

## Indoor Distribution Test Report

### Photopia Photometric Analysis & Optical Design

**Catalog Number**

Juniper-Spotlight-800lm

**Test Number**

1

**Test Date**

Mon Apr 12 12:31:11 2021

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

Juniper-Spotlight-800lm  
PL135910

**Summary of Results**

**Input**

Number of Lamps	1
Lumens per Lamp	N/A lm
Total Input Lumens	N/A lm
Input Watts	9 W

**Output**

Total Output Lumens	737 lm
Efficiency	N/A %
Efficacy	86 lm/W

**Luminous Dimensions**

0° - 180° Size	0.13 ft
90° - 270° Size	0.13 ft
Height	0 ft

**Photometry Information**

Distribution	Direct
Photometry Type	C

**Spacing Criterion**

Two luminaires, plane 0°	0.36
Two luminaires, plane 90°	0.37
Four luminaires	0.34

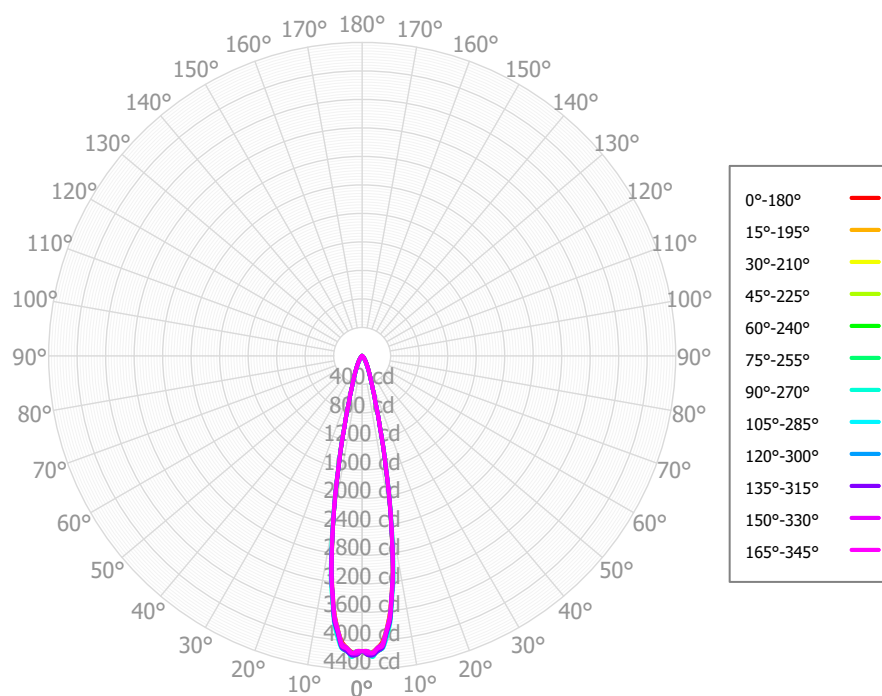
**Full Beam Angle**

0° - 180°	21.24°
90° - 270°	21.39°

**IES Header Data**

TESTLAB	Photopia 2020.1.0 see: www.ltioptics.com/i
ISSUEDATE	
TESTDATE	Mon Apr 12 12:31:11 2021
TEST	1
MANUFAC	Juniper
LUMCAT	
LUMINAIRE	Juniper-Spotlight- 800lm
LAMP	PL135910

### Candela Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0° - 10°	375.10	50.92%	90° - 100°	0.00	0.00%
10° - 20°	303.82	41.24%	100° - 110°	0.00	0.00%
20° - 30°	103.60	14.06%	100° - 120°	0.00	0.00%
30° - 40°	44.96	6.10%	120° - 130°	0.00	0.00%
40° - 50°	18.02	2.45%	130° - 140°	0.00	0.00%
50° - 60°	7.16	0.97%	140° - 150°	0.00	0.00%
60° - 70°	2.64	0.36%	150° - 160°	0.00	0.00%
70° - 80°	0.31	0.04%	160° - 170°	0.00	0.00%
80° - 90°	0.00	0.00%	170° - 180°	0.00	0.00%
0° - 90°	855.59	116.15%	90° - 180°	0.00	0.00%

