



Les Industries Spectralux Inc. Spectralux Industries Inc.

2750 Sabourin, Saint-Laurent (Quebec) H4S 1M2 Canada
Tel.: (514) 332-0082 Fax: (514) 332-3590 www.spectralux.ca

ISO/IEC 17025
NVLAP
NVLAP LAB CODE: 200899-0

Moving Mirror Goniophotometer Test Report

Standard(s): IESNA LM-35-02, IES LM-79-08, ANSI C82.77-2002

Customer Lumenpulse, 1751 Richardson, suite 1505, Montréal, Québec, Canada, H3K 1G6

General Information		SSL Details	Driver Details	
Test Report	G1504221-R1	Description	30W White 3894K SSL	Type Commercial
Test Date	22 April 2015	Serial Number	SRIS 1899	Description 30SSL-CY829
Report Date	24 April 2015	Photometric Method	Absolute	Manufacturer MEAN WELL USA inc.
Ambient	24.2 °C	Lamp Lumens	-1	Catalog No. LPF-40-24
Humidity	25.5 %	Test Position	Axial	Voltage Tap 120.00 V
Lamp Type	SSL	Comments	CREE XPE2 LED's	Power Factor 0.9900

Floodlight Data

General Information		Optics	Aperture (feet)	
Manufacturer	Lumenpulse	Reflector	24 Collimators	X 0.0000
Name	LUMENFACADE	Housing	Extruded Aluminum	Y 2.0000
Catalog No.	LOG-HO-120-24-40K-WWLF-SI-NO	Lens	Clear Flat Glass C/W Diffuse Film	Z 0.0167

SKT Position: None

Lamp Stabilization Time: 59 minutes, 42 seconds

Tested By: Jean-Paul Ojeil

Approved Signatory: Chrisnel Blot

Signature:



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Luminaire Test Method

Precise installation and alignment of the luminaire to the rotation axis of the photometer is governed by a servomotor controlled via a microcontroller. A laser is used to validate the luminaire positioning. Before photometric measurements are taken, luminaire is operated long enough to reach stabilization and temperature equilibrium.

All movement commands issued to the photometer axes are mediated by the software to ensure the motion is within the limits of operation. The photometric detector used is a silicon detector corrected to closely match the spectral luminous efficiency photopic curve with a quality index less than 1.5%. Proper shielding is incorporated to the photometric test bench such that only the light from the unit under test is measured.

Luminous intensity measurements are performed at a distance great enough so that the inverse-square law applies. During each measurement the computer records the luminous intensity associated to the corresponding angles of radiation, as well as input electrical operational parameters and temperature measurements. Candela values are reported in IES format as per LM-63.

Equipment, reference standards are traceable to National Institute of Standards and Technology (NIST) and National Research Council of Canada (NRC).





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Electrical Equipment

Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date
Power Supply	iRDC	CIF-3000A	974997	N.P.C.R.	N.P.C.R.
Input Power Meter	Yokogawa	WT210	91L239798	2015/04/15	2016/04/16
Output Power Meter	N/A	N/A	N/A	N.P.C.R.	N.P.C.R.

Photometric Equipment

Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date
Photometer	Gigahertz-Optik	X11	4500	2014/12/12	2015/12/12
Photodetector	INPHORA	IPR-PDET 19	110803	2014/05/16	2015/05/16

Environment Equipment

Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due Date
Temperature Humidity Sensor	Omega	HH311	051202970	2014/10/24	2016/10/24



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Photometric Report: G1504221-R1

