

## Indoor Distribution Test Report

### Photopia Photometric Analysis & Optical Design

**Catalog Number**

Juniper-Spotlight-37deg-800lm

**Test Number**

1

**Test Date**

Thu Apr 22 16:52:25 2021

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

Juniper-Spotlight-37deg-800lm  
PL135936

**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	681 lm
Efficiency	N/A %
Efficacy	79 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°	0.6
Two luminaires, plane 90°	0.6
Four luminaires	0.61

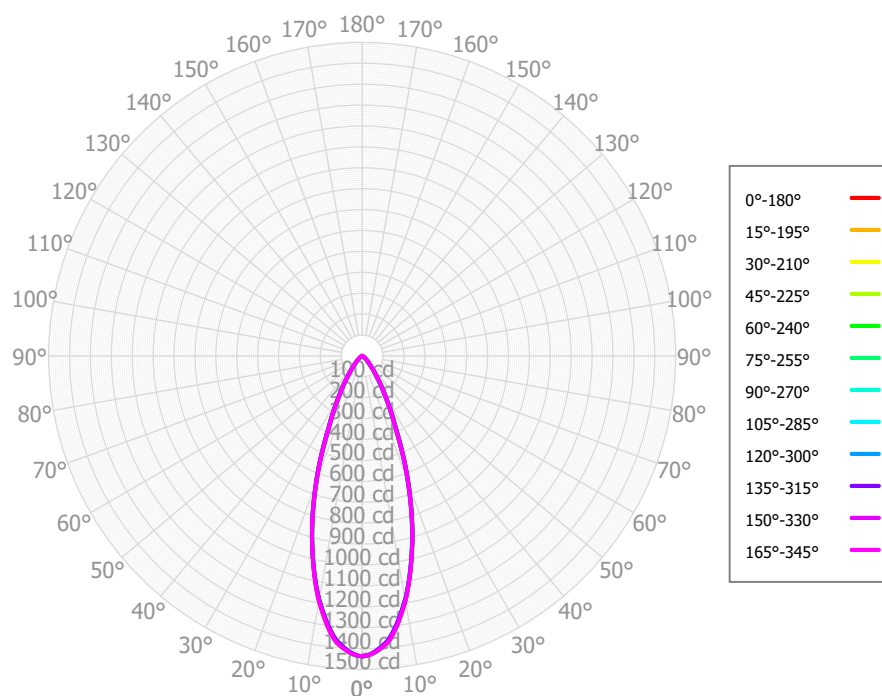
**Full Beam Angle**

0° - 180°	37.41°
90° - 270°	37.04°

**IES Header Data**

TESTLAB	Photopia 2021.0.0 see: www.ltioptics.com/i
ISSUEDATE	
TESTDATE	Thu Apr 22 16:52:25 2021
TEST	1
MANUFAC	Juniper
LUMCAT	
LUMINAIRE	Juniper-Spotlight- 37deg-800lm
LAMP	PL135936

### Candela Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0° - 10°	152.51	22.40%	90° - 100°	0.00	0.00%
10° - 20°	289.01	42.45%	100° - 110°	0.00	0.00%
20° - 30°	206.19	30.28%	100° - 120°	0.00	0.00%
30° - 40°	92.89	13.64%	120° - 130°	0.00	0.00%
40° - 50°	35.09	5.15%	130° - 140°	0.00	0.00%
50° - 60°	12.81	1.88%	140° - 150°	0.00	0.00%
60° - 70°	4.27	0.63%	150° - 160°	0.00	0.00%
70° - 80°	0.62	0.09%	160° - 170°	0.00	0.00%
80° - 90°	0.00	0.00%	170° - 180°	0.00	0.00%
0° - 90°	793.38	116.52%	90° - 180°	0.00	0.00%

### Candela Distribution

	0.00°	15.00°	30.00°	45.00°	60.00°	75.00°	90.00°
0.00°	1436.93	1436.93	1436.93	1436.93	1436.93	1436.93	1436.93
5.00°	1374.66	1379.69	1377.45	1369.92	1371.17	1371.53	1378.04
10.00°	1186.15	1191.98	1189.51	1183.46	1185.44	1184.96	1183.26
15.00°	926.10	926.41	923.84	925.72	927.43	924.05	918.32
20.00°	645.83	640.49	637.15	643.32	646.03	640.63	634.55
25.00°	381.05	373.86	367.68	378.57	382.98	374.00	363.44
30.00°	225.56	217.81	212.93	222.85	226.79	216.40	203.90
35.00°	127.36	121.87	120.15	125.80	128.75	119.63	110.93
40.00°	67.20	63.85	63.95	67.47	67.87	62.16	58.86
45.00°	37.78	36.37	37.31	39.65	38.47	35.34	34.25
50.00°	20.53	20.29	21.49	23.14	21.31	19.62	19.10
55.00°	10.80	11.17	12.06	12.65	11.57	10.48	10.28
60.00°	6.22	6.56	7.08	7.16	6.74	6.07	5.80
65.00°	3.27	3.55	3.82	3.70	3.55	3.31	3.23
70.00°	1.40	1.44	1.58	1.51	1.44	1.42	1.49
75.00°	0.26	0.27	0.31	0.31	0.29	0.27	0.30
80.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
85.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90.00°	0.00	0.00	0.00	0.00	0.00	0.00	0.00

