

Indoor Distribution Test Report

Spectrum Lighting Inc.

994 Jefferson Street
Fall River, MA 02721
+1.508.678.2303

Spectrum Lighting Photometric Lab

Luminaire

NL1008GV 27L 35K XX FJ1 MW
Nautical Light RLM with 8" diam reflector/canopy

Test Number

SP-00937_1

Test Date

10/22/2019

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

Summary of Results

Power

Input Watts	18.3 W
-------------	--------

Lumen Output

Output Lumens	1741
Efficacy	95.16 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

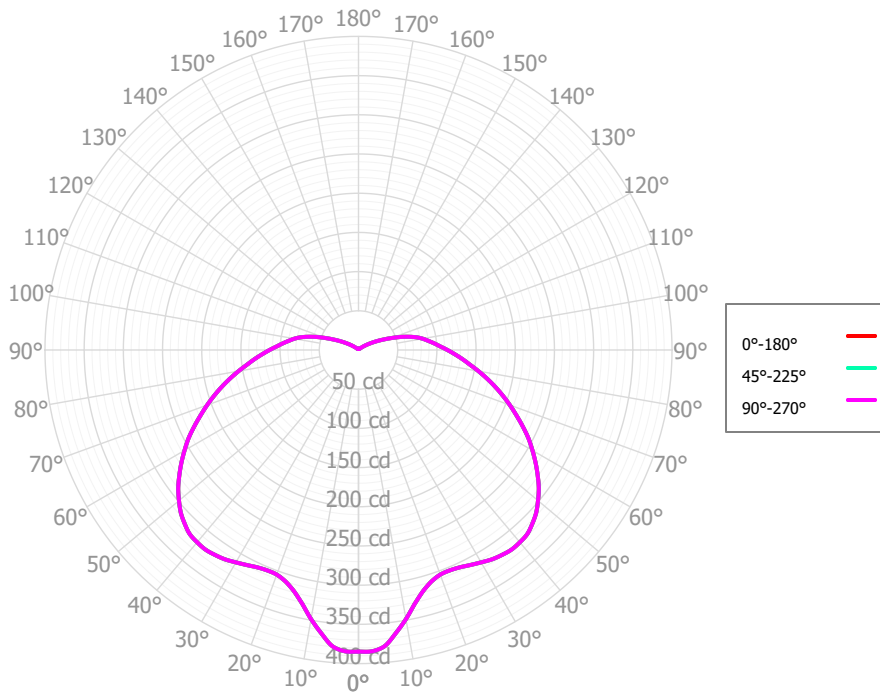
Full Beam Angle

0° - 180°	145°
90° - 270°	145°

IES File Header Contents

Keyword	Value
TEST	SP-00937_1
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	10/22/2019
ISSUEDATE	2/20/2020
LUMCAT	NL1008GV 27L 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
_CRI	80
_CCTMULT	27K x 0.971, 30K x 0.985, 40K x 1.03
_LAMPMULT	15L x 0.573

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0.00° - 10.00°	36.54	2.10%	90.00° - 100.00°	106.21	6.10%
10.00° - 20.00°	90.40	5.19%	100.00° - 110.00°	68.69	3.94%
20.00° - 30.00°	142.27	8.17%	100.00° - 120.00°	97.48	5.59%
30.00° - 40.00°	200.06	11.48%	120.00° - 130.00°	8.69	0.50%
40.00° - 50.00°	241.55	13.86%	130.00° - 140.00°	2.24	0.13%
50.00° - 60.00°	249.50	14.32%	140.00° - 150.00°	1.04	0.06%
60.00° - 70.00°	229.09	13.15%	150.00° - 160.00°	0.75	0.04%
70.00° - 80.00°	190.49	10.93%	160.00° - 170.00°	0.45	0.03%
80.00° - 90.00°	145.50	8.35%	170.00° - 180.00°	0.15	0.01%
0.00° - 90.00°	1,525.40	87.55%	0.00° - 180.00°	1,742.39	100.00%