Prepared for: Lumenpulse · Test Date: 22 April 2015

Floodlight: LUMENFACADE · Lumcat: LOG-HO-120-24-40K-WWLF-SI-NO

Photometric Floodlight Characteristics

Nominal SSL Power	30.00 W	
Measured Input Voltage	119.64 V	Notes
Test SSL Current	0.0000 A	1) Floodlight tested in accordance to IES LM-35-1989 at a distance great enough so that the inverse-square law applies.
Floodlight Luminous Flux	1787	
Measured Input Power	30.92 W	
Floodlight Luminous Efficacy	57.8 lm/W	2) Field performance may differ from laboratory measurements.
Maximum Candela Value	2730	
Maximum Candela Location	0.0 H, 2.0 V	3) Results are valid for the tested material only.
Horizontal Beam Angle (50%)	77.0 °	
Vertical Beam Angle (50%)	19.0 °	4) All data published in this report are based on absolute photometry.
Horizontal Field Angle (10%)	123.0 °	
Vertical Field Angle (10%)	57.0 °	5) The original electronic file or paper report cannot be edited in whole or in part without written consent of Spectralux Industries Inc.
IES/NEMA Type Classification	6Hx4V	
Beam Lumens (50%)	680	
Beam Efficiency (50%)	N/A	
Field Lumens (10%)	1447	
Field Efficiency (10%)	N/A	
Spill Lumens	339	
Total Floodlight Lumens	1787	
Total Floodlight Efficiency	N/A	



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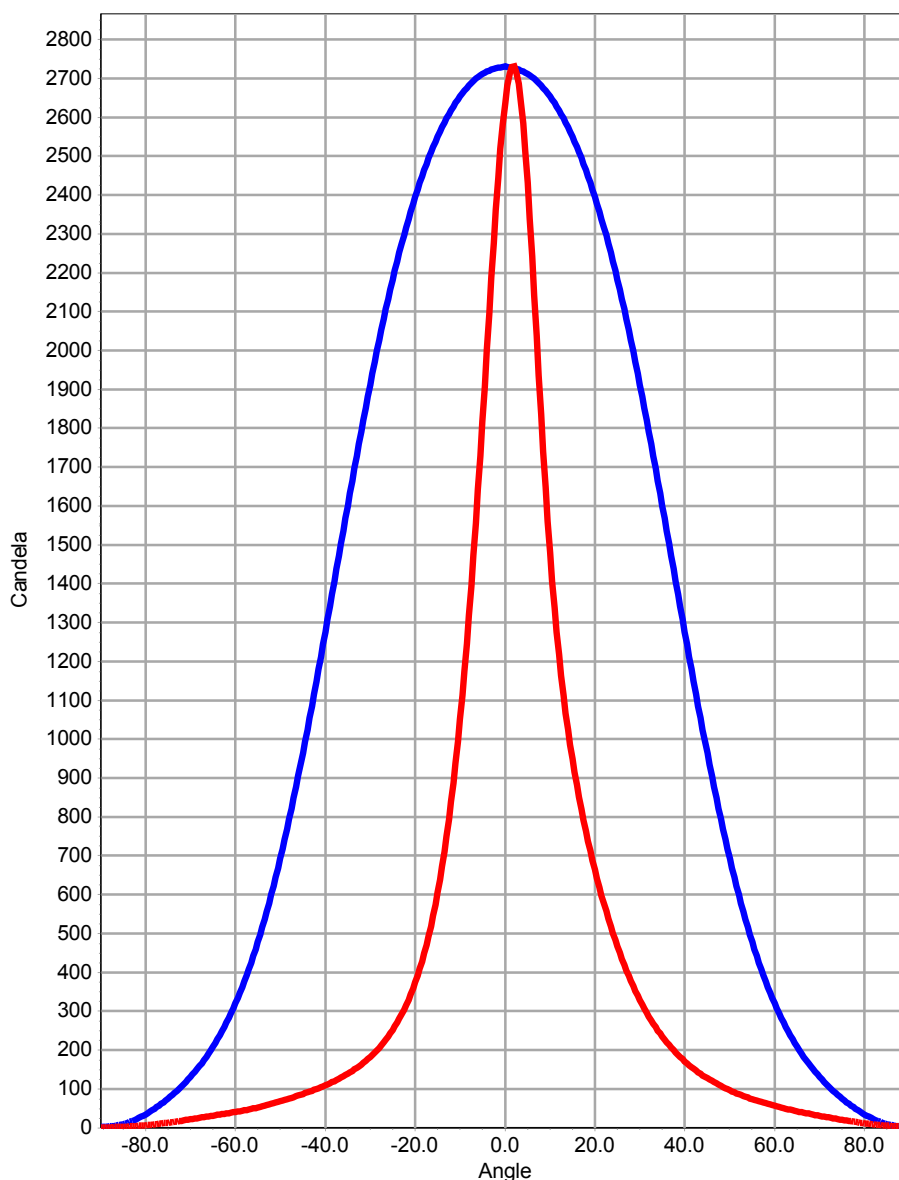
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Floodlight: LUMENFACADE · Lumcat: LOG-HO-120-24-40K-WWLF-SI-NO

