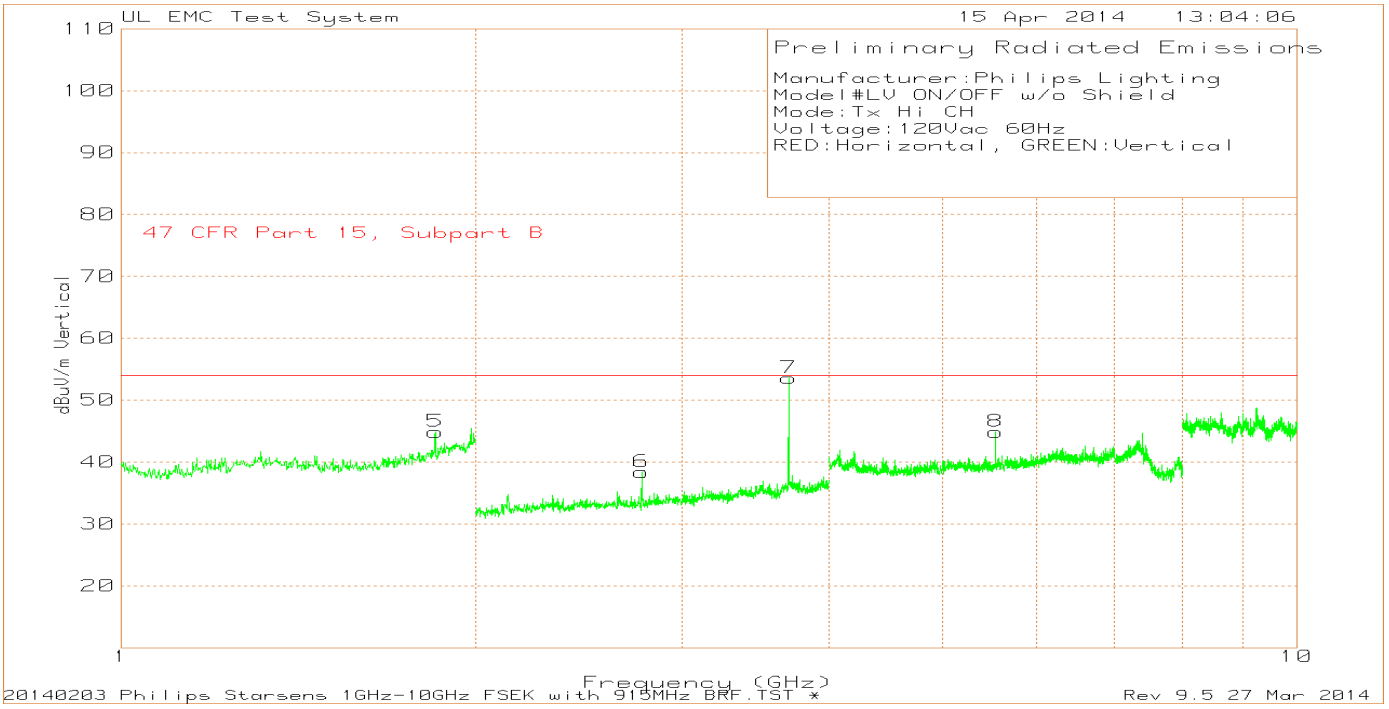



**Table 33 Radiated Spurious Emissions below 1GHz, High Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philips Lighting | | | | | | | | | | | | |
| LV ON/OFF w/o Shield | | | | | | | | | | | | |
| Tx Hi CH | | | | | | | | | | | | |
| 120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 Limit dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 30.7225 | 31.56 | PK | 17.5 | -30.1 | 10.5 | 29.46 | 40 | -10.54 | 0-360 | 99 | H |
| 2 | 174.33 | 33.07 | PK | 15.5 | -29.3 | 10.5 | 29.77 | 43.52 | -13.75 | 0-360 | 249 | H |
| 3 | 30.34 | 35.38 | PK | 17.7 | -30.1 | 10.5 | 33.48 | 40 | -6.52 | 0-360 | 99 | V |
| 4 | 60.9825 | 45.43 | PK | 6.8 | -30 | 10.5 | 32.73 | 40 | -7.27 | 0-360 | 249 | V |
| 5 | 64.85 | 48.22 | PK | 6.3 | -30 | 10.5 | 35.02 | 40 | -4.98 | 0-360 | 249 | V |
| 6 | 870.4 | 31.58 | PK | 22.5 | -24.5 | 10.5 | 40.08 | 46.02 | -5.94 | 0-360 | 199 | H |
| 7 | 924.1333 | 91.37 | PK | 22.8 | -24.7 | 10.5 | 99.97 | 46.02 | 53.95 | 0-360 | 299 | H |
| 8 | 870.8 | 32.88 | PK | 22.5 | -24.5 | 10.5 | 41.38 | 46.02 | -4.64 | 0-360 | 399 | V |
| 9 | 923.8667 | 91.99 | PK | 22.8 | -24.7 | 10.5 | 100.59 | 46.02 | 54.57 | 0-360 | 199 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor | Level dBuV/m | Limit FCC 15.209 Limit | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 64.898077 | 44.24 | QP | 6.3 | -30 | 10.5 | 31.04 | 40 | -8.96 | 5 | 231 | V |
| QP - Quasi-Peak detector | | | | | | | | | | | | |

**Figure 31 Radiated Spurious Emissions above 1GHz, High Channel**



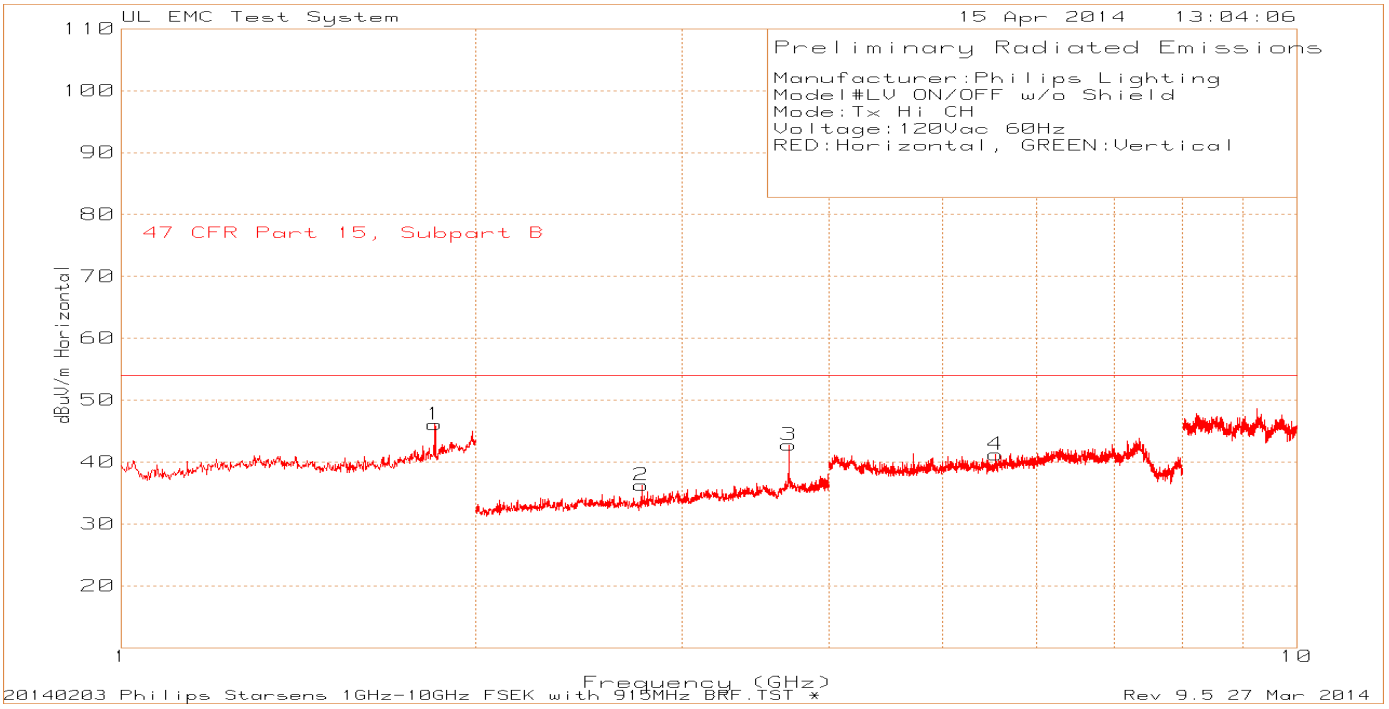
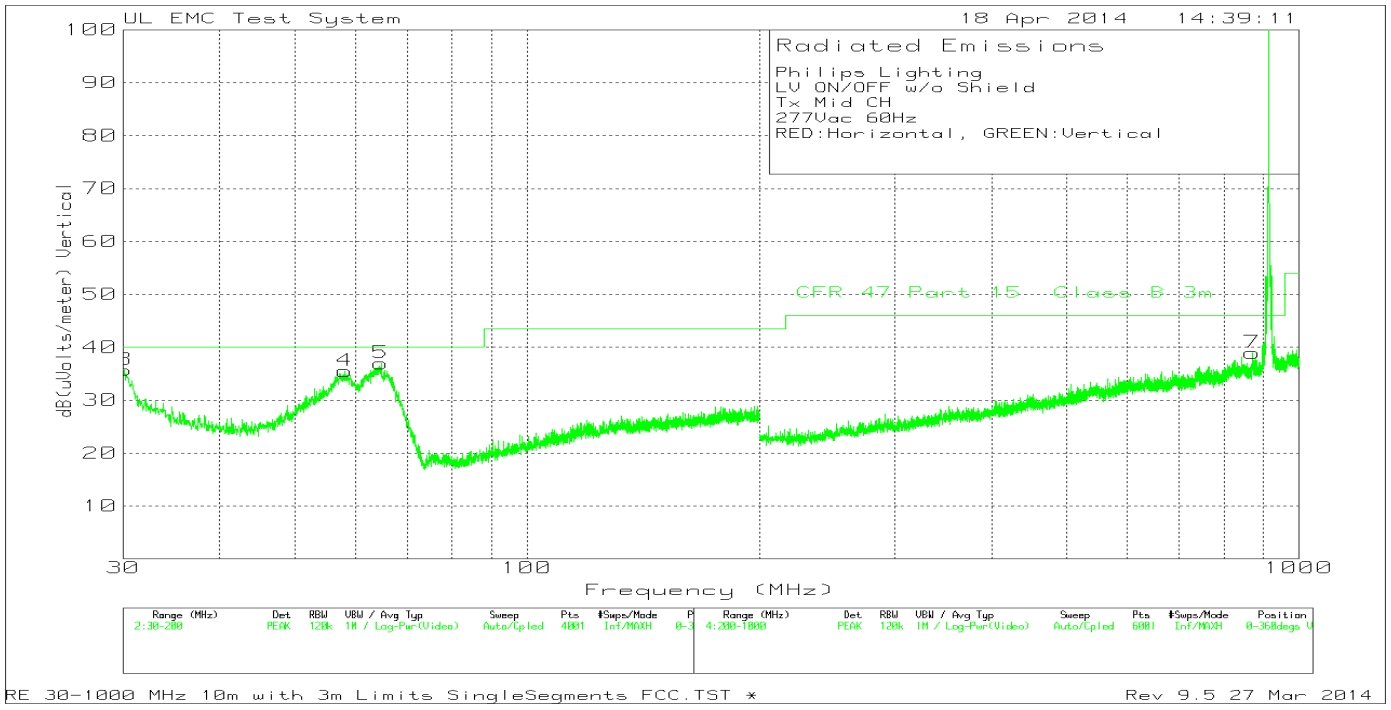



**Table 34 Radiated Spurious Emissions above 1GHz, High Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manufacturer:Philips Lighting | | | | | | | | | | | | |
| Model#LV ON/OFF w/o Shield | | | | | | | | | | | | |
| Mode:Tx Hi CH | | | | | | | | | | | | |
| Voltage:120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 1.8477 | 68.72 | PK | 30.5 | 0.3 | -53.44 | 46.08 | 54 | -7.92 | 0-360 | 149 | H |
| 2 | 2.7708 | 64.63 | PK | 22.2 | - | -50.57 | 36.26 | 54 | -17.74 | 0-360 | 150 | H |
| 3 | 3.6977 | 68.03 | PK | 23.5 | - | -48.77 | 42.76 | 54 | -11.24 | 0-360 | 150 | H |
| 4 | 5.5448 | 62.39 | PK | 28.3 | - | -49.47 | 41.22 | 54 | -12.78 | 0-360 | 150 | H |
| 5 | 1.8497 | 67.5 | PK | 30.5 | 0.3 | -53.42 | 44.88 | 54 | -9.12 | 0-360 | 150 | V |
| 6 | 2.7708 | 66.75 | PK | 22.2 | - | -50.57 | 38.38 | 54 | -15.62 | 0-360 | 150 | V |
| 7 | 3.6977 | 78.85 | PK | 23.5 | - | -48.77 | 53.58 | 54 | -0.42 | 0-360 | 150 | V |
| 8 | 5.5448 | 66.06 | PK | 28.3 | - | -49.47 | 44.89 | 54 | -9.11 | 0-360 | 150 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 3.6961 | 82.51 | PK | 23.5 | - | -48.76 | 57.25 | 74 | -16.75 | 161 | 116 | V |
| | | Level with -12.65dB Duty Cycle Correction | | | | | 44.6 | 54 | -9.4 | | | |
| PK - Peak detector | | | | | | | | | | | | |

### 4.3.2 Low Voltage On/Off (277V/60Hz)

**Figure 32 Radiated Spurious Emissions below 1GHz, Middle Channel**



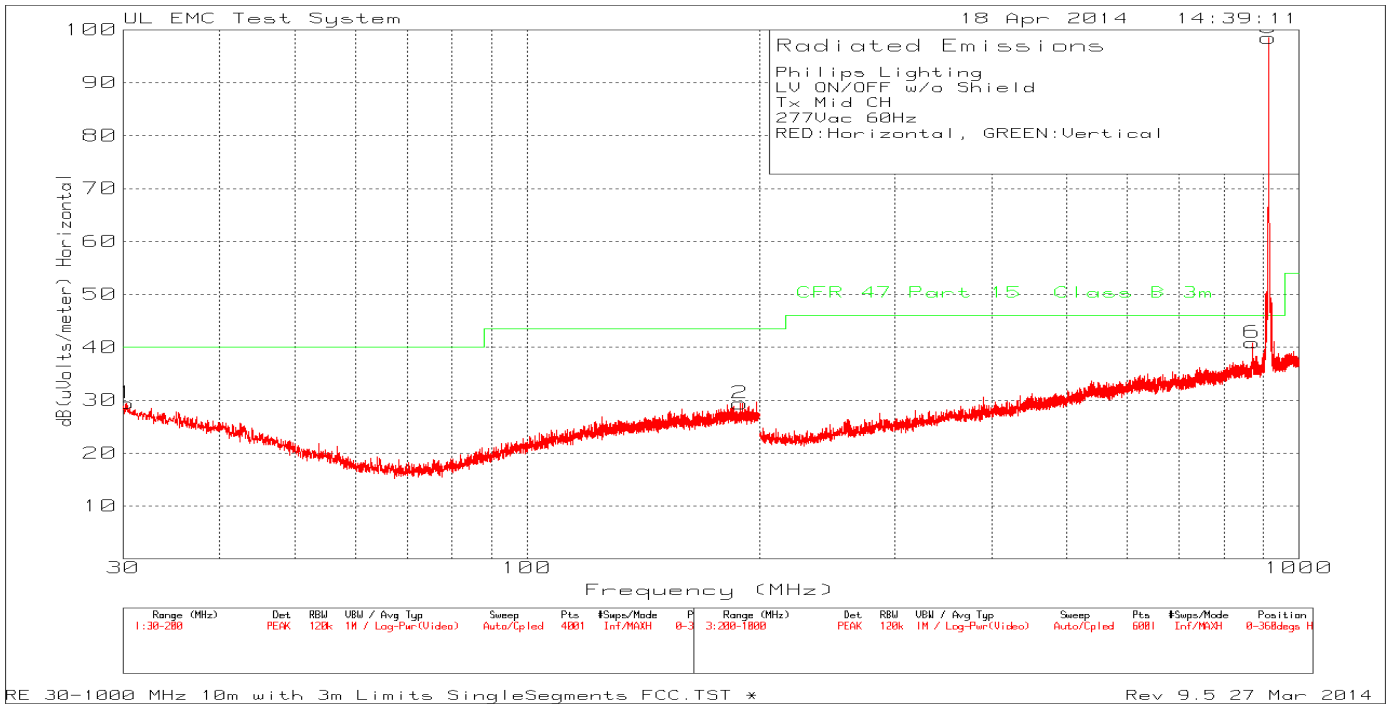
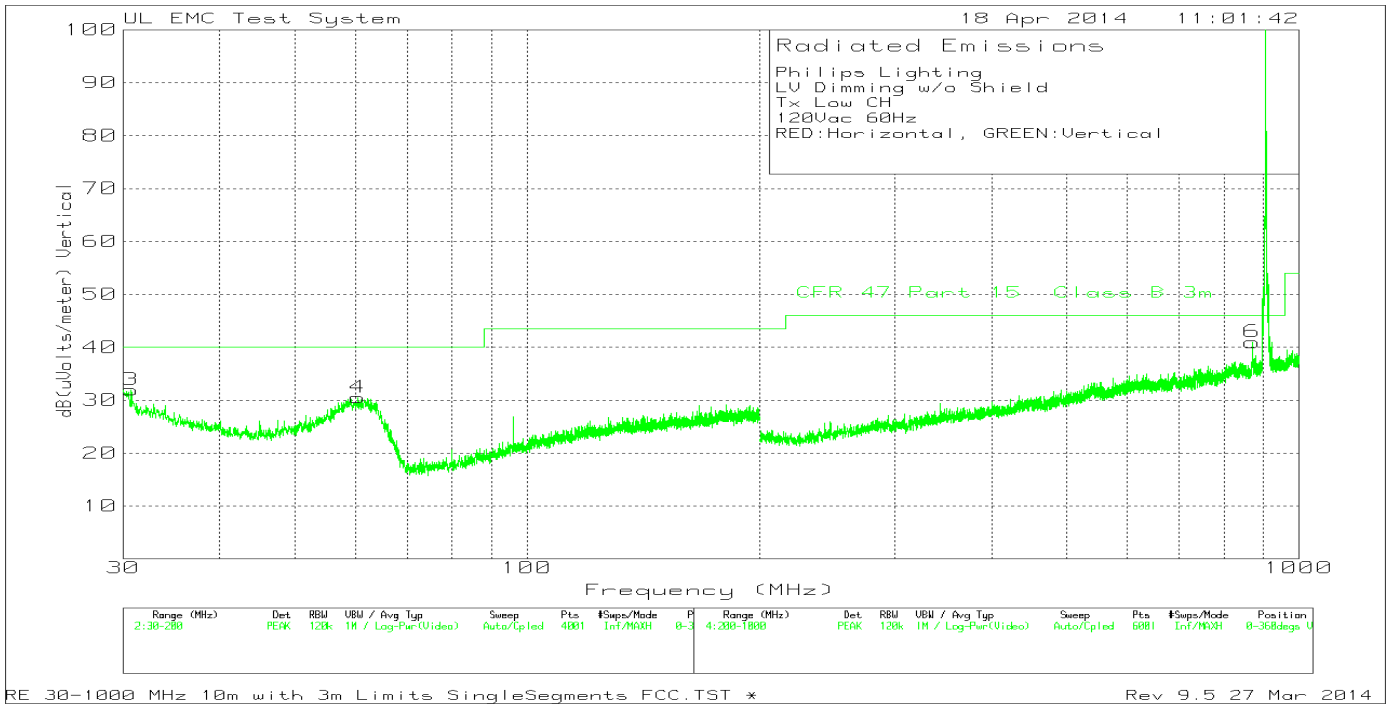



**Table 35 Radiated Spurious Emissions below 1GHz, Middle Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philips Lighting | | | | | | | | | | | | |
| LV ON/OFF w/o Shield | | | | | | | | | | | | |
| Tx Mid CH | | | | | | | | | | | | |
| 277Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 Limit dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 30.2975 | 31.34 | PK | 17.7 | -30.1 | 10.5 | 29.44 | 40 | -10.56 | 0-360 | 102 | H |
| 2 | 188.78 | 32.12 | PK | 15.9 | -29.1 | 10.5 | 29.42 | 43.52 | -14.1 | 0-360 | 249 | H |
| 3 | 30.0425 | 37.42 | PK | 17.9 | -30.1 | 10.5 | 35.72 | 40 | -4.28 | 0-360 | 249 | V |
| 4 | 58.0925 | 47.84 | PK | 7.3 | -30.1 | 10.5 | 35.54 | 40 | -4.46 | 0-360 | 249 | V |
| 5 | 64.68 | 50.2 | PK | 6.3 | -30 | 10.5 | 37 | 40 | -3 | 0-360 | 249 | V |
| 6 | 870.2667 | 32.4 | PK | 22.5 | -24.5 | 10.5 | 40.9 | 46.02 | -5.12 | 0-360 | 99 | H |
| 8 | 914.1333 | 89.48 | PK | 23.1 | -24.6 | 10.5 | 98.48 | 46.02 | 52.46 | 0-360 | 99 | H |
| 7 | 870.8 | 30.48 | PK | 22.5 | -24.5 | 10.5 | 38.98 | 46.02 | -7.04 | 0-360 | 299 | V |
| 9 | 914.2667 | 94.14 | PK | 23.1 | -24.6 | 10.5 | 103.14 | 46.02 | 57.12 | 0-360 | 200 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor | Level dBuV/m | Limit FCC 15.209 Limit | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 64.582244 | 46.03 | QP | 6.3 | -30 | 10.5 | 32.83 | 40 | -7.17 | 293 | 248 | V |
| | 57.925833 | 43.26 | QP | 7.3 | -30.1 | 10.5 | 30.96 | 40 | -9.04 | 0 | 249 | V |
| | 30.047372 | 33.75 | QP | 17.9 | -30.1 | 10.5 | 32.05 | 40 | -7.95 | 344 | 100 | V |
| QP - Quasi-Peak detector | | | | | | | | | | | | |

### 4.3.3 Low Voltage Dimming (120V/60Hz)

**Figure 33 Radiated Spurious Emissions below 1GHz, Low Channel**



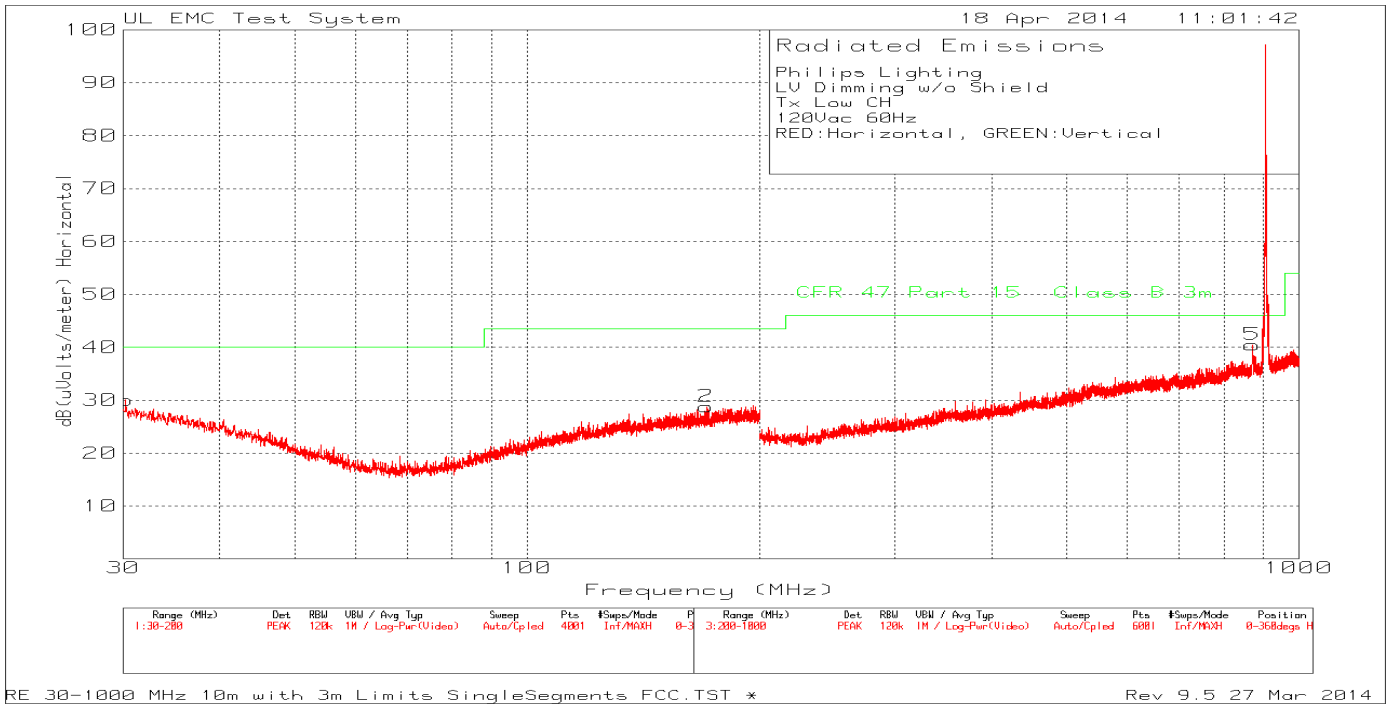
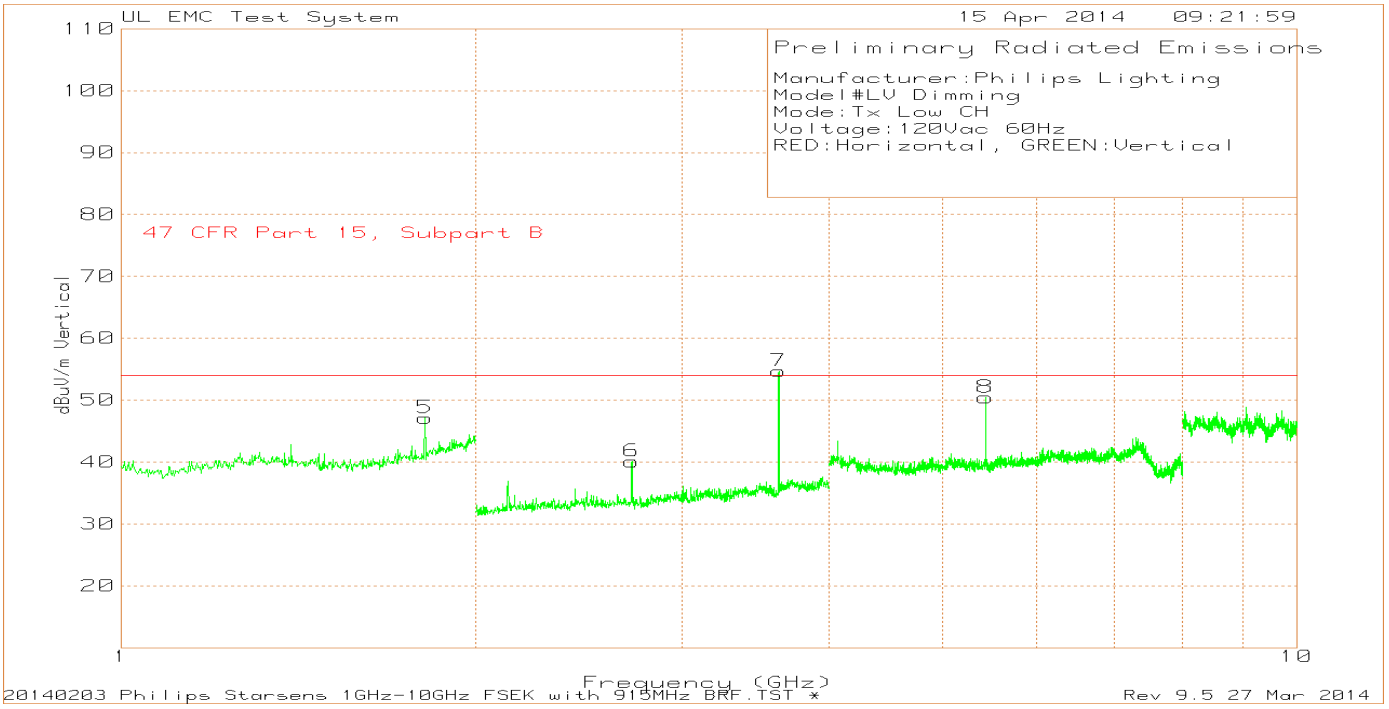



