

FCC 47 CFR PART 15 SUBPART C INDUSTRY CANADA RSS-210 ISSUE 8

CERTIFICATION TEST REPORT

FOR

Light Sensor

MODEL NUMBER: SNS100

FCC ID: 2AF2N-SNS100 IC: 20659-SNS100

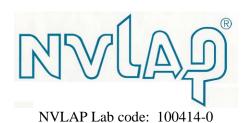
REPORT NUMBER: 10975967A

ISSUE DATE: November 2, 2015

Prepared for

Philips Lighting North America Corp.
O'Hare International Center
10275 W. Higgins Rd
Rosemont, IL 60018

Prepared by
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Northbrook, IL 60062
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Revision History

Rev.	Issue Date	Revisions	Revised By
	02-NOV-2015	Initial Issue	ВМ

DATE: 2015-NOV-02

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Philips Lighting Norht America Corp

O'Hare Internation Center 10275 W. Higgins Rd Rosemont, IL 60018

EUT DESCRIPTION: Light Sensor

MODEL: SNS100

SERIAL NUMBER: non serialized

DATE TESTED: 2015-OCT-01 to 2015-OCT-30

APPLICABLE STANDARDS

711 FIG. 1512 GT. 11157 11150		
STANDARD	TEST RESULTS	
CFR 47 Part 15 Subpart C	Pass	
INDUSTRY CANADA RSS-210 Issue 8 Annex 2	Pass	
INDUSTRY CANADA RSS-GEN Issue 4	Pass	

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL LLC based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document. 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.

Test Engineer:

Bartlomiej Mucha Staff Engineer

Consumer Technology Division

Mhul

Reviewer:

Michael Ferrer Program Manager

Consumer Technology Division

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013, FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 4 and RSS-210 Issue 8.

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3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 333 Pfingsten Road, Northbrook, IL 60062 USA.

UL NBK is accredited by NVLAP, Laboratory Code 100414-0. The full scope of accreditation can be viewed at http://www.nist.gov

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

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)

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Test	Range	Equipment	Uncertainty k=2
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
Radiated Emissions	1-6GHz	Horn	5.02dB
Radiated Emissions	6-18GHz	Horn	5.34dB
Radiated Emissions	18-26GHz	Horn	6.60dB
Conducted Ant Port	30MHz-26GHz	Spectrum Analyzer	2.94

Uncertainty figures are valid to a confidence level of 95%.

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5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a Light Sensor with built in 2.4GHz transceiver

5.2. MAXIMUM OUTPUT E-FIELD STRENGTH

The transmitter has a maximum output average E-field as follows:

Frequency Range	Mode	Output AV E-field Strength
(MHz)		(dBuV/m)
2405-2480	TX	93.63

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an internal antenna, with a maximum gain of -2.0 dBi.

5.4. SOFTWARE AND FIRMWARE

The EUT driver software installed during testing was version 6.12.

5.5. WORST-CASE CONFIGURATION AND MODE

EUT can be mounted in single orientation therefore only single axis were tested. The device has only one operating mode.

FORM NO: CCSUP4701i

DATE: 2015-NOV-02

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List						
Description Manufacturer Model Serial Number FCC IE						
LED Electronic DRiver	Philips	XI040C110V054VPT1	-	-		

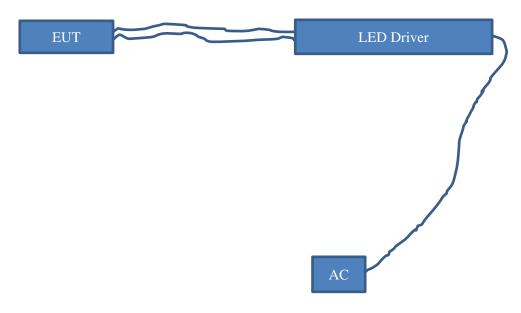
I/O CABLES

	I/O Cable List						
Cable	Port	# of identical	Connector	Cable Type	Cable	Remarks	
No		ports	Туре		Length (m)		
1	Power	1	WiredIn	standard	> 3m	Used as power and	
	& IO			two wire		Contrl lines	

TEST SETUP

The EUT is a stand alone sensor which is powered by LED driver.

SETUP DIAGRAM FOR TESTS



DATE: 2015-NOV-02

6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment List						
Description	Manufacturer	Model	T No.	Cal Date	Cal Due	
Radiated Software	UL	UL EMC	Vei	r 9.5, July 22, 2	014	
Conducted Software	UL	UL EMC	Ve	r 9.5, May 17 2	012	
EMI Test Receiver	Rohde & Schwarz	ESU	EMC4323	20141216	20151231	
EMI Test Receiver	Rohde & Schwarz	ESCI	EMC4328	20141830	20151231	
Bicon Antenna	Electro-Metrics	EM6912A	EMC4070	20141014	20151031	
Log-P Antenna	Chase	UPA6109	EMC4313	20141119	20151130	
Loop Antenna	EMCO	6502/1	EMC4026	20150420	20160430	
Antenna Array	UL	BOMS	EMC4276	20141201	20151231	
Spectrum Analyzer	Agilent	N9030A (PXA)	EMC4360	20141219	20151219	

EMI Test Receiver	Rohde & Schwarz	ESR	EMC4377	20150423	20160423
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	9-Jan-15	10-Jan-16
LISN - L2	Solar	8602-50-TS-50-N	EMC4064	9-Jan-15	10-Jan-16

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7. TEST RESULTS

7.1.1. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

RESULTS

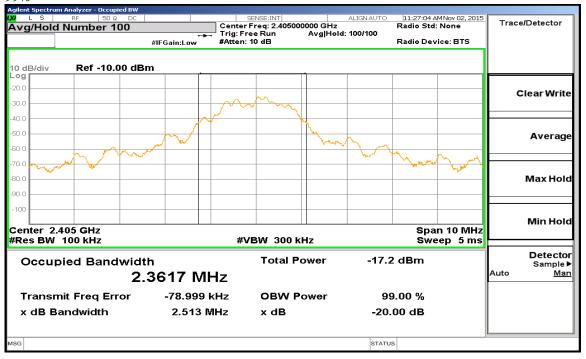
Channel	Frequency	99% Bandwidth	20dB Bandwidth
	(MHz)	(MHz)	(MHz)
Low	2405	2.3617	2.539
Middle	2440	2.8888	2.597
High	2480	2.5445	2.597

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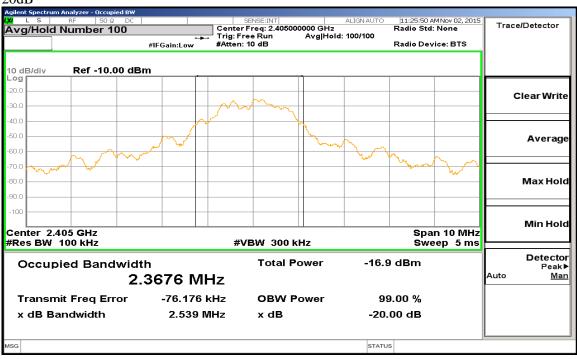
DATE: 2015-NOV-02 IC: 20659-SNS100

Low Channel Bandwidth

99%

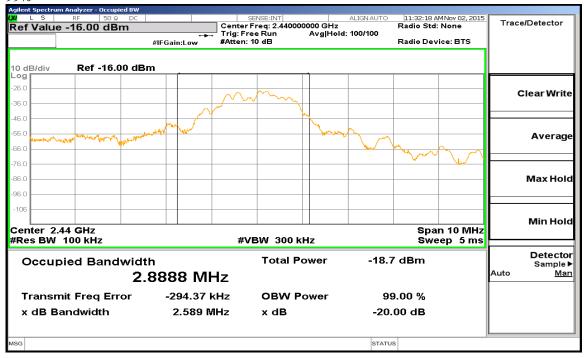


20dB

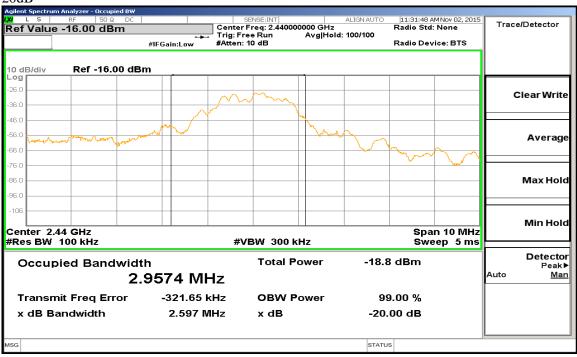


Middle Channel Bandwidth

99%



20dB



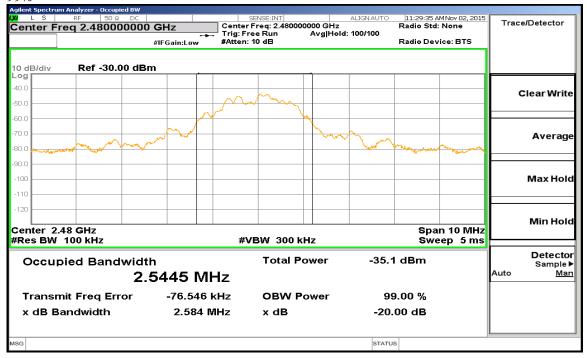
DATE: 2015-NOV-02

IC: 20659-SNS100

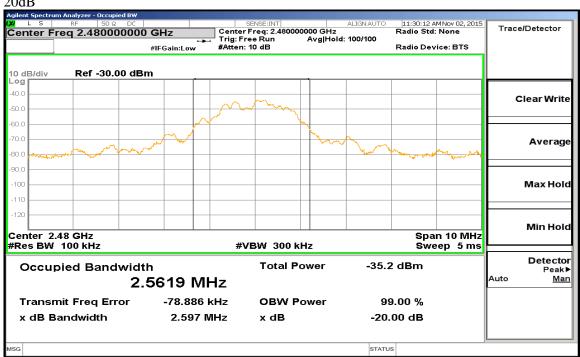
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High Channel Bandwidth

99%



20dB



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7.2. RADIATED EMISSIONS

<u>LIMIT</u>

IC RSS-210, A2.9 FCC 15.249

Operation within the bands 902–928 MHz, 2400–2483.5 MHz, 5725–5875 MHZ, and 24.0–24.25 GHz. (a) Except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental frequency	Field strength of fundamental (millivolts/ meter)	Field strength of harmonics (microvolts/ meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24.0–24.25 GHz	250	2500

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation.

