

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

NL1008GV 15L 35K XX FJ1 MW
Nautical Light RLM with 8" diam reflector/canopy

Test Number

SP-00937_1_M-15L

Test Date

10/22/2019

The results contained in this report pertain only to this IES file.

Summary of Results

Power

Input Watts	11 W
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Lumen Output

Output Lumens	998
Efficacy	90.71 lm/W

Luminous Dimensions

0° - 180° Size	-0.67
90° - 270° Size	-0.67
Height	0.63

Spacing Criterion

Two luminaires, plane 0°	1.25
Two luminaires, plane 90°	1.25
Four luminaires	1.53

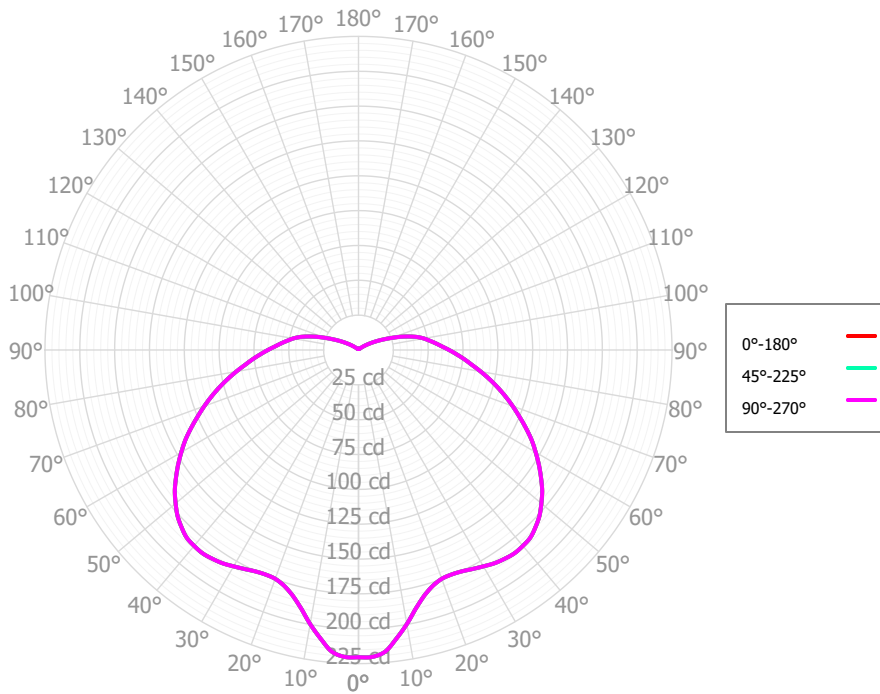
Full Beam Angle

0° - 180°	145°
90° - 270°	145°

IES File Header Contents

Keyword	Value
TEST	SP-00937_1_M-15L
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	10/22/2019
ISSUEDATE	2/20/2020
LUMCAT	NL1008GV 15L 35K XX FJ1 MW
LUMINAIRE	Nautical Light RLM with 8" diam reflector/canopy
OTHER	3" Frosted glass jar
OTHER	Beam angle: 145.2 degrees
LAMPCAT	N/A
LAMP	N/A
OTHER	CCT Output Multipliers: 27K x 0.971, 30K x 0.985, 40K x 1.03
OTHER	Total luminaire wattage is approximate
OTHER	This report prepared by Spectrum Lighting, scaled from 27L

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	20.94	2.10%	90.00° - 100.00°	60.86	6.10%
10.00° - 20.00°	51.80	5.19%	100.00° - 110.00°	39.36	3.94%
20.00° - 30.00°	81.52	8.17%	100.00° - 120.00°	55.86	5.59%
30.00° - 40.00°	114.63	11.48%	120.00° - 130.00°	4.98	0.50%
40.00° - 50.00°	138.41	13.86%	130.00° - 140.00°	1.28	0.13%
50.00° - 60.00°	142.96	14.32%	140.00° - 150.00°	0.60	0.06%
60.00° - 70.00°	131.27	13.15%	150.00° - 160.00°	0.43	0.04%
70.00° - 80.00°	109.15	10.93%	160.00° - 170.00°	0.26	0.03%
80.00° - 90.00°	83.37	8.35%	170.00° - 180.00°	0.09	0.01%
0.00° - 90.00°	874.05	87.55%	0.00° - 180.00°	998.39	100.00%