**Table 36 Radiated Spurious Emissions below 1GHz, Low Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philips Lighting | | | | | | | | | | | | |
| LV Dimming w/o Shield | | | | | | | | | | | | |
| Tx Low CH | | | | | | | | | | | | |
| 120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 30.17 | 31.87 | PK | 17.8 | -30.1 | 10.5 | 30.07 | 40 | -9.93 | 0-360 | 99 | H |
| 2 | * 170.76 | 32.41 | PK | 15.3 | -29.4 | 10.5 | 28.81 | 43.52 | -14.71 | 0-360 | 99 | H |
| 3 | 30.68 | 34.06 | PK | 17.5 | -30.1 | 10.5 | 31.96 | 40 | -8.04 | 0-360 | 99 | V |
| 4 | 60.3875 | 43.23 | PK | 6.8 | -30 | 10.5 | 30.53 | 40 | -9.47 | 0-360 | 249 | V |
| 5 | 870.8 | 31.97 | PK | 22.5 | -24.5 | 10.5 | 40.47 | 46.02 | -5.55 | 0-360 | 200 | H |
| 6 | 870.6667 | 32.48 | PK | 22.5 | -24.5 | 10.5 | 40.98 | 46.02 | -5.04 | 0-360 | 99 | V |
| * - indicates frequency in CFR15.205/IC7.2.2 Restricted Band | | | | | | | | | | | | |
| PK - Peak detector | | | | | | | | | | | | |

**Figure 34 Radiated Spurious Emissions above 1GHz, Low Channel**



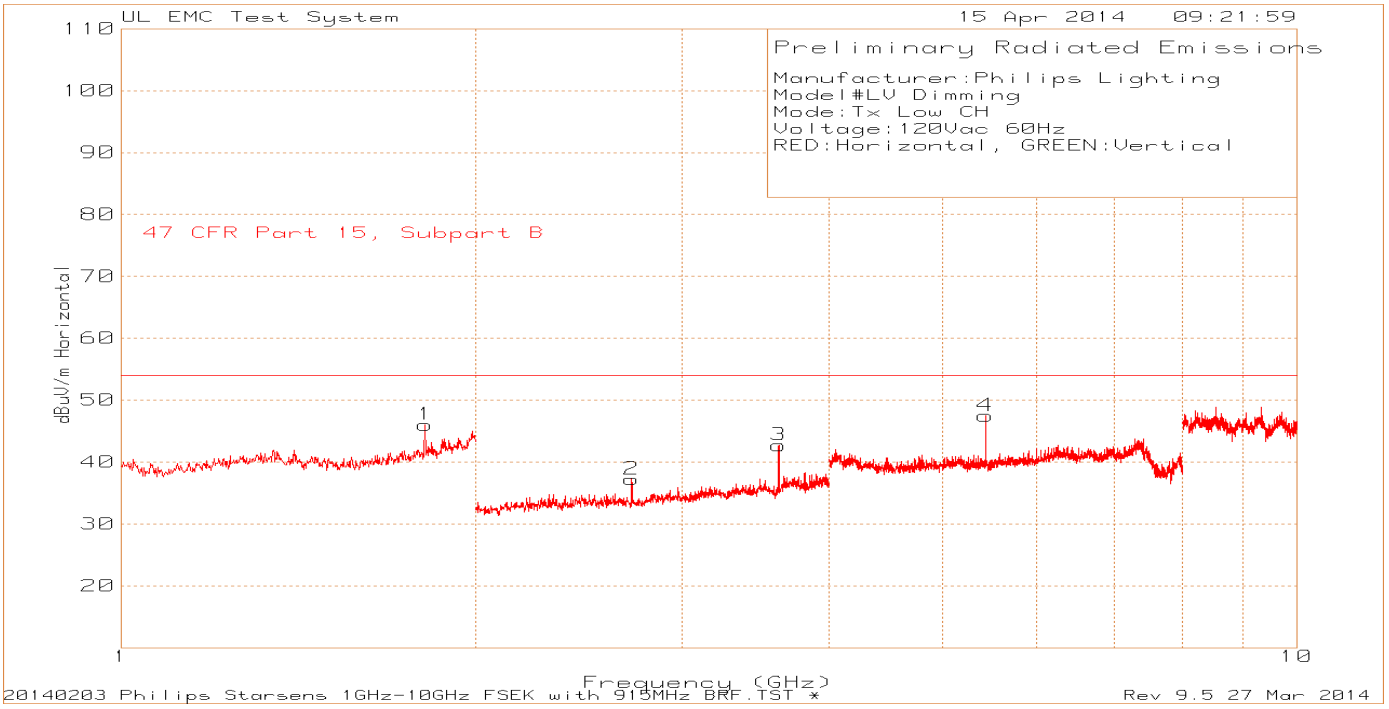
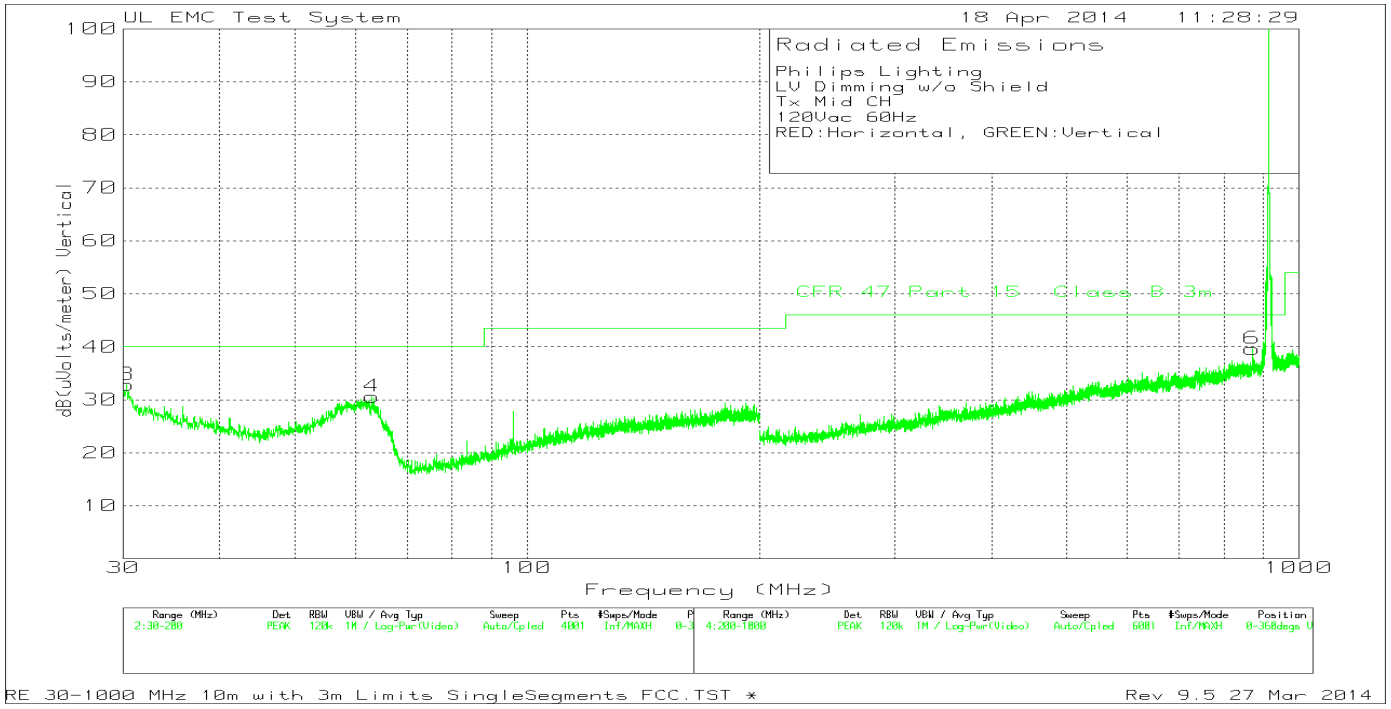



**Table 37 Radiated Spurious Emissions above 1GHz, Low Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manufacturer:Philips Lighting | | | | | | | | | | | | |
| Model#LV Dimming | | | | | | | | | | | | |
| Mode:Tx Low CH | | | | | | | | | | | | |
| Voltage:120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 1.8136 | 69.18 | PK | 30 | 0.4 | -53.54 | 46.04 | 54 | -7.96 | 0-360 | 149 | H |
| 2 | 2.7167 | 65.78 | PK | 22.1 | | -50.67 | 37.21 | 54 | -16.79 | 0-360 | 150 | H |
| 3 | 3.6256 | 69.4 | PK | 23.3 | | -49.98 | 42.72 | 54 | -11.28 | 0-360 | 150 | H |
| 4 | 5.4367 | 68.51 | PK | 28 | | -49.04 | 47.47 | 54 | -6.53 | 0-360 | 150 | H |
| 5 | 1.8136 | 70.25 | PK | 30 | 0.4 | -53.54 | 47.11 | 54 | -6.89 | 0-360 | 150 | V |
| 6 | 2.7187 | 68.68 | PK | 22.1 | | -50.66 | 40.12 | 54 | -13.88 | 0-360 | 150 | V |
| 7 | 3.6256 | 81.39 | PK | 23.3 | | -49.98 | 54.71 | 54 | 0.71 | 0-360 | 150 | V |
| 8 | 5.4367 | 71.46 | PK | 28 | | -49.04 | 50.42 | 54 | -3.58 | 0-360 | 150 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 3.6239 | 85.01 | PK | 23.3 | | -50.03 | 58.28 | 74 | -15.72 | 11 | 117 | V |
| | | Level with -12.65dB Duty Cycle Correction | | | | | 45.63 | 54 | -8.37 | | | |
| PK - Peak detector | | | | | | | | | | | | |

**Figure 35 Radiated Spurious Emissions below 1GHz, Middle Channel**



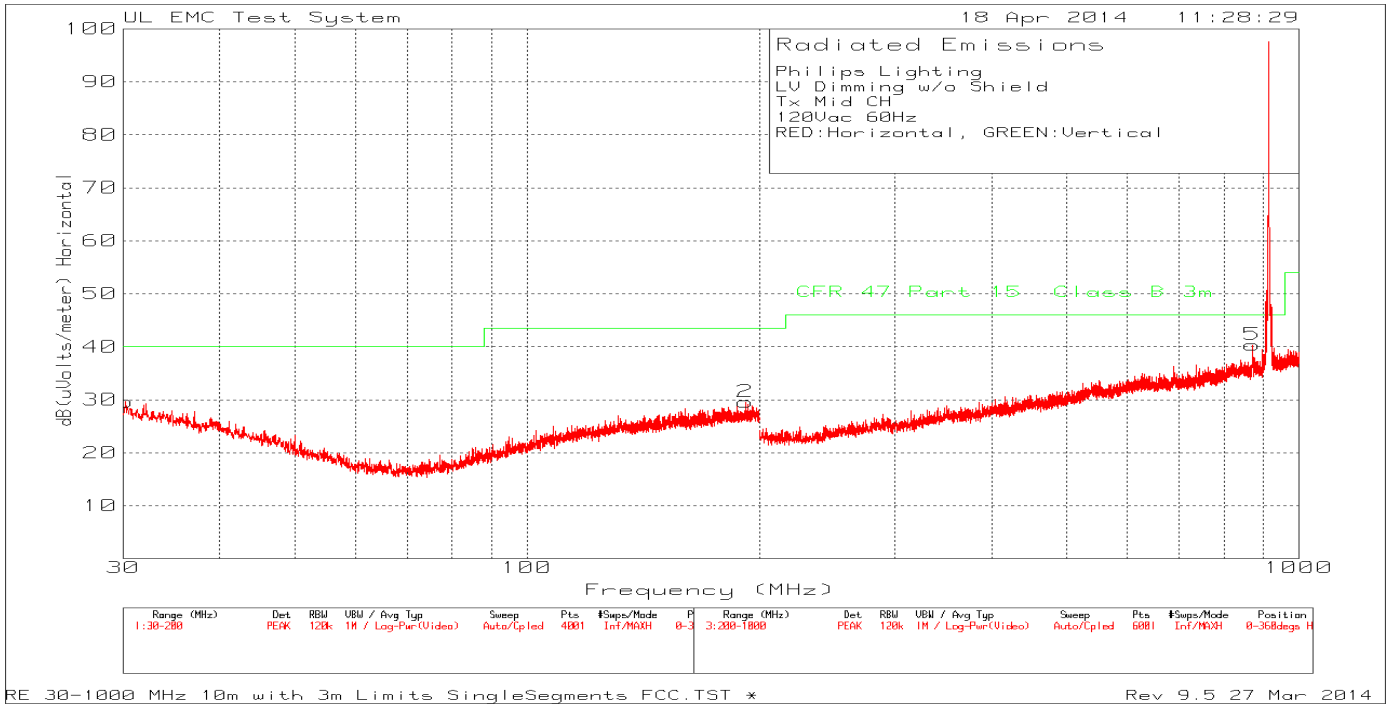
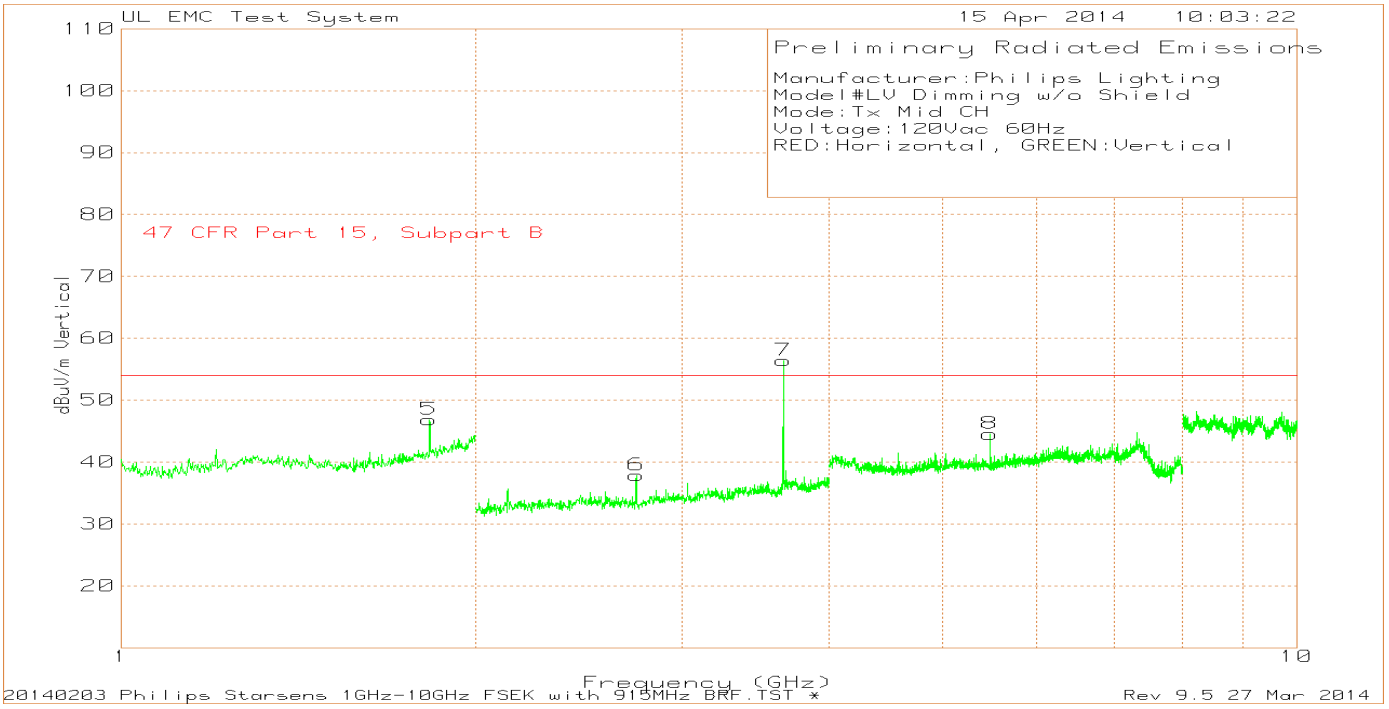



**Table 38 Radiated Spurious Emissions below 1GHz, Middle Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philips Lighting | | | | | | | | | | | | |
| LV Dimming w/o Shield | | | | | | | | | | | | |
| Tx Mid CH | | | | | | | | | | | | |
| 120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 30.17 | 31.49 | PK | 17.8 | -30.1 | 10.5 | 29.69 | 40 | -10.31 | 0-360 | 99 | H |
| 2 | 192.095 | 31.9 | PK | 16.1 | -28.9 | 10.5 | 29.6 | 43.52 | -13.92 | 0-360 | 99 | H |
| 3 | 30.2975 | 34.71 | PK | 17.7 | -30.1 | 10.5 | 32.81 | 40 | -7.19 | 0-360 | 99 | V |
| 4 | 62.98 | 43.6 | PK | 6.5 | -30 | 10.5 | 30.6 | 40 | -9.4 | 0-360 | 249 | V |
| 5 | 870.9333 | 31.85 | PK | 22.5 | -24.5 | 10.5 | 40.35 | 46.02 | -5.67 | 0-360 | 299 | H |
| 6 | 870.1333 | 31.13 | PK | 22.5 | -24.5 | 10.5 | 39.63 | 46.02 | -6.39 | 0-360 | 299 | V |
| PK - Peak detector | | | | | | | | | | | | |

**Figure 36 Radiated Spurious Emissions above 1GHz, Middle Channel**



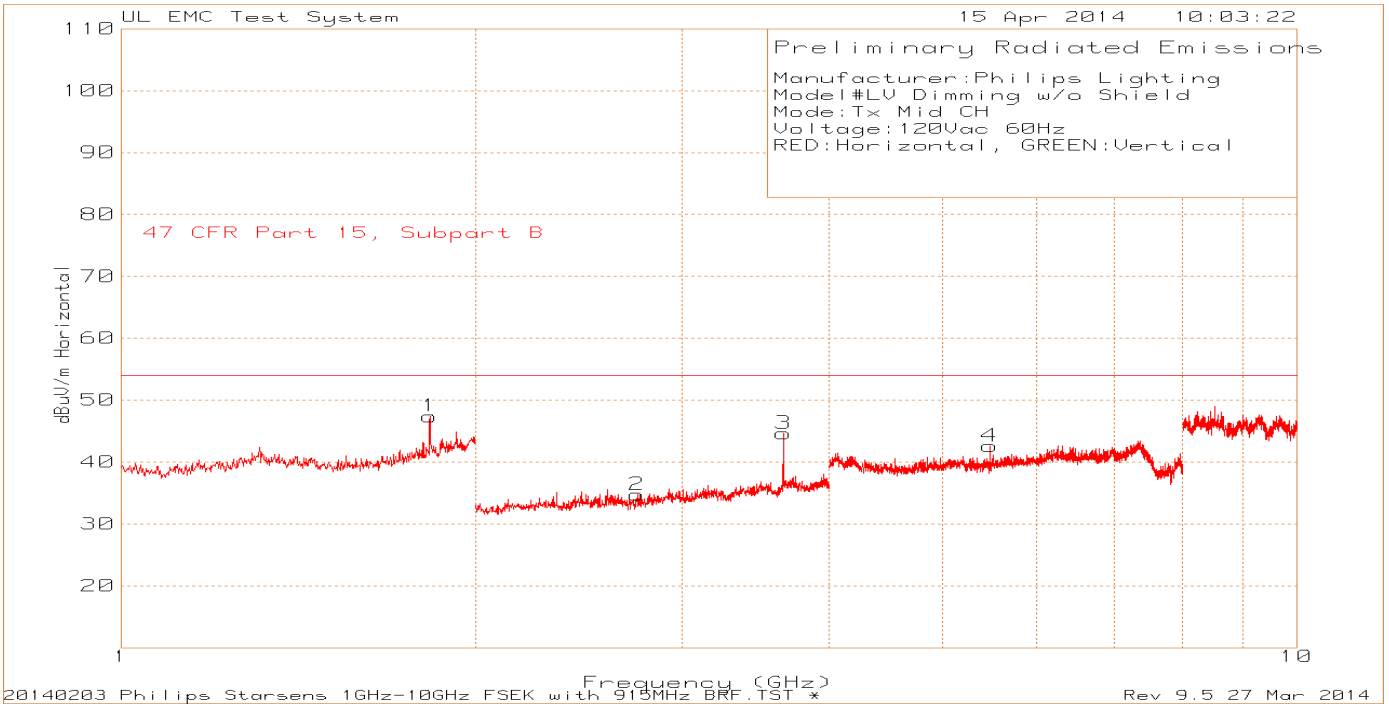



**Table 39 Radiated Spurious Emissions above 1GHz, Middle Channel**

Manufacturer:Philips Lighting

Model#LV Dimming w/o Shield

Mode:Tx Mid CH

Voltage:120Vac 60Hz

RED:Horizontal, GREEN:Vertical

Trace Markers

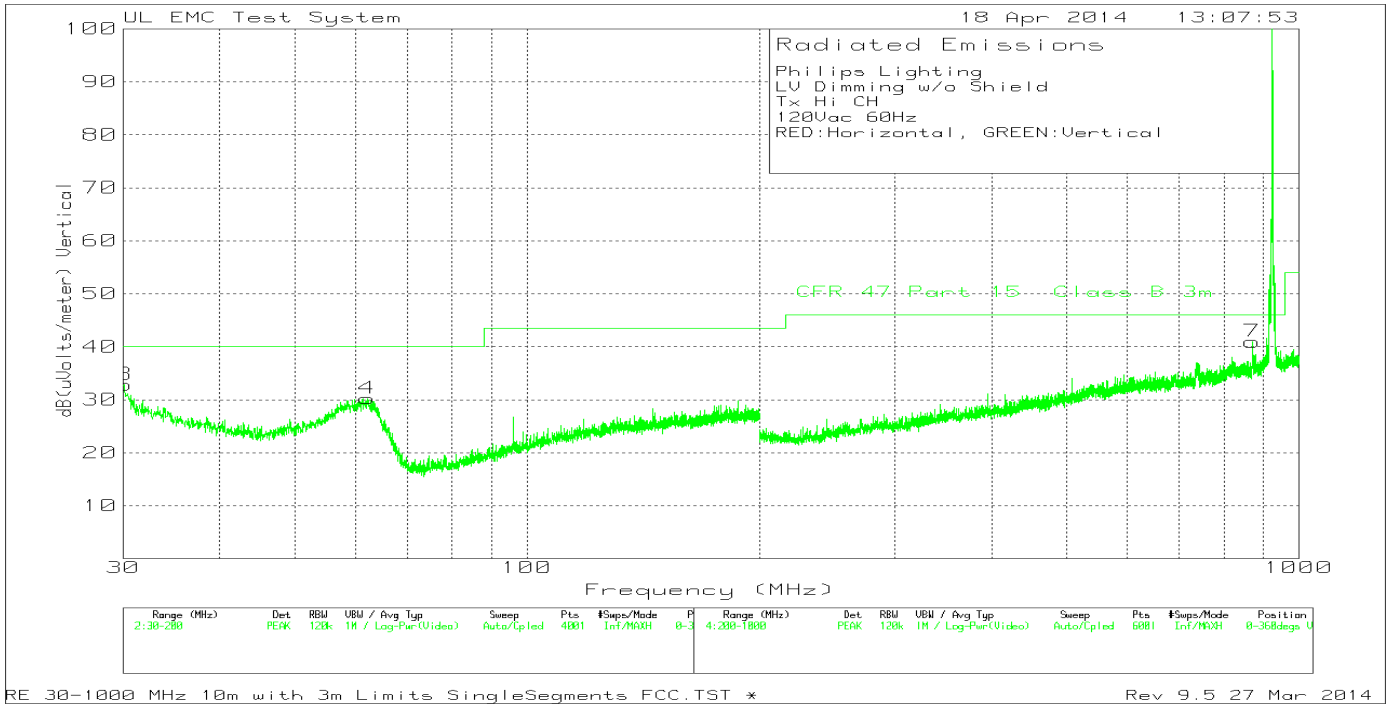
| Marker No. | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.8297 | 70.32 | PK | 30.2 | 0.4 | -53.52 | 47.4 | 54 | -6.6 | 0-360 | 117 | H |
| 2 | 2.7467 | 63.29 | PK | 22.1 | | -50.66 | 34.73 | 54 | -19.27 | 0-360 | 150 | H |
| 3 | 3.6577 | 70.25 | PK | 23.4 | | -49.04 | 44.61 | 54 | -9.39 | 0-360 | 150 | H |
| 4 | 5.4847 | 63.64 | PK | 28.1 | | -49.17 | 42.57 | 54 | -11.43 | 0-360 | 150 | H |
| 5 | 1.8277 | 69.8 | PK | 30.2 | 0.4 | -53.53 | 46.87 | 54 | -7.13 | 0-360 | 150 | V |
| 6 | 2.7427 | 66.43 | PK | 22.1 | | -50.67 | 37.86 | 54 | -16.14 | 0-360 | 150 | V |
| 7 | 3.6577 | 82.06 | PK | 23.4 | | -49.04 | 56.42 | 54 | 2.42 | 0-360 | 150 | V |
| 8 | 5.4847 | 65.62 | PK | 28.1 | | -49.17 | 44.55 | 54 | -9.45 | 0-360 | 150 | V |

PK - Peak detector

Radiated Emission Data

| | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3.6557 | 86.06 | PK | 23.4 | | -49.08 | 60.38 | 74 | -13.62 | 5 | 116 | V |
| PK - Peak detector | | | | Level with -12.65dB Duty Cycle Correction | | | 47.73 | 54 | -6.27 | | | |