Frequency (MHz)	Field strength (microvolts/meter)	Measure- ment dis- tance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100 **	3
88-216	150 **	3
216-960	200 ***	3
Above 960	500	3

^{**} Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54–72 MHz, 76–88 MHz, 174–216 MHz or 470–806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

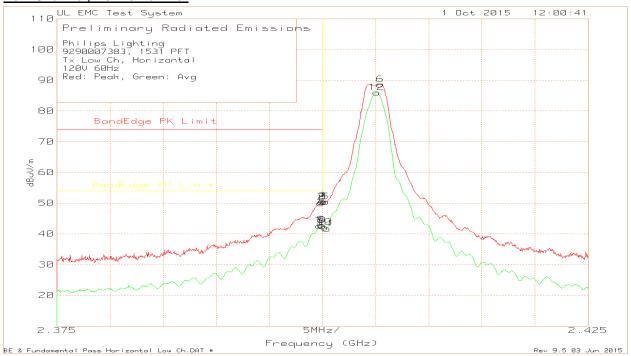
DATE: 2015-NOV-02

RESULTS

AV FS @ 2405MHz dBuV/m	AV FS @ 2440MHz dBuV/m	AV FS @ 2480MHz dBuV/m
86.01 H	86.06 H	69.57 H
91.41 V	93.63 V	74.18 V

7.2.1. FUNDAMENTAL FREQUENCY RADIATED EMISSION and BANDEDGES

Low Channel, Horizontal Plot



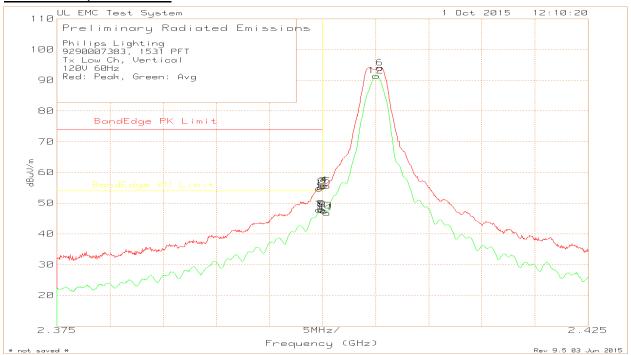
DATE: 2015-NOV-02

Low Channel, Horizontal Data

Philips Li	ghting										
9290007	383, 1531 PF	Т									
Tx Low	Ch, Horizonta	al									
120V 60H	l z										
Red: Pea	ak, Green: Av	/g									
Trace Ma	arkers										
							FCC				
	Test	Meter		Antenna	Path		15.249				ĺ
Marker	Frequency	Reading		Factor	Factor	Level	Limit	Margin	Azimuth	Height	i
No.	(GHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	[Degs]	[cm]	Polarity
1	2.3998	80.07	Pk	21.8	-51.93	49.94	74	-24.06	19	174	Н
2	2.3999	80.44	Pk	21.8	-51.93	50.31	74	-23.69	19	174	Н
3	2.4	80.84	Pk	21.8	-51.93	50.71	74	-23.29	19	174	Н
4	2.4001	80.64	Pk	21.8	-51.93	50.51	114	-63.49	19	174	Н
5	2.4003	80.6	Pk	21.8	-51.93	50.47	114	-63.53	19	174	Н
6	2.4054	118.62	Pk	21.8	-51.8	88.62	114	-25.38	19	174	Н
7	2.3997	72.67	Av	21.8	-51.93	42.54	54	-11.46	19	174	Н
8	2.3999	73.03	Av	21.8	-51.93	42.9	54	-11.1	19	174	Н
9	2.4	72.85	Av	21.8	-51.93	42.72	54	-11.28	19	174	Н
10	2.4002	72.24	Av	21.8	-51.93	42.11	94	-51.89	19	174	Н
11	2.4004	71.84	Av	21.8	-51.93	41.71	94	-52.29	19	174	Н
12	2.4051	116.02	Av	21.8	-51.81	86.01	94	-7.99	19	174	Н
Pk - Pea	k detector										

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Low Channel, Vertical Plot



Low Channel, Vertical Data

Philips L	ighting										
9290007	383, 1531 P	FT									
Tx Low	Ch, Vertical										
120V 60	Hz										
Red: Pe	ak, Green: A	Avg									
Trace M	arkers										
							FCC				
	Test	Meter		Antenna	Path		15.249				
Marker	Frequency	Reading		Factor	Factor	Lev el	Limit	Margin	Azimuth	Height	
No.	(GHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	[Degs]	[cm]	Polarity
1	2.3997	84.89	Pk	21.8	-51.93	54.76	74	-19.24	76	99	V
2	2.3999	85.28	Pk	21.8	-51.93	55.15	74	-18.85	76	99	V
3	2.4	85.74	Pk	21.8	-51.93	55.61	74	-18.39	76	99	V
4	2.4002	85.93	Pk	21.8	-51.93	55.8	114	-58.2	76	99	V
5	2.4004	85.74	Pk	21.8	-51.93	55.61	114	-58.39	76	99	V
6	2.4054	124.05	Pk	21.8	-51.8	94.05	114	-19.95	76	99	V
7	2.3997	77.94	Av	21.8	-51.93	47.81	54	-6.19	76	99	V
8	2.3999	78.21	Av	21.8	-51.93	48.08	54	-5.92	76	99	V
9	2.4	78.02	Av	21.8	-51.93	47.89	54	-6.11	76	99	V
10	2.4002	77.62	Av	21.8	-51.93	47.49	94	-46.51	76	99	V
11	2.4004	76.93	Av	21.8	-51.93	46.8	94	-47.2	76	99	V
12	2.4051	121.42	Av	21.8	-51.81	91.41	94	-2.59	76	99	V
Pk - Pea	k detector										

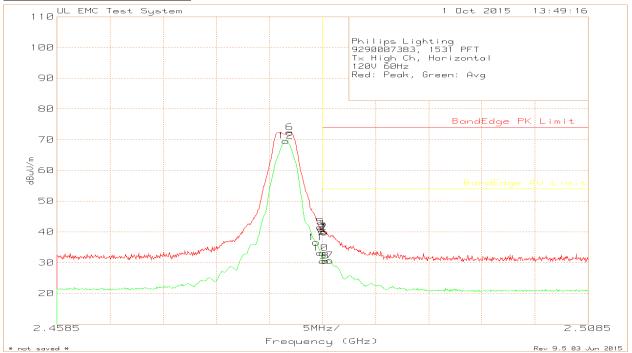
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Middle Channel, Horizontal & Vertical Data

Philips Lighti	ng									
9290007383	, 1531 PF	Γ								
Tx Mid Ch										
120V 60Hz										
Red: Horizon	ntal, Green	: Vertical								
Radiated Em	nission Dat	а								
						FCC				
Test	Meter		Antenna	Path		15.249				
Frequency	Reading		Factor	Factor	Lev el	Limit	Margin	Azimuth	Height	
(GHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	[Degs]	[cm]	Polarity
2.4393	117.96	Pk	21.9	-51.29	88.57	114	-25.43	360	174	Н
2.44	117.45	Av	21.9	-51.29	88.06	94	-5.94	360	174	Н
2.4393	123.52	Pk	21.9	-51.29	94.13	114	-19.87	50	119	٧
2.44	123.02	Av	21.9	-51.29	93.63	94	-0.37	50	119	V
Pk - Peak detector										
Av - Averag	e detection	1								

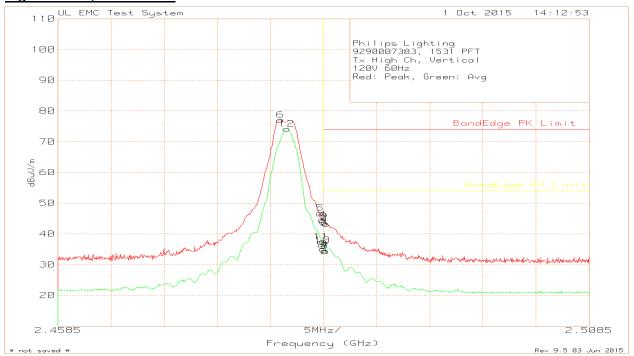
High Channel, Horizontal Plot



High Channel, Horizontal Data

Philips Li	ghting										
92900073	83, 1531 PF	Т									
Tx High (Ch, Horizonta	al									
120V 60H	łz										
Red: Pea	k, Green: Av	/g									
Trace Ma	ırkers										
							FCC				
	Test	Meter		Antenna	Path		15.249				
Marker	Frequency	Reading		Factor	Factor	Lev el	Limit	Margin	Azimuth	Height	
No.	(GHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	[Degs]	[cm]	Polarity
1	2.4837	69.49	Pk	22.1	-51.74	39.85	74	-34.15	159	132	Н
2	2.4836	69.6	Pk	22.1	-51.74	39.96	74	-34.04	159	132	Н
3	2.4835	69.99	Pk	22.1	-51.74	40.35	74	-33.65	159	132	Н
4	2.4834	70.61	Pk	22.1	-51.73	40.98	114	-73.02	159	132	Н
5	2.4833	71.33	Pk	22	-51.73	41.6	114	-72.4	159	132	Н
6	2.4804	102.05	Pk	22	-51.68	72.37	114	-41.63	159	132	Н
7	2.4842	60.31	Av	22.1	-51.75	30.66	54	-23.34	159	132	Н
8	2.4838	60.21	Av	22.1	-51.74	30.57	54	-23.43	159	132	Н
9	2.4836	60.12	Av	22.1	-51.74	30.48	54	-23.52	159	132	Н
10	2.4833	62.84	Av	22	-51.73	33.11	94	-60.89	159	132	Н
11	2.4829	66.26	Av	22	-51.73	36.53	94	-57.47	159	132	Н
12	2.4801	99.25	Av	22	-51.68	69.57	94	-24.43	159	132	Н
Pk - Peal	detector										

