

## Indoor Distribution Test Report

### Photopia Photometric Analysis & Optical Design

**Catalog Number**

Juniper-Spotlight-37deg-500lm

**Test Number**

1

**Test Date**

Thu Apr 22 16:55:51 2021

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

Juniper-Spotlight-37deg-500lm  
PL135936

**Summary of Results**

**Input**

Number of Lamps	1
Lumens per Lamp	N/A lm
Total Input Lumens	N/A lm
Input Watts	5 W

**Output**

Total Output Lumens	426 lm
Efficiency	N/A %
Efficacy	85 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

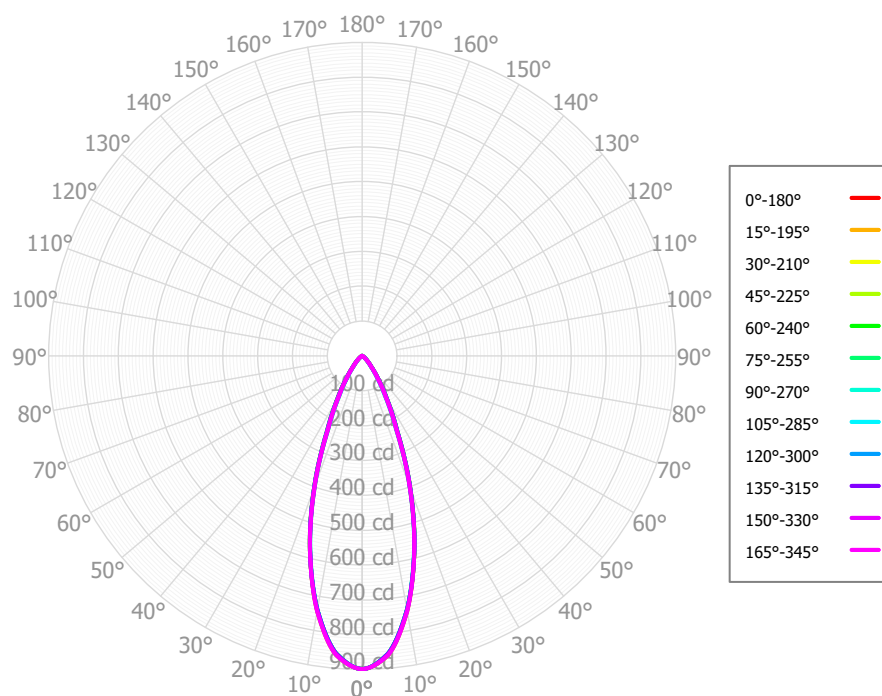
**Full Beam Angle**

0° - 180°	37.39°
90° - 270°	37.05°

**IES Header Data**

TESTLAB	Photopia 2021.0.0 see: www.ltioptics.com/i
ISSUEDATE	
TESTDATE	Thu Apr 22 16:55:51 2021
TEST	1
MANUFAC	Juniper
LUMCAT	
LUMINAIRE	Juniper-Spotlight- 37deg-500lm
LAMP	PL135936