**Figure 37 Radiated Spurious Emissions below 1GHz, High Channel**



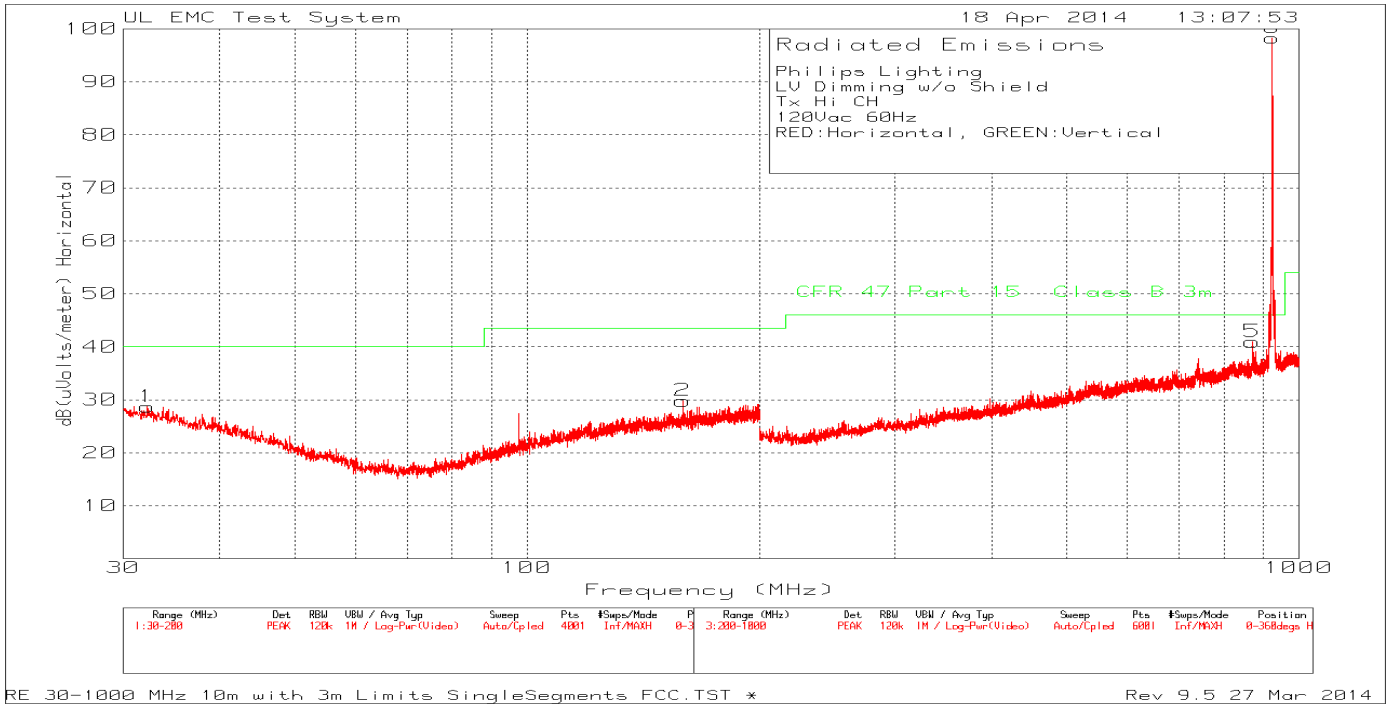
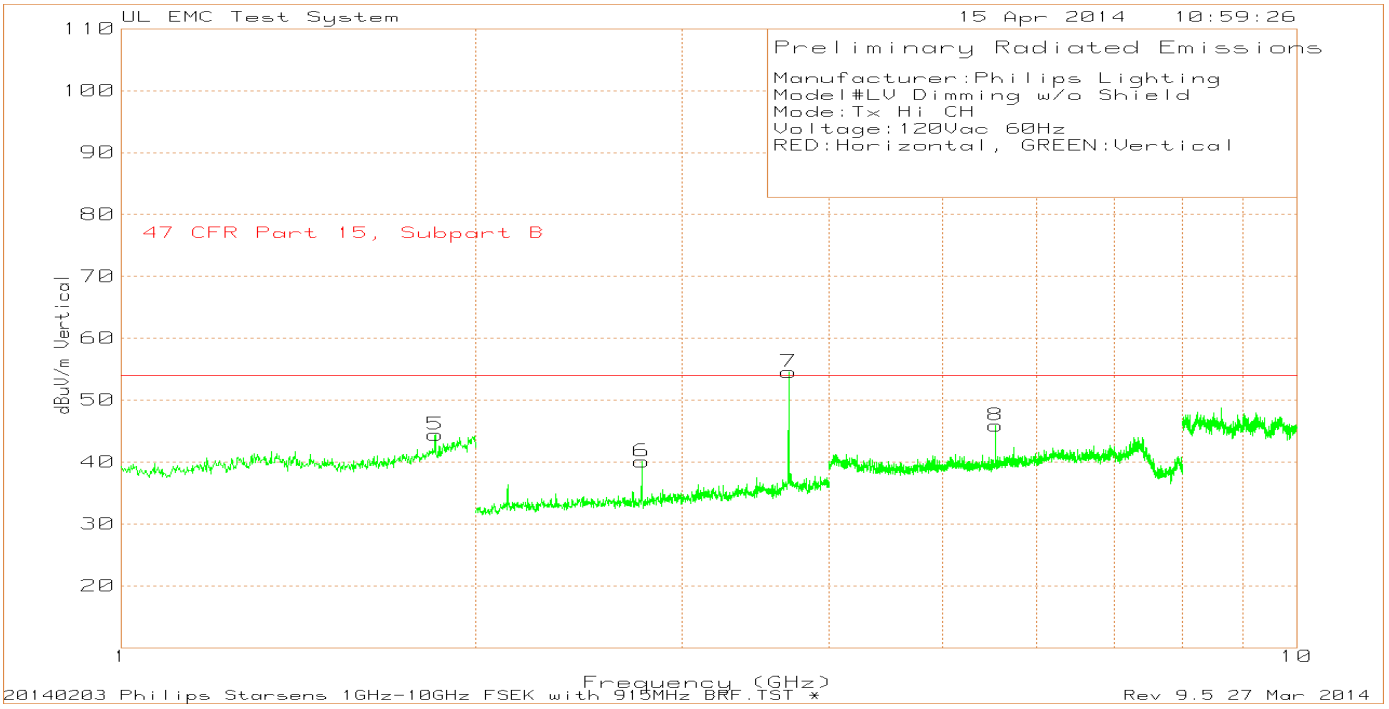



**Table 40 Radiated Spurious Emissions below 1GHz, High Channel**

| Philips Lighting | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LV Dimming w/o Shield | | | | | | | | | | | | |
| Tx Hi CH | | | | | | | | | | | | |
| 120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 32.21 | 31.38 | PK | 16.9 | -30.1 | 10.5 | 28.68 | 40 | -11.32 | 0-360 | 99 | H |
| 2 | 159.1575 | 33.83 | PK | 15.1 | -29.6 | 10.5 | 29.83 | 43.52 | -13.69 | 0-360 | 249 | H |
| 3 | 30.0425 | 34.51 | PK | 17.9 | -30.1 | 10.5 | 32.81 | 40 | -7.19 | 0-360 | 249 | V |
| 4 | 62.13 | 43.16 | PK | 6.5 | -29.9 | 10.5 | 30.26 | 40 | -9.74 | 0-360 | 249 | V |
| 5 | 871.2 | 32.54 | PK | 22.5 | -24.6 | 10.5 | 40.94 | 46.02 | -5.08 | 0-360 | 399 | H |
| 6 | 924.1333 | 89.7 | PK | 22.8 | -24.7 | 10.5 | 98.3 | 46.02 | 52.28 | 0-360 | 299 | H |
| 7 | 870.2667 | 32.46 | PK | 22.5 | -24.5 | 10.5 | 40.96 | 46.02 | -5.06 | 0-360 | 399 | V |
| 8 | 924.1333 | 94.59 | PK | 22.8 | -24.7 | 10.5 | 103.19 | 46.02 | 57.17 | 0-360 | 199 | V |
| PK - Peak detector | | | | | | | | | | | | |

**Figure 38 Radiated Spurious Emissions above 1GHz, High Channel**



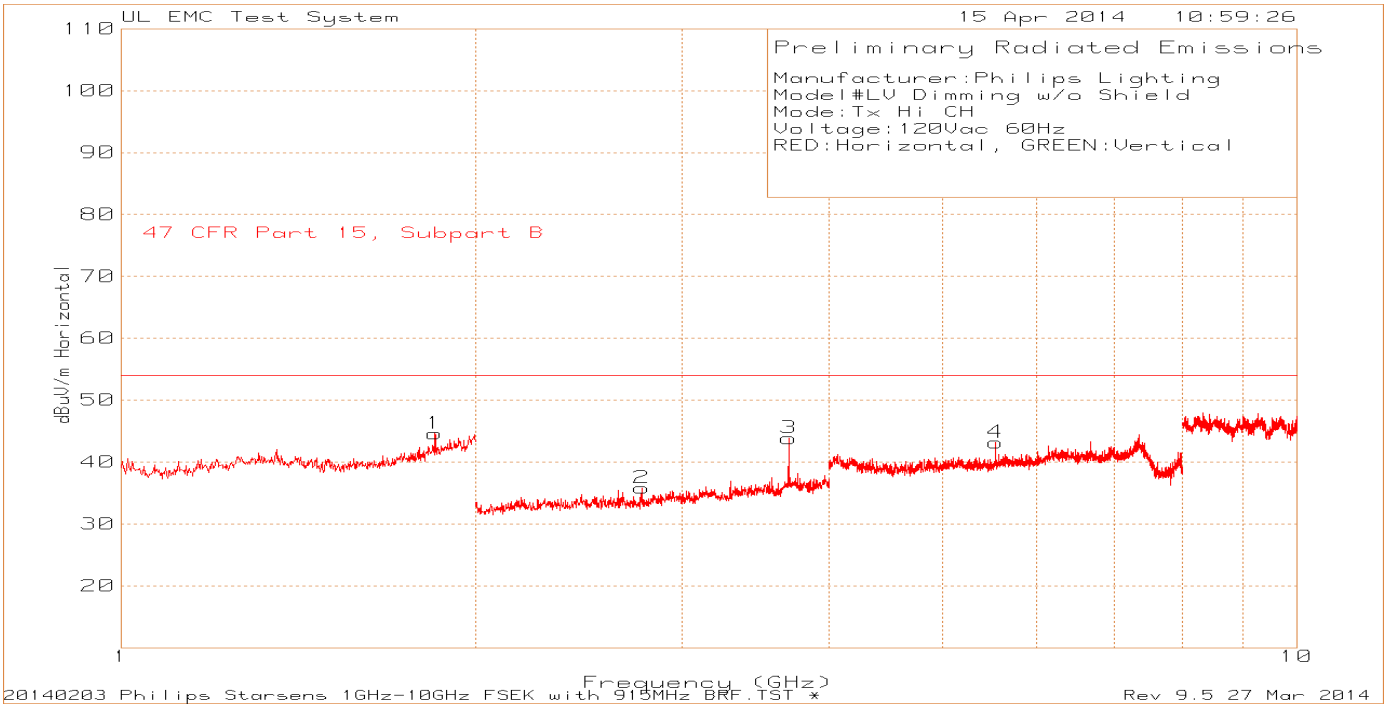
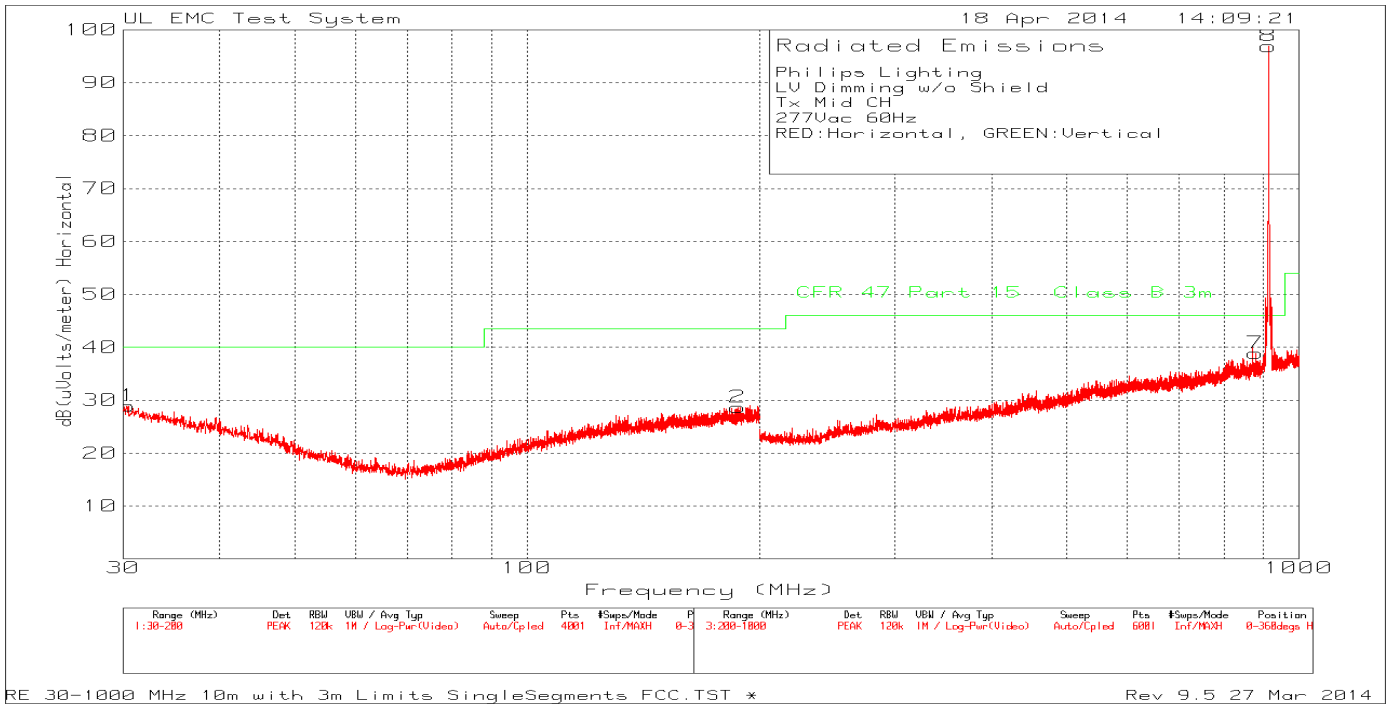



**Table 41 Radiated Spurious Emissions above 1GHz, High Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manufacturer:Philips Lighting | | | | | | | | | | | | |
| Model#LV Dimming w/o Shield | | | | | | | | | | | | |
| Mode:Tx Hi CH | | | | | | | | | | | | |
| Voltage:120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 1.8477 | 67.24 | PK | 30.5 | 0.3 | -53.44 | 44.6 | 54 | -9.4 | 0-360 | 149 | H |
| 2 | 2.7728 | 64.2 | PK | 22.2 | | -50.57 | 35.83 | 54 | -18.17 | 0-360 | 150 | H |
| 3 | 3.6977 | 69.13 | PK | 23.5 | | -48.77 | 43.86 | 54 | -10.14 | 0-360 | 150 | H |
| 4 | 5.5448 | 64.32 | PK | 28.3 | | -49.47 | 43.15 | 54 | -10.85 | 0-360 | 150 | H |
| 5 | 1.8497 | 67.04 | PK | 30.5 | 0.3 | -53.42 | 44.42 | 54 | -9.58 | 0-360 | 150 | V |
| 6 | 2.7728 | 68.46 | PK | 22.2 | | -50.57 | 40.09 | 54 | -13.91 | 0-360 | 150 | V |
| 7 | 3.6977 | 79.83 | PK | 23.5 | | -48.77 | 54.56 | 54 | 0.56 | 0-360 | 150 | V |
| 8 | 5.5448 | 67.09 | PK | 28.3 | | -49.47 | 45.92 | 54 | -8.08 | 0-360 | 150 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 3.6959 | 83.96 | PK | 23.5 | | -48.76 | 58.7 | 74 | -15.3 | 357 | 116 | V |
| | | Level with -12.65dB Duty Cycle Correction | | | | | 46.05 | 54 | -7.95 | | | |
| PK - Peak detector | | | | | | | | | | | | |

### 4.3.4 Low Voltage Dimming (277V/60Hz)

**Figure 39 Radiated Spurious Emissions below 1GHz, Middle Channel**



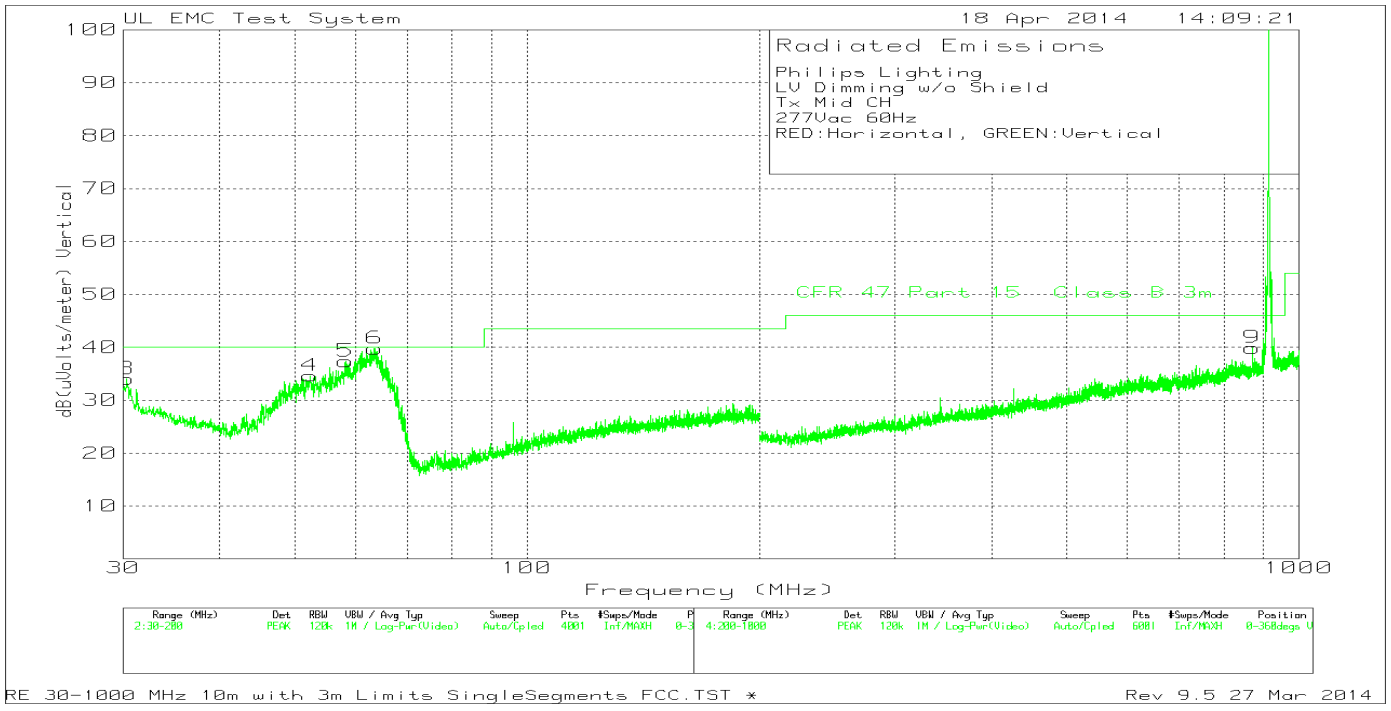
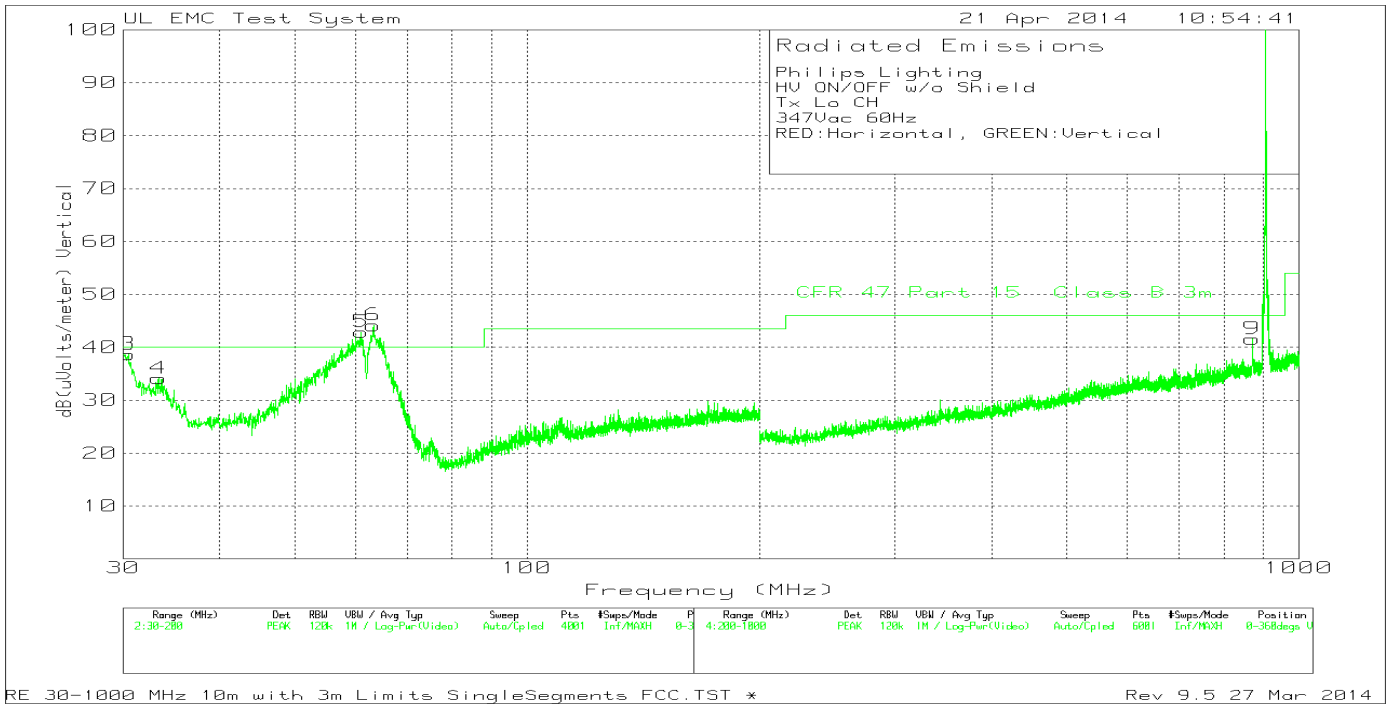



**Table 42 Radiated Spurious Emissions below 1GHz, Middle Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philips Lighting | | | | | | | | | | | | |
| LV Dimming w/o Shield | | | | | | | | | | | | |
| Tx Mid CH | | | | | | | | | | | | |
| 277Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 30.425 | 30.93 | PK | 17.6 | -30.1 | 10.5 | 28.93 | 40 | -11.07 | 0-360 | 399 | H |
| 2 | 187.8025 | 31.26 | PK | 16 | -29.1 | 10.5 | 28.66 | 43.52 | -14.86 | 0-360 | 399 | H |
| 3 | 30.2975 | 35.92 | PK | 17.7 | -30.1 | 10.5 | 34.02 | 40 | -5.98 | 0-360 | 99 | V |
| 4 | 52.355 | 44.92 | PK | 9.2 | -30 | 10.5 | 34.62 | 40 | -5.38 | 0-360 | 249 | V |
| 5 | 58.1775 | 49.65 | PK | 7.3 | -30.1 | 10.5 | 37.35 | 40 | -2.65 | 0-360 | 249 | V |
| 6 | 63.49 | 52.88 | PK | 6.4 | -30 | 10.5 | 39.78 | 40 | -0.22 | 0-360 | 249 | V |
| 7 | 879.6 | 30.49 | PK | 22.8 | -24.9 | 10.5 | 38.89 | 46.02 | -7.13 | 0-360 | 199 | H |
| 8 | 914.2667 | 87.89 | PK | 23.1 | -24.6 | 10.5 | 96.89 | 46.02 | 50.87 | 0-360 | 299 | H |
| 9 | 870.1333 | 31.4 | PK | 22.5 | -24.5 | 10.5 | 39.9 | 46.02 | -6.12 | 0-360 | 199 | V |
| 10 | 914.1333 | 93.73 | PK | 23.1 | -24.6 | 10.5 | 102.73 | 46.02 | 56.71 | 0-360 | 199 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 62.023397 | 46.89 | QP | 6.5 | -29.9 | 10.5 | 33.99 | 40 | -6.01 | 12 | 271 | V |
| | 58.084551 | 43.2 | QP | 7.3 | -30.1 | 10.5 | 30.9 | 40 | -9.1 | 16 | 244 | V |
| | 52.355 | 38.53 | QP | 9.2 | -30 | 10.5 | 28.23 | 40 | -11.77 | 30 | 102 | V |
| QP - Quasi-Peak detector | | | | | | | | | | | | |

