

Indoor Distribution Test Report

Photopia Photometric Analysis & Optical Design

Catalog Number

Juniper-Spotlight-50deg-500lm

Test Number

1

Test Date

Thu Apr 22 17:07:53 2021

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

Juniper-Spotlight-50deg-500lm
PL135960

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	400 lm
Efficiency	N/A %
Efficacy	80 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°	0.81
Two luminaires, plane 90°	0.82
Four luminaires	0.77

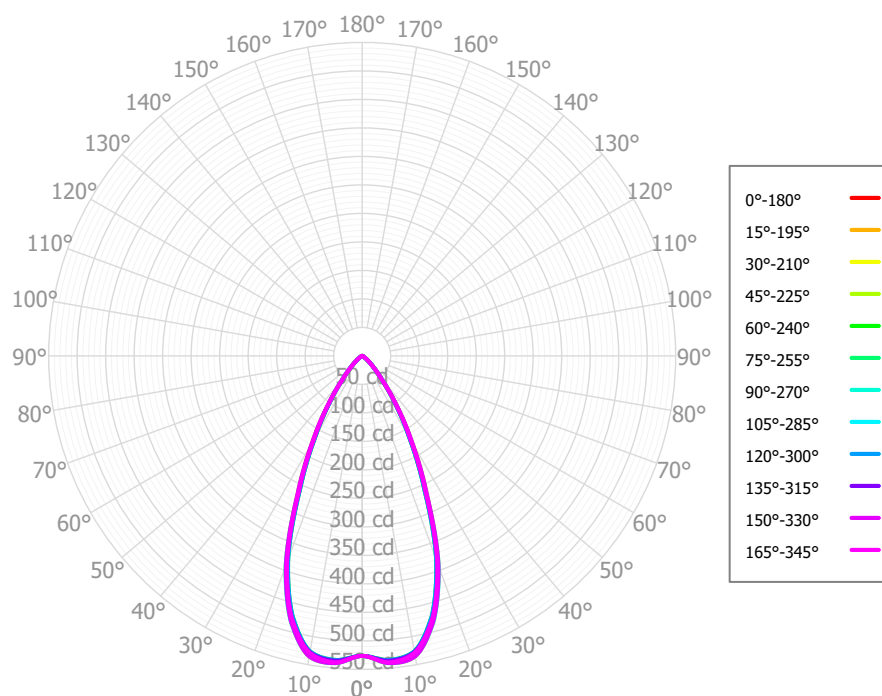
Full Beam Angle

0° - 180°	49.18°
90° - 270°	49.73°

IES Header Data

TESTLAB	Photopia 2021.0.0 see: www.ltioptics.com/i
ISSUEDATE	
TESTDATE	Thu Apr 22 17:07:53 2021
TEST	1
MANUFAC	Juniper
LUMCAT	
LUMINAIRE	Juniper-Spotlight- 50deg-500lm
LAMP	PL135960

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0° - 10°	63.09	15.75%	90° - 100°	0.00	0.00%
10° - 20°	150.72	37.64%	100° - 110°	0.00	0.00%
20° - 30°	140.62	35.12%	100° - 120°	0.00	0.00%
30° - 40°	74.88	18.70%	120° - 130°	0.00	0.00%
40° - 50°	26.81	6.69%	130° - 140°	0.00	0.00%
50° - 60°	8.14	2.03%	140° - 150°	0.00	0.00%
60° - 70°	2.54	0.63%	150° - 160°	0.00	0.00%
70° - 80°	0.37	0.09%	160° - 170°	0.00	0.00%
80° - 90°	0.00	0.00%	170° - 180°	0.00	0.00%
0° - 90°	467.16	116.66%	90° - 180°	0.00	0.00%