High Channel, Vertical Plot

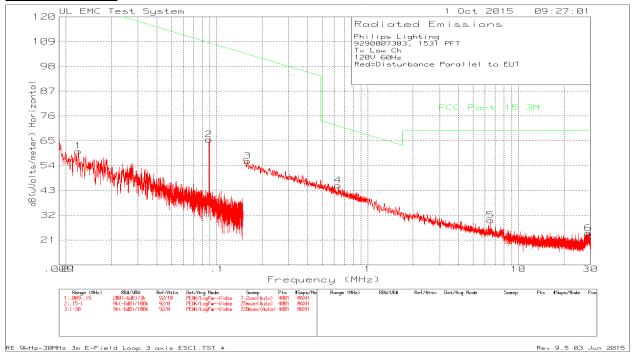


High Channel, Vertical Data

	<u>nannei, v</u>	0.1.00.									
Philips L											
	383, 1531 P										
	Ch, Vertical										
120V 60	Hz										
Red: Pe	ak, Green: A	wg									
Trace M	arkers										
Marker	Test Frequency	Meter Reading		Antenna Factor	Path Factor	Lev el	FCC 15.249 Limit	Margin	Azimuth	Height	
No.	(GHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	[Degs]	[cm]	Polarity
1	2.4838	72.86	Pk	22.1	-51.74	43.22	74	-30.78	143	101	V
2	2.4836	73.26	Pk	22.1	-51.74	43.62	74	-30.38	143	101	V
3	2.4835	73.72	Pk	22.1	-51.74	44.08	74	-29.92	143	101	V
4	2.4834	74.16	Pk	22.1	-51.73	44.53	114	-69.47	143	101	V
5	2.4832	76.43	Pk	22	-51.73	46.7	114	-67.3	143	101	V
6	2.4795	106.74	Pk	22	-51.66	77.08	114	-36.92	143	101	V
7	2.4837	64	Av	22.1	-51.74	34.36	54	-19.64	143	101	V
8	2.4836	64.01	Av	22.1	-51.74	34.37	54	-19.63	143	101	٧
9	2.4835	64.62	Av	22.1	-51.74	34.98	54	-19.02	143	101	V
10	2.4834	65.84	Av	22.1	-51.73	36.21	94	-57.79	143	101	V
11	2.4833	67.11	Av	22	-51.73	37.38	94	-56.62	143	101	V
12	2.4801	103.86	Av	22	-51.68	74.18	94	-19.82	143	101	V
Pk - Pea	k Detector										
Av - Av	erage Detect	or									

7.2.2. HARMONICS AND SPURIOUS EMISSIONS 9kHz - 30MHz

Low Channel Plot

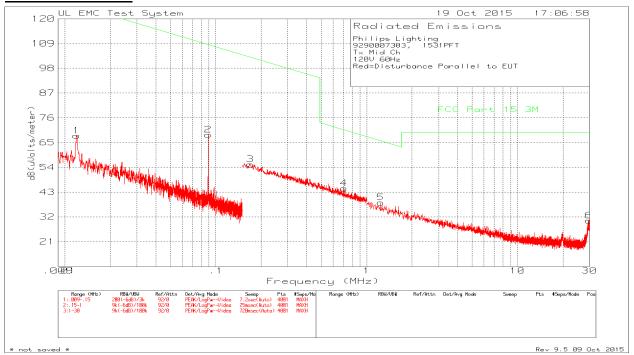


Low Channel Data

Philips Li	ghting								
92900073	383, 1531 PF	Т							
Tx Low (Ch								
120V 60H	120V 60Hz								
Red: Hori	Red: Horizontal, Green: Vetical								
Trace Ma	arkers								
	Test	Meter		Antenna	Path		Limit		
Marker	Frequency	Reading		Factor	Factor	Lev el	dBuV/m	Margin	Azimuth
No.	(MHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	@ 3m	(dB)	[Degs]
1	0.01208	40.16	Pk	20.2	0	60.36	125.94	-65.58	0-360
2	1 0.01208		Pk	13	0	65.56	108.62	-43.06	0-360
3	0.16001	43.86	Pk	12.2	0	56.06	103.52	-47.46	0-360
4	0.63713	33.18	Pk	12	0	45.18	71.52	-26.34	0-360
5			Pk	11.7	0.1	29.75	69.54	-39.79	0-360
6	6 28.93425 14.		Pk	9.2	0.3	23.93	69.54	-45.61	0-360
Pk - Peal	k detector								

DATE: 2015-NOV-02

Middle Channel Plot

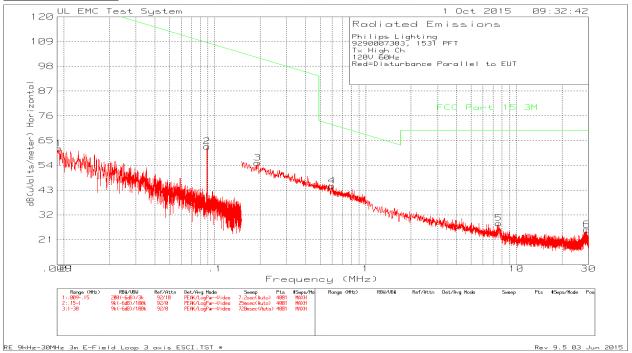


Middle Channel Data

Philips Li	ghting								
92900073	383, 1531PF	Т							
Tx Mid C	Ch								
120V 60H	Ηz								
Red=Dist	urbance Para	llel to EU	Г						
Trace Ma	arkers								
	Test	Meter		Antenna	Path		Limit		
Marker	Frequency	Reading		Factor	Factor	Lev el	dBuV/m	Margin	Azimuth
No.	(MHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	@ 3m	(dB)	[Degs]
1	0.01194	47.85	Pk	20.2	0	68.05	126.05	-58	0-360
2	0.08901	55.49	Pk	13	0	68.49	108.61	-40.12	0-360
3	0.1696	43.03	Pk	12.2	0	55.23	103.01	-47.78	0-360
4	0.70763	32.66	Pk	12	0	44.66	70.61	-25.95	0-360
5	1.23925	25.73	Pk	12.5	0.1	38.33	65.74	-27.41	0-360
6	29.81875	20.94	Pk	9.1	0.3	30.34	69.54	-39.2	0-360
Pk - Peal	k detector								

DATE: 2015-NOV-02

High Channel Plot



High Channel Data

Philips L	ighting								
9290007	383, 1531 PF	-T							
Tx High	Ch								
120V 60	20V 60Hz								
Red: Ho	rizontal, Gree	n: Vetical							
Trace M	arkers								
	Test	Meter		Antenna	Path		Limit		
Marker	Frequency	Reading		Factor	Factor	Lev el	dBuV/m	Margin	Azimuth
No.	(MHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	@ 3m	(dB)	[Degs]
1	0.009245	39.41	Pk	22.1	0	61.51	128.27	-66.76	0-360
2	0.08887	49.39	Pk	13	0	62.39	108.62	-46.23	0-360
3	0.1926	43.14	Pk	12	0	55.14	101.91	-46.77	0-360
4	0.59709	32.87	Pk	12	0	44.87	72.08	-27.21	0-360
5	7.612	16.57	Pk	11.5	0.2	28.27	69.54	-41.27	0-360
6	29.16625	15.89	Pk	9.2	0.3	25.39	69.54	-44.15	0-360
Pk - Pea	ık detector								

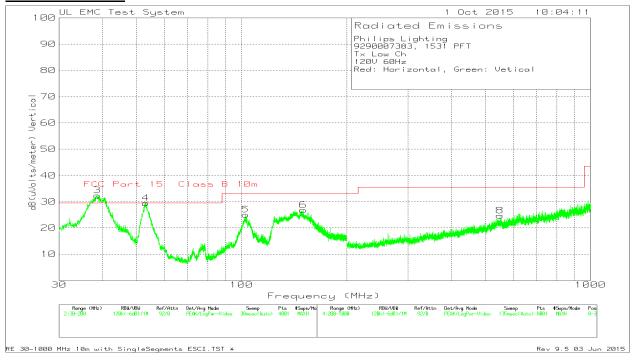
DATE: 2015-NOV-02

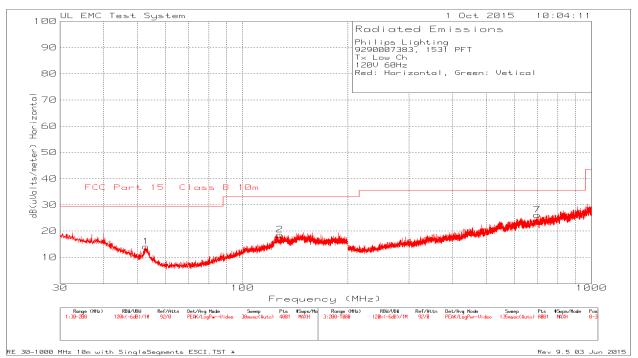
7.2.1. HARMONICS AND SPURIOUS EMISSIONS 30MHz - 1GHz