Maximum Candela Trace (Max. Location: 0.0 H, 2.0 V)

Horizontal Angles	Candela
-90.0	2
-85.0	9
-80.0	34
-75.0	74
-70.0	130
-65.0	209
-60.0	320
-55.0	478
-50.0	692
-45.0	963
-40.0	1276
-35.0	1600
-30.0	1912
-25.0	2182
-20.0	2395
-15.0	2550
-10.0	2654
-5.0	2712
0.0	2730
5.0	2712
10.0	2654
15.0	2550
20.0	2395
25.0	2182
30.0	1912
35.0	1600
40.0	1276
45.0	963
50.0	692
55.0	478
60.0	320
65.0	209
70.0	130
75.0	74
80.0	34
85.0	9
90.0	2



Vertical Angles	Candela
-90.0	1
-85.0	2
-80.0	6
-75.0	13
-70.0	22
-65.0	31
-60.0	41
-55.0	52
-50.0	68
-45.0	87
-40.0	109
-35.0	139
-30.0	182
-25.0	251
-20.0	374
-15.0	605
-10.0	1051
-5.0	1817
0.0	2637
5.0	2431
10.0	1480
15.0	949
20.0	664
25.0	466
30.0	329
35.0	234
40.0	171
45.0	127
50.0	96
55.0	74
60.0	56
65.0	42
70.0	31
75.0	20
80.0	11
85.0	5
90.0	3