## Candela Distribution

	0.00°	15.00°	30.00°	45.00°	60.00°	75.00°	90.00°
0.00°	4142.18	4142.18	4142.18	4142.18	4142.18	4142.18	4142.18
1.00°	4182.54	4142.55	4177.27	4197.35	4190.22	4146.25	4167.17
2.00°	4158.97	4177.30	4170.13	4206.24	4196.88	4171.93	4228.50
3.00°	4102.29	4115.13	4099.88	4147.51	4153.19	4126.96	4132.23
4.00°	4029.45	4082.97	4050.92	4102.70	4106.93	4073.25	4117.36
5.00°	3869.89	3889.80	3873.07	3912.67	3909.13	3885.50	3965.20
6.00°	3666.32	3710.23	3686.33	3743.15	3733.48	3713.09	3770.12
7.00°	3400.00	3411.14	3373.77	3399.83	3410.42	3396.25	3442.53
8.00°	3089.93	3106.16	3080.26	3105.06	3098.27	3106.96	3162.48
9.00°	2701.06	2717.65	2690.59	2711.20	2701.69	2716.00	2767.77
10.00°	2342.99	2339.12	2319.34	2316.18	2316.58	2333.96	2372.92
11.00°	1973.74	1980.57	1955.99	1954.19	1949.35	1976.21	2000.91
12.00°	1618.26	1605.74	1589.57	1583.27	1578.08	1601.76	1630.39
13.00°	1334.64	1330.60	1308.93	1303.60	1309.64	1329.43	1348.06
14.00°	1049.05	1038.49	1029.12	1026.70	1026.59	1039.56	1042.15
15.00°	868.06	862.52	853.69	850.98	847.51	853.98	868.13
16.00°	687.94	675.40	671.13	671.10	672.84	670.84	680.29
17.00°	580.78	578.69	574.05	576.11	574.28	569.93	569.67
18.00°	475.46	471.04	470.34	468.18	470.71	463.62	463.14
19.00°	413.61	414.08	413.39	416.11	414.91	403.70	402.76
20.00°	354.50	353.09	353.95	355.82	354.59	341.68	334.75
21.00°	311.95	310.34	315.72	316.39	314.60	304.99	296.44
22.00°	266.22	269.84	275.15	276.28	274.32	260.96	252.70
23.00°	238.48	242.05	248.90	250.43	248.48	235.47	225.07
24.00°	203.77	210.48	219.91	221.32	217.15	202.25	192.25
25.00°	181.86	187.03	196.21	200.29	196.74	178.79	169.94
26.00°	155.25	161.00	173.87	177.50	173.50	154.76	144.48
27.00°	136.01	143.89	158.04	165.06	155.91	138.00	128.59
28.00°	117.81	124.89	139.25	147.13	139.45	120.41	108.41
29.00°	106.26	110.26	126.04	136.05	127.14	108.08	97.26
30.00°	90.45	97.37	112.99	122.17	113.28	92.68	84.92
31.00°	80.84	87.91	102.51	112.08	103.80	83.69	76.14
32.00°	69.38	76.23	92.52	101.82	92.76	73.56	67.10
33.00°	62.56	69.00	84.47	95.22	84.97	66.63	59.55
34.00°	54.12	61.12	76.13	85.58	75.87	58.87	52.11
35.00°	48.23	54.16	70.45	79.70	68.97	53.26	46.16
36.00°	42.39	48.51	63.00	71.49	62.06	46.82	40.38
37.00°	37.55	43.08	58.03	67.23	57.09	41.88	35.67
38.00°	31.73	37.36	52.80	60.85	50.57	36.71	31.09

## Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

RCR	<b>pfc</b>	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	0%
	<b>pcc</b>	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	0%
	<b>pw</b>	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	30%
	<b>0</b>	1019	1019	1019	1019	995	995	995	995	951	951	951	910	910	910	873	873	856
	<b>1</b>	985	967	951	936	964	949	934	921	915	903	893	883	875	867	855	848	831
	<b>2</b>	953	922	897	876	935	908	885	866	881	863	847	857	842	830	834	823	807
	<b>3</b>	923	884	853	829	908	872	845	822	851	829	810	832	813	797	814	799	784
	<b>4</b>	895	850	817	791	882	841	810	787	824	798	778	808	787	769	794	776	762
	<b>5</b>	869	820	786	760	858	813	781	757	799	772	751	787	763	745	775	755	742
	<b>6</b>	846	794	759	734	835	788	755	731	776	748	727	766	741	722	756	735	723
	<b>7</b>	823	770	735	710	814	765	732	709	755	726	705	747	721	702	739	716	705
	<b>8</b>	803	748	714	690	795	744	711	689	736	707	686	729	703	684	722	699	688
	<b>9</b>	783	728	694	672	776	725	693	671	718	689	669	712	686	667	706	682	673
	<b>10</b>	765	710	677	655	759	707	676	654	701	673	653	696	670	651	691	667	658

## Cone of Light

Mtg Height	Light Level	Beam Diameter
6.0 ft	115.1 fc	2.3 ft
8.0 ft	64.7 fc	3.0 ft
10.0 ft	41.4 fc	3.8 ft
12.0 ft	28.8 fc	4.5 ft
14.0 ft	21.1 fc	5.3 ft
16.0 ft	16.2 fc	6.0 ft

### 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	7.4	8.3	7.8	8.6	8.9	7.3	8.2	7.7	8.5	8.9
	3H	7.6	8.4	8.0	8.7	9.1	7.5	8.3	7.9	8.6	9.0
	4H	7.5	8.2	7.9	8.6	9.0	7.4	8.1	7.8	8.5	8.9
	6H	7.4	8.1	7.8	8.4	8.8	7.3	8.0	7.7	8.3	8.7
	8H	7.3	8.0	7.8	8.3	8.8	7.2	7.9	7.7	8.2	8.7
	12H	7.3	7.9	7.7	8.2	8.7	7.2	7.8	7.6	8.1	8.6
4H	2H	8.1	8.9	8.6	9.3	9.6	8.1	8.8	8.5	9.2	9.6
	3H	8.3	8.9	8.8	9.4	9.8	8.2	8.8	8.6	9.2	9.7
	4H	8.2	8.8	8.7	9.2	9.6	8.1	8.7	8.5	9.1	9.5
	6H	8.1	8.6	8.6	9.0	9.5	8.0	8.5	8.5	8.9	9.4
	8H	8.0	8.5	8.5	8.9	9.4	7.9	8.3	8.4	8.8	9.3
	12H	8.0	8.3	8.5	8.8	9.3	7.8	8.2	8.3	8.7	9.2
8H	4H	8.0	8.5	8.5	8.9	9.4	7.9	8.4	8.4	8.8	9.3
	6H	7.9	8.3	8.4	8.8	9.2	7.8	8.2	8.3	8.7	9.1
	8H	7.8	8.1	8.4	8.7	9.2	7.7	8.0	8.3	8.6	9.1
	12H	7.8	8.0	8.3	8.5	9.1	7.7	7.9	8.2	8.4	9.0
12H	4H	8.0	8.3	8.5	8.8	9.3	7.9	8.2	8.4	8.7	9.2
	6H	7.8	8.1	8.4	8.6	9.2	7.7	8.0	8.3	8.5	9.1
	8H	7.8	8.0	8.3	8.5	9.1	7.7	7.9	8.2	8.4	9.0

Corrected UGR values based on total output energy  
SHR = 1.0

### Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	2853507	2853507	2853507
45.00°	10989	32725	10385
55.00°	4240	15986	4768
65.00°	2657	5836	2934
75.00°	266	452	266
85.00°	0	0	0