DATE: 2015-NOV-02

IC: 20659-SNS100

Low Channel Plots



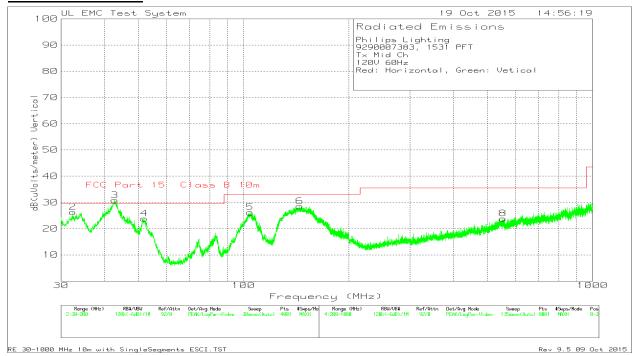


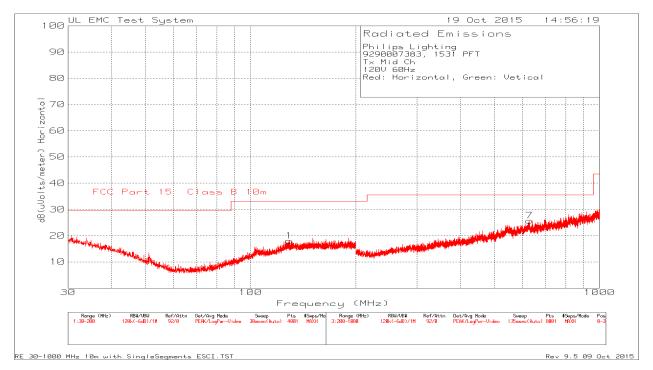
Low Channel Data

Philips L	ighting										
9290007	383, 1531 PF	-T									
Tx Low	Ch										
120V 60I	-lz										
Red: Hor	rizontal, Gree	n: Vetical									
Trace Ma	arkers										
	Test	Meter		Antenna	Path		Limit FCC Part				
Marker	Frequency	Reading		Factor	Factor	Lev el	15.209	Margin	Azimuth	Height	
No.	(MHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	[Degs]	[cm]	Polarity
1	52.865	36.12	Pk	8.1	-30.1	14.12	29.55	-15.43	0-360	398	Н
2	127.9625	33.89	Pk	14.5	-29.8	18.59	33.07	-14.48	0-360	398	Н
3	38.6275	47.95	Pk	14.5	-30.1	32.35	29.55	2.8	0-360	101	V
4	53.1625	51.55	Pk	8	-30.1	29.45	29.55	-0.1	0-360	252	V
5	102.8025	43.35	Pk	11.6	-29.9	25.05	33.07	-8.02	0-360	101	V
6	150.2325	41.32	Pk	15.1	-29.6	26.82	33.07	-6.25	0-360	101	V
7	698.7	31.48	Pk	20.6	-25.9	26.18	35.57	-9.39	0-360	103	Н
8	550.5	31.96	Pk	19.7	-27	24.66	35.57	-10.91	0-360	399	V
Pk - Pea	k detector										
Radiated	Emission Da	ata									
							Limit FCC				
	Test	Meter		Antenna	Path		Part				
	Frequency Reading			Factor	Factor		15.209	Margin	Azimuth	Height	
	(MHz) (dBuV)		Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	[Degs]	[cm]	Polarity
	40.27575	44.01	Qp	13.8	-30.2	27.61	29.55	-1.94	293	102	V
	53.103125	47.31	Qp	8	-30.1	25.21	29.55	-4.34	242	242	V
Qp - Qua	asi-Peak dete	ector									

DATE: 2015-NOV-02

Middle Channel Plots





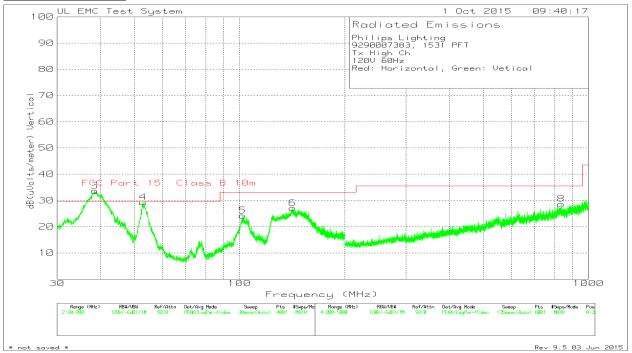
DATE: 2015-NOV-02

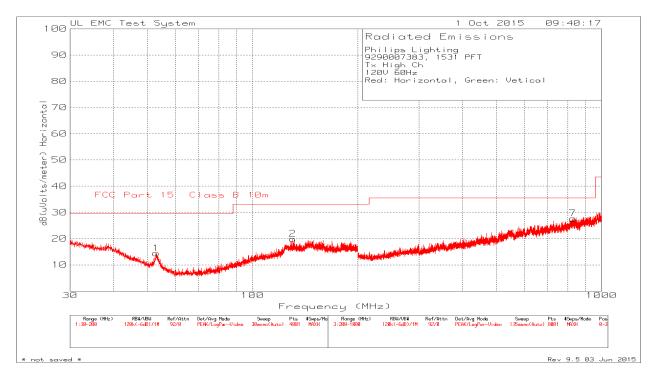
Middle Channel Data

Philips Li	ghting										
92900073	383, 1531 PF	Т									
Tx Mid C	Ch										
120V 60H	-lz										
Red: Hor	izontal, Gree	n: Vetical									
Trace Ma	arkers										
	Test	Meter		Antenna	Path		Limit FCC				
Marker	Frequency	Reading		Factor	Factor	Lev el	Part 15.209	Margin	Azimuth	Height	
No.	(MHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	[Degs]	[cm]	Polarity
1	128.9825	33.5	Pk	14.3	-29.8	18	33.07	-15.07	0-360	250	Н
2	32.465	39.26	Pk	17.2	-30.2	26.26	29.55	-3.29	0-360	101	V
3	42.75	48.28	Pk	12.6	-30.1	30.78	29.55	1.23	0-360	101	V
4	51.9725	45.53	Pk	8.4	-30.1	23.83	29.55	-5.72	0-360	101	V
5	104.545	44.19	Pk	11.9	-29.9	26.19	33.07	-6.88	0-360	101	V
6	144.8775	43.23	Pk	15.1	-29.8	28.53	33.07	-4.54	0-360	101	V
7	630	31.29	Pk	20.6	-26.2	25.69	35.57	-9.88	0-360	199	Н
8	553.8	31.22	Pk	19.3	-26.7	23.82	35.57	-11.75	0-360	299	V
Pk - Peal	k detector										
Radiated	Emission Da	ıta									
	Test	Meter		Antenna	Path		Limit FCC				
	Frequency	Reading		Factor	Factor	Lev el	Part 15.209	Margin	Azimuth	Height	
	(MHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	[Degs]	[cm]	Polarity
	43.1645	43.26	Qp	12.4	-30.1	25.56	29.55	-3.99	151	103	V
	31.572 33 (17.6	-30.2	20.4	29.55	-9.15	0	101	V
	53.61	Qp	7.8	-30.1	19	29.55	-10.55	74	104	V	
	143.6	39.71	Qp	14.9	-29.8	24.81	33.07	-8.26	340	101	V
Qp - Qua	si-Peak dete	ctor									

DATE: 2015-NOV-02

High Channel Plots





DATE: 2015-NOV-02

High Channel Data

Tigh Ghamer Bata											
Philips Lig	ghting										
92900073	383, 1531 PF	T									
Tx High (Ch										
120V 60H	łz										
Red: Hori	izontal, Gree	n: Vetical									
Trace Ma	arkers										
	Test	Meter		Antenna	Path		Limit FCC				
Marker	Frequency	Reading		Factor	Factor	Lev el	Part 15.209	Margin	Azimuth	Height	
No.	(MHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	[Degs]	[cm]	Polarity
1	52.9075	36.41	Pk	8.1	-30.1	14.41	29.55	-15.14	0-360	398	Н
2	130.5125	35.19	Pk	14.5	-29.8	19.89	33.07	-13.18	0-360	398	Н
3	38.5	49.09	Pk	14.6	-30.1	33.59	29.55	4.04	0-360	101	V
4	52.95	51.28	Pk	8.1	-30.1	29.28	29.55	-0.27	0-360	101	V
5	102.08	42.74	Pk	11.4	-30	24.14	33.07	-8.93	0-360	101	V
6	141.86	41.86	Pk	14.9	-29.7	27.06	33.07	-6.01	0-360	101	V
7	828.4	31.35	Pk	22.5	-26.2	27.65	35.57	-7.92	0-360	199	Н
8	835.2	32.88	Pk	22.6	-26.9	28.58	35.57	-6.99	0-360	399	V
Pk - Peak	k detector										
Radiated	Emission Da	ata									
	Test	Meter		Antenna	Path		Limit FCC				
	Frequency	Reading		Factor	Factor	Lev el	Part 15.209	Margin	Azimuth	Height	
	(MHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	[Degs]	[cm]	Polarity
	40.24975	44.91	Qp	13.8	-30.2	28.51	29.55	-1.04	332	103	V
	53.284375	46.43	Qp	8	-30.1	24.33	29.55	-5.22	1	102	V
Qp - Qua	si-Peak dete	ctor									

DATE: 2015-NOV-02

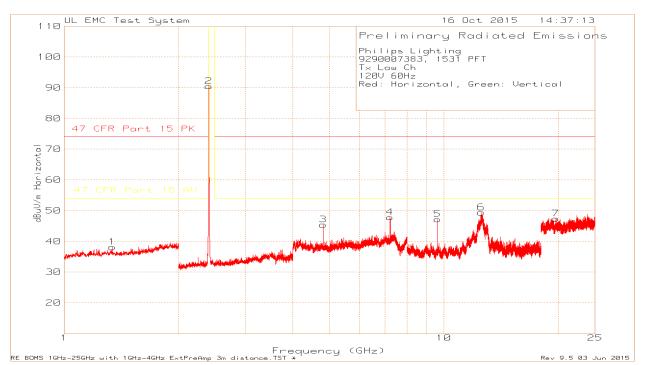
7.2.2. HARMONICS AND SPURIOUS EMISSIONS 1GHz - 25GHz