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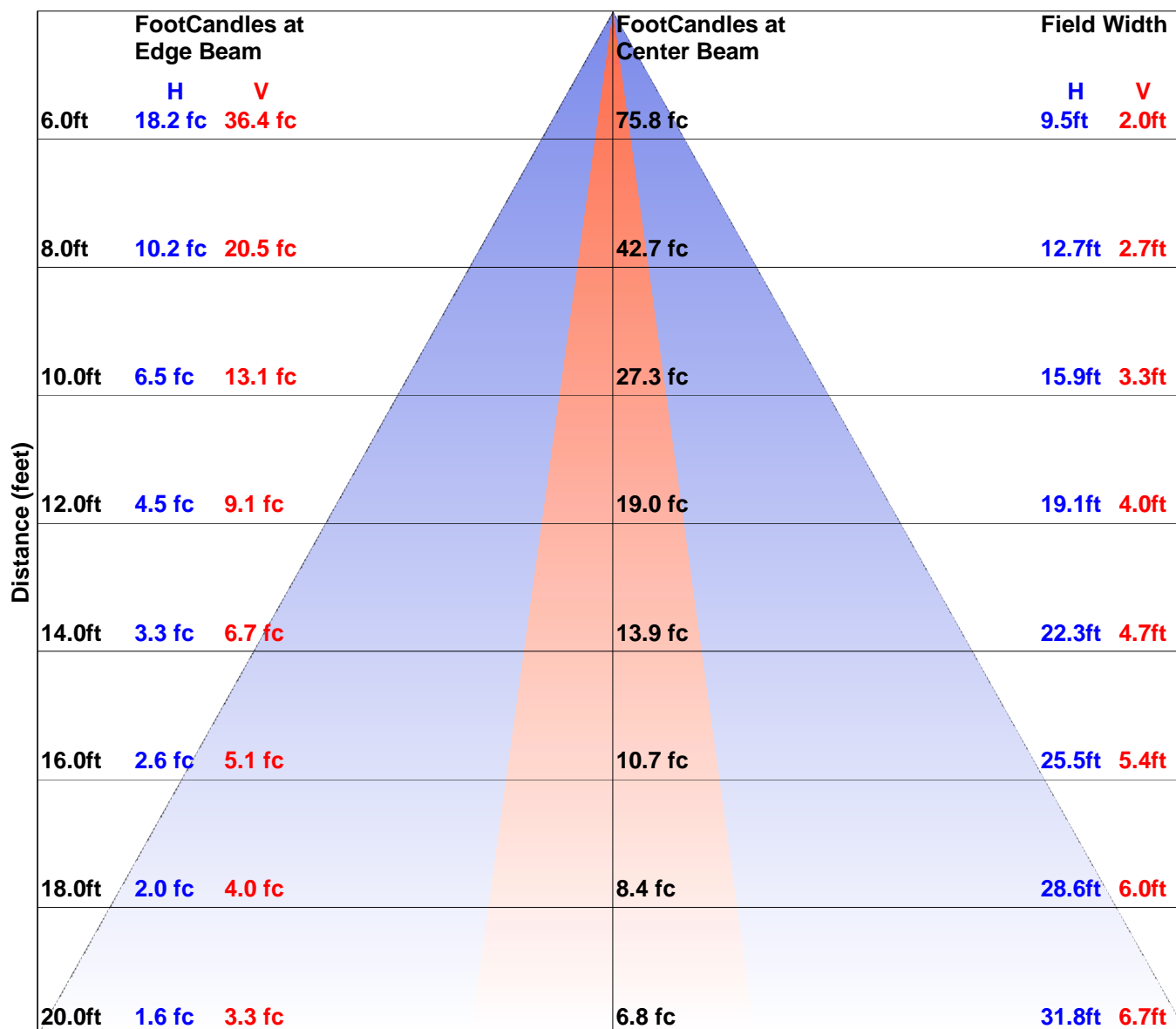
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Photometric Report: G1504221-R1

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Floodlight: LUMENFACADE · Lumcat: LOG-HO-120-24-40K-WWLF-SI-NO

Downlight Beam



— Horizontal (77.0 °) — Vertical (19.0 °)



