

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

NL1010GV 15L 35K XX FJ1 MW
Nautical Light RLM with 10" diam reflector/canopy

Test Number

SP-00938_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	1030
Efficacy	93.67 lm/W

Luminous Dimensions

0° - 180° Size	-0.83
90° - 270° Size	-0.83
Height	0.63

Spacing Criterion

Two luminaires, plane 0°	1.26
Two luminaires, plane 90°	1.26
Four luminaires	1.53

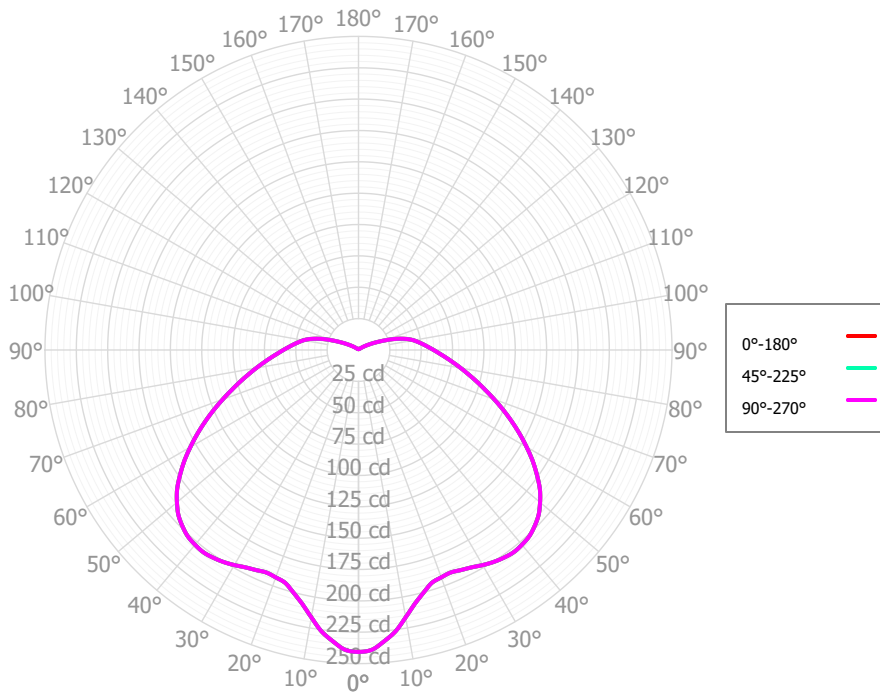
Full Beam Angle

0° - 180°	137°
90° - 270°	137°

IES File Header Contents

Keyword	Value
TEST	SP-00938_1_M-15L
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	10/22/2019
ISSUEDATE	2/20/2020
LUMCAT	NL1010GV 15L 35K XX FJ1 MW
LUMINAIRE	Nautical Light RLM with 10" diam reflector/canopy
OTHER	3" Frosted glass jar
OTHER	Beam angle: 137.8 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°	22.65	2.20%	90.00° - 100.00°	56.67	5.50%
10.00° - 20.00°	56.76	5.51%	100.00° - 110.00°	36.37	3.53%
20.00° - 30.00°	89.93	8.72%	100.00° - 120.00°	50.03	4.85%
30.00° - 40.00°	126.66	12.29%	120.00° - 130.00°	3.87	0.38%
40.00° - 50.00°	152.89	14.83%	130.00° - 140.00°	1.15	0.11%
50.00° - 60.00°	154.95	15.03%	140.00° - 150.00°	0.57	0.05%
60.00° - 70.00°	133.58	12.96%	150.00° - 160.00°	0.36	0.04%
70.00° - 80.00°	103.65	10.05%	160.00° - 170.00°	0.23	0.02%
80.00° - 90.00°	76.89	7.46%	170.00° - 180.00°	0.09	0.01%
0.00° - 90.00°	917.96	89.04%	0.00° - 180.00°	1,030.93	100.00%