### 4.3.5 High Voltage On/Off (347V/60Hz)

**Figure 40 Radiated Spurious Emissions below 1GHz, Low Channel**



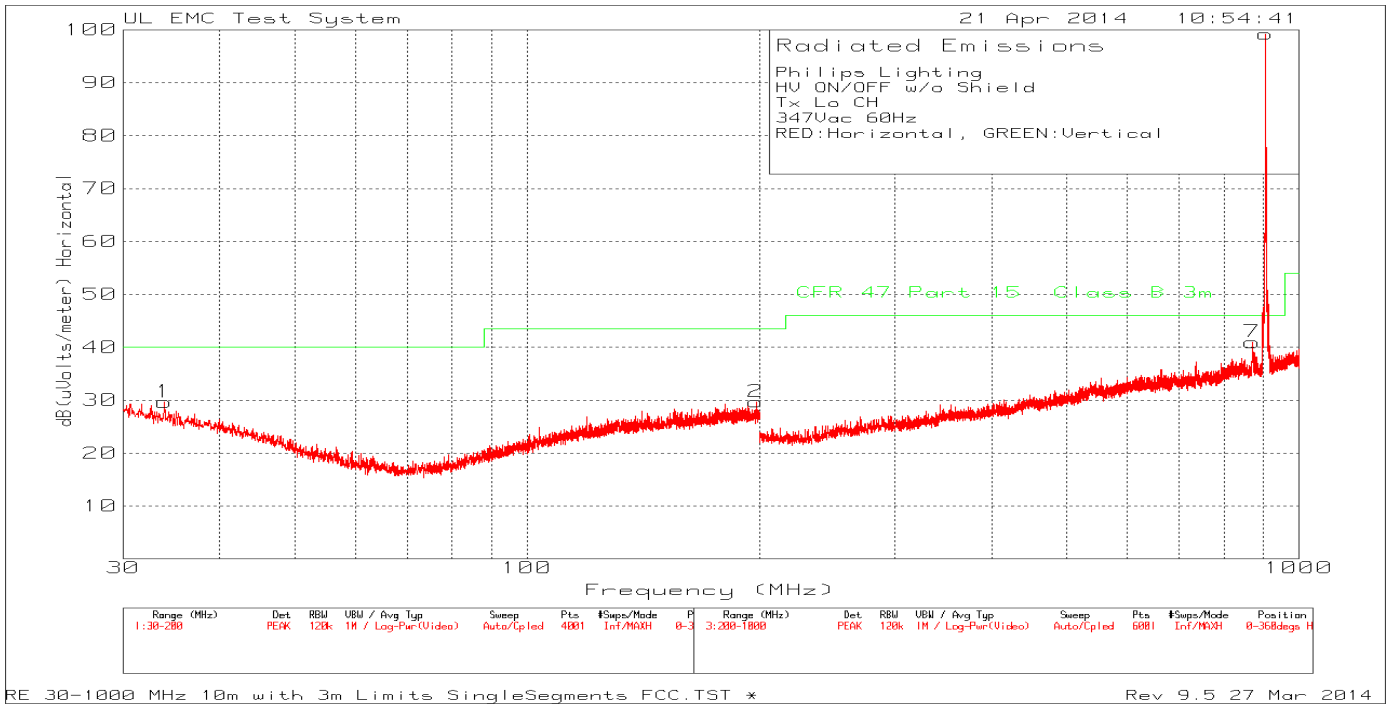
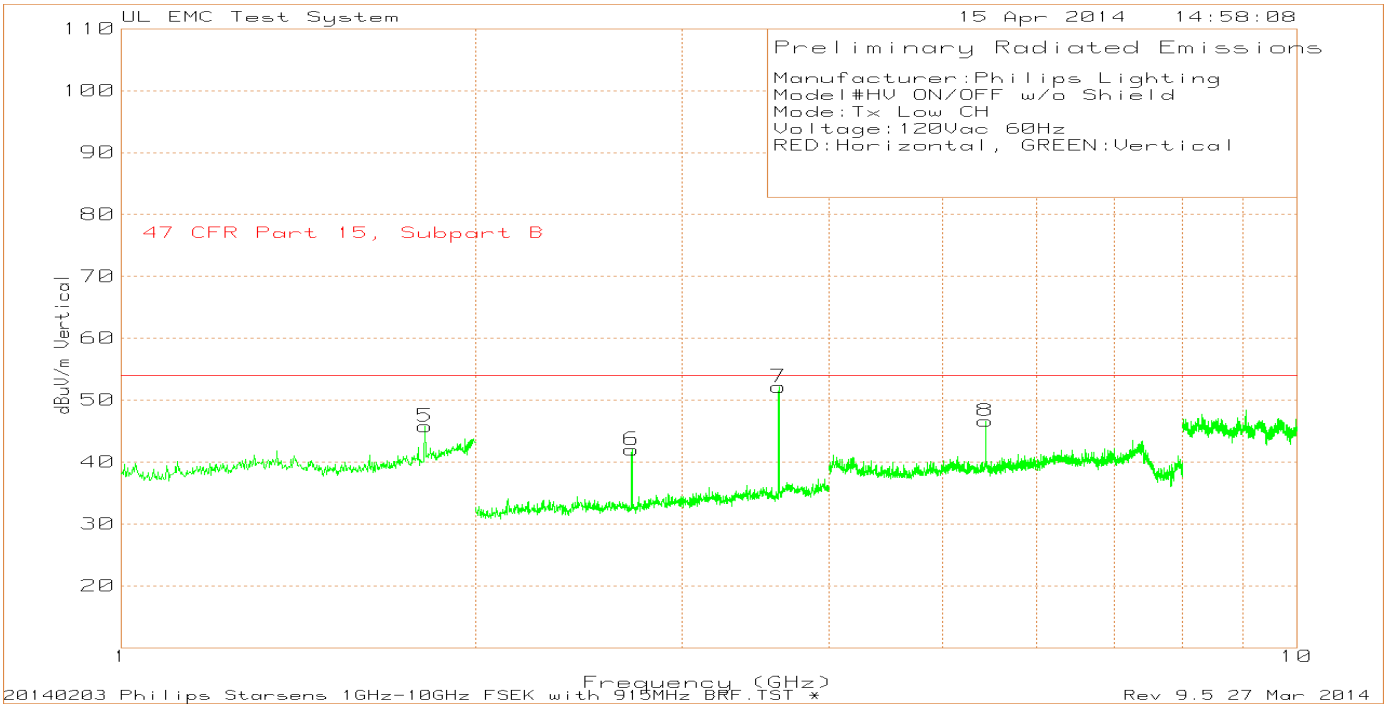



**Table 43 Radiated Spurious Emissions below 1GHz, Low Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philips Lighting | | | | | | | | | | | | |
| HV ON/OFF w/o Shield | | | | | | | | | | | | |
| Tx Lo CH | | | | | | | | | | | | |
| 347Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 33.91 | 32.93 | PK | 16.3 | -30.1 | 10.5 | 29.63 | 40 | -10.37 | 0-360 | 250 | H |
| 2 | 198.0025 | 31.83 | PK | 16.1 | -28.7 | 10.5 | 29.73 | 43.52 | -13.79 | 0-360 | 250 | H |
| 3 | 30.425 | 40.65 | PK | 17.6 | -30.1 | 10.5 | 38.65 | 40 | -1.35 | 0-360 | 99 | V |
| 4 | 33.315 | 37.33 | PK | 16.4 | -30.1 | 10.5 | 34.13 | 40 | -5.87 | 0-360 | 99 | V |
| 5 | 61.025 | 55.57 | PK | 6.8 | -30 | 10.5 | 42.87 | 40 | 2.87 | 0-360 | 249 | V |
| 6 | 63.235 | 57.14 | PK | 6.5 | -30 | 10.5 | 44.14 | 40 | 4.14 | 0-360 | 249 | V |
| 7 | 870.5333 | 32.48 | PK | 22.5 | -24.5 | 10.5 | 40.98 | 46.02 | -5.04 | 0-360 | 299 | H |
| 8 | 906.1333 | 90.53 | PK | 23.1 | -24.9 | 10.5 | 99.23 | 46.02 | 53.21 | 0-360 | 299 | H |
| 9 | 870.2667 | 33.07 | PK | 22.5 | -24.5 | 10.5 | 41.57 | 46.02 | -4.45 | 0-360 | 99 | V |
| 10 | 906.1333 | 92.82 | PK | 23.1 | -24.9 | 10.5 | 101.52 | 46.02 | 55.5 | 0-360 | 199 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor | Level dBuV/m | Limit FCC 15.209 | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 63.108141 | 52.64 | QP | 6.5 | -30 | 10.5 | 39.64 | 40 | -0.36 | 42 | 248 | V |
| | 60.763887 | 50.66 | QP | 6.8 | -30 | 10.5 | 37.96 | 40 | -2.04 | 46 | 275 | V |
| | 30.024406 | 37.27 | QP | 17.9 | -30.1 | 10.5 | 35.57 | 40 | -4.43 | 204 | 101 | V |
| QP - Quasi-Peak detector | | | | | | | | | | | | |

**Figure 41 Radiated Spurious Emissions above 1GHz, Low Channel**



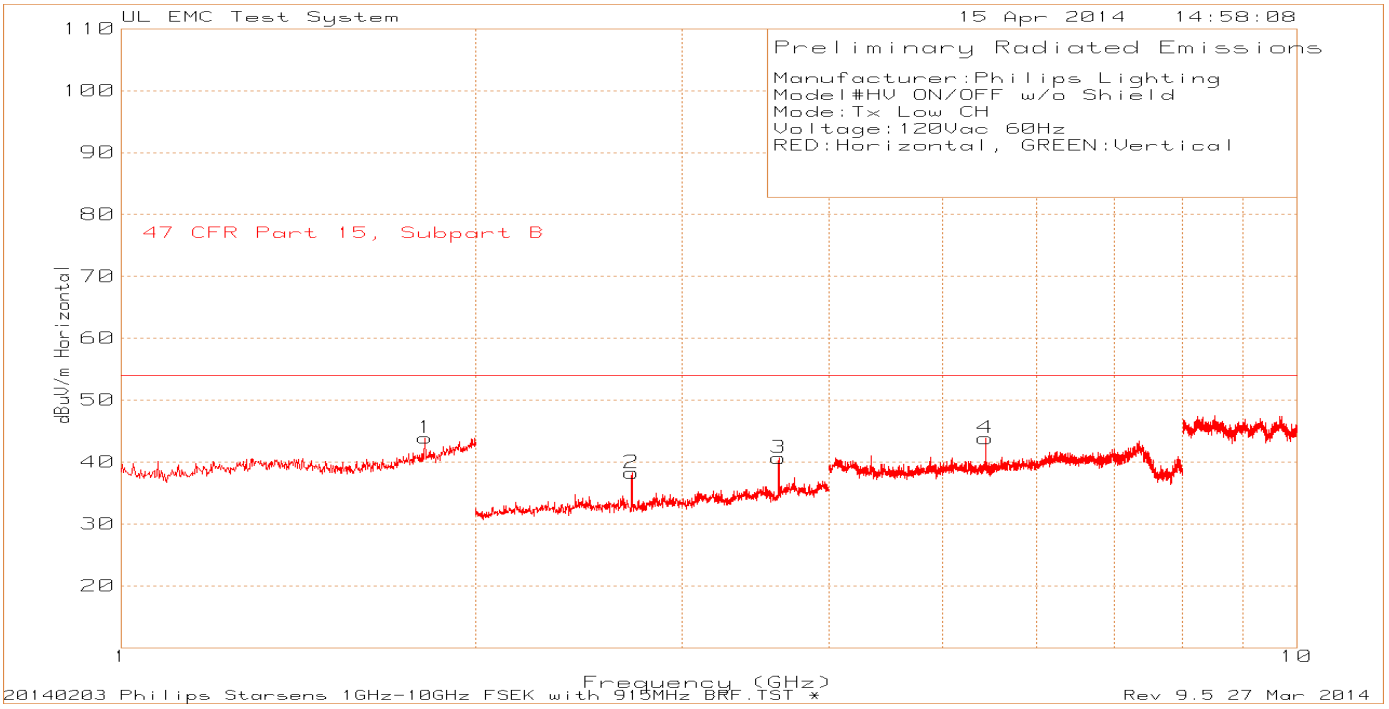
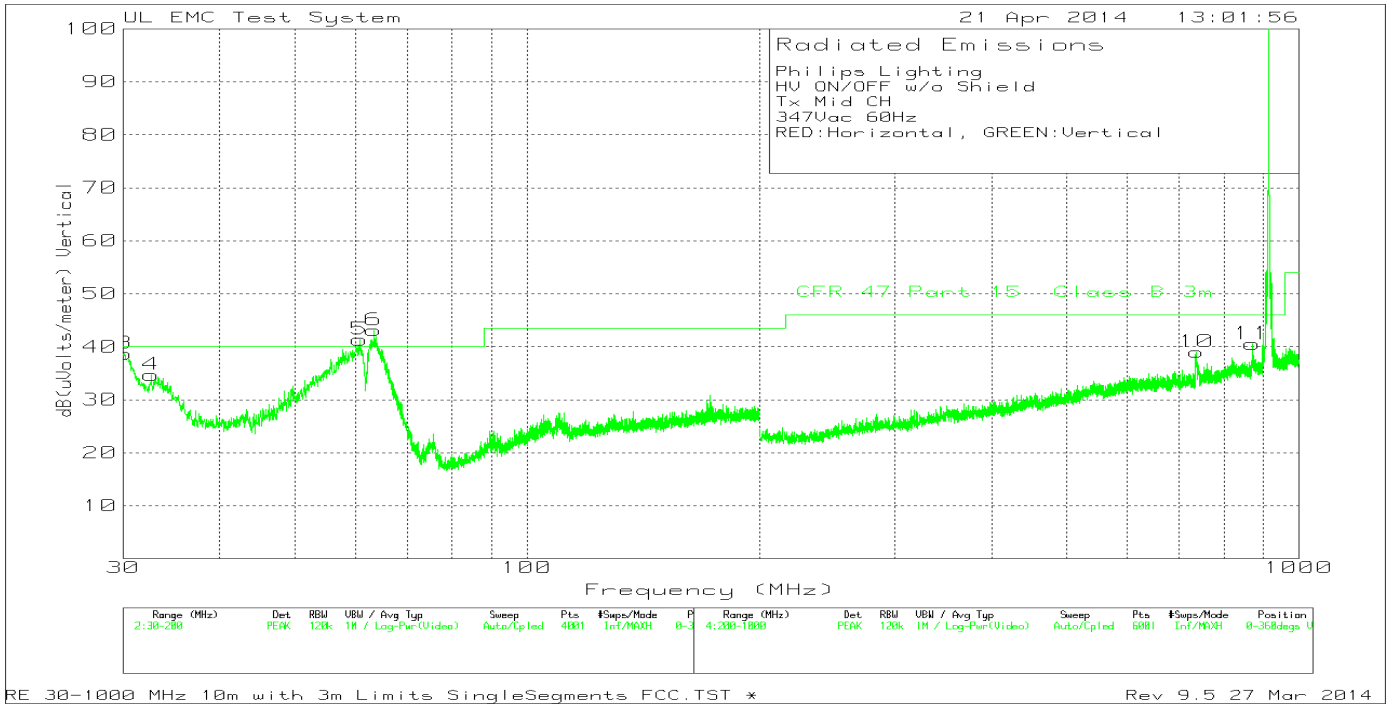



**Table 44 Radiated Spurious Emissions above 1GHz, Low Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manufacturer:Philips Lighting | | | | | | | | | | | | |
| Model#HV ON/OFF w/o Shield | | | | | | | | | | | | |
| Mode:Tx Low CH | | | | | | | | | | | | |
| Voltage:120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 1.8136 | 67.05 | PK | 30 | 0.4 | -53.54 | 43.91 | 54 | -10.09 | 0-360 | 149 | H |
| 2 | 2.7187 | 66.81 | PK | 22.1 | | -50.66 | 38.25 | 54 | -15.75 | 0-360 | 150 | H |
| 3 | 3.6256 | 67.37 | PK | 23.3 | | -49.98 | 40.69 | 54 | -13.31 | 0-360 | 150 | H |
| 4 | 5.4367 | 64.91 | PK | 28 | | -49.04 | 43.87 | 54 | -10.13 | 0-360 | 150 | H |
| 5 | 1.8136 | 68.89 | PK | 30 | 0.4 | -53.54 | 45.75 | 54 | -8.25 | 0-360 | 150 | V |
| 6 | 2.7187 | 70.55 | PK | 22.1 | | -50.66 | 41.99 | 54 | -12.01 | 0-360 | 150 | V |
| 7 | 3.6256 | 78.8 | PK | 23.3 | | -49.98 | 52.12 | 54 | -1.88 | 0-360 | 150 | V |
| 8 | 5.4367 | 67.68 | PK | 28 | | -49.04 | 46.64 | 54 | -7.36 | 0-360 | 150 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 3.6241 | 82.41 | PK | 23.3 | | -50.03 | 55.68 | 74 | -18.32 | 167 | 117 | V |
| | | Level with -12.65dB Duty Cycle Correction | | | | | 43.03 | 54 | -10.97 | | | |
| PK - Peak detector | | | | | | | | | | | | |

**Figure 42 Radiated Spurious Emissions below 1GHz, Middle Channel**



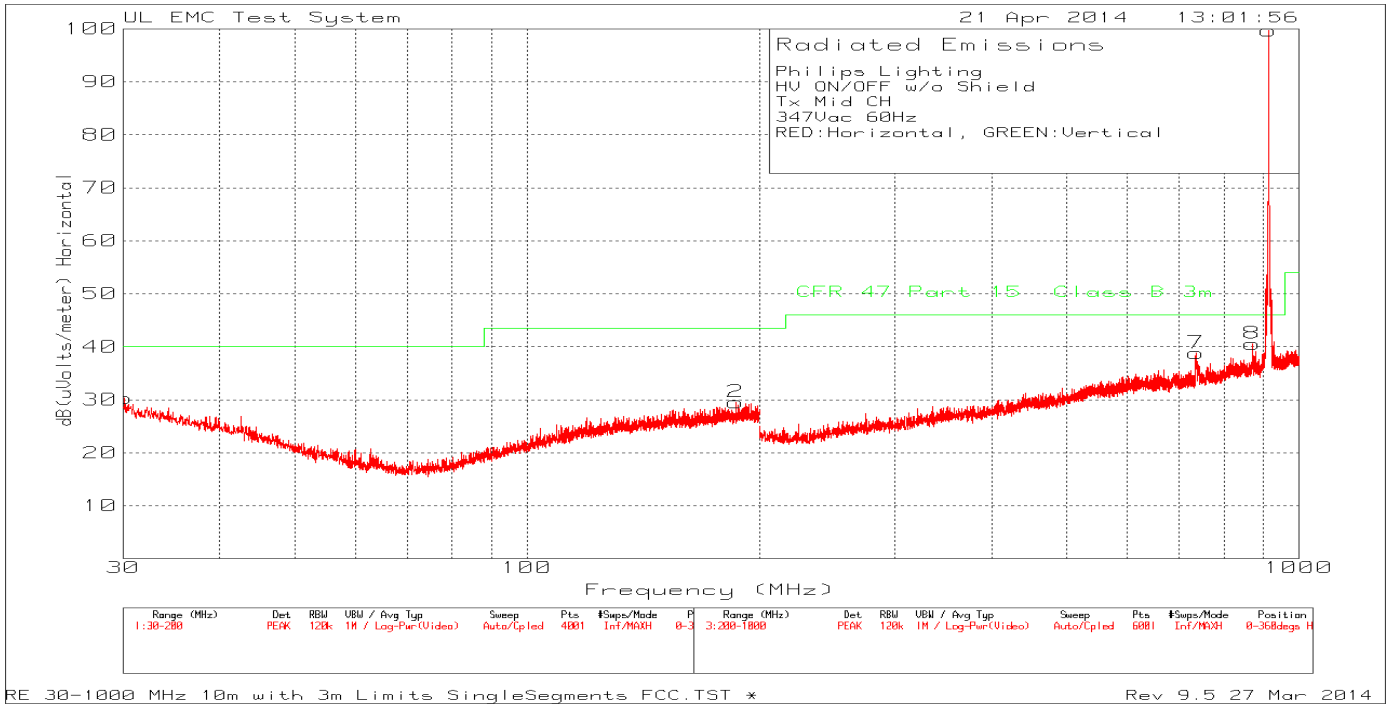
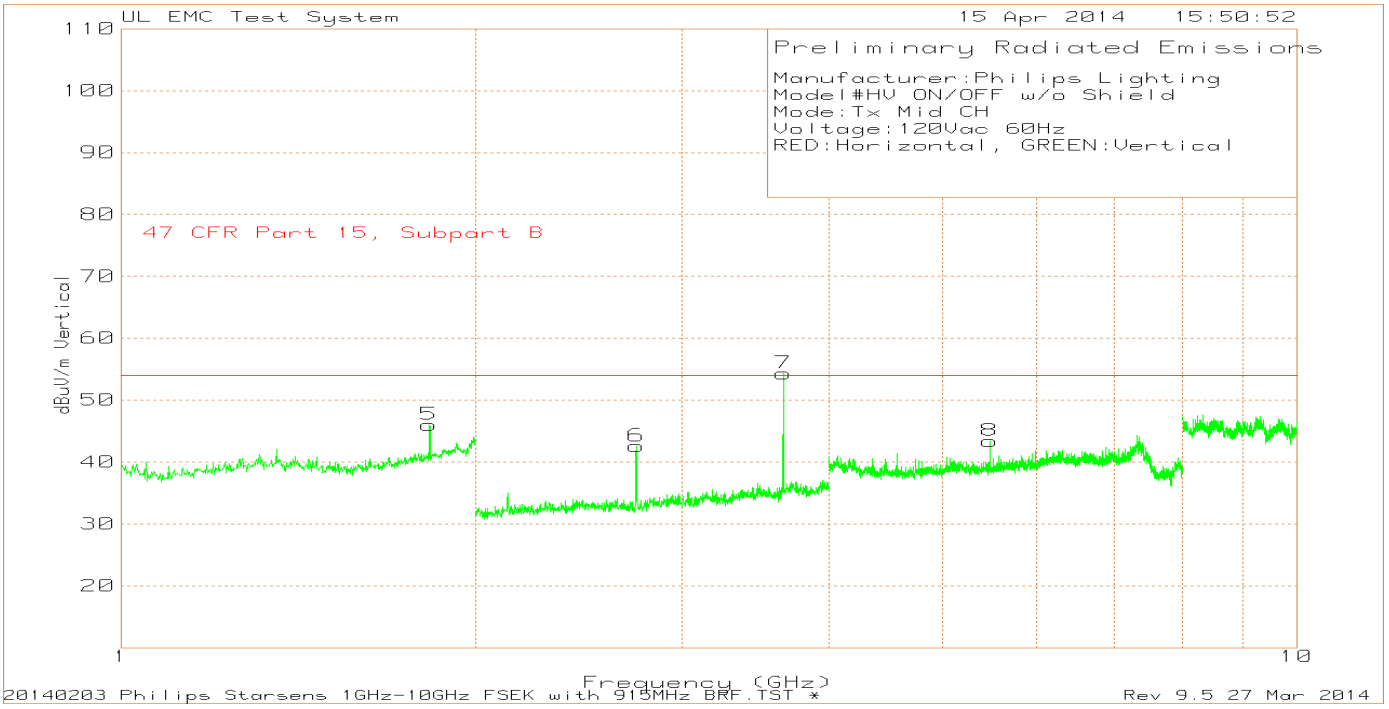



**Table 45 Radiated Spurious Emissions below 1GHz, Middle Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philips Lighting | | | | | | | | | | | | |
| HV ON/OFF w/o Shield | | | | | | | | | | | | |
| Tx Mid CH | | | | | | | | | | | | |
| 347Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 30.085 | 32.12 | PK | 17.8 | -30.1 | 10.5 | 30.32 | 40 | -9.68 | 0-360 | 250 | H |
| 2 | 186.485 | 32.15 | PK | 16 | -29.1 | 10.5 | 29.55 | 43.52 | -13.97 | 0-360 | 400 | H |
| 3 | 30.0425 | 40.43 | PK | 17.9 | -30.1 | 10.5 | 38.73 | 40 | -1.27 | 0-360 | 99 | V |
| 4 | 32.5925 | 37.63 | PK | 16.7 | -30.1 | 10.5 | 34.73 | 40 | -5.27 | 0-360 | 99 | V |
| 5 | 60.7275 | 54.07 | PK | 6.8 | -30 | 10.5 | 41.37 | 40 | 1.37 | 0-360 | 249 | V |
| 6 | 63.3625 | 56.26 | PK | 6.4 | -30 | 10.5 | 43.16 | 40 | 3.16 | 0-360 | 249 | V |
| 7 | 736.2667 | 32.3 | PK | 20.3 | -24.3 | 10.5 | 38.8 | 46.02 | -7.22 | 0-360 | 400 | H |
| 8 | 871.0667 | 32.08 | PK | 22.5 | -24.5 | 10.5 | 40.58 | 46.02 | -5.44 | 0-360 | 99 | H |
| 9 | 914 | 90.71 | PK | 23.1 | -24.6 | 10.5 | 99.71 | 46.02 | 53.69 | 0-360 | 299 | H |
| 10 | 737.2 | 32.63 | PK | 20.3 | -24.4 | 10.5 | 39.03 | 46.02 | -6.99 | 0-360 | 400 | V |
| 11 | 870.5333 | 32.04 | PK | 22.5 | -24.5 | 10.5 | 40.54 | 46.02 | -5.48 | 0-360 | 299 | V |
| 12 | 913.8667 | 93.25 | PK | 23.1 | -24.6 | 10.5 | 102.25 | 46.02 | 56.23 | 0-360 | 199 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 63.105712 | 49.87 | QP | 6.5 | -30 | 10.5 | 36.87 | 40 | -3.13 | 137 | 267 | V |
| | 60.492497 | 47.27 | QP | 6.8 | -30 | 10.5 | 34.57 | 40 | -5.43 | 0 | 257 | V |
| | 30.062853 | 37.11 | QP | 17.9 | -30.1 | 10.5 | 35.41 | 40 | -4.59 | 186 | 100 | V |
| QP - Quasi-Peak detector | | | | | | | | | | | | |

