

Indoor Distribution Test Report

Spectrum Lighting Inc.

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Spectrum Lighting Photometric Lab

Luminaire

NL1012GV 27L 35K XX FJ1 MW
Nautical Light RLM with 12" diam reflector/canopy

Test Number

SP-00939_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
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Lumen Output

Output Lumens	1792
Efficacy	97.95 lm/W

Luminous Dimensions

0° - 180° Size	-1
90° - 270° Size	-1
Height	0.63

Spacing Criterion

Two luminaires, plane 0°	1.25
Two luminaires, plane 90°	1.25
Four luminaires	1.52

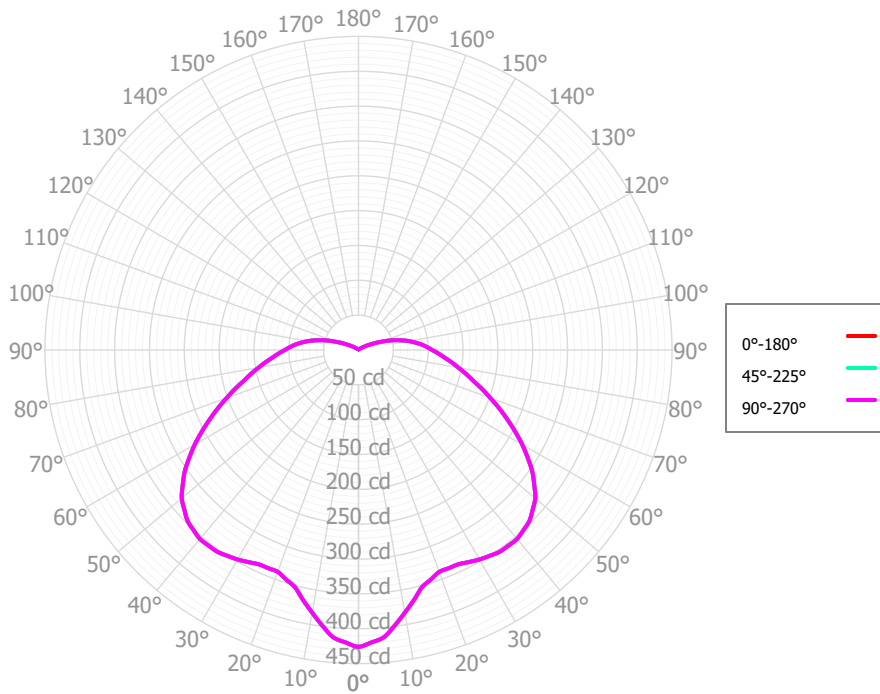
Full Beam Angle

0° - 180°	137°
90° - 270°	137°

IES File Header Contents

Keyword	Value
TEST	SP-00939_1
TESTLAB	Spectrum Lighting Photometric Lab, VLS-245-981
MANUFAC	Spectrum Lighting
TESTDATE	10/22/2019
ISSUEDATE	2/20/2020
LUMCAT	NL1012GV 27L 35K XX FJ1 MW
LUMINAIRE	Nautical Light RLM with 12" diam reflector/canopy
OTHER	3" Frosted glass jar
OTHER	Beam angle: 136.9 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°	40.00	2.23%	90.00° - 100.00°	98.37	5.48%
10.00° - 20.00°	100.29	5.59%	100.00° - 110.00°	57.45	3.20%
20.00° - 30.00°	158.00	8.81%	100.00° - 120.00°	77.97	4.35%
30.00° - 40.00°	221.21	12.33%	120.00° - 130.00°	5.28	0.29%
40.00° - 50.00°	266.67	14.87%	130.00° - 140.00°	1.52	0.08%
50.00° - 60.00°	271.12	15.12%	140.00° - 150.00°	0.84	0.05%
60.00° - 70.00°	233.64	13.03%	150.00° - 160.00°	0.63	0.03%
70.00° - 80.00°	181.50	10.12%	160.00° - 170.00°	0.38	0.02%
80.00° - 90.00°	135.93	7.58%	170.00° - 180.00°	0.14	0.01%
0.00° - 90.00°	1,608.37	89.68%	0.00° - 180.00°	1,793.48	100.00%