### 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	945	945	945	945	923	923	923	923	882	882	882	844	844	844	810	810	810	793
	1	905	885	867	851	886	868	852	837	836	823	811	807	797	787	780	772	765	757
	2	866	831	802	778	849	817	791	769	792	771	752	769	751	736	747	733	721	719
	3	828	782	747	719	813	772	739	713	751	724	702	732	710	691	715	696	680	683
	4	793	739	700	670	779	730	694	666	714	683	658	698	672	651	684	662	644	650
	5	759	700	659	629	747	693	655	626	679	646	620	667	638	615	655	630	610	619
	6	728	665	623	593	717	659	620	591	648	613	587	637	606	583	627	600	579	590
	7	698	633	591	561	688	628	588	560	618	583	557	609	578	554	601	573	551	564
	8	671	604	562	533	662	600	560	532	592	556	530	584	552	528	577	548	526	539
	9	645	577	536	508	637	574	534	507	567	531	506	560	528	504	554	524	503	517
	10	621	553	512	486	613	550	511	485	544	508	484	538	505	482	533	503	481	496

### Cone of Light

Mtg Height	Light Level	Beam Diameter
6.0 ft	39.9 fc	4.0 ft
8.0 ft	22.5 fc	5.4 ft
10.0 ft	14.4 fc	6.7 ft
12.0 ft	10.0 fc	8.1 ft
14.0 ft	7.3 fc	9.4 ft
16.0 ft	5.6 fc	10.8 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	12.7	13.6	13.0	13.9	14.3	12.2	13.2	12.6	13.5	13.8
	3H	12.8	13.6	13.2	14.0	14.3	12.4	13.2	12.8	13.6	13.9
	4H	12.7	13.5	13.1	13.8	14.2	12.3	13.1	12.7	13.4	13.8
	6H	12.6	13.3	13.0	13.7	14.1	12.2	12.9	12.6	13.3	13.7
	8H	12.5	13.2	13.0	13.6	14.0	12.1	12.8	12.6	13.2	13.6
	12H	12.5	13.1	12.9	13.5	13.9	12.1	12.7	12.5	13.1	13.5
4H	2H	12.7	13.4	13.1	13.8	14.2	12.3	13.0	12.7	13.4	13.8
	3H	12.8	13.5	13.2	13.9	14.3	12.4	13.1	12.9	13.5	13.9
	4H	12.7	13.3	13.2	13.7	14.2	12.3	12.9	12.8	13.3	13.8
	6H	12.6	13.1	13.1	13.5	14.0	12.2	12.7	12.7	13.2	13.6
	8H	12.5	13.0	13.0	13.4	13.9	12.2	12.6	12.6	13.1	13.5
	12H	12.5	12.9	13.0	13.3	13.8	12.1	12.5	12.6	13.0	13.4
8H	4H	12.5	13.0	13.0	13.5	13.9	12.2	12.6	12.6	13.1	13.5
	6H	12.4	12.8	12.9	13.3	13.8	12.0	12.4	12.6	12.9	13.4
	8H	12.4	12.7	12.9	13.2	13.7	12.0	12.3	12.5	12.8	13.3
	12H	12.3	12.6	12.8	13.1	13.6	11.9	12.2	12.4	12.7	13.3
12H	4H	12.5	12.9	13.0	13.4	13.8	12.1	12.5	12.6	13.0	13.5
	6H	12.4	12.7	12.9	13.1	13.7	12.0	12.3	12.5	12.8	13.3
	8H	12.3	12.6	12.8	13.1	13.6	11.9	12.2	12.4	12.7	13.3

Corrected UGR values based on total output energy  
SHR = 1.0

### Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	989887	989887	989887
45.00°	36807	38629	33368
55.00°	12971	15193	12347
65.00°	5330	6031	5265
75.00°	692	825	799
85.00°	0	0	0