Candela Distribution

	0.00°	15.00°	30.00°	45.00°	60.00°	75.00°	90.00°
0.00°	526.28	526.28	526.28	526.28	526.28	526.28	526.28
5.00°	536.36	539.61	540.96	536.81	535.47	536.95	541.11
10.00°	526.98	528.98	535.33	527.73	526.33	528.75	535.11
15.00°	474.74	476.69	482.28	476.47	472.13	477.65	483.10
20.00°	384.13	385.05	391.34	386.07	379.46	385.94	392.64
25.00°	260.47	263.27	269.21	264.16	257.75	262.39	267.14
30.00°	166.43	170.26	175.62	170.67	165.37	168.46	172.25
35.00°	98.02	101.47	104.39	101.38	97.86	100.39	102.14
40.00°	49.84	52.24	53.94	52.30	50.81	53.17	53.68
45.00°	26.22	27.78	28.48	27.89	27.19	28.43	29.05
50.00°	13.64	14.13	14.44	13.98	13.90	14.25	14.56
55.00°	6.70	6.99	7.05	6.92	6.93	6.90	6.73
60.00°	3.66	3.92	4.01	3.87	3.98	3.91	3.64
65.00°	1.97	2.10	2.18	2.09	2.14	2.11	1.99
70.00°	0.88	0.88	0.92	0.87	0.89	0.89	0.82
75.00°	0.17	0.18	0.16	0.17	0.17	0.16	0.17
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%	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	556	556	556	556	543	543	543	543	519	519	519	497	497	497	477	477	467
	1	531	519	508	497	520	509	499	489	490	482	474	472	466	460	457	452	443
	2	506	484	466	451	496	476	460	446	461	448	436	447	436	427	435	426	417
	3	482	453	431	413	473	447	426	410	435	417	403	423	409	397	413	401	393
	4	459	425	400	381	451	420	397	379	410	390	375	401	384	370	392	378	371
	5	437	400	374	354	430	395	371	353	387	366	350	380	361	347	372	357	350
	6	417	377	350	331	410	373	348	330	366	344	328	360	340	326	354	337	331
	7	398	356	329	311	392	353	328	310	347	325	308	342	322	307	337	319	313
	8	380	337	311	292	374	335	309	292	330	307	291	325	304	289	321	302	297
	9	363	320	294	276	358	318	293	276	314	291	275	310	289	274	306	287	282
	10	348	304	279	261	343	303	278	261	299	276	260	295	274	260	292	273	269

Cone of Light

Mtg Height	Light Level	Beam Diameter
6.0 ft	14.6 fc	5.5 ft
8.0 ft	8.2 fc	7.4 ft
10.0 ft	5.3 fc	9.2 ft
12.0 ft	3.7 fc	11.1 ft
14.0 ft	2.7 fc	12.9 ft
16.0 ft	2.1 fc	14.7 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	10.9	11.9	11.3	12.2	12.5
	3H	11.1	12.0	11.5	12.3	12.7	11.1	11.9	11.4	12.3	12.6
	4H	11.0	11.8	11.5	12.2	12.6	11.0	11.8	11.4	12.1	12.5
	6H	10.9	11.7	11.4	12.0	12.4	10.9	11.6	11.3	12.0	12.4
	8H	10.9	11.6	11.3	12.0	12.4	10.8	11.5	11.3	11.9	12.3
	12H	10.8	11.5	11.3	11.9	12.3	10.8	11.4	11.2	11.8	12.2
4H	2H	11.0	11.8	11.4	12.1	12.5	10.9	11.7	11.3	12.0	12.4
	3H	11.1	11.8	11.5	12.2	12.6	11.1	11.7	11.5	12.1	12.5
	4H	11.0	11.6	11.5	12.0	12.5	11.0	11.5	11.4	12.0	12.4
	6H	10.9	11.4	11.4	11.9	12.3	10.8	11.3	11.3	11.8	12.3
	8H	10.8	11.3	11.3	11.7	12.2	10.8	11.2	11.3	11.7	12.2
	12H	10.8	11.2	11.3	11.7	12.1	10.7	11.1	11.2	11.6	12.1
8H	4H	10.9	11.3	11.3	11.8	12.2	10.8	11.3	11.3	11.7	12.2
	6H	10.7	11.1	11.2	11.6	12.1	10.7	11.0	11.2	11.5	12.0
	8H	10.7	11.0	11.2	11.5	12.0	10.6	10.9	11.1	11.4	11.9
	12H	10.6	10.9	11.1	11.4	12.0	10.5	10.8	11.1	11.3	11.9
12H	4H	10.8	11.2	11.3	11.7	12.2	10.7	11.1	11.2	11.6	12.1
	6H	10.7	11.0	11.2	11.5	12.0	10.6	10.9	11.1	11.4	11.9
	8H	10.6	10.9	11.1	11.4	12.0	10.5	10.8	11.1	11.3	11.9

Corrected UGR values based on total output energy
SHR = 1.0

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	362549	362549	362549
45.00°	25545	27171	28302
55.00°	8047	8311	8083
65.00°	3211	3407	3244
75.00°	452	452	452
85.00°	0	0	0