Candela Distribution

	0.00°	45.00°	90.00°
0.00°	240.74	240.74	240.74
2.50°	239.38	239.38	239.38
5.00°	233.26	233.26	233.26
7.50°	226.29	226.29	226.29
10.00°	216.48	216.48	216.48
12.50°	207.34	207.34	207.34
15.00°	200.32	200.32	200.32
17.50°	194.64	194.64	194.64
20.00°	192.94	192.94	192.94
22.50°	192.08	192.08	192.08
25.00°	193.59	193.59	193.59
27.50°	195.41	195.41	195.41
30.00°	198.04	198.04	198.04
32.50°	200.42	200.42	200.42
35.00°	202.17	202.17	202.17
37.50°	203.26	203.26	203.26
40.00°	202.75	202.75	202.75
42.50°	201.52	201.52	201.52
45.00°	198.60	198.60	198.60
47.50°	194.78	194.78	194.78
50.00°	189.00	189.00	189.00
52.50°	182.31	182.31	182.31
55.00°	173.71	173.71	173.71
57.50°	164.68	164.68	164.68
60.00°	154.80	154.80	154.80
62.50°	144.87	144.87	144.87
65.00°	134.84	134.84	134.84
67.50°	124.93	124.93	124.93
70.00°	115.23	115.23	115.23
72.50°	106.03	106.03	106.03
75.00°	97.70	97.70	97.70
77.50°	89.84	89.84	89.84
80.00°	82.74	82.74	82.74
82.50°	76.07	76.07	76.07
85.00°	70.08	70.08	70.08
87.50°	64.61	64.61	64.61
90.00°	59.92	59.92	59.92
92.50°	55.59	55.59	55.59
95.00°	51.79	51.79	51.79
97.50°	48.10	48.10	48.10
100.00°	44.59	44.59	44.59
102.50°	40.21	40.21	40.21
105.00°	34.67	34.67	34.67
107.50°	28.78	28.78	28.78
110.00°	22.44	22.44	22.44
112.50°	17.10	17.10	17.10

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%	20%	0%
	pcc	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	10%	0%
	pw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	30%
	0	1,200	1,200	1,200	1,200	1,159	1,159	1,159	1,159	1,083	1,083	1,083	1,013	1,013	1,013	948	948	948	918
	1	1,062	999	943	892	1,021	964	913	867	898	856	818	838	804	773	782	755	730	728
	2	951	851	768	698	912	821	745	681	765	702	647	713	661	615	665	622	584	599
	3	858	735	639	563	821	709	621	550	661	587	526	616	554	502	575	523	479	504
	4	780	642	542	465	746	621	528	456	579	500	437	541	473	418	505	448	401	431
	5	712	568	467	392	681	549	455	385	514	432	370	481	410	355	450	389	341	375
	6	655	507	407	336	626	490	397	330	460	378	318	431	360	306	404	343	294	330
	7	604	456	359	292	579	442	351	287	415	335	277	390	320	267	367	305	257	294
	8	561	413	320	257	537	401	313	252	378	300	244	356	286	236	335	274	227	264
	9	522	377	288	228	501	366	282	224	346	270	217	326	259	210	308	248	203	239
	10	488	346	261	204	469	336	256	201	318	245	195	301	235	189	285	226	183	218

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	8.0 fc	28.2 ft
6.5 ft	5.7 fc	33.3 ft
7.5 ft	4.3 fc	38.4 ft
8.0 ft	3.8 fc	41.0 ft
10.0 ft	2.4 fc	51.2 ft
12.0 ft	1.7 fc	61.5 ft
14.0 ft	1.2 fc	71.7 ft
16.0 ft	0.9 fc	82.0 ft
20.0 ft	0.6 fc	102.5 ft
24.0 ft	0.4 fc	122.9 ft
28.0 ft	0.3 fc	143.4 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	4,789	4,789	4,789
45.00°	2,841	2,841	2,841
55.00°	2,531	2,531	2,531
65.00°	2,066	2,066	2,066
75.00°	1,630	1,630	1,630
85.00°	1,328	1,328	1,328

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