DATE: 2015-NOV-02

IC: 20659-SNS100

Low Channel Plots





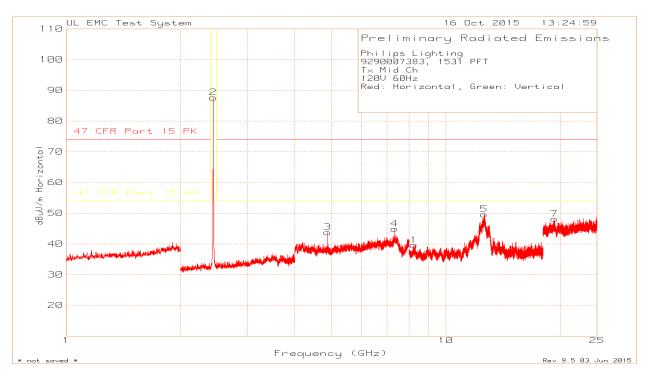
Low Channel Data

Philips Li	ghting												
92900073	383, 1531 PF	-T											
Tx Low	Ch												
120V 60H	Нz												
Red: Hor	izontal, Gree	n: Vertical											
Trace Ma	arkers												
	Test	Meter		Antenna	Path		Peak		Av erage				
Marker	Frequency	Reading		Factor	Factor	Lev el	Limit	Margin	Limit	Margin	Azimuth	Heiaht	
No.	(GHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	dBuV/m	(dB)	[Degs]	[cm]	Polarity
1	1.339	68.62	Pk	25.2	-55.69	38.13	74	` ′	54	-15.87	0-360	151	Н
2	2.404	120.53	- ''	21.8	-51.84	90.49		-	-	-	0-360	99	
3	4.809	68.28		27.7	-50.57	45.41	74		54	-8.59		100	
4	7.214	64.78		29.8	-46.73	47.85	74		54	-6.15		149	
5	9.622	59.07		36.4	-48.3	47.17	74		54		0-360	99	
6	12.522	45.75		39.4	-35.77	49.38	74	-24.62	54		0-360	150	
7	19.693	56.5		40.3	-49.39	47.41	74	-26.59	54		0-360	100	
8	1.061	69.41		24.5	-56.57	37.34	74		54	-16.66		150	V
9	2.404	124.88		21.8	-51.84	94.84		-30.00	_	-10.00	0-360	99	V
10	4.811	74.31	Pk	27.7	-50.55	51.46	74	-22.54	54		0-360	99	V
11	9.622	56.46		36.4	-48.3	44.56	74		54	-9.44	0-360	99	•
12	12.628	43.55		39.5	-34.19	48.86	74		54	-5.14		99	
13	21.531	54.25		40.3	-46.02	48.53	74		54		0-360	100	
	k detector	34.23	FK	40.3	-40.02	40.55	74	-23.41	34	-5.47	0-300	100	V
	Emission Da	ato.											
Radiated	Test	Meter		Antenna	Path		Peak		A., a.a.a.a				
				Factor		Level	Limit	Marain	Av erage Limit	Marain	Λ = i · · · · · · · · · · · · · · · · ·	l laimht	
	Frequency	Reading	Datasta		Factor			Margin	-	Margin	Azimuth	Ŭ	D. L. St
	(GHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	dBuV/m	(dB)	[Degs]	[cm]	Polarity
	4.809	70.83		27.7	-50.57	47.96	74	-26.04	- 54	-	335	100	
	4.8107	62.89		27.7	-50.55	40.04	- 74	- 04.70	54		335	100	
	7.2131	66.2		29.8	-46.72	49.28	74		- 54	-	0	100	
	7.2161	57.87		29.8	-46.76	40.91		-	54	-13.09	0	100	
	9.6213	67.52		36.4	-48.31	55.61	74	-18.39		-	41	100	
	9.6217	57.71		36.4	-48.3	45.81	-	-	54	-8.19	41	100	
	4.8089	75.42		27.7	-50.57	52.55	74		-	-	331	100	
	4.8107	69.31	Av	27.7	-50.55	46.46	-	-	54	-7.54	331	100	
	9.6217	66.91		36.4	-48.3	55.01	74	-18.99	-	-	3	100	
	9.6217	57.25	Av	36.4	-48.3	45.35	-	-	54	-8.65	3	100	V
	k detector												
Av - Ave	erage detection	n											

DATE: 2015-NOV-02

Middle Channel Plots



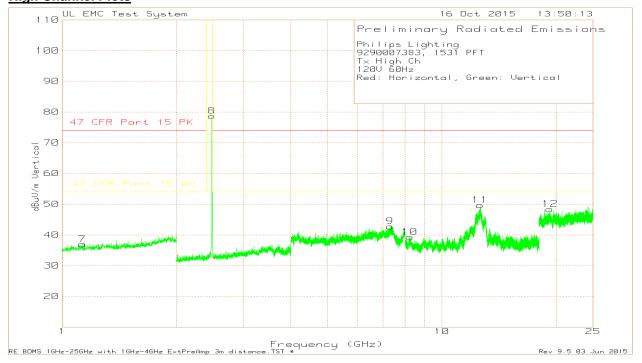


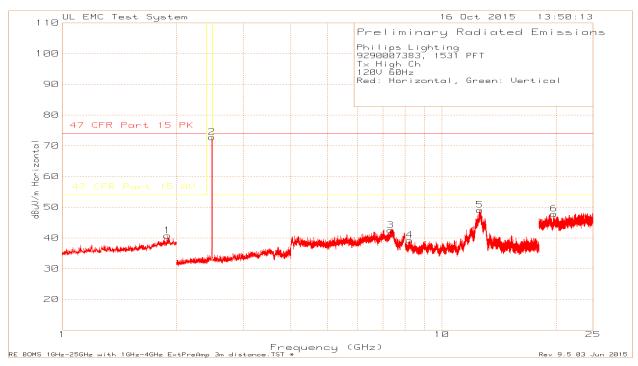
Middle Channel Data

Tx Mid C	383, 1531 PI	-T											
Tx Mid C													
170V/60P	120V 60Hz												
Red: Horizontal. Green: Vertical													
Trace Ma	,												
		Meter		Antenna	Path		Peak		Av erage				
Marker F	Frequency	Reading		Factor	Factor	Lev el	Limit	Margin	Limit	Margin	Azimuth	Height	
No. ((GHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	dBuV/m	(dB)	[Degs]	[cm]	Polarity
2	2.439	116.99	Pk	21.9	-51.29	87.6	-	-	-	-	0-360	99	Н
3	4.881	66.41	Pk	27.7	-50.36	43.75	74	-30.25	54	-10.25	0-360	100	Н
4	7.319	60.19	Pk	30.6	-45.87	44.92	74	-29.08	54	-9.08	0-360	149	Н
1	8.239	50.06	Pk	36.4	-46.9	39.56	74	-34.44	54	-14.44	0-360	99	Н
5	12.606	44.59	Pk	39.5	-34.52	49.57	74	-24.43	54	-4.43	0-360	99	Н
7	19.32	57.83	Pk	40.3	-50.02	48.11	74	-25.89	54	-5.89	0-360	100	Н
8	1.554	67.36	Pk	25.4	-54.85	37.91	74	-36.09	54	-16.09	0-360	150	٧
9	2.439	123.53	Pk	21.9	-51.29	94.14	-	-	-	-	0-360	99	٧
10	4.879	72.43	Pk	27.7	-50.34	49.79	74	-24.21	54	-4.21	0-360	99	٧
11	7.322	58.58	Pk	30.6	-45.93	43.25	74	-30.75	54	-10.75	0-360	150	٧
6	8.272	50.62	Pk	36.4	-47.57	39.45	74	-34.55	54	-14.55	0-360	99	٧
12	12.623	43.98	Pk	39.5	-34.26	49.22	74	-24.78	54	-4.78	0-360	150	٧
14	21.632	52.9	Pk	40.4	-45.93	47.37	74	-26.63	54	-6.63	0-360	100	٧
Pk - Peak	Pk - Peak detector												
Radiated	Emission Da												
Т	Test	Meter		Antenna	Path		Peak		Av erage				
F	. ,	Reading		Factor	Factor	Lev el	Limit	Margin	Limit	Margin	Azimuth	Height	
((GHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	dBuV/m	(dB)	[Degs]	[cm]	Polarity
	4.879	71.62		27.7	-50.34	48.98	74	-25.02	54	-	-	131	
	4.88	62.72	Av	27.7	-50.35	40.07	-	-	54	-13.93	209	131	
_	7.3188	66.12	Pk	30.6	-45.87	50.85	74	-23.15	54	-	-	100	Н
	7.3207	55.38	Av	30.6	-45.9	40.08	-	-	54	-13.92	4	100	
_	4.8808	73.8	Pk	27.7	-50.36	51.14	74	-22.86	54	-	-	100	٧
	4.8808	67.17	Av	27.7	-50.36	44.51	-	-	54	-9.49	321	100	
	7.321	60.77	Pk	30.6	-45.91	45.46	74	-28.54	54	-	-	100	٧
	7.3212	49.93	Av	30.6	-45.91	34.62	-	-	54	-19.38	9	100	٧
Pk - Peak	k detector												
Av - Avei	rage detection	on											