**Figure 43 Radiated Spurious Emissions above 1GHz, Middle Channel**



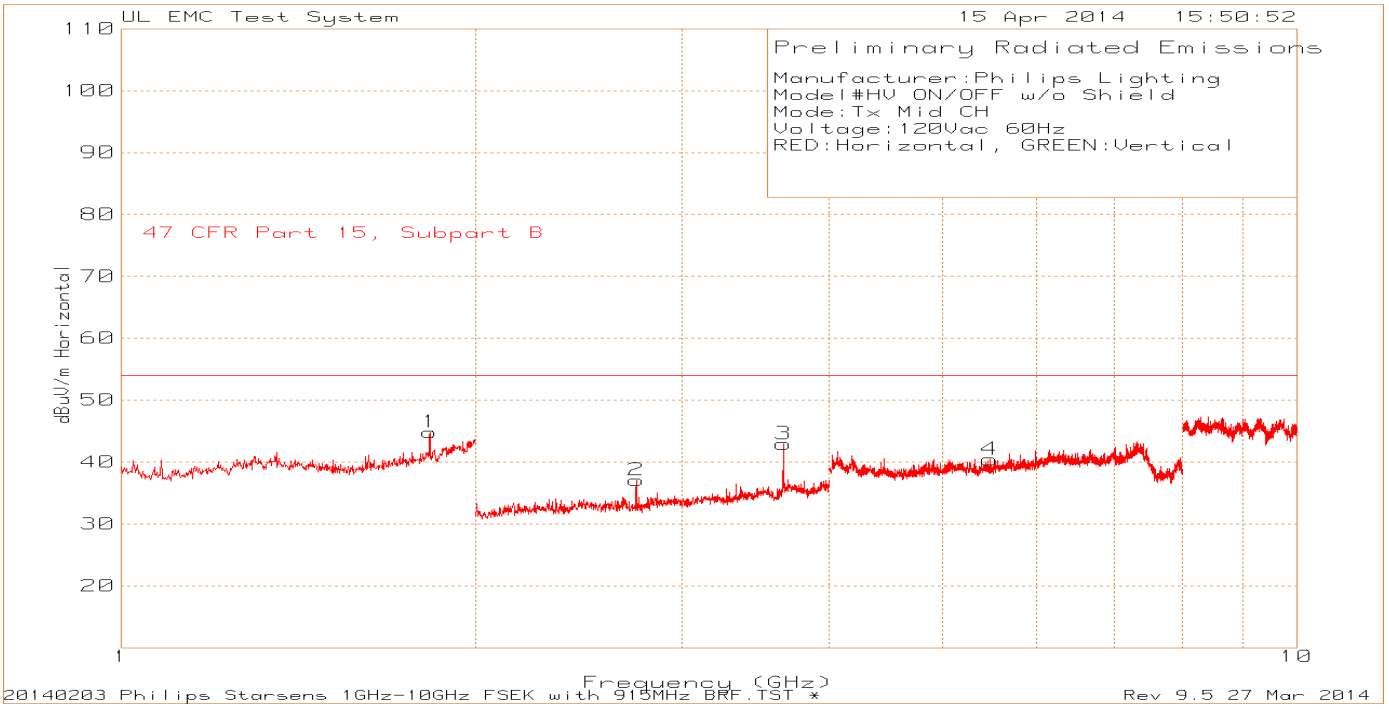
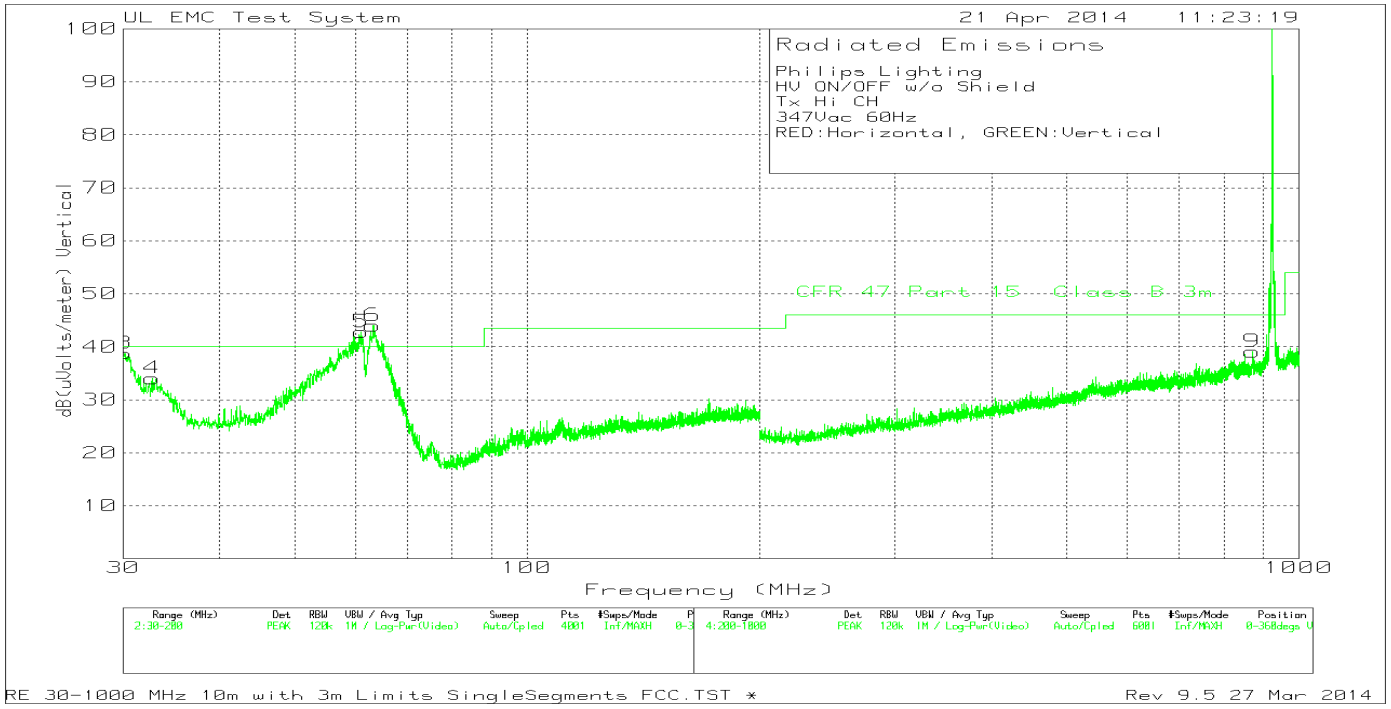



**Table 46 Radiated Spurious Emissions above 1GHz, Middle Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manufacturer:Philips Lighting | | | | | | | | | | | | |
| Model#HV ON/OFF w/o Shield | | | | | | | | | | | | |
| Mode:Tx Mid CH | | | | | | | | | | | | |
| Voltage:120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 1.8297 | 67.74 | PK | 30.2 | 0.4 | -53.52 | 44.82 | 54 | -9.18 | 0-360 | 149 | H |
| 2 | 2.7427 | 65.64 | PK | 22.1 | 0 | -50.67 | 37.07 | 54 | -16.93 | 0-360 | 150 | H |
| 3 | 3.6577 | 68.55 | PK | 23.4 | 0 | -49.04 | 42.91 | 54 | -11.09 | 0-360 | 150 | H |
| 4 | 5.4847 | 61.49 | PK | 28.1 | 0 | -49.17 | 40.42 | 54 | -13.58 | 0-360 | 150 | H |
| 5 | 1.8277 | 68.94 | PK | 30.2 | 0.4 | -53.53 | 46.01 | 54 | -7.99 | 0-360 | 150 | V |
| 6 | 2.7427 | 71.15 | PK | 22.1 | 0 | -50.67 | 42.58 | 54 | -11.42 | 0-360 | 149 | V |
| 7 | 3.6577 | 79.97 | PK | 23.4 | 0 | -49.04 | 54.33 | 54 | 0.33 | 0-360 | 96 | V |
| 8 | 5.4827 | 64.47 | PK | 28.1 | 0 | -49.15 | 43.42 | 54 | -10.58 | 0-360 | 150 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 3.6561 | 83.58 | PK | 23.4 | 0 | -49.07 | 57.91 | 74 | -16.09 | 161 | 117 | V |
| | | Level with -12.65dB Duty Cycle Correction | | | | | 45.26 | 54 | -8.74 | | | |
| PK - Peak detector | | | | | | | | | | | | |

**Figure 44 Radiated Spurious Emissions below 1GHz, High Channel**



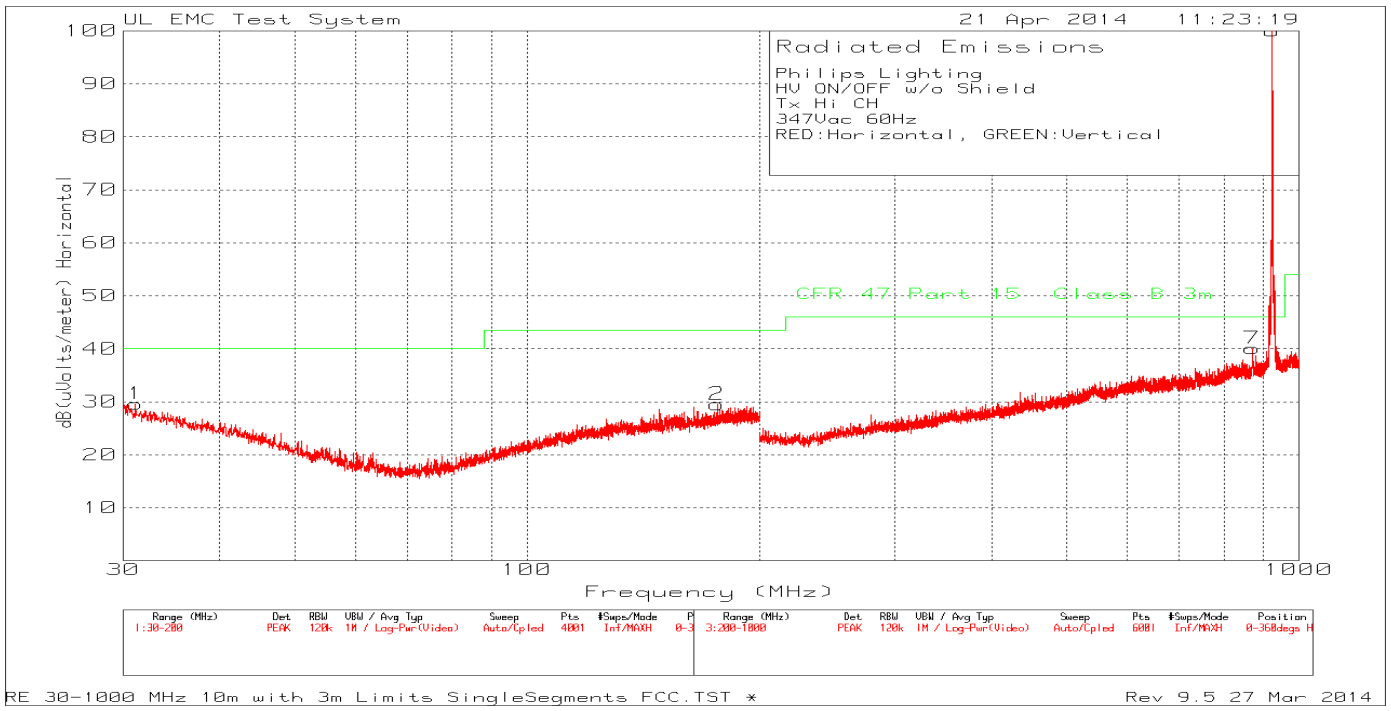
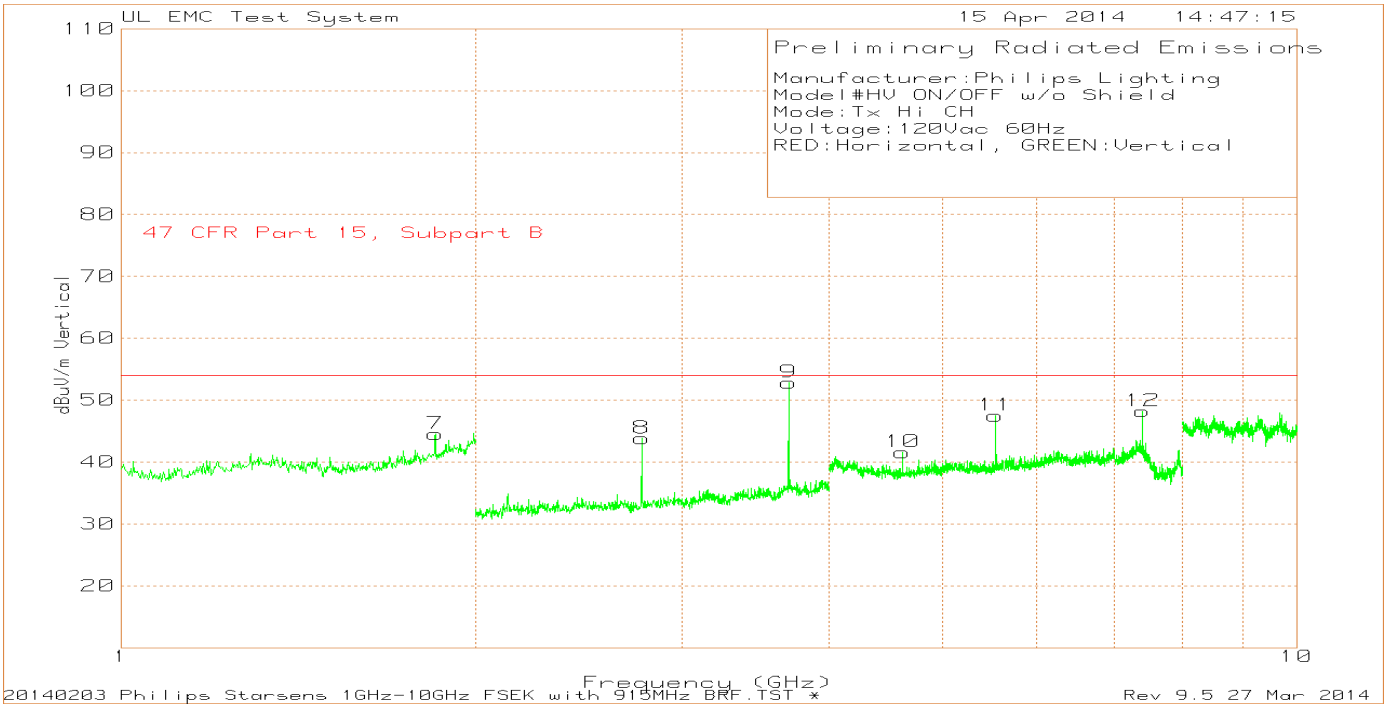



**Table 47 Radiated Spurious Emissions below 1GHz, High Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philips Lighting | | | | | | | | | | | | |
| HV ON/OFF w/o Shield | | | | | | | | | | | | |
| Tx Hi CH | | | | | | | | | | | | |
| 347Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 31.105 | 31.88 | PK | 17.3 | -30.1 | 10.5 | 29.58 | 40 | -10.42 | 0-360 | 101 | H |
| 2 | 176.37 | 32.71 | PK | 15.6 | -29.3 | 10.5 | 29.51 | 43.52 | -14.01 | 0-360 | 399 | H |
| 3 | 30.085 | 40.55 | PK | 17.8 | -30.1 | 10.5 | 38.75 | 40 | -1.25 | 0-360 | 99 | V |
| 4 | 32.6775 | 36.95 | PK | 16.7 | -30.1 | 10.5 | 34.05 | 40 | -5.95 | 0-360 | 99 | V |
| 5 | 61.025 | 55.49 | PK | 6.8 | -30 | 10.5 | 42.79 | 40 | 2.79 | 0-360 | 249 | V |
| 6 | 63.15 | 57 | PK | 6.5 | -30 | 10.5 | 44 | 40 | 4 | 0-360 | 249 | V |
| 7 | 870.8 | 31.59 | PK | 22.5 | -24.5 | 10.5 | 40.09 | 46.02 | -5.93 | 0-360 | 99 | H |
| 8 | 923.8667 | 91.4 | PK | 22.8 | -24.7 | 10.5 | 100 | 46.02 | 53.98 | 0-360 | 299 | H |
| 9 | 870.5333 | 30.56 | PK | 22.5 | -24.5 | 10.5 | 39.06 | 46.02 | -6.96 | 0-360 | 299 | V |
| 10 | 924.1333 | 93.02 | PK | 22.8 | -24.7 | 10.5 | 101.62 | 46.02 | 55.6 | 0-360 | 199 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 63.15641 | 50.65 | QP | 6.5 | -30 | 10.5 | 37.65 | 40 | -2.35 | 342 | 262 | V |
| | 60.816453 | 48.31 | QP | 6.8 | -30 | 10.5 | 35.61 | 40 | -4.39 | 2 | 245 | V |
| | 30.015568 | 37.05 | QP | 17.9 | -30.1 | 10.5 | 35.35 | 40 | -4.65 | 177 | 100 | V |
| QP - Quasi-Peak detector | | | | | | | | | | | | |

**Figure 45 Radiated Spurious Emissions above 1GHz, High Channel**



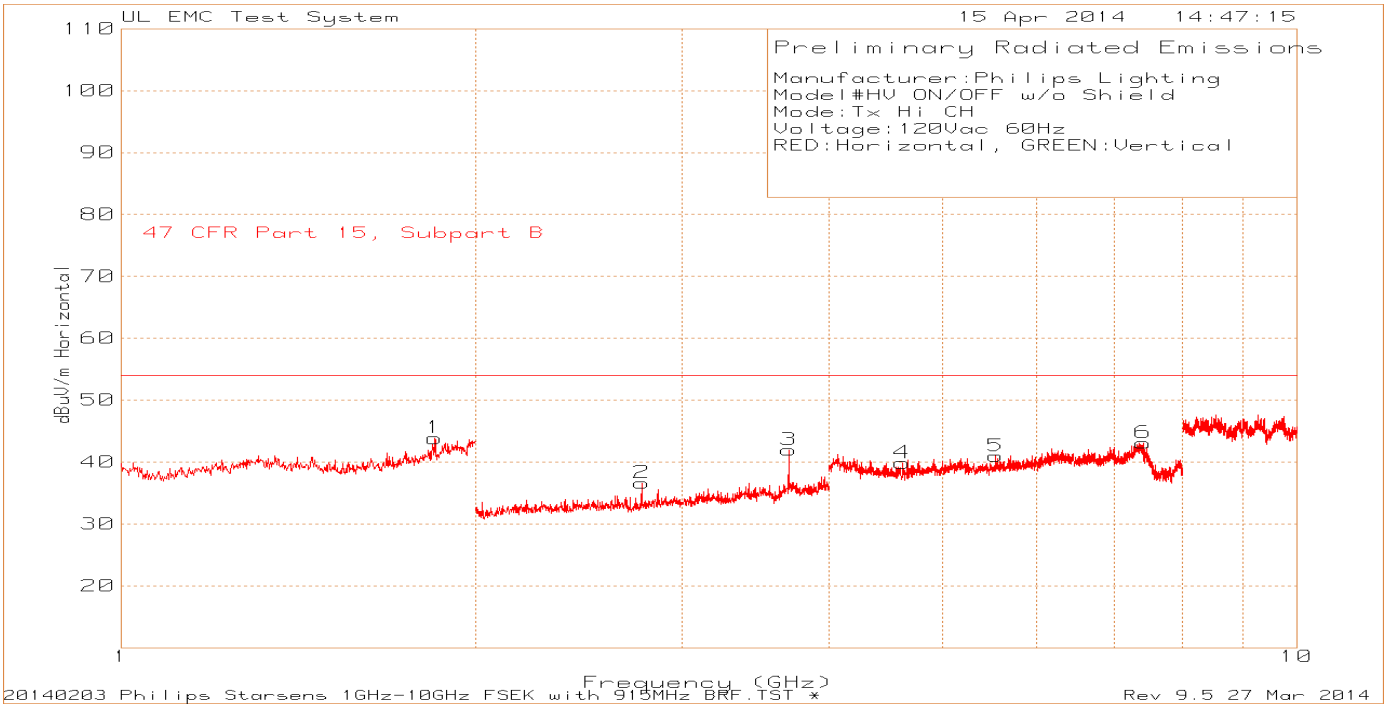
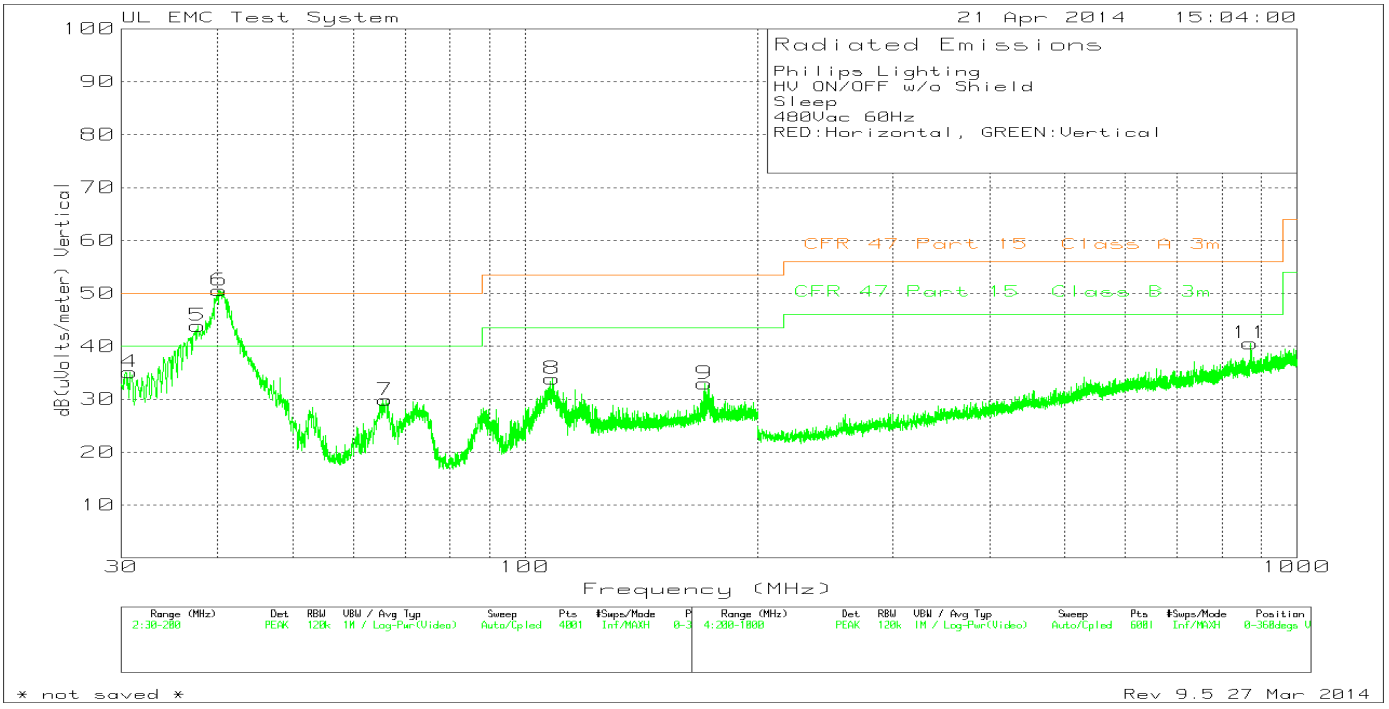



**Table 48 Radiated Spurious Emissions above 1GHz, High Channel**

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Manufacturer:Philips Lighting | | | | | | | | | | | | |
| Model#HV ON/OFF w/o Shield | | | | | | | | | | | | |
| Mode:Tx Hi CH | | | | | | | | | | | | |
| Voltage:120Vac 60Hz | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | |
| Marker No. | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 1.8477 | 66.5 | PK | 30.5 | 0.3 | -53.44 | 43.86 | 54 | -10.14 | 0-360 | 101 | H |
| 2 | 2.7728 | 65 | PK | 22.2 | 0 | -50.57 | 36.63 | 54 | -17.37 | 0-360 | 150 | H |
| 3 | 3.6977 | 67.23 | PK | 23.5 | 0 | -48.77 | 41.96 | 54 | -12.04 | 0-360 | 150 | H |
| 4 | 4.6203 | 63.66 | PK | 27.7 | 0 | -51.52 | 39.84 | 54 | -14.16 | 0-360 | 150 | H |
| 5 | 5.5448 | 62.13 | PK | 28.3 | 0 | -49.47 | 40.96 | 54 | -13.04 | 0-360 | 150 | H |
| 6 | 7.4037 | 58.35 | PK | 31.1 | 0 | -46.36 | 43.09 | 54 | -10.91 | 0-360 | 150 | H |
| 7 | 1.8497 | 67.18 | PK | 30.5 | 0.3 | -53.42 | 44.56 | 54 | -9.44 | 0-360 | 150 | V |
| 8 | 2.7728 | 72.19 | PK | 22.2 | 0 | -50.57 | 43.82 | 54 | -10.18 | 0-360 | 150 | V |
| 9 | 3.6977 | 78.13 | PK | 23.5 | 0 | -48.77 | 52.86 | 54 | -1.14 | 0-360 | 150 | V |
| 10 | 4.6203 | 65.4 | PK | 27.7 | 0 | -51.52 | 41.58 | 54 | -12.42 | 0-360 | 96 | V |
| 11 | 5.5428 | 68.67 | PK | 28.3 | 0 | -49.48 | 47.49 | 54 | -6.51 | 0-360 | 96 | V |
| 12 | 7.3937 | 63.32 | PK | 31.2 | 0 | -46.28 | 48.24 | 54 | -5.76 | 0-360 | 96 | V |
| PK - Peak detector | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | |
| | Test Frequency GHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | BRF dB | Gain/Loss dB | Level dBuV/m | Limit 47 CFR Part 15.209 dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 3.696 | 81.58 | PK | 23.5 | 0 | -48.76 | 56.32 | 74 | -17.68 | 167 | 116 | V |
| | | Level with -12.65dB Duty Cycle Correction | | | | | 43.67 | 54 | -10.33 | | | |
| PK - Peak detector | | | | | | | | | | | | |

### 4.3.6 High Voltage On/Off (480V/60Hz)

**Figure 46 Radiated Spurious Emissions below 1GHz, Radio Sleep Mode**



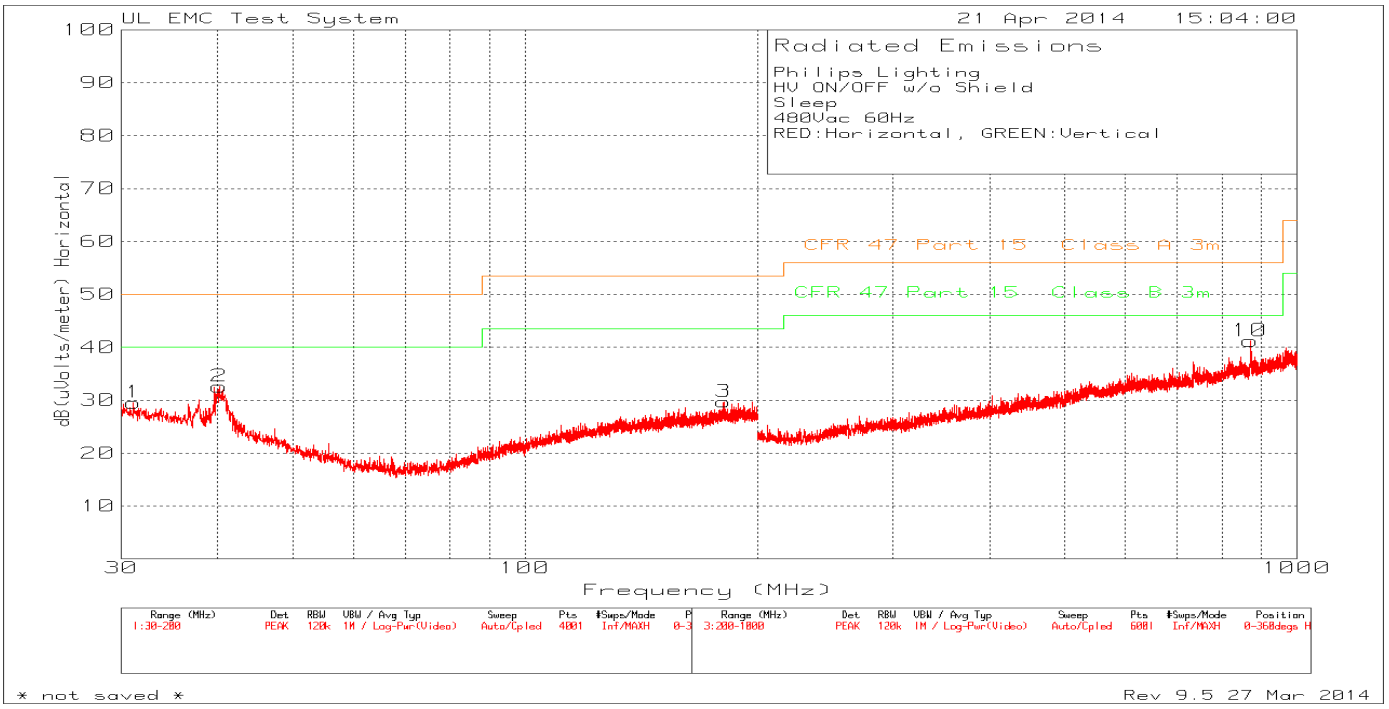
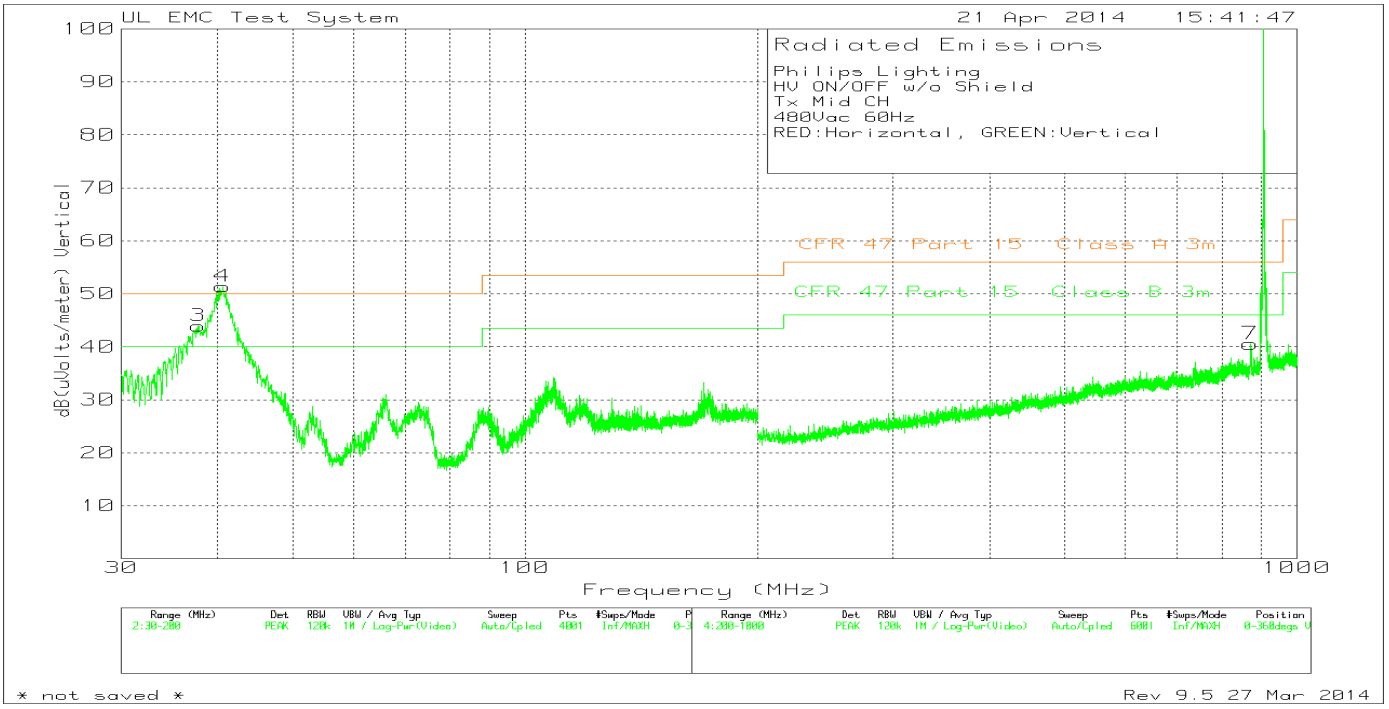