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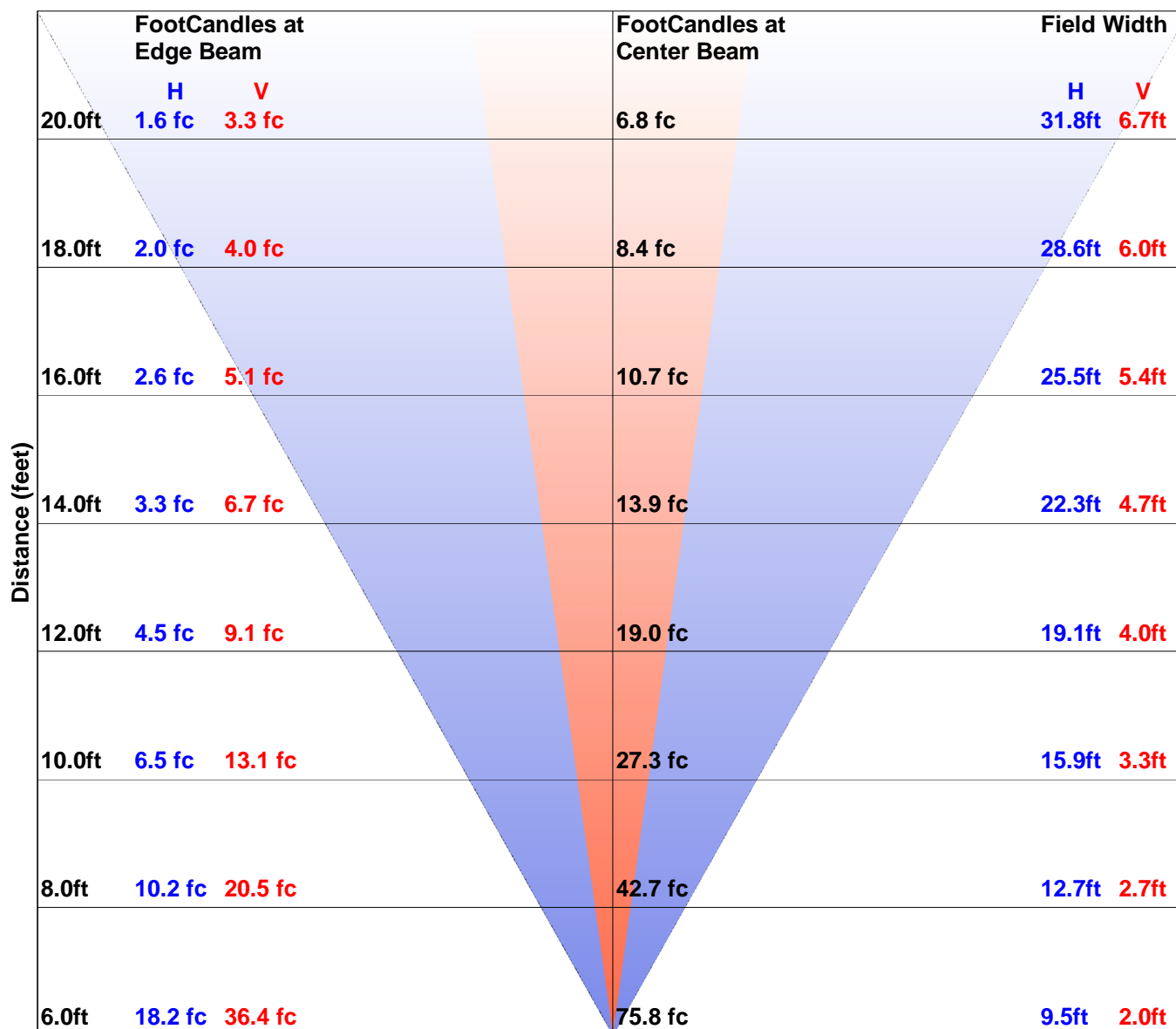
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Uplight Beam



— Horizontal (77.0 °) — Vertical (19.0 °)