DATE: 2015-NOV-02

High Channel Plots





DATE: 2015-NOV-02

High Channel Data

Philips Li	ighting												
9290007	383, 1531 PF	Т											
Tx High	Ch												
120V 60H	Нz												
Red: Hor	rizontal, Gree	n: Vertical											
Trace Ma	arkers												
	Test	Meter		Antenna	Path		Peak		Av erage				
Marker	Frequency	Reading		Factor	Factor	Lev el	Limit	Margin	Limit	Margin	Azimuth	Height	
No.	(GHz)	(dBuV)	Detector	dB/m	dB	dBuV/m	dBuV/m	(dB)	dBuV/m	(dB)	[Degs]	[cm]	Polarit
1	1.896	66.94	Pk	27.4	-53.63	40.71	74	-33.29	54	-13.29	0-360	150	Н
2	2.479	102.45	Pk	22	-51.66	72.79	-	-	ı	ı	0-360	99	Н
3	7.323	57.87	Pk	30.6	-45.95	42.52	74	-31.48	54	-11.48	0-360	149	Н
4	8.227	49.88	Pk	36.4	-47.04	39.24	74	-34.76	54	-14.76	0-360	99	Н
5	12.587	44.29	Pk	39.5	-34.72	49.07	74	-24.93	54	-4.93	0-360	150	Н
6	19.723	56.93	Pk	40.3	-49.41	47.82	74	-26.18	54	-6.18	0-360	100	Н
7	1.129	68.32	Pk	25	-56.38	36.94	74	-37.06	54	-17.06	0-360	150	V
8	2.479	108.33	Pk	22	-51.66	78.67	-	-	-	-	0-360	150	V
9	7.306	58	Pk	30.5	-45.78	42.72	74	-31.28	54	-11.28	0-360	150	V
10	8.237	49.76	Pk	36.4	-46.92	39.24	74	-34.76	54	-14.76	0-360	99	V
11	12.601	44.75	Pk	39.5	-34.58	49.67	74	-24.33	54	-4.33	0-360	99	V
12	19.239	57.98	Pk	40.3	-49.91	48.37	74	-25.63	54	-5.63	0-360	100	V
Pk - Pea	k detector												

DATE: 2015-NOV-02

REPORT NO: 10975967A FCC ID:2AF2N-SNS100

DATE: 2015-NOV-02 IC: 20659-SNS100

8. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBuV)				
	Quasi-peak	Average			
0.15-0.5	66 to 56 *	56 to 46 *			
0.5-5	56	46			
5-30	60	50			

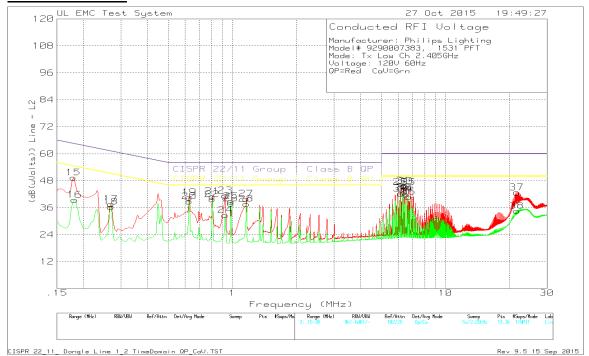
Decreases with the logarithm of the frequency.

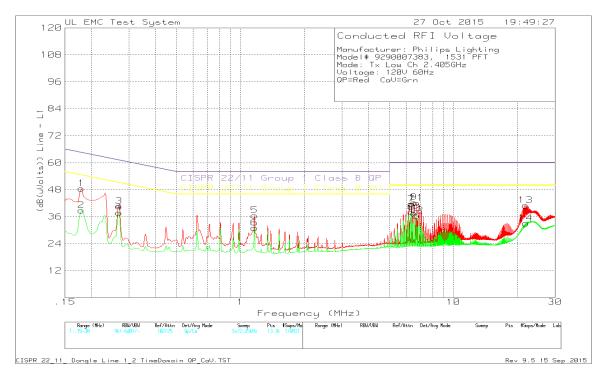
TEST PROCEDURE

ANSI C63.4

RESULTS

Low Channel Plots





DATE: 2015-NOV-02

Low Channel Data

Manufacturer: Philips Lighting Model# 9290007383, 1531 PFT Mode: Tx Low Ch 2.405GHz Voltage: 120V 60Hz QP=Red CaV=Grn

Trace Markers Test No. Frequency (MHz)	Meter Reading	Transducer Factor (dB)	Factor (dB)	Corrected I Reading (dB	(uVolts))	2	3	4	5	6
Line										
1 .17925	36.55dBuV Qp	.1	11.9	48.55	-	-	64.52	-	-	-
2 .17925	26.82dBuV Ca	.1	11.9	Margin (dB) 38.82	_	-	-15.97 -	- 54.52	-	-
2 .1/923	20.02dBuV Ca	• 1	11.9	Margin (dB)	_	_	_	-15.7	_	_
3 .26925	29.63dBuV Qp	.1	11	40.73	-	-	61.14	_	-	-
4 06005	06 60 10 11 0	1	1.1	Margin (dB)	-	-	-20.41	-	-	-
4 .26925	26.68dBuV Ca	.1	11	37.78 Margin (dB)	_	_	_	51.14 -13.36	_	_
5 1.1625	25.83dBuV Qp	.1	10.6	36.53	_	_	56	-	_	_
				Margin (dB)	-	-	-19.47	-	-	-
6 1.1625	20.3dBuV Ca	.1	10.6	31	-	-	-	46	-	-
7 6.34875	30.7dBuV Qp	.2	10.8	Margin (dB) 41.7	_	_	- 60	-15	_	_
7 0.34073	30./aвиv <u>ф</u> р	• 4	10.0	Margin (dB)	_	_	-18.3	_	_	_
8 6.3465	26.99dBuV Ca	.2	10.8	37.99	-	-	_	50	-	-
0 6 5065	04 00 1		400	Margin (dB)	-	-	-	-12.01	-	-
9 6.5265	31.33dBuV Qp	.2	10.8	42.33	_	-	60 -17.67	-	-	-
10 6.52425	26.49dBuV Ca	.2	10.8	Margin (dB) 37.49	_	_	-17.67	- 50	_	_
10 0.02120	20.13020 00	• -	10.0	Margin (dB)	_	_	_	-12.51	_	-
11 6.7065	31.08dBuV Qp	.2	10.8	42.08	-	-	60	_	-	-
12 6.70425	0E 42-ID17 C-	.2	10 0	Margin (dB)	-	-	-17.92	- 50	-	-
12 6.70425	25.43dBuV Ca	• 4	10.8	36.43 Margin (dB)	_	_	_	-13.57	_	_
13 21.80625	28.54dBuV Qp	1	11.5	41.04	_	_	60	-	_	_
				Margin (dB)	-	-	-18.96	-	-	-
14 21.822	20.55dBuV Ca	1	11.5	33.05	-	-	-	50	-	-
				Margin (dB)	-	-	-	-16.95	_	_

DATE: 2015-NOV-02

IC: 20659-SNS100

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

Qp - Quasi-Peak detector Ca - CISPR Average

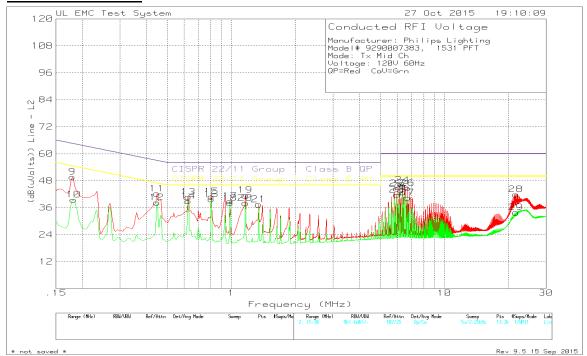
Manufacturer: Philips Lighting Model# 9290007383, 1531 PFT Mode: Tx Low Ch 2.405GHz Voltage: 120V 60Hz QP=Red CaV=Grn

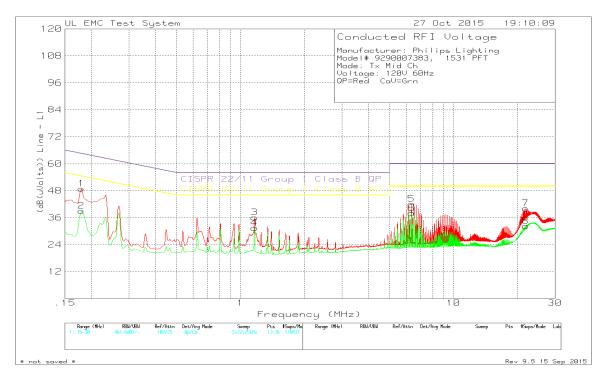
Trace Markers Test No. Frequency (MHz)	Meter Reading	Transducer Factor (dB)	Gain/Loss Factor (dB)	Corrected December 1	(uVolts))	2	3	4	5	6
Neutral 15 .17925	37.27dBuV Qp	.1	12	49.37	_		64.52	-		-
16 .1815	27.3dBuV Ca	.1	12	Margin (dB) 39.4	_	_	-15.15 -	54.42	_	-
17 .26925	26.42dBuV Qp	.1	11.1	Margin (dB) 37.62	_	_	61.14	-15.02 -	_	_
18 .26925	25.16dBuV Ca	.1	11.1	Margin (dB) 36.36	_	_	-23.52 -	51.14	=	_
19 .627	29.78dBuV Qp	.1	10.7	Margin (dB) 40.58	_	_	- 56	-14.78	_	_
20 .627	27.97dBuV Ca	.1	10.7	Margin (dB) 38.77	_	_	-15.42 -	46	_	_
21 .80475	30.18dBuV Qp	.1	10.7	Margin (dB) 40.98	_	_	<u>-</u> 56	-7.23 -	_	- -
22 .80475	28.86dBuV Ca	.1	10.7	Margin (dB) 39.66	-	_	-15.02 -	46	_	-
23 .92625	30.49dBuV Qp	.1	10.7	Margin (dB) 41.29	_	_	- 56	-6.34	_	_
24 .92625	21.85dBuV Ca	.1	10.7	Margin (dB) 32.65	_	_	-14.71 -	- 46	_	_
25 .98475	28.05dBuV Qp	.1	10.7	Margin (dB) 38.85	_	_	- 56	-13.35 -	_	_
26 .98475	27.06dBuV Ca	.1	10.7	Margin (dB) 37.86	_	_	-17.15 -	- 46	_	_
27 1.16025	29.07dBuV Qp	.1	10.7	Margin (dB) 39.87	_	_	- 56	-8.14	_	_
28 1.1625	26.84dBuV Ca	.1	10.7	Margin (dB) 37.64	_	_	-16.13 -	- 46	_	_
29 6.16875	34dBuV Qp	.2	10.9	Margin (dB) 45.1	-	_	- 60	-8.36 -	_	-
30 6.16875	31.13dBuV Ca	.2	10.9	Margin (dB) 42.23	_	_	-14.9	- 50	_	_
31 6.34875	34.55dBuV Qp	.2	10.9	Margin (dB) 45.65	_	_	- 60	-7.77 -	_	_
32 6.3465	31.55dBuV Ca	.2	10.9	Margin (dB) 42.65	_	_	-14.35 -	- 50	_	_
33 6.5265	34.33dBuV Qp	.2	10.9	Margin (dB) 45.43	_	_	- 60	-7.35	_	_
34 6.52425	30.8dBuV Ca	.2	10.9	Margin (dB) 41.9	_	_	-14.57	- 50	_	_
35 6.7065	33.9dBuV Qp	.2	10.9	Margin (dB) 45	_	_	- 60	-8.1	_	_
36 6.70425	29.72dBuV Ca	.2	10.9	Margin (dB) 40.82	_	_	-15 -	- 50	_	_
37 21.6285	29.99dBuV Qp	1.1	11.6	Margin (dB) 42.69	- -	_	- 60	-9.18	_	_ _
38 21.62738	21.83dBuV Ca	1.1	11.6	Margin (dB) 34.53	- -	_	-17.31	- 50	_	- -
00 21.02/00	21.00abav ca	± • ±	11.0	Margin (dB)	-	-	-	-15.47	-	-