**Table 49 Radiated Spurious Emissions below 1GHz, Radio Sleep Mode**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philips Lighting | | | | | | | | | | | | | |
| HV ON/OFF w/o Shield | | | | | | | | | | | | | |
| Sleep | | | | | | | | | | | | | |
| 480Vac 60Hz | | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Limit FCC 15.109 Class A dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 31.105 | 31.86 | PK | 17.3 | -30.1 | 10.5 | 29.56 | 40 | -10.44 | 50 | -20.44 | 0-360 | 99 | H |
| 2 | 40.1575 | 38.18 | PK | 14 | -30.1 | 10.5 | 32.58 | 40 | -7.42 | 50 | -17.42 | 0-360 | 250 | H |
| 3 | 180.96 | 32.52 | PK | 15.9 | -29.2 | 10.5 | 29.72 | 43.52 | -13.8 | 53.52 | -23.8 | 0-360 | 99 | H |
| 4 | 30.765 | 37.32 | PK | 17.4 | -30.1 | 10.5 | 35.12 | 40 | -4.88 | 50 | -14.88 | 0-360 | 99 | V |
| 5 | 37.6925 | 48.51 | PK | 14.9 | -30 | 10.5 | 43.91 | 40 | 3.91 | 50 | -6.09 | 0-360 | 99 | V |
| 6 | 40.1575 | 56.17 | PK | 14 | -30.1 | 10.5 | 50.57 | 40 | 10.57 | 50 | 0.57 | 0-360 | 99 | V |
| 7 | 65.955 | 43.15 | PK | 6.2 | -30 | 10.5 | 29.85 | 40 | -10.15 | 50 | -20.15 | 0-360 | 249 | V |
| 8 | 108.455 | 41.27 | PK | 11.9 | -29.8 | 10.5 | 33.87 | 43.52 | -9.65 | 53.52 | -19.65 | 0-360 | 99 | V |
| 9 | 170.9725 | 36.56 | PK | 15.3 | -29.4 | 10.5 | 32.96 | 43.52 | -10.56 | 53.52 | -20.56 | 0-360 | 99 | V |
| 10 | 870.1333 | 32.71 | PK | 22.5 | -24.5 | 10.5 | 41.21 | 46.02 | -4.81 | 56.02 | -14.81 | 0-360 | 299 | H |
| 11 | 870.5333 | 32.07 | PK | 22.5 | -24.5 | 10.5 | 40.57 | 46.02 | -5.45 | 56.02 | -15.45 | 0-360 | 299 | V |
| PK - Peak detector | | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | | |
| | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Limit FCC 15.109 Class A | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 40.372885 | 52 | QP | 13.9 | -30.1 | 10.5 | 46.3 | 40 | 6.3 | 50 | -3.7 | 209 | 100 | V |
| QP - Quasi-Peak detector | | | | | | | | | | | | | | |

**Figure 47 Radiated Spurious Emissions below 1GHz, Middle Channel**



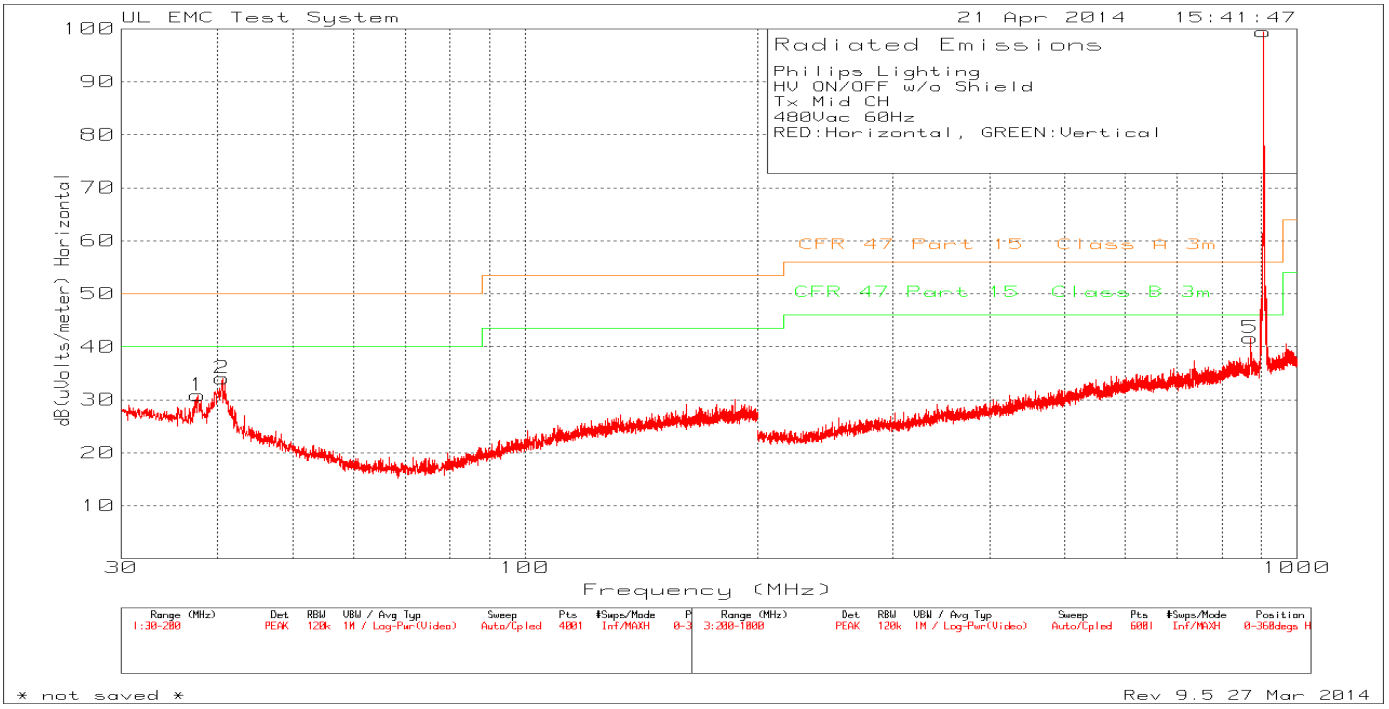



**Table 50 Radiated Spurious Emissions below 1GHz, Middle Channel**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Philips Lighting | | | | | | | | | | | | | |
| HV ON/OFF w/o Shield | | | | | | | | | | | | | |
| Tx Mid CH | | | | | | | | | | | | | |
| 480Vac 60Hz | | | | | | | | | | | | | |
| RED:Horizontal, GREEN:Vertical | | | | | | | | | | | | | |
| Trace Markers | | | | | | | | | | | | | |
| Marker No. | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Limit FCC 15.109 Class A dBuV/m | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| 1 | 37.6925 | 35.44 | PK | 14.9 | -30 | 10.5 | 30.84 | 40 | -9.16 | 50 | -19.16 | 0-360 | 250 | H |
| 2 | 40.54 | 39.86 | PK | 13.8 | -30.1 | 10.5 | 34.06 | 40 | -5.94 | 50 | -15.94 | 0-360 | 250 | H |
| 3 | 37.735 | 48.55 | PK | 14.9 | -30 | 10.5 | 43.95 | 40 | 3.95 | 50 | -6.05 | 0-360 | 99 | V |
| 4 | 40.5825 | 57.17 | PK | 13.8 | -30.1 | 10.5 | 51.37 | 40 | 11.37 | 50 | 1.37 | 0-360 | 99 | V |
| 5 | 870.2667 | 33.17 | PK | 22.5 | -24.5 | 10.5 | 41.67 | 46.02 | -4.35 | 56.02 | -14.35 | 0-360 | 400 | H |
| 6 | 905.8667 | 90.77 | PK | 23.1 | -24.9 | 10.5 | 99.47 | 46.02 | 53.45 | 56.02 | 43.45 | 0-360 | 299 | H |
| 7 | 870.4 | 32.02 | PK | 22.5 | -24.5 | 10.5 | 40.52 | 46.02 | -5.5 | 56.02 | -15.5 | 0-360 | 199 | V |
| 8 | 906.1333 | 93.62 | PK | 23.1 | -24.9 | 10.5 | 102.32 | 46.02 | 56.3 | 56.02 | 46.3 | 0-360 | 199 | V |
| PK - Peak detector | | | | | | | | | | | | | | |
| Radiated Emission Data | | | | | | | | | | | | | | |
| | Test Frequency MHz | Meter Reading dBuV | Detector | Antenna Factor dB/m | Path Factor dB | 10m to 3m Factor dB | Level dBuV/m | Limit FCC 15.209 dBuV/m | Margin dB | Limit FCC 15.109 Class A | Margin dB | Azimuth [Degs] | Height [cm] | Polarity |
| | 40.147885 | 52.3 | QP | 14 | -30.1 | 10.5 | 46.7 | 40 | 6.7 | 50 | -3.3 | 174 | 102 | V |
| QP - Quasi-Peak detector | | | | | | | | | | | | | | |

### 4.4 Test Conditions and Results – 6dB BANDWIDTH

| | |
|---|---|
| Test Description | Systems using digital modulation techniques may operate in the 902 - 928 MHz, 2400 - 2483.5 MHz, and 5725 - 5850 MHz bands. The minimum 6 dB bandwidth shall be at least 500 kHz. |
| Basic Standard | 47 CFR Part 15.247(a)(2)<br>RSS-210, A8.2(a) |

**Table 51 6dB Bandwidth Configuration Settings**

| Power Interface Mode # | EUT Configurations Mode # | EUT Operation Mode # |
|---|---|---|
| 5 | 1 | 1 |
| Supplementary information: None | | |

**Table 52 6dB Bandwidth Results**

| Mode | Channel | 6dB Bandwidth |
|---|---|---|
| TX | Low | 0.8006 MHz |
| | Middle | 0.8402 MHz |
| | High | 0.7820 MHz |

**Figure 48 6dB Bandwidth Graphs – Low Channel**

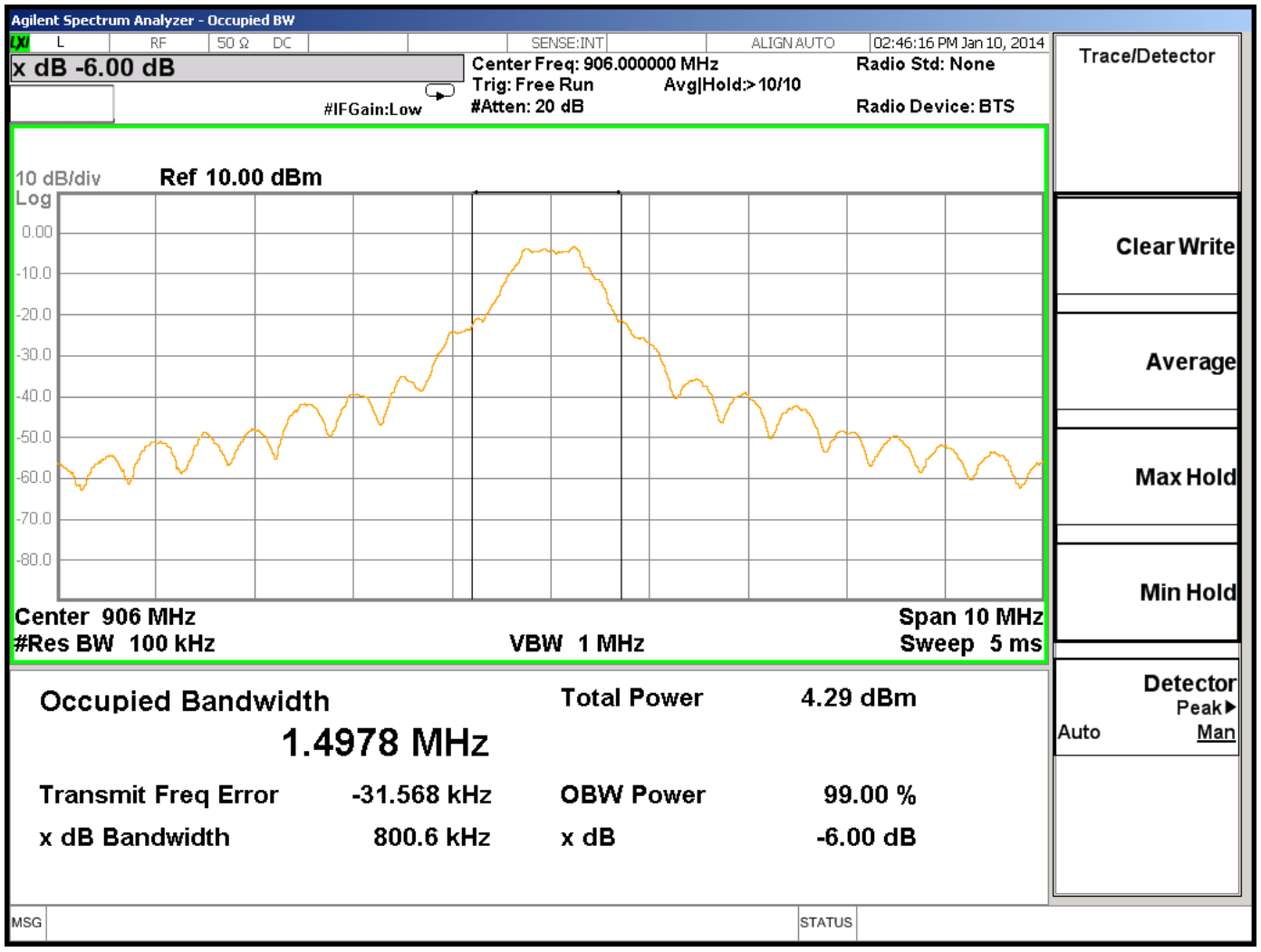


**Figure 49 6dB Bandwidth Graphs – Middle Channel**

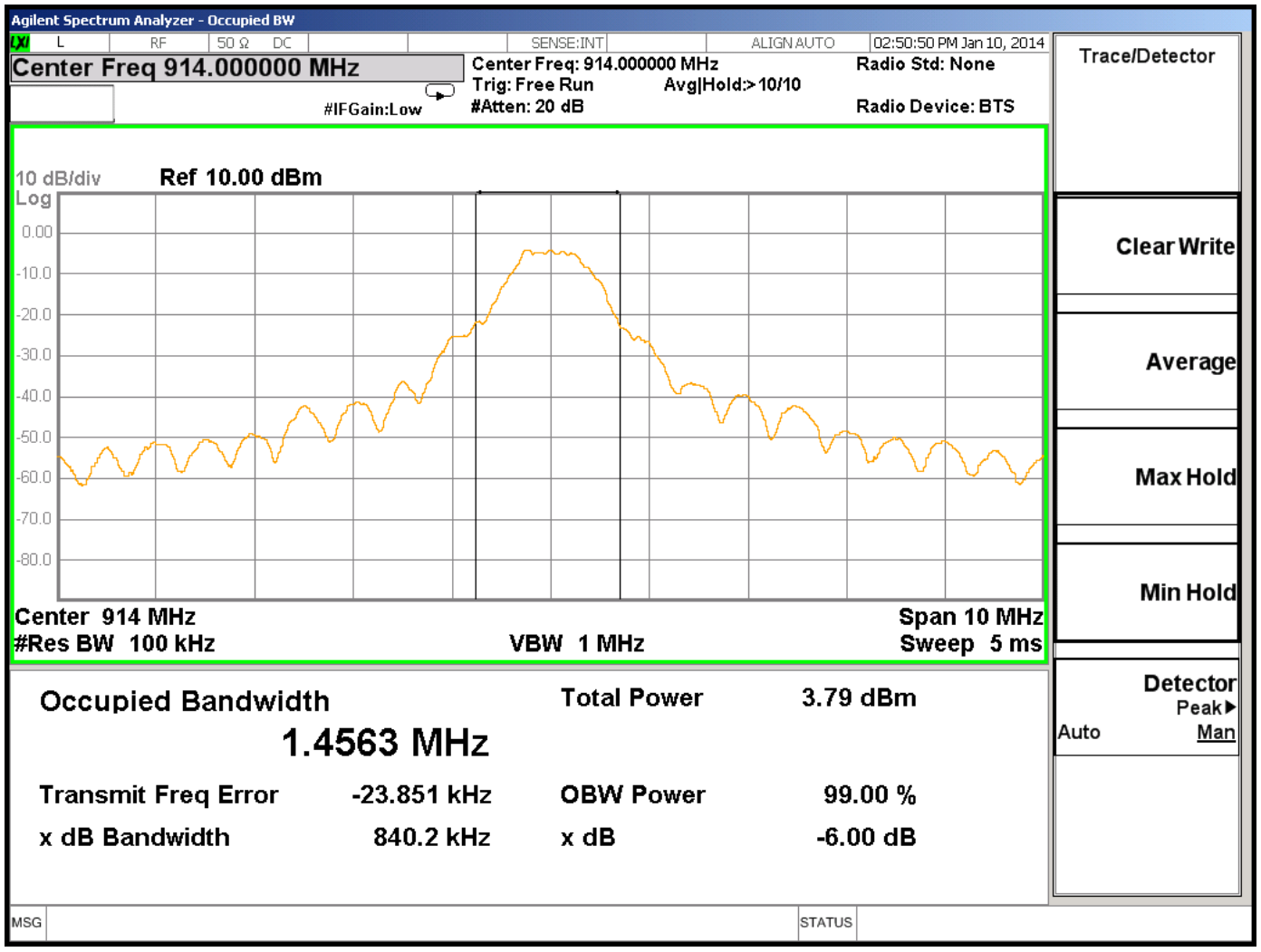
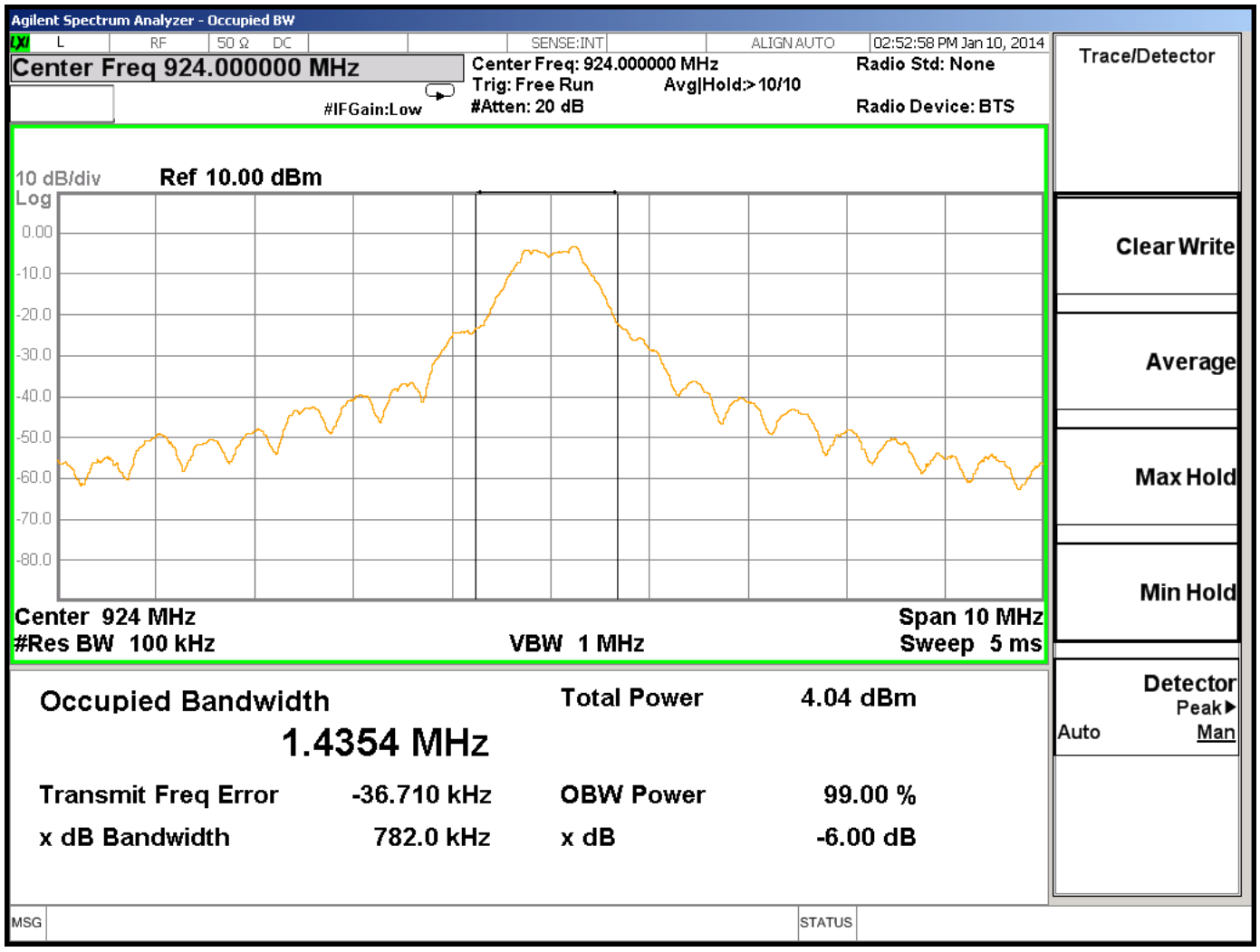


**Figure 50 6dB Bandwidth Graphs – High Channel**



### 4.5 Test Conditions and Results – MAXIMUM PEAK OUTPUT POWER

| | | |
|---|---|---|
| Test Description | For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. | |
| Basic Standard | 47 CFR Part 15.247(b)(3)<br>RSS-210, A8.4(4) | |
| | Frequency range | Measurement Point |
| Fully configured sample scanned over the following frequency range | 902MHz – 928MHz | Antenna Conducted |
| **Limits** | | |
| Frequency (MHz) | Limit mW | |
| | Peak | |
| 902 - 928 | 1,000 | |
| Supplementary information: None | | |

**Table 53 Maximum Peak Output Power EUT Configuration Settings**

| Power Interface Mode # | EUT Configurations Mode # | EUT Operation Mode # |
|---|---|---|
| 5 | 1 | 1 |
| Supplementary information: None | | |

**Table 54 Maximum Peak Output Power Results**

| Channel | Limit (dBm) | Power dBm | Power W |
|---|---|---|---|
| Low Channel | 30 | 8.620 | 0.00728 |
| Middle Channel | 30 | 8.523 | 0.00712 |
| High Channel | 30 | 8.696 | 0.00741 |