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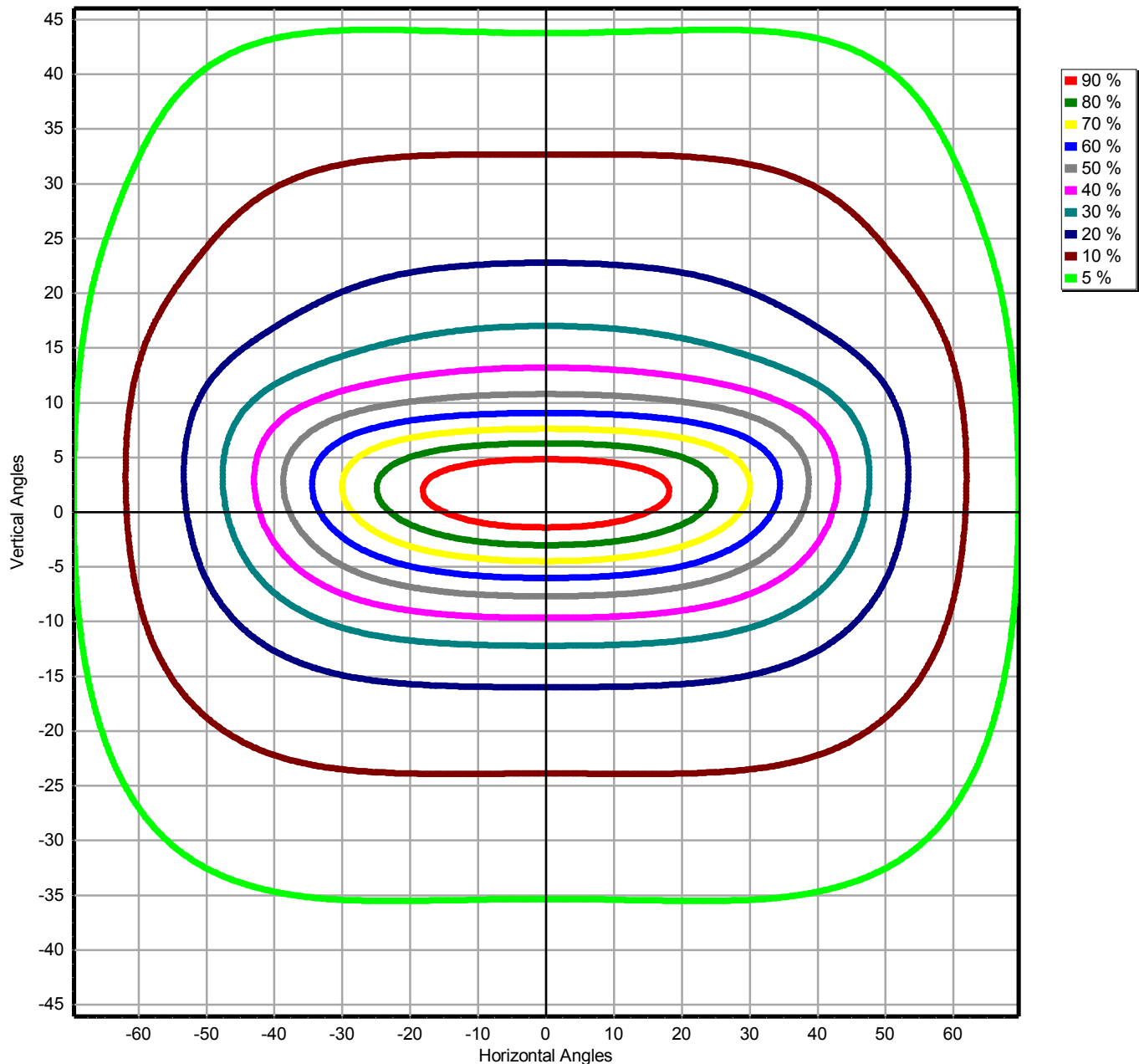
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ISO Candela Diagram





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IES File Headers

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IESNA:LM-63-2002
[ISSUEDATE]      22 April 2015
[TESTLAB]        Spectra Lux Industries Inc.
[TEST]           G1504221-R1
[MANUFAC]        Lumenpulse
[LUMCAT]          LOG-HO-120-24-40K-WWLF-SI-NO
[LUMINAIRE]       LUMENFACADE
[LAMP]            (CREE XPE2 LED's) White 30W SSL c/w MEAN WELL USA inc. Driver LPF-40-24 @ 120.00V
[_LAMPDETAILS]   DC Voltage=24V, Current=1.25A, CCT=3894K, CRI=83, x=0.3863, y=0.3833
[_BURNING]        Axial (1,787 Luminaire Lumens)
[_REFLECTOR]     24 Collimators
[_LENS]           Clear Flat Glass C/W Diffuse Film
[_HOUSING]        Extruded Aluminum
[_SKTPOSITION]    None
[DISTRIBUTION]    NEMA 6Hx4V (Max. CP at 0.0H,2.0V)
[MORE] (Based on IES LM-35-1989)
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Candela Table