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

Qp - Quasi-Peak detector Ca - CISPR Average

Middle Channel Plots





DATE: 2015-NOV-02

Middle Channel Data

Manufacturer: Philips Lighting Model# 9290007383, 1531 PFT

Mode: Tx Mid Ch Voltage: 120V 60Hz QP=Red CaV=Grn

Trace Markers Test No. Frequency (MHz)	Meter Reading	Transducer Factor (dB)	Gain/Loss Factor (dB)	Corrected Li Reading (dB(u		2	3	4	5	6
Line			:======	========	======	=====	======	======		=====
1 .17925	36.87dBuV Qp	.1	11.9	48.87	_	-	64.52	_	-	-
				Margin (dB)	_	-	-15.65	_	-	-
2 .17925	27.03dBuV Ca	.1	11.9	39.03	_	-	-	54.52	-	-
				Margin (dB)	_	-	-	-15.49	-	-
3 1.1625	25.36dBuV Qp	.1	10.6	36.06	_	-	56	-	-	-
				Margin (dB)	_	-	-19.94	-	-	-
4 1.1625	20.73dBuV Ca	.1	10.6	31.43	_	-	_	46	-	-
				Margin (dB)	_	-	-	-14.57	-	-
5 6.351	30.98dBuV Qp	.2	10.8	41.98	_	-	60	-	-	-
				Margin (dB)	_	-	-18.02	-	-	-
6 6.34875	27.01dBuV Ca	.2	10.8	38.01	_	-	-	50	-	-
				Margin (dB)	_	-	-	-11.99	-	-
7 21.813	27.6dBuV Qp	1	11.5	40.1	_	-	60	-	-	-
				Margin (dB)	_	-	-19.9	-	-	-
8 21.81075	19.74dBuV Ca	1	11.5	32.24	_	-	-	50	-	-
				Margin (dB)	_	_	_	-17.76	_	_

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

Qp - Quasi-Peak detector Ca - Cispr AV

DATE: 2015-NOV-02

Manufacturer: Philips Lighting Model# 9290007383, 1531 PFT

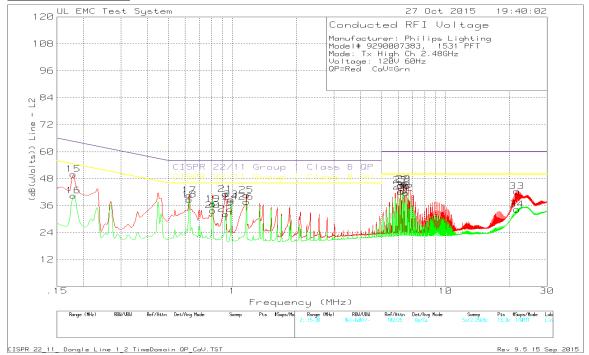
Mode: Tx Mid Ch Voltage: 120V 60Hz QP=Red CaV=Grn

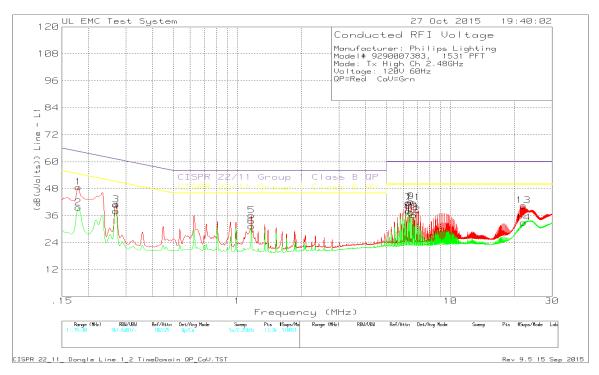
Trace Markers Test No. Frequency (MHz)	Meter Reading	Factor (dB)	Factor (dB)	Corrected Li Reading (dB(u	Volts))	2	3	4	5	6
Neutral										
9 .17925	37.58dBuV Qp	.1	12	49.68	_	_	64.52	_	_	_
				Margin (dB)	-	-	-14.84	_	-	-
10 .1815	27.41dBuV Ca	.1	12	39.51	-	-	-	54.42	-	-
				Margin (dB)	-	-	-	-14.91	-	-
11 .447	31.31dBuV Qp	.1	10.8	42.21	-	-	56.93	-	-	-
				nargin (ab)	-	-	-14.72		-	-
12 .447	27.34dBuV Ca	.1	10.8	38.24	-	-	-	46.93	-	-
10 607	00 01 15 77 0	4	10 5	nargin (ab)	-	-	-	-8.69	-	-
13 .627	29.91dBuV Qp	.1	10.7	40.71	-	-	56	-	-	-
14 .627	28.09dBuV Ca	.1	10.7	nargin (ab)	_	_	-15.29 -	- 46	-	_
14 .02/	28.09dBuv Ca	• 1	10.7	38.89 Margin (dB)	_	_	_	-7.11	_	_
15 .80475	30.15dBuV Qp	.1	10.7	40.95	_	_	- 56	-/.11 -	_	_
13 .004/3	30.13dbuv Qp	• ±	10.7	Margin (dB)	_	_	-15.05	_	_	_
16 .80475	28.93dBuV Ca	.1	10.7	39.73	_	_	-	46	_	_
		• -		Margin (dB)	_	_	_	-6.27	_	_
17 .98475	28.09dBuV Qp	.1	10.7	38.89	_	_	56	_	_	_
	~-			Margin (dB)	-	_	-17.11	_	-	_
18 .98475	27.18dBuV Ca	.1	10.7	37.98	-	-	_	46	-	-
				Margin (dB)	-	-	_	-8.02	-	-
19 1.1625	30.7dBuV Qp	.1	10.7	41.5	-	-	56	-	-	-
				Margin (dB)	-	-	-14.5	-	-	-
20 1.1625	27.18dBuV Ca	.1	10.7	37.98	-	-	-	46	-	-
				Margin (dB)	-	-	_	-8.02	-	-
21 1.3425	26.57dBuV Qp	.1	10.7	37.37	-	-	56	-	-	-
		_		Margin (dB)	-	-	-18.63	-	-	-
22 5.991	33.4dBuV Qp	.2	10.9	44.5	-	-	60	-	-	-
00 5 004	00 643		40.0	Margin (dB)	-	-	-15.5	-	-	-
23 5.991	30.64dBuV Ca	.2	10.9	41.74	-	_	-	50	-	-
24 6.34875	24 0640777 05	.2	10.9	Margin (dB) 45.96	_	_	- 60	-8.26 -	_	_
24 0.340/3	34.86dBuV Qp	• 4	10.9	Margin (dB)	_	_	-14.04	_	_	_
25 6.34875	31.67dBuV Ca	.2	10.9		_	_	-	50	_	_
25 0.54075	JI.07dbuv Ca	• 2	10.5	Margin (dB)	_	_	_	-7.23	_	_
26 6.70875	33.58dBuV Qp	.2	10.9	44.68	_	_	60	-	_	_
20 0.70075	JJ.JJabav Qp	• 2	10.5	Margin (dB)	_	_	-15.32	_	_	_
27 6.70425	29.35dBuV Ca	.2	10.9	40.45	_	_	_	50	_	_
				Margin (dB)	_	_	_	-9.55	_	_
28 21.651	29.15dBuV Qp	1.1	11.6	41.85	_	-	60	_	-	-
				Margin (dB)	_	-	-18.15	-	-	-
29 21.6285	21.12dBuV Ca	1.1	11.6	33.82	-	-	-	50	-	-
				Margin (dB)	-	-	-	-16.18	-	-

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

Qp - Quasi-Peak detector Ca - Cispr AV

High Channel Plots





DATE: 2015-NOV-02

CC ID:2AF2N-SNS100 IC: 20659-SNS100

High Channel Data

Manufacturer: Philips Lighting Model# 9290007383, 1531 PFT Mode: Tx High Ch 2.48GHz