**Figure 51 Maximum Peak Output Power Graphs – Low Channel**

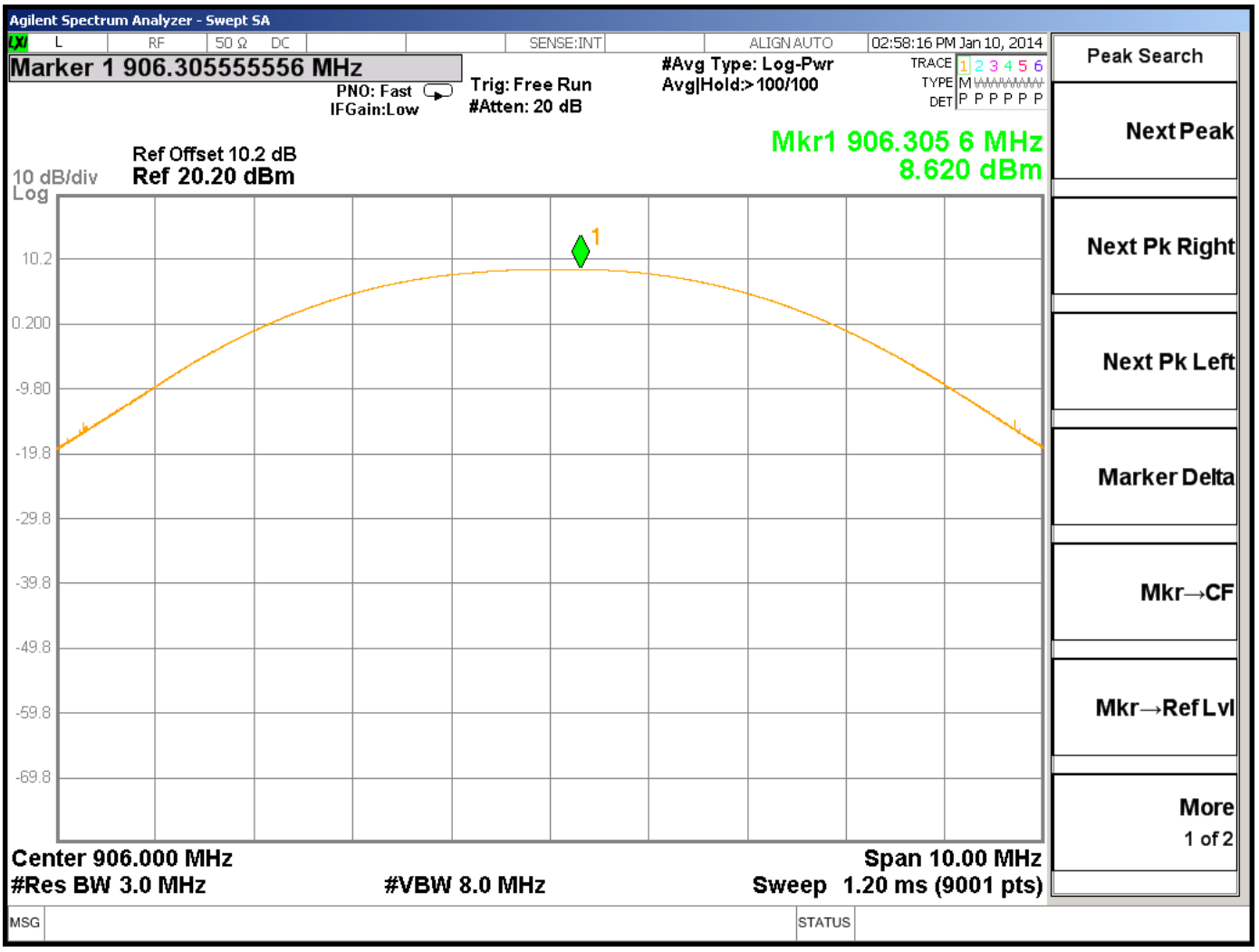


**Figure 52 Maximum Peak Output Power Graphs – Mid Channel**

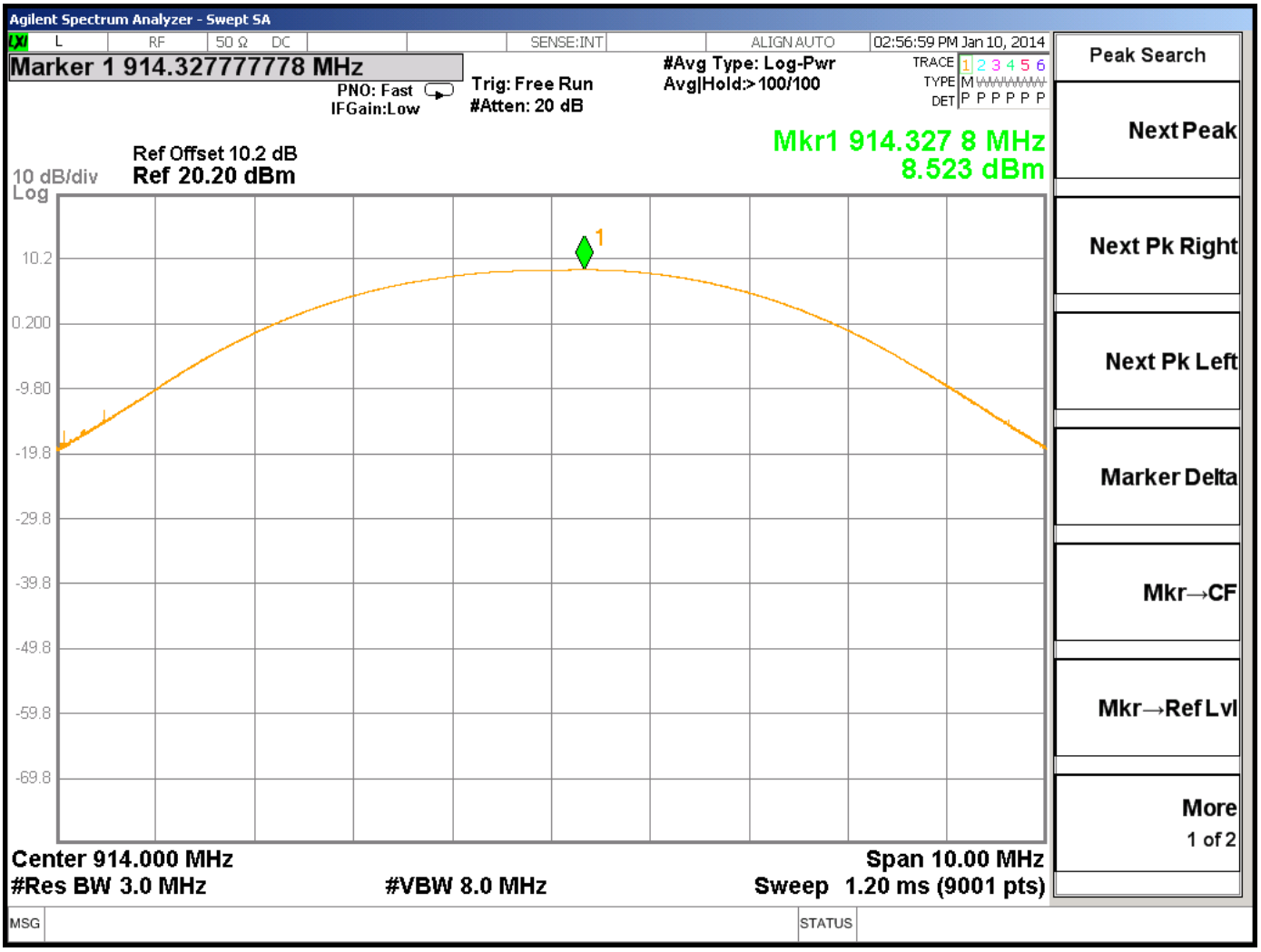
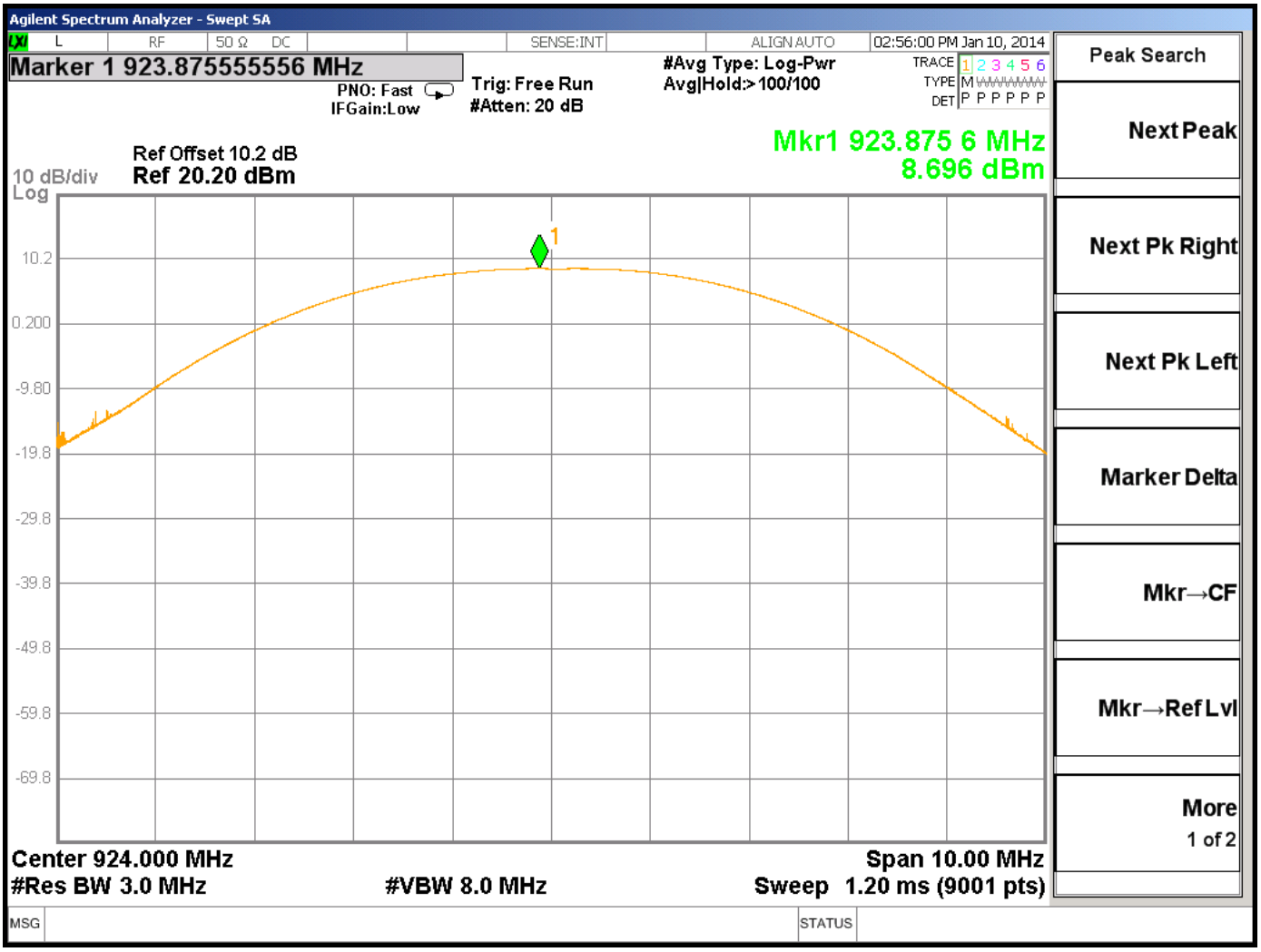


**Figure 53 Maximum Peak Output Power Graphs – High Channel**



### 4.6 Test Conditions and Results – POWER SPECTRAL DENSITY

| | | |
|---|---|---|
| Test Description | For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission. | |
| Basic Standard | 47 CFR Part 15.247(e)<br>RSS-210, A8.2(b) | |
| | Frequency range | Measurement Point |
| Fully configured sample scanned over the following frequency range | 902MHz – 928MHz | Antenna Conducted |
| **Limits** | | |
| Frequency (MHz) | Limit mW | |
| | Peak | |
| 902 - 928 | 8dBm (0.00631mW) | |
| Supplementary information: None | | |

**Table 55 Power Spectral Density EUT Configuration Settings**

| Power Interface Mode # | EUT Configurations Mode # | EUT Operation Mode # |
|---|---|---|
| 5 | 1 | 1 |
| Supplementary information: None | | |

**Table 56 Power Spectral Density Power Results**

| Channel | Limit (dBm) | Power Density dBm |
|---|---|---|
| Low Channel | 8 | -3.391 |
| Middle Channel | 8 | -3.323 |
| High Channel | 8 | -4.671 |

**Figure 54 Power Spectral Density Graphs – Low Channel**

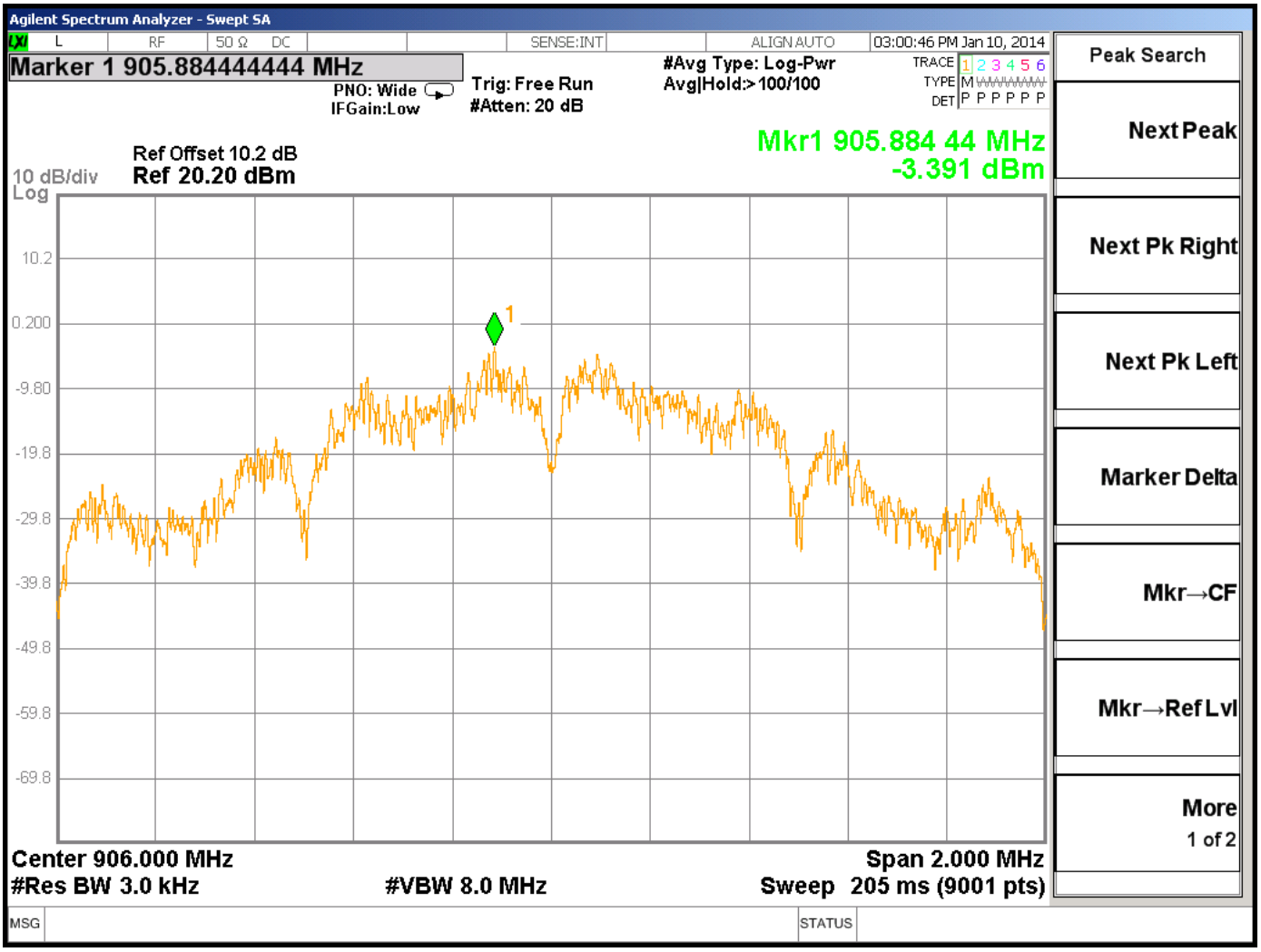


**Figure 55 Power Spectral Density Graphs – Middle Channel**

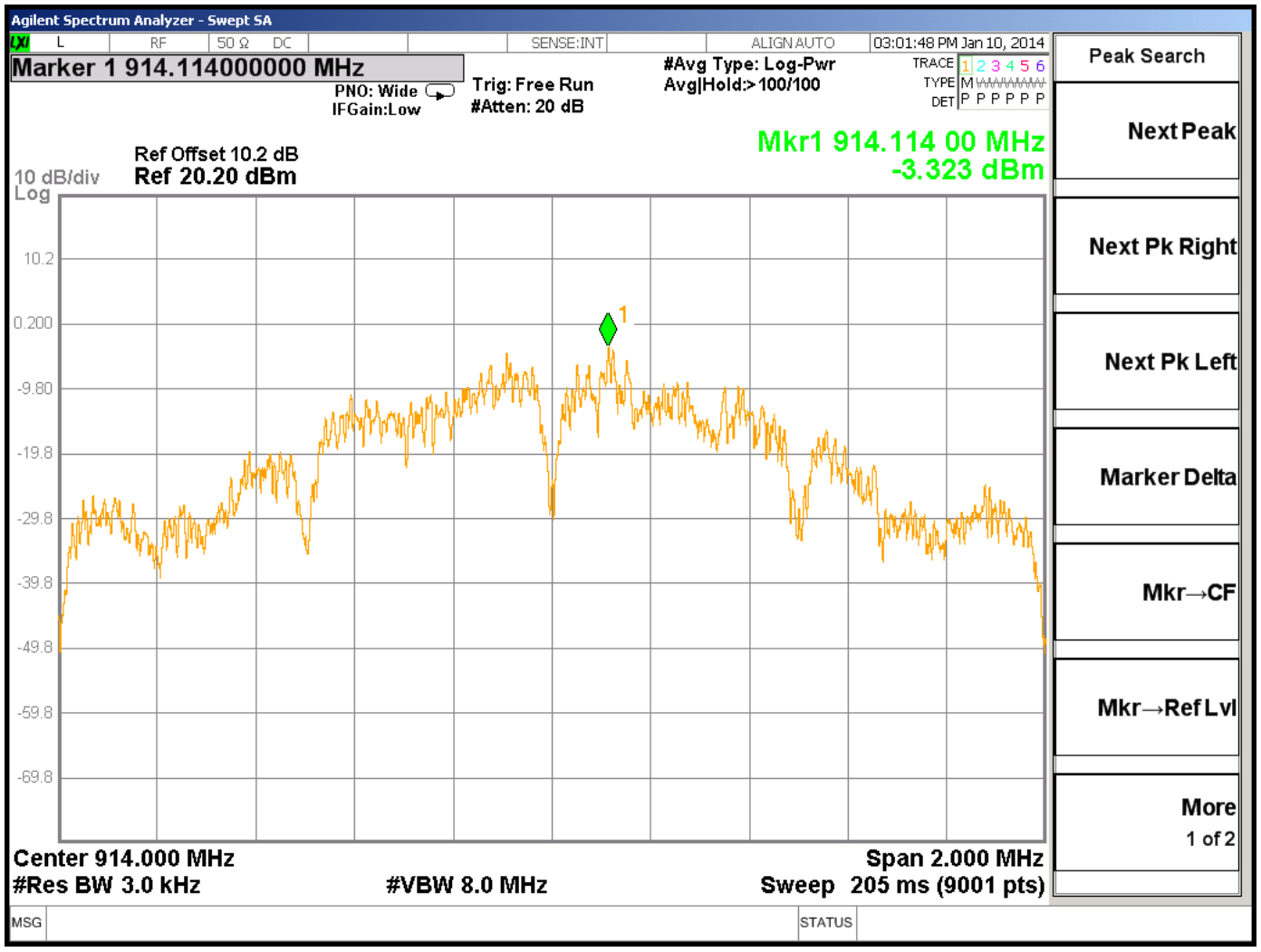
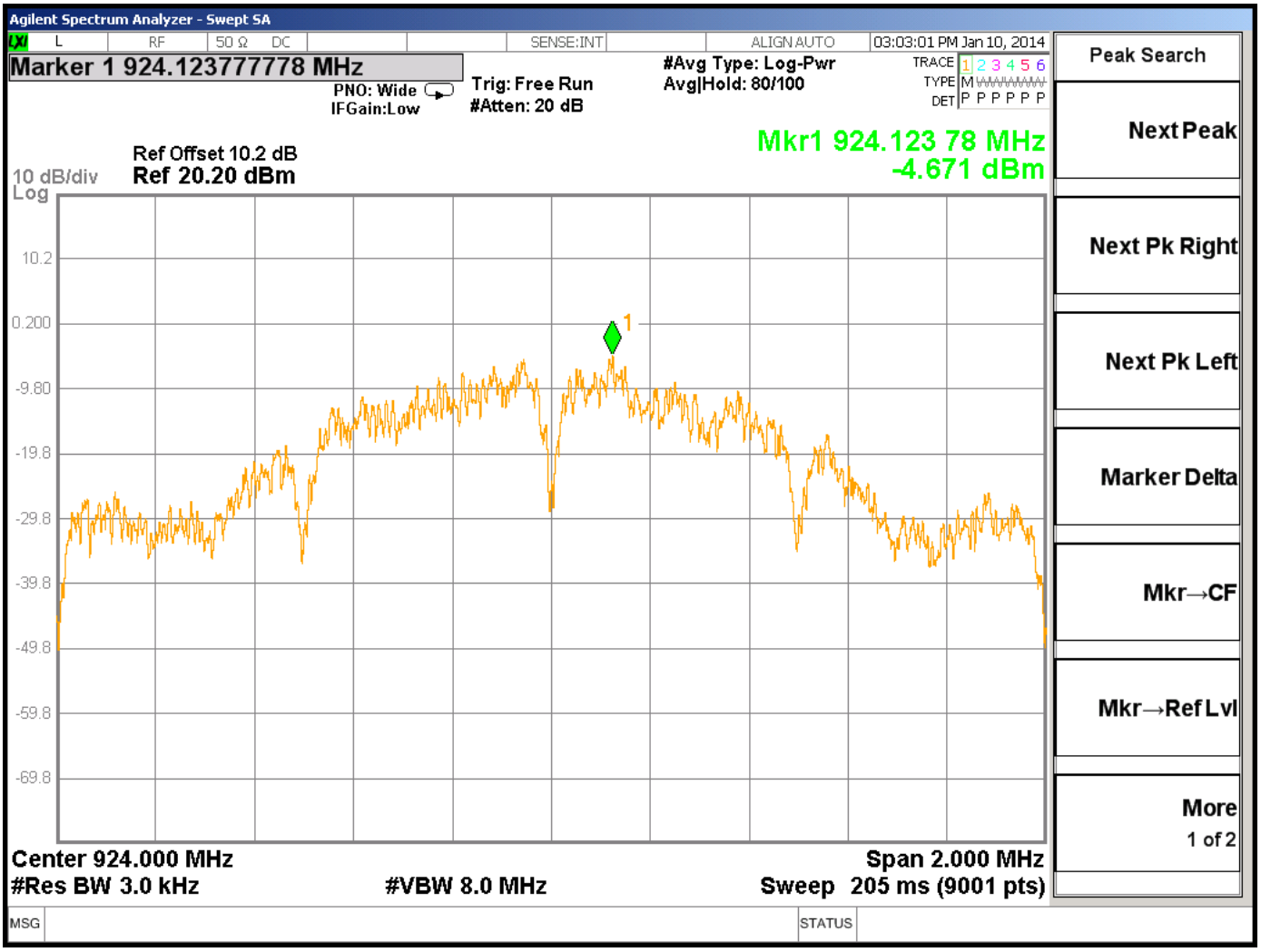


**Figure 56 Power Spectral Density Graphs – High Channel**



### 4.7 Test Conditions and Results – 99% Power BANDWIDTH

| | |
|---|---|
| Test Description | When an occupied bandwidth value is not specified in the applicable RSS, the transmitted signal bandwidth to be reported is to be its 99% emission bandwidth, as calculated or measured. |
| Basic Standard | RSS-Gen, 4.6.1 |

**Table 57 99% Power Bandwidth Configuration Settings**

| Power Interface Mode # | EUT Configurations Mode # | EUT Operation Mode # |
|---|---|---|
| 5 | 1 | 1 |
| Supplementary information: None | | |

**Table 58 99% Power Bandwidth Results**

| Mode | Channel | 99% Power Bandwidth |
|---|---|---|
| TX | Low | 1.4819MHz |
| | Middle | 1.4492MHz |
| | High | 1.4193MHz |