Horizontal Angles

	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0
V e r t i c a l	-90.0	1	1	1	1	1	1	1	1
	-85.0	2	2	2	2	2	2	2	2
	-75.0	13	13	13	13	13	12	12	12
	-65.0	31	31	31	31	30	30	29	29
	-55.0	52	52	52	53	53	54	55	54
	-45.0	87	87	87	88	88	88	87	86
	-35.0	139	139	139	140	140	140	139	135
	-32.5	158	158	158	159	159	159	158	152
	-30.0	182	182	182	183	183	183	181	173
	-27.5	212	212	213	213	212	210	205	198
	-25.0	251	252	252	252	250	246	240	229
	-22.5	304	304	304	304	299	293	283	268
	-20.0	374	374	374	373	370	364	354	316
	-17.5	470	470	469	466	460	450	434	378
	-15.0	605	604	602	596	585	568	541	456
	-14.0	673	671	668	661	647	625	593	492
	-13.0	750	749	744	734	717	690	650	533
	-12.0	838	837	830	818	796	762	715	576
A n g l e s	-11.0	938	935	927	911	884	843	786	623
	-10.0	1051	1048	1037	1017	983	933	864	673
	-9.0	1176	1172	1159	1132	1091	1031	948	726
	-8.0	1318	1313	1296	1263	1212	1139	1041	782
	-7.0	1473	1466	1445	1405	1343	1255	1140	842
	-6.0	1642	1633	1607	1559	1484	1380	1244	901
	-5.0	1817	1807	1775	1717	1631	1508	1351	964
	-4.0	2002	1990	1951	1882	1779	1636	1459	1022
	-3.0	2187	2173	2129	2049	1931	1768	1567	1083
	-2.0	2363	2346	2296	2206	2072	1891	1666	1135
	-1.0	2519	2501	2446	2348	2201	2005	1759	1188
	0.0	2637	2617	2558	2455	2300	2092	1832	1225
	1.0	2713	2692	2634	2529	2371	2155	1888	1260
	2.0	2730	2712	2654	2550	2395	2182	1912	1276
	3.0	2687	2669	2616	2520	2374	2170	1909	1284
	4.0	2585	2570	2522	2437	2303	2114	1870	1270
	5.0	2431	2419	2377	2305	2188	2022	1802	1246



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Horizontal Angles

	0.0	5.0	10.0	15.0	20.0	25.0	30.0	35.0	40.0	
V e r t i c a l	6.0	2242	2233	2200	2140	2040	1899	1705	1468	1201
	7.0	2039	2029	2003	1954	1874	1755	1592	1383	1148
	8.0	1835	1828	1805	1765	1699	1599	1465	1290	1080
	9.0	1648	1643	1624	1591	1536	1453	1338	1190	1012
	10.0	1480	1474	1457	1427	1379	1309	1213	1087	935
	11.0	1338	1333	1317	1289	1246	1184	1101	993	864
	12.0	1217	1212	1197	1171	1130	1074	1000	906	794
	13.0	1112	1108	1093	1068	1030	978	911	828	731
	14.0	1025	1021	1007	983	947	898	836	761	674
	15.0	949	945	932	909	875	830	772	703	624
	17.5	791	788	777	759	731	694	646	589	524
	20.0	664	661	653	640	618	589	551	504	451
	22.5	557	555	550	540	525	503	473	436	393
	25.0	466	465	462	455	445	429	408	379	345
	27.5	391	391	389	385	378	367	351	330	304
	30.0	329	328	327	325	321	314	303	288	268
	32.5	277	276	276	275	273	269	262	251	235
	35.0	234	234	234	234	233	231	226	219	208
A n g l e s	45.0	127	128	128	129	129	130	129	128	125
	55.0	74	74	74	75	75	76	76	76	75
	65.0	42	42	42	43	43	43	43	43	42
	75.0	20	20	20	20	20	20	20	20	19
	85.0	5	5	5	5	5	5	5	5	5
	90.0	3	3	3	3	3	3	3	3	3