Candela Distribution

	0.00°	45.00°	90.00°
0.00°	384.87	384.87	384.87
2.50°	384.87	384.87	384.87
5.00°	379.54	379.54	379.54
7.50°	364.45	364.45	364.45
10.00°	348.61	348.61	348.61
12.50°	331.66	331.66	331.66
15.00°	318.45	318.45	318.45
17.50°	309.67	309.67	309.67
20.00°	305.01	305.01	305.01
22.50°	304.39	304.39	304.39
25.00°	305.96	305.96	305.96
27.50°	309.26	309.26	309.26
30.00°	312.89	312.89	312.89
32.50°	316.75	316.75	316.75
35.00°	319.19	319.19	319.19
37.50°	320.90	320.90	320.90
40.00°	320.26	320.26	320.26
42.50°	318.64	318.64	318.64
45.00°	313.59	313.59	313.59
47.50°	307.45	307.45	307.45
50.00°	298.99	298.99	298.99
52.50°	289.98	289.98	289.98
55.00°	279.11	279.11	279.11
57.50°	267.93	267.93	267.93
60.00°	256.27	256.27	256.27
62.50°	244.56	244.56	244.56
65.00°	231.38	231.38	231.38
67.50°	218.15	218.15	218.15
70.00°	205.50	205.50	205.50
72.50°	192.86	192.86	192.86
75.00°	180.27	180.27	180.27
77.50°	167.71	167.71	167.71
80.00°	155.40	155.40	155.40
82.50°	143.41	143.41	143.41
85.00°	133.07	133.07	133.07
87.50°	122.91	122.91	122.91
90.00°	113.43	113.43	113.43
92.50°	104.45	104.45	104.45
95.00°	96.92	96.92	96.92
97.50°	89.67	89.67	89.67
100.00°	83.07	83.07	83.07
102.50°	75.22	75.22	75.22
105.00°	65.18	65.18	65.18
107.50°	54.94	54.94	54.94
110.00°	44.44	44.44	44.44
112.50°	35.35	35.35	35.35

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	2,023	2,023	2,023	2,023	1,950	1,950	1,950	1,950	1,815	1,815	1,815	1,692	1,692	1,692	1,579	1,579	1,525
	1	1,780	1,670	1,571	1,482	1,707	1,607	1,518	1,437	1,491	1,418	1,351	1,384	1,325	1,270	1,285	1,238	1,192
	2	1,590	1,416	1,272	1,152	1,520	1,363	1,232	1,120	1,264	1,154	1,060	1,172	1,082	1,003	1,087	1,013	973
	3	1,433	1,220	1,056	925	1,368	1,175	1,024	902	1,090	962	857	1,011	904	814	937	849	814
	4	1,301	1,066	894	762	1,241	1,027	868	744	954	818	710	886	770	677	822	725	695
	5	1,188	941	769	641	1,134	908	747	627	845	706	600	786	667	573	731	629	604
	6	1,092	840	670	549	1,042	811	653	538	756	618	515	705	585	493	657	553	531
	7	1,008	755	591	476	963	730	576	467	683	547	448	638	519	430	596	492	473
	8	935	684	527	418	894	663	514	411	621	489	395	582	465	380	545	442	425
	9	871	625	473	371	834	605	462	365	569	441	351	534	420	338	502	400	385
	10	815	573	429	333	781	556	419	327	524	401	315	493	382	304	464	365	352

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	12.7 fc	35.1 ft
6.5 ft	9.1 fc	41.4 ft
7.5 ft	6.8 fc	47.8 ft
8.0 ft	6.0 fc	51.0 ft
10.0 ft	3.8 fc	63.8 ft
12.0 ft	2.7 fc	76.5 ft
14.0 ft	2.0 fc	89.3 ft
16.0 ft	1.5 fc	102.0 ft
20.0 ft	1.0 fc	127.5 ft
24.0 ft	0.7 fc	153.0 ft
28.0 ft	0.5 fc	178.5 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	11,750	11,750	11,750
45.00°	6,162	6,162	6,162
55.00°	5,482	5,482	5,482
65.00°	4,685	4,685	4,685
75.00°	3,889	3,889	3,889
85.00°	3,174	3,174	3,174

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