Candela Distribution

	0.00°	45.00°	90.00°
0.00°	425.98	425.98	425.98
2.50°	420.27	420.27	420.27
5.00°	414.08	414.08	414.08
7.50°	398.85	398.85	398.85
10.00°	382.84	382.84	382.84
12.50°	367.60	367.60	367.60
15.00°	352.41	352.41	352.41
17.50°	345.40	345.40	345.40
20.00°	338.95	338.95	338.95
22.50°	338.94	338.94	338.94
25.00°	339.38	339.38	339.38
27.50°	343.17	343.17	343.17
30.00°	347.17	347.17	347.17
32.50°	350.33	350.33	350.33
35.00°	353.44	353.44	353.44
37.50°	353.82	353.82	353.82
40.00°	354.05	354.05	354.05
42.50°	350.56	350.56	350.56
45.00°	346.89	346.89	346.89
47.50°	339.11	339.11	339.11
50.00°	331.18	331.18	331.18
52.50°	317.98	317.98	317.98
55.00°	304.59	304.59	304.59
57.50°	288.01	288.01	288.01
60.00°	271.33	271.33	271.33
62.50°	253.47	253.47	253.47
65.00°	235.58	235.58	235.58
67.50°	218.46	218.46	218.46
70.00°	201.36	201.36	201.36
72.50°	185.80	185.80	185.80
75.00°	170.27	170.27	170.27
77.50°	157.90	157.90	157.90
80.00°	145.55	145.55	145.55
82.50°	134.63	134.63	134.63
85.00°	123.72	123.72	123.72
87.50°	114.71	114.71	114.71
90.00°	105.71	105.71	105.71
92.50°	98.20	98.20	98.20
95.00°	90.68	90.68	90.68
97.50°	82.06	82.06	82.06
100.00°	73.43	73.43	73.43
102.50°	63.95	63.95	63.95
105.00°	54.45	54.45	54.45
107.50°	44.34	44.34	44.34
110.00°	34.29	34.29	34.29
112.50°	26.60	26.60	26.60

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	2,091	2,091	2,091	2,091	2,021	2,021	2,021	2,021	1,890	1,890	1,890	1,770	1,770	1,770	1,660	1,660	1,608
	1	1,849	1,740	1,641	1,553	1,779	1,680	1,590	1,509	1,567	1,494	1,427	1,464	1,404	1,350	1,368	1,321	1,276
	2	1,656	1,481	1,336	1,215	1,589	1,430	1,298	1,185	1,334	1,224	1,129	1,245	1,154	1,074	1,163	1,089	1,050
	3	1,495	1,279	1,112	979	1,431	1,235	1,082	958	1,153	1,024	917	1,077	968	877	1,007	916	882
	4	1,358	1,119	943	810	1,299	1,081	919	794	1,011	872	762	946	827	731	885	784	755
	5	1,241	989	813	683	1,188	957	793	670	896	754	645	840	717	621	787	682	657
	6	1,140	882	709	585	1,092	855	693	575	803	661	555	754	630	535	708	600	579
	7	1,053	794	626	508	1,009	770	612	500	725	585	483	682	559	467	642	534	515
	8	977	720	558	447	937	699	546	440	659	523	426	622	501	412	587	479	463
	9	910	657	502	397	874	639	492	391	604	472	379	571	453	368	540	434	420
	10	851	603	455	356	818	587	446	351	556	429	341	527	412	331	500	396	383

Cone of Light

Mtg Height	Light Level	Beam Diameter
5.5 ft	14.1 fc	27.6 ft
6.5 ft	10.1 fc	32.7 ft
7.5 ft	7.6 fc	37.7 ft
8.0 ft	6.7 fc	40.2 ft
10.0 ft	4.3 fc	50.3 ft
12.0 ft	3.0 fc	60.3 ft
14.0 ft	2.2 fc	70.4 ft
16.0 ft	1.7 fc	80.4 ft
20.0 ft	1.1 fc	100.5 ft
24.0 ft	0.7 fc	120.6 ft
28.0 ft	0.5 fc	140.7 ft

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	5,838	5,838	5,838
45.00°	3,731	3,731	3,731
55.00°	3,392	3,392	3,392
65.00°	2,809	2,809	2,809
75.00°	2,258	2,258	2,258
85.00°	1,913	1,913	1,913

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