**Figure 57 99% Power Bandwidth Graphs – Low Channel**

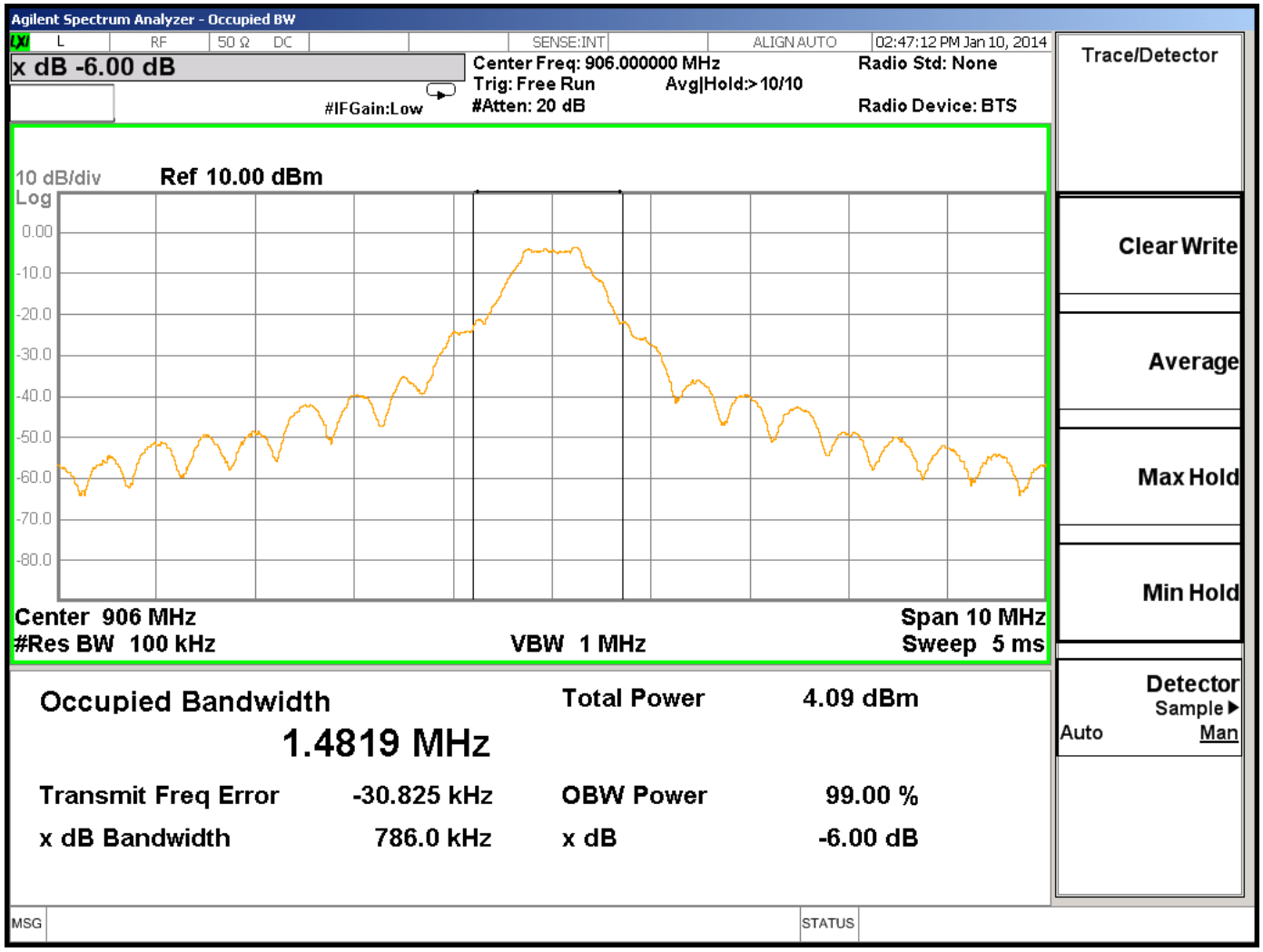


**Figure 58 99% Power Bandwidth Graphs – Middle Channel**

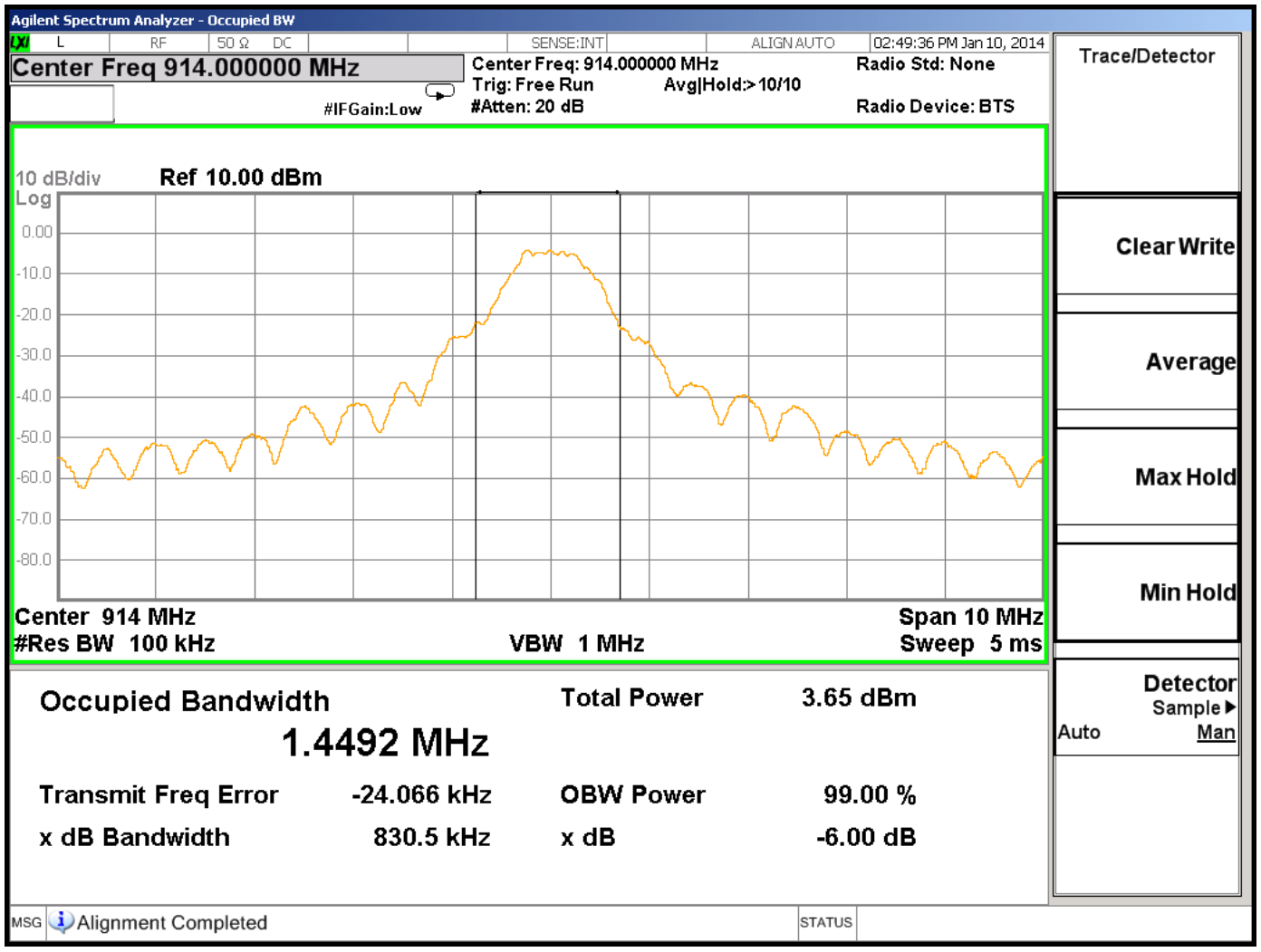
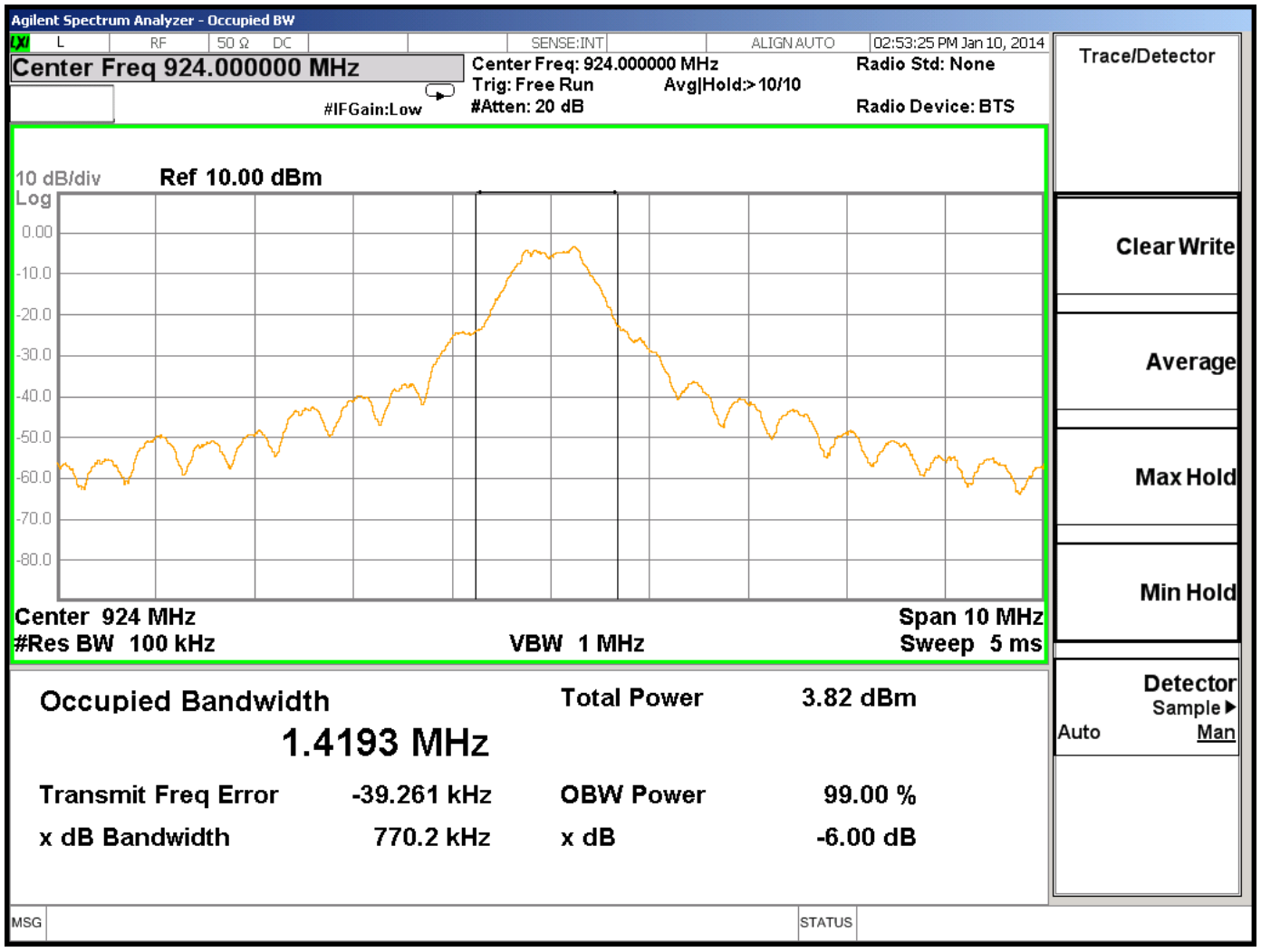


**Figure 59 99% Power Bandwidth Graphs – High Channel**



### 4.8 Test Conditions and Results – Duty Cycle Data

| | |
|---|---|
| Test Description | Duty cycle was measured over 100mS period. |
| Basic Standard | none |

**Table 59 Duty Cycle Configuration Settings**

| Power Interface Mode # | EUT Configurations Mode # | EUT Operation Mode # |
|---|---|---|
| 5 | 1 | 1 |
| Supplementary information: Manufacturer declared worst case duty cycle (-12.65dB) was used for radiated spurious emissions average level calculation. | | |

**Duty Cycle Correction Factor based on Measurements**

| | |
|---|---|
| Single Burst On Time | 4.22mS |
| Maximum number of bursts captured in 100mS | 2 |
| Duty Cycle Calculation: 20 x Log (8.44/100) = -21.47dB | |

**Duty Cycle Correction Factor based on information provided by the manufacturer**

Calculation of maximum duty cycle of RF transmissions

In this section the maximum duty cycle of the RF transmissions is demonstrated by means of a calculation. The following hypothetical case is considered.

- In two consecutive timeslots a data package with maximum length is transmitted.
- In these same two timeslots the device receives the maximum possible number of messages it has to give an acknowledgement on.

In reference 4 a calculation is made based on this worst case condition. It is very hard, if not impossible to create a test bed that will simulate this condition. Even in this hypothetical condition, during a timeframe of 100ms the device under test can transmit only:

- 2 messages with a maximum length of 132 Bytes. Duration: 4224µs
- 58 acknowledgements on message with 31 Bytes length Duration: 14848µs
- Total transmit time. Duration: 23296µs

The duty cycle is limited to 23.296%

Conclusions

In the worst case condition the Duty Cycle of transmissions in the Starsense system is limited to 23.296%.
The average field strength of any spurious emission during any 100ms period is:
20xLog(23.296/100) = -12.65dB

**Figure 60 Duty Cycle – Single Burst Duration**

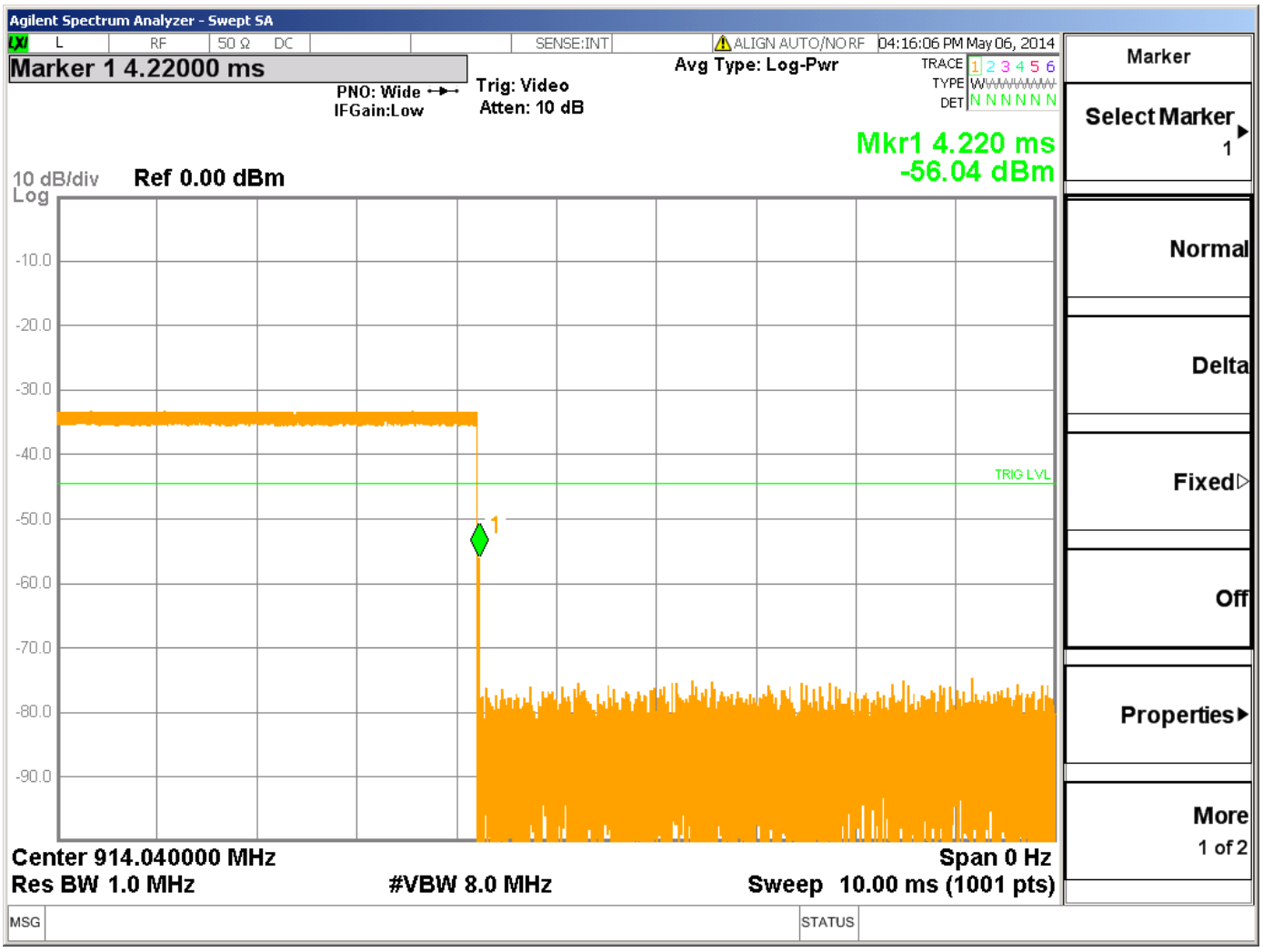
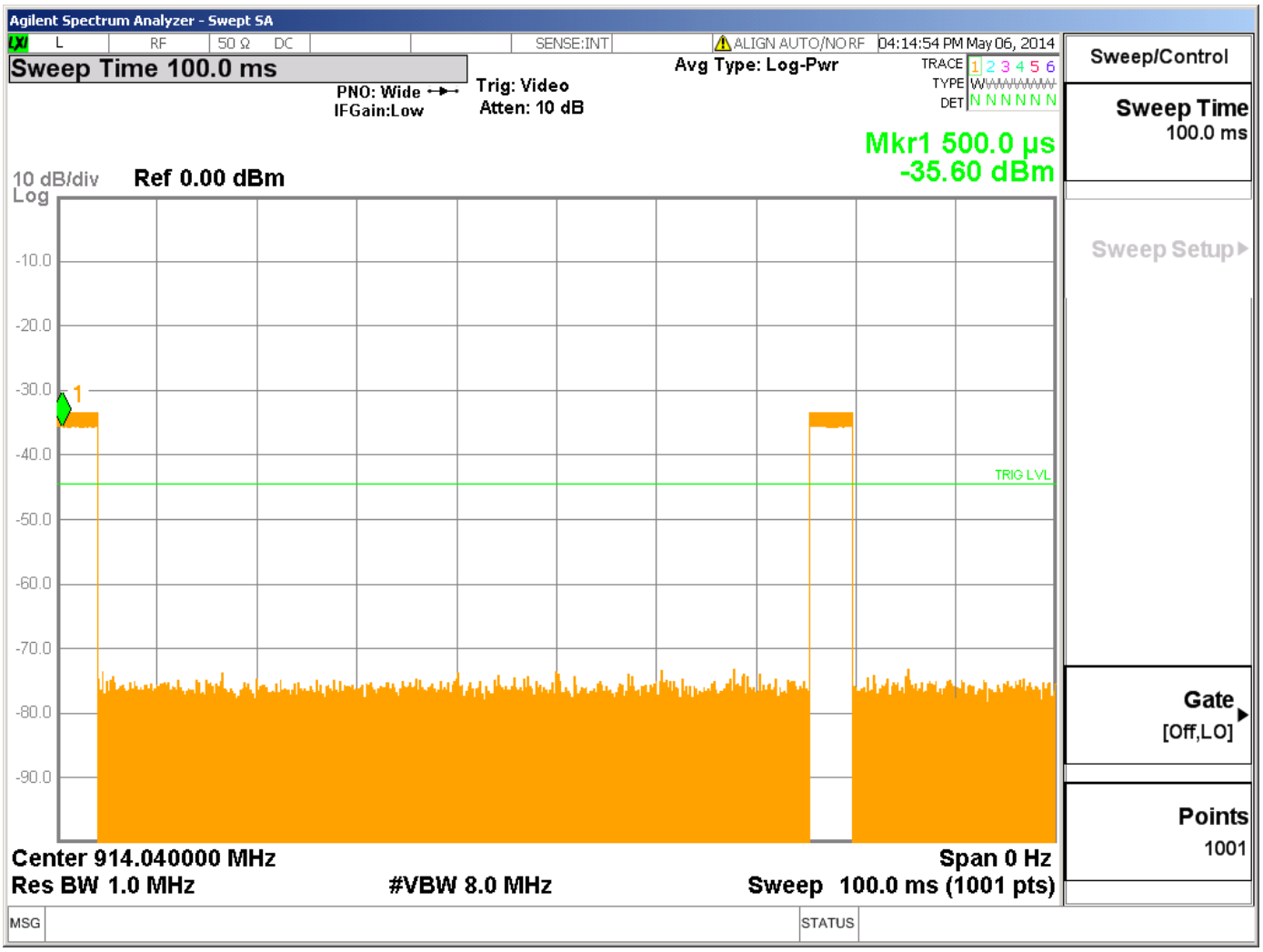


**Figure 61 Duty Cycle – Number of Burst over 100mS (attempt to capture worst case)**



# Appendix A

**Test Setup Photos**

**Figure 62 – Radiated Emissions**

**Figure 63 – Module under plastic cover installed on a host.**

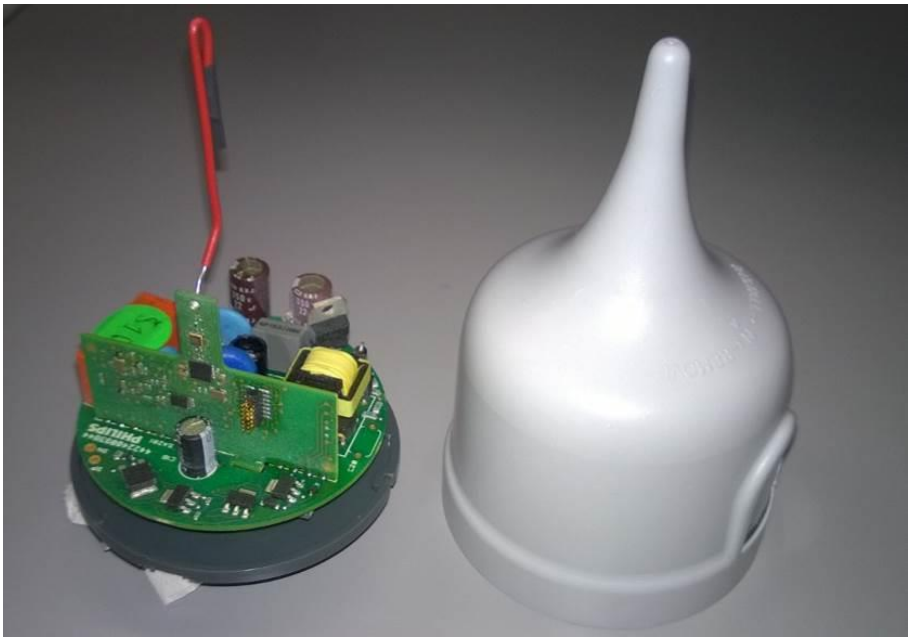
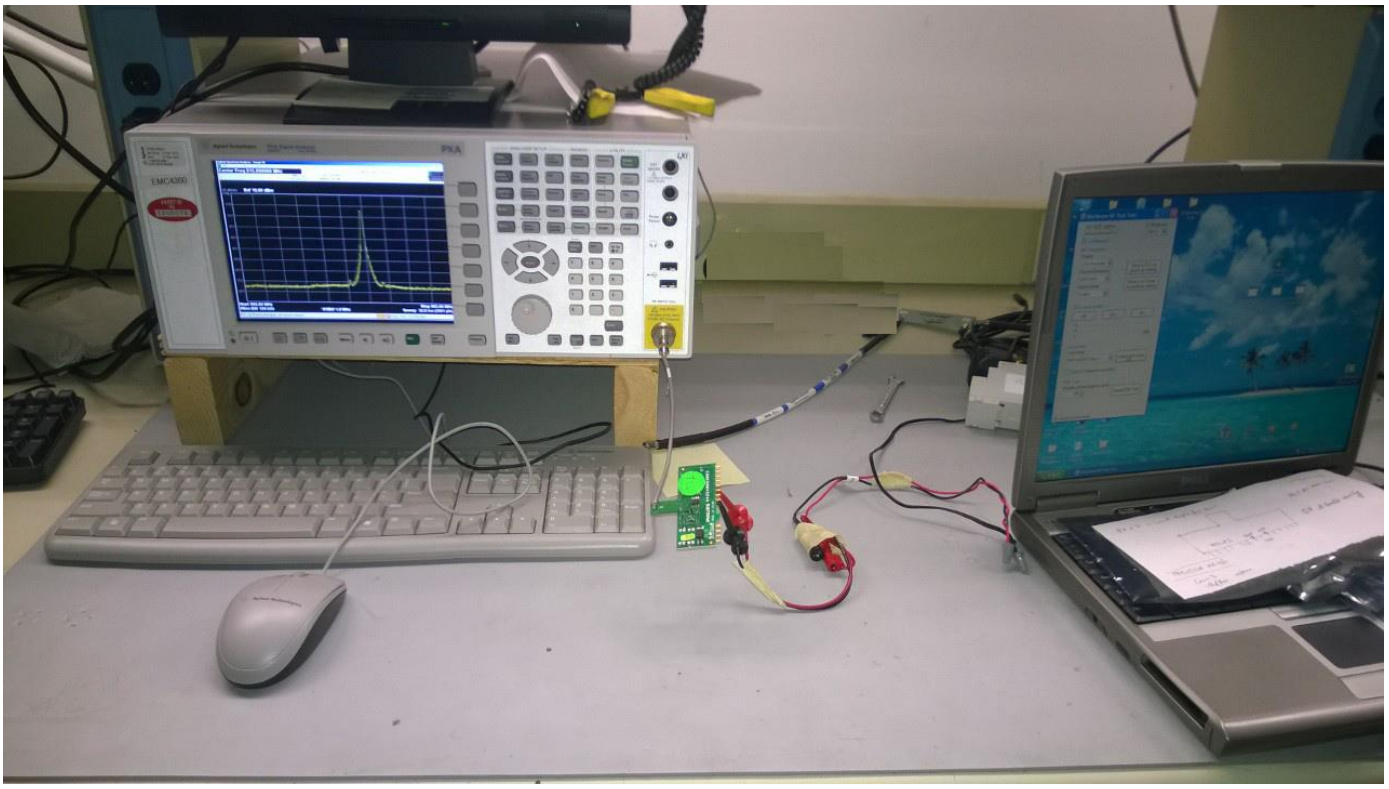


**Figure 64 – Line Conducted Emissions**

**Figure 65 – Antenna Port Measurements**



# Appendix B

### Test Equipment List

**Table 60 Antenna Port Measurements Test Equipment**

| Test Equipment Used | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due |
| Spectrum analyzer | Agilent | N9030A | EMC4360 | 20131221 | 20141221 |
| Attenuator w/ Cable | Mini Circuits | - | - | *N/A | N/A |
| * Cable and attenuator ware characterized at the time of testing | | | | | |

**Table 61 Line conducted Emissions Test Equipment**

| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due Date |
|---|---|---|---|---|---|
| EMI Test Receiver | Rohde & Schwarz | ESCI | EMC4328 | Dec 30, 2013 | Dec 30, 2014 |
| Transient Limiter | Electro-Metrics | EM7600-2 | EMC4224 | N/A | N/A |
| HighPass Filter | Solar Electronics | 2803-150 | 885551 | N/A | N/A |
| Attenuator | HP | 8494B | 2831A00838 | N/A | N/A |
| LISN - L1 | Solar | 8602-50-TS-50-N | EMC4052 | Jan 15, 2014 | Jan 16, 2015 |
| LISN - L2 | Solar | 8602-50-TS-50-N | EMC4064 | Jan 15, 2014 | Jan 16, 2015 |

**Table 62 Radiated Emissions Test Equipment**

| Description | Manufacturer | Model | Identifier | Cal. Date | Cal. Due Date |
|---|---|---|---|---|---|
| EMI Test Receiver | Rohde & Schwarz | ESU | EMC4323 | 20131227 | 20141231 |
| Bicon Antenna | Electro-Metrics | EM6912A | EMC4070 | 20130806 | 20140830 |
| Log-P Antenna | Chase | UPA6109 | EMC4313 | 20131003 | 20141003 |
| Spectrum Analyzer | Rhode & Schwarz | FSEK | EMC4182 | 20131226 | 20141231 |
| Antenna Array | UL | BOMS | EMC4276 | 20130912 | 20140930 |

## Appendix C

**Accreditations and Authorizations**

NVLAP Lab code: 100414-0

NVLAP: The National Institute of Standards and Technology (NIST) administers the National Voluntary Laboratory Accreditation Program (NVLAP). NVLAP is comprised of laboratory accreditation programs (LAPs) which are established on the basis of requests and demonstrated need. Each LAP includes specific calibration and/or test standards and related methods and protocols assembled to satisfy the unique needs for accreditation in a field of testing or calibration. NVLAP accredits public and private laboratories based on evaluation of their technical qualifications and competence to carry out specific calibrations or tests. Accreditation criteria are established in accordance with the U.S. Code of Federal Regulations (CFR, Title 15, Part 285), NVLAP Procedures and General Requirements, and encompass the requirements of ISO/IEC 17025. For a full scope listing see http://ts.nist.gov/standards/scopes/1004140.htm

FCC: Details of the measurement facilities used for these tests have been filed with the Federal Communications Commission's Laboratory in Columbia, Maryland (Ref. No. 91044).

Industry Canada Industrie Canada

Industry of Canada: Accredited by Industry Canada for performance of radiated measurements. Our test site complies with RSP 100, Issue 7, Section 3.3. File #: IC 2180

VCCI: Accepted as an Associate Member to the VCCI. The measurement facilities detailed in this test report have been registered in accordance with Regulations for Voluntary Control Measures, Article 8. Registration Nos.: Radiated Emissions R-621, Conducted Emissions C-642.

ICASA: ICASA (Independent Communications Authority of South Africa) has appointed UL as a Designated Test Laboratory to test Telecommunications equipment for type approval in compliance with CISPR 22 to assist in fulfilling its mandate under section 54(1) of the Telecommunications Act, 1996 (Act 103 of 1996).

NIST/CAB: Validated by the European Commission as a U.S. Conformity Assessment Body (CAB) of the U.S.-EU Mutual Recognition Agreement (MRA) for the Electromagnetic Compatibility - Council Directive 2004/108/EC, Annex III (2-3). Also validated for the Telecommunication Equipment-Council Directive 99/5/EC, Annex III and IV, Identification Number: 0983.
NIST/CAB: Provisioned to act as a U.S. Conformity Assessment Body (CAB) under Appendix B, Phase I Procedures, of the Asia Pacific Economic Cooperation (APEC) MRA between the American Institute in Taiwan (AIT) and the United States. Our laboratory is considered qualified to test equipment subject to the applicable EMC regulations of the Chinese Taipei Bureau of Standards, Metrology and Inspection (BSMI) which require testing to CNS 13438 (CISPR 22).
NIST/CAB: Recognized by the Infocomm Development Authority of Singapore (IDA) under the Asia Pacific Economic Cooperation Mutual Recognition Agreement (APEC MRA). Our laboratory is provisionally designated to act as a Conformity Assessment Body (CAB) under Appendix B, Phase I Procedures, of the APEC MRA. Our scope of designation includes IDA TS EMC (CISPR 22), IEC 61000-4-2, -4-3, -4-4, -4-5, and -4-6