Candela Distribution

	0.00°	45.00°	90.00°
0.00°	220.53	220.53	220.53
2.50°	220.53	220.53	220.53
5.00°	217.48	217.48	217.48
7.50°	208.83	208.83	208.83
10.00°	199.75	199.75	199.75
12.50°	190.04	190.04	190.04
15.00°	182.47	182.47	182.47
17.50°	177.44	177.44	177.44
20.00°	174.77	174.77	174.77
22.50°	174.42	174.42	174.42
25.00°	175.31	175.31	175.31
27.50°	177.20	177.20	177.20
30.00°	179.29	179.29	179.29
32.50°	181.50	181.50	181.50
35.00°	182.90	182.90	182.90
37.50°	183.88	183.88	183.88
40.00°	183.51	183.51	183.51
42.50°	182.58	182.58	182.58
45.00°	179.69	179.69	179.69
47.50°	176.17	176.17	176.17
50.00°	171.32	171.32	171.32
52.50°	166.16	166.16	166.16
55.00°	159.93	159.93	159.93
57.50°	153.52	153.52	153.52
60.00°	146.84	146.84	146.84
62.50°	140.13	140.13	140.13
65.00°	132.58	132.58	132.58
67.50°	125.00	125.00	125.00
70.00°	117.75	117.75	117.75
72.50°	110.51	110.51	110.51
75.00°	103.29	103.29	103.29
77.50°	96.10	96.10	96.10
80.00°	89.04	89.04	89.04
82.50°	82.17	82.17	82.17
85.00°	76.25	76.25	76.25
87.50°	70.43	70.43	70.43
90.00°	64.99	64.99	64.99
92.50°	59.85	59.85	59.85
95.00°	55.53	55.53	55.53
97.50°	51.38	51.38	51.38
100.00°	47.60	47.60	47.60
102.50°	43.10	43.10	43.10
105.00°	37.35	37.35	37.35
107.50°	31.48	31.48	31.48
110.00°	25.47	25.47	25.47
112.50°	20.25	20.25	20.25

Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

RCR	pfc	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	0%
	pcc	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	0%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	0	1,159	1,159	1,159	1,159	1,118	1,118	1,118	1,118	1,040	1,040	1,040	970	970	970	905	905	874
	1	1,020	957	900	849	978	921	870	823	854	812	774	793	759	728	737	710	683
	2	911	812	729	660	871	781	706	642	724	662	608	671	620	575	623	581	558
	3	821	699	605	530	784	673	587	517	624	551	491	579	518	467	537	486	466
	4	745	611	512	437	711	588	497	427	546	469	407	507	441	388	471	415	398
	5	681	539	440	367	650	520	428	359	484	405	344	450	382	328	419	360	346
	6	626	481	384	314	597	465	374	308	433	354	295	404	335	283	377	317	304
	7	578	433	339	273	552	418	330	268	391	314	257	366	297	246	342	282	271
	8	536	392	302	240	512	380	295	235	356	280	226	333	266	217	312	253	244
	9	499	358	271	213	478	347	265	209	326	253	201	306	241	194	287	229	221
	10	467	328	246	191	447	319	240	187	300	230	181	283	219	174	266	209	202

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	7.3 fc	35.1 ft
6.5 ft	5.2 fc	41.4 ft
7.5 ft	3.9 fc	47.8 ft
8.0 ft	3.4 fc	51.0 ft
10.0 ft	2.2 fc	63.8 ft
12.0 ft	1.5 fc	76.5 ft
14.0 ft	1.1 fc	89.3 ft
16.0 ft	0.9 fc	102.0 ft
20.0 ft	0.6 fc	127.5 ft
24.0 ft	0.4 fc	153.0 ft
28.0 ft	0.3 fc	178.5 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	6,733	6,733	6,733
45.00°	3,531	3,531	3,531
55.00°	3,141	3,141	3,141
65.00°	2,685	2,685	2,685
75.00°	2,228	2,228	2,228
85.00°	1,819	1,819	1,819

UGR CIE 190:2010

Ceiling reflectance		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall reflectance		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Plane reflectance		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
2H	2H	-	-	-	-	-	-	-	-	-	-
	3H	-	-	-	-	-	-	-	-	-	-
	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
4H	2H	-	-	-	-	-	-	-	-	-	-
	3H	-	-	-	-	-	-	-	-	-	-
	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
8H	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-
	12H	-	-	-	-	-	-	-	-	-	-
12H	4H	-	-	-	-	-	-	-	-	-	-
	6H	-	-	-	-	-	-	-	-	-	-
	8H	-	-	-	-	-	-	-	-	-	-

Corrected UGR values based on total output lumens

SHR = 1.0