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Horizontal Angles

	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
V e r t i c a l	-90.0	1	1	1	1	1	1	1	1
	-85.0	2	2	2	2	2	2	2	1
	-75.0	11	10	10	9	8	7	5	3
	-65.0	28	28	26	24	21	18	13	7
	-55.0	53	51	48	44	39	32	23	13
	-45.0	84	80	75	68	60	48	35	20
	-35.0	129	122	113	101	86	68	47	26
	-32.5	146	137	125	111	93	73	50	27
	-30.0	164	153	139	122	101	78	53	28
	-27.5	187	173	155	134	110	84	56	30
	-25.0	215	196	173	148	119	90	59	31
	-22.5	248	223	194	163	129	95	62	32
	-20.0	288	255	218	179	140	101	65	33
	-17.5	338	293	245	197	151	107	67	34
	-15.0	400	339	277	217	162	113	70	34
	-14.0	428	359	290	225	166	115	70	34
	-13.0	458	380	304	233	171	117	71	35
	-12.0	491	403	318	241	175	119	72	35
	-11.0	525	426	333	250	179	120	73	35
	-10.0	561	450	347	258	183	122	73	35
A n g l e s	-9.0	599	475	362	265	187	124	74	35
	-8.0	638	500	376	273	190	125	74	35
	-7.0	679	525	391	280	194	126	74	35
	-6.0	720	550	404	287	196	127	75	35
	-5.0	761	575	418	293	199	128	75	35
	-4.0	799	597	429	299	201	129	75	35
	-3.0	838	619	442	304	203	130	75	35
	-2.0	872	639	451	308	205	130	75	35
	-1.0	904	657	461	313	207	130	75	35
	0.0	929	672	467	315	207	130	75	35
	1.0	951	684	474	318	208	131	75	35
	2.0	963	692	478	320	209	130	74	34
	3.0	970	697	481	321	209	130	74	34
	4.0	965	696	480	321	209	130	74	34
	5.0	953	690	479	320	208	130	74	34
	6.0	928	679	473	318	207	129	73	34
	7.0	898	663	467	315	206	128	73	33
	8.0	857	643	457	311	204	127	72	33
	9.0	814	619	446	306	202	127	72	33
	10.0	764	591	432	300	199	125	71	33
	11.0	716	562	418	294	197	124	71	32
	12.0	666	531	400	286	193	122	70	32
	13.0	620	501	384	277	190	121	69	32
	14.0	576	471	366	268	186	119	68	31
	15.0	537	444	350	260	182	117	68	31
	17.5	455	382	309	237	170	112	65	30
	20.0	393	334	274	215	158	106	63	29
	22.5	345	295	244	195	146	100	60	28
	25.0	306	263	220	177	135	94	57	26
	27.5	272	237	200	162	124	87	53	25
	30.0	243	213	182	148	115	81	50	24
	32.5	216	192	165	136	106	76	47	22
	35.0	192	173	151	125	98	70	44	21
	45.0	120	112	101	87	70	51	32	16



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Horizontal Angles

	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0	85.0
55.0	73	70	65	57	47	35	22	11	4
65.0	41	40	37	33	27	20	13	7	4
75.0	18	17	16	14	11	9	6	4	3
85.0	5	4	4	4	3	3	3	3	3
90.0	3	3	3	3	3	3	3	3	3

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Horizontal Angles

	90.0
V e r t i c a l	-90.0 1
	-85.0 1
	-75.0 1
	-65.0 1
	-55.0 1
	-45.0 2
	-35.0 2
	-32.5 2
	-30.0 2
	-27.5 2
	-25.0 2
	-22.5 2
	-20.0 2
	-17.5 2
	-15.0 2
	-14.0 2
	-13.0 2
	-12.0 2
	-11.0 2
	-10.0 2
A n g l e s	-9.0 2
	-8.0 2
	-7.0 2
	-6.0 2
	-5.0 2
	-4.0 2
	-3.0 2
	-2.0 2
	-1.0 2
	0.0 2
	1.0 2
	2.0 2
	3.0 2
	4.0 2
	5.0 2
	6.0 2
	7.0 2
	8.0 2
	9.0 2
	10.0 2
	11.0 2
	12.0 2
	13.0 2
	14.0 2
	15.0 2
	17.5 2
	20.0 2
	22.5 2
	25.0 2
	27.5 2
	30.0 2
	32.5 2
	35.0 2
	45.0 2



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Horizontal Angles

90.0

55.0	3
65.0	3
75.0	3
85.0	2
90.0	2

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