### Candela Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0° - 10°	95.33	22.40%	90° - 100°	0.00	0.00%
10° - 20°	180.63	42.45%	100° - 110°	0.00	0.00%
20° - 30°	128.87	30.28%	100° - 120°	0.00	0.00%
30° - 40°	58.03	13.64%	120° - 130°	0.00	0.00%
40° - 50°	21.93	5.15%	130° - 140°	0.00	0.00%
50° - 60°	8.01	1.88%	140° - 150°	0.00	0.00%
60° - 70°	2.66	0.63%	150° - 160°	0.00	0.00%
70° - 80°	0.39	0.09%	160° - 170°	0.00	0.00%
80° - 90°	0.00	0.00%	170° - 180°	0.00	0.00%
0° - 90°	495.86	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°	898.75	898.75	898.75	898.75	898.75	898.75	898.75
5.00°	860.84	860.44	861.92	857.40	857.56	857.21	859.26
10.00°	741.20	744.25	743.66	740.12	740.97	740.86	739.59
15.00°	579.14	578.77	577.80	577.65	579.09	577.71	575.05
20.00°	403.52	400.04	397.73	402.39	403.09	400.79	396.88
25.00°	238.27	233.70	230.19	236.43	239.56	234.09	226.77
30.00°	140.66	136.04	133.11	139.14	141.82	135.17	127.41
35.00°	79.45	76.09	75.04	78.78	80.45	74.74	69.35
40.00°	41.94	39.98	40.03	42.16	42.37	38.92	36.69
45.00°	23.64	22.68	23.35	24.88	24.01	22.00	21.36
50.00°	12.75	12.70	13.46	14.40	13.40	12.29	12.10
55.00°	6.81	6.94	7.52	7.94	7.26	6.57	6.37
60.00°	3.81	4.14	4.43	4.46	4.20	3.81	3.65
65.00°	2.03	2.20	2.40	2.32	2.21	2.06	1.98
70.00°	0.86	0.93	0.99	0.95	0.89	0.87	0.94
75.00°	0.17	0.18	0.19	0.18	0.17	0.19	0.18
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	590	590	590	590	577	577	577	577	551	551	551	528	528	528	506	506	506	496
	1	566	553	542	532	554	542	532	523	522	514	507	504	498	492	487	482	478	473
	2	541	519	501	486	530	511	494	481	495	482	470	480	470	460	467	458	451	449
	3	518	489	467	449	508	482	462	446	470	453	439	458	444	432	447	435	425	427
	4	495	462	437	419	487	456	434	416	446	427	411	436	420	407	428	414	402	406
	5	474	438	412	393	467	433	409	391	425	404	388	417	399	384	409	394	381	387
	6	455	416	389	371	448	412	387	369	405	383	367	398	379	364	392	375	362	369
	7	436	396	369	351	430	393	368	350	387	364	348	381	361	346	376	358	345	352
	8	419	377	351	333	414	375	350	333	370	347	331	365	345	330	360	342	329	337
	9	403	361	335	318	398	359	334	317	354	332	316	350	330	315	346	328	314	323
	10	388	346	320	303	383	344	319	303	340	318	302	336	316	302	333	314	301	310

### Cone of Light

Mtg Height	Light Level	Beam Diameter
6.0 ft	25.0 fc	4.0 ft
8.0 ft	14.0 fc	5.4 ft
10.0 ft	9.0 fc	6.7 ft
12.0 ft	6.2 fc	8.1 ft
14.0 ft	4.6 fc	9.4 ft
16.0 ft	3.5 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	11.0	12.0	11.4	12.3	12.6	10.6	11.6	11.0	11.9	12.2
	3H	11.2	12.0	11.5	12.3	12.7	10.8	11.6	11.1	11.9	12.3
	4H	11.1	11.9	11.5	12.2	12.6	10.7	11.5	11.1	11.8	12.2
	6H	11.0	11.7	11.4	12.1	12.5	10.6	11.3	11.0	11.7	12.1
	8H	10.9	11.6	11.3	12.0	12.4	10.5	11.2	10.9	11.6	12.0
	12H	10.8	11.5	11.3	11.9	12.3	10.4	11.1	10.9	11.5	11.9
4H	2H	11.0	11.8	11.4	12.2	12.6	10.6	11.4	11.0	11.8	12.2
	3H	11.2	11.8	11.6	12.2	12.6	10.8	11.5	11.2	11.9	12.3
	4H	11.1	11.7	11.5	12.1	12.5	10.7	11.3	11.2	11.7	12.2
	6H	11.0	11.5	11.5	11.9	12.4	10.6	11.1	11.1	11.5	12.0
	8H	10.9	11.4	11.4	11.8	12.3	10.5	11.0	11.0	11.4	11.9
	12H	10.8	11.2	11.3	11.7	12.2	10.5	10.9	11.0	11.3	11.8
8H	4H	10.9	11.4	11.4	11.8	12.3	10.5	11.0	11.0	11.5	11.9
	6H	10.8	11.2	11.3	11.7	12.1	10.4	10.8	10.9	11.3	11.8
	8H	10.7	11.0	11.3	11.6	12.1	10.4	10.7	10.9	11.2	11.7
	12H	10.7	10.9	11.2	11.4	12.0	10.3	10.6	10.8	11.1	11.6
12H	4H	10.9	11.2	11.3	11.7	12.2	10.5	10.9	11.0	11.4	11.8
	6H	10.7	11.0	11.3	11.5	12.1	10.4	10.7	10.9	11.1	11.7
	8H	10.7	10.9	11.2	11.4	12.0	10.3	10.6	10.8	11.1	11.6

Corrected UGR values based on total output energy  
SHR = 1.0

### Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	619140	619140	619140
45.00°	23031	24239	20810
55.00°	8179	9536	7651
65.00°	3309	3782	3228
75.00°	452	479	479
85.00°	0	0	0