Voltage: 120V 60Hz QP=Red CaV=Grn

Trace Markers

Test No. Frequency (MHz)	Meter y Reading	Factor (dB)	Factor (dB)	Corrected Reading (d	B(uVolts))	2	3	4	5	6
Line										
1 .17925	36.72dBuV Qp	.1	11.9	48.72	_	-	64.52	-	-	-
				Margin (dB)	-	-	-15.8	-	-	-
2 .17925	27.58dBuV Ca	.1	11.9	39.58	-	-	-	54.52	-	-
				Margin (dB)	-	-	-	-14.94	-	-
3 .26925	29.87dBuV Qp	.1	11	40.97	-	-	61.14	-	-	-
				Margin (dB)	-	-	-20.17	-	-	-
4 .26925	26.89dBuV Ca	.1	11	37.99	-	-	-	51.14	-	_
				Margin (dB)	-	-	-	-13.15	-	_
5 1.1625	25.42dBuV Qp	.1	10.6	36.12	-	-	56	-	-	_
				Margin (dB)	-	-	-19.88	-	-	-
6 1.1625	20.62dBuV Ca	.1	10.6	31.32	-	-	-	46	-	_
				Margin (dB)	-	-	-	-14.68	-	_
7 6.34875	30.81dBuV Qp	.2	10.8	41.81	_	-	60	-	-	_
0 6 0465	0.6.00.1=		4.0	Margin (dB)	-	-	-18.19	-	-	-
8 6.3465	26.99dBuV Ca	.2	10.8	37.99	-	-	-	50	_	_
0 6 5065	21 06 15 77 0	0	10.0	Margin (dB)	-	-	-	-12.01	-	_
9 6.5265	31.26dBuV Qp	.2	10.8	42.26	-	-	60	-	-	_
10 6 50405	06 41 10 17 0-	0	10.0	Margin (dB)	-	-	-17.74	- 50	-	_
10 6.52425	26.41dBuV Ca	.2	10.8	37.41 Margin (dB)	_	-	_	-12.59	-	_
11 6.7065	30.88dBuV Qp	.2	10.8	41.88	_	-	- 60	-12.59	_	_
11 0.7003	JU.OOUBUV QP	• 4	10.0	Margin (dB)	_	_	-18.12	_	_	_
12 6.70425	25.25dBuV Ca	.2	10.8	36.25	_	_	-	50	_	_
12 0.70423	ZJ.ZJUBUV Ca	• 2	10.0	Margin (dB)	_	_	_	-13.75	_	_
13 21.98625	28.04dBuV Op	1	11.5	40.54	_	_	60	-13.73	_	_
10 21.70020	20.04abav Qp	1	11.0	Margin (dB)	_	_	-19.46	_	_	_
14 21.99975	20.38dBuV Ca	1	11.5	32.88	_	_	-	50	_	_
11 21.00010	20.33abav ca	-	11.5	Margin (dB)	_	_	_	-17.12	_	_
				inargin (ab)						

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

Qp - Quasi-Peak detector Ca - Cispr Average DATE: 2015-NOV-02

Manufacturer: Philips Lighting Model# 9290007383, 1531 PFT Mode: Tx High Ch 2.48GHz Voltage: 120V 60Hz

QP=Red CaV=Grn

Trace Markers

	Test Frequency (MHz)	Meter Reading	Transducer Factor (dB)	Factor (dB)	Corrected Reading (dB	(uVolts))	2	3	4	5	6
	tral				========						
	.17925	37.81dBuV Qp	.1	12	49.91	_	-	64.52	-	-	-
					Margin (dB)	-	-	-14.61	-	-	-
16	.17925	28.33dBuV Ca	.1	12	40.43	-	-	-	54.52	-	-
					Margin (dB)	-	-	-	-14.09	-	-
17	.627	29.79dBuV Qp	.1	10.7	40.59	_	-	56	-	-	-
			_		Margin (dB)	-	-	-15.41	-	-	-
18	.627	27.84dBuV Ca	.1	10.7	38.64	-	-	-	46	-	-
1.0	00005	05 0 15 77 0	1	10 5	Margin (dB)	_	-	-	-7.36	_	_
19	.80925	25.9dBuV Qp	.1	10.7	36.7	_	_	56	_	-	-
20	.80925	23.01dBuV Ca	.1	10.7	Margin (dB) 33.81	_	_	-19.3 -	46	_	_
20	.00923	23.010BuV Ca	• 1	10.7	Margin (dB)	_	_	_	-12.19	_	_
21	.9285	30.27dBuV Qp	.1	10.7	41.07	_	_	56	_	_	_
21	. 9203	30.27abav Qp	• ±	10.7	Margin (dB)	_	_	-14.93	_	_	_
22	.9285	21.51dBuV Ca	.1	10.7	32.31	_	_	-	46	_	_
	. 3 2 0 0	21.010200	• =	20.7	Margin (dB)	_	_	_	-13.69	_	_
23	.98475	27.91dBuV Qp	.1	10.7	38.71	_	_	56	_	_	_
		~1			Margin (dB)	_	_	-17.29	_	_	-
24	.98475	26.9dBuV Ca	.1	10.7	37.7	-	-	_	46	-	-
					Margin (dB)	-	-	_	-8.3	-	-
25	1.1625	29.88dBuV Qp	.1	10.7	40.68	-	-	56	-	-	-
					Margin (dB)	-	-	-15.32	-	-	-
26	1.1625	26.87dBuV Ca	.1	10.7	37.67	_	-	-	46	-	-
					Margin (dB)	-	-	-	-8.33	-	-
27	6.16875	33.96dBuV Qp	.2	10.9	45.06	-	-	60	-	-	-
		04 40 1		40.0	Margin (dB)	-	-	-14.94	-	-	_
28	6.16875	31.13dBuV Ca	.2	10.9	42.23	_	_	_	50 -7.77	_	-
2.0	6.34875	34.44dBuV Qp	.2	10.9	Margin (dB) 45.54	_	_	- 60	-/.//	_	-
29	0.340/3	34.44abuv Qp	• 4	10.9	Margin (dB)	_	_	-14.46	_	_	_
3.0	6.3465	31.43dBuV Ca	.2	10.9	42.53	_	_	-14.40	50	_	_
50	0.5405	Ji.4Jubuv Ca	• 4	10.5	Margin (dB)	_	_	_	-7.47	_	_
31	6.5265	34.1dBuV Qp	.2	10.9	45.2	_	_	60	-	_	_
0 =	0.0200	or.rabav gp	•=	20.5	Margin (dB)	_	_	-14.8	_	_	_
32	6.52425	30.57dBuV Ca	.2	10.9	41.67	_	_	-	50	-	_
					Margin (dB)	-	-	-	-8.33	-	-
33	21.6465	29.7dBuV Qp	1.1	11.6	42.4	-	_	60	-	-	-
					Margin (dB)	_	-	-17.6	-	-	-
34	21.6285	21.56dBuV Ca	1.1	11.6	34.26	-	-	-	50	-	-
					Margin (dB)	-	-	-	-15.74	-	-

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

Qp - Quasi-Peak detector Ca - Cispr Average

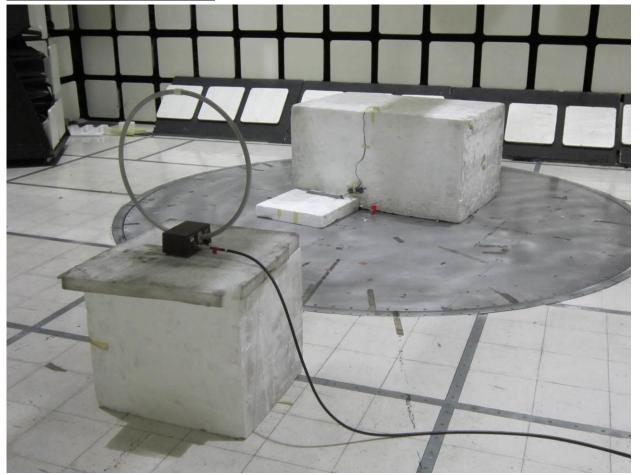
9. SETUP PHOTOS

Near Field Measurements - Bandwidth

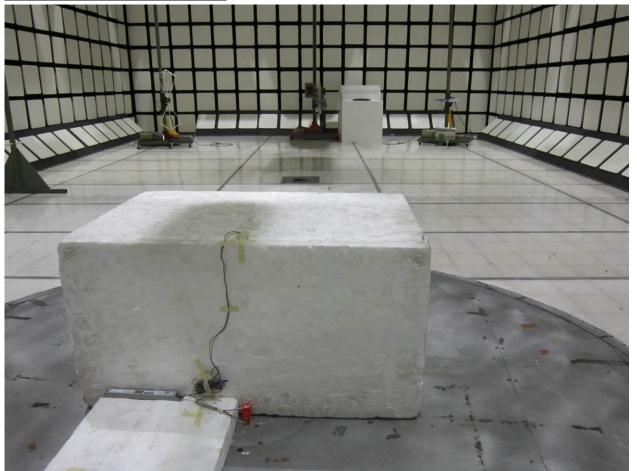


DATE: 2015-NOV-02

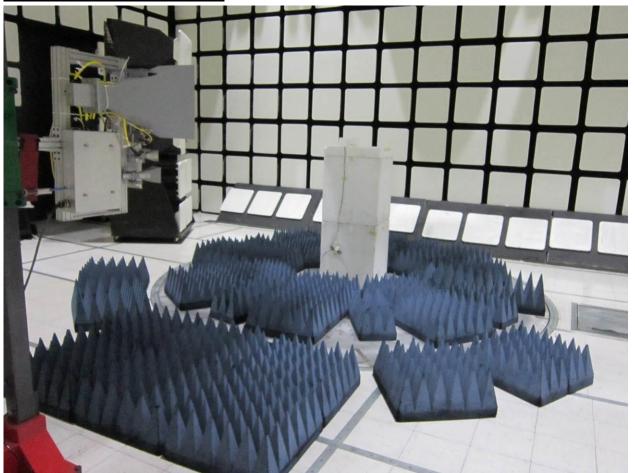
Radiated Emissions 9kHz-30MHz



Radiated Emissions 30MHz - 1GHz



Radiated Emissions 1GHz - 25GHz



Line Conducted Emissions



END OF REPORT

DATE: 2015-NOV-02