

Indoor Distribution Test Report

Photopia Photometric Analysis & Optical Design

Catalog Number

Juniper-Spotlight-50deg-800lm

Test Number

1

Test Date

Thu Apr 22 17:09:03 2021

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

Juniper-Spotlight-50deg-800lm
PL135960

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	641 lm
Efficiency	N/A %
Efficacy	75 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

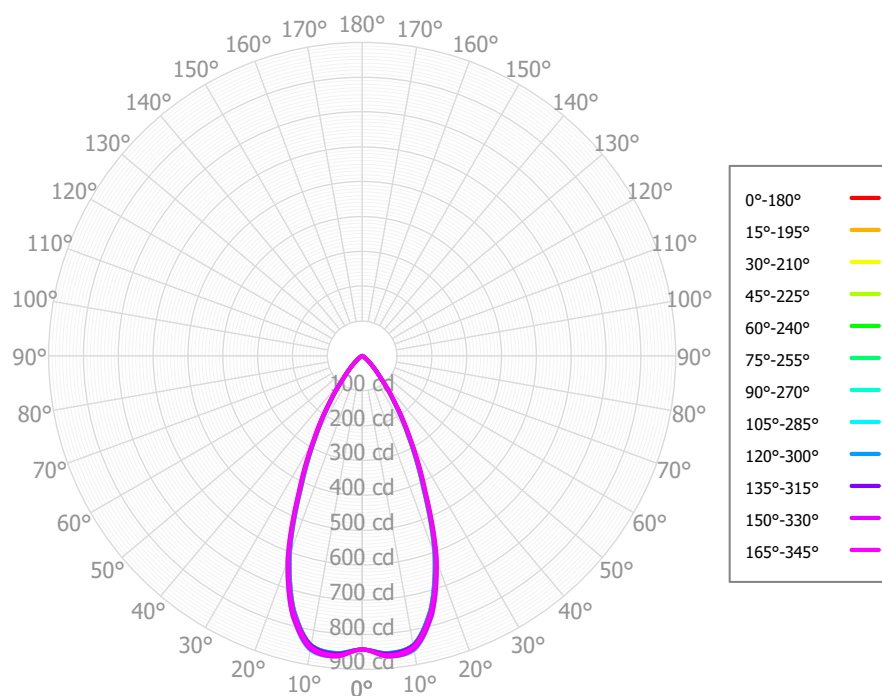
Full Beam Angle

0° - 180°	49.17°
90° - 270°	49.77°

IES Header Data

TESTLAB	Photopia 2021.0.0 see: www.ltioptics.com/i
ISSUEDATE	
TESTDATE	Thu Apr 22 17:09:03 2021
TEST	1
MANUFAC	Juniper
LUMCAT	
LUMINAIRE	Juniper-Spotlight- 50deg-800lm
LAMP	PL135960

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0° - 10°	100.95	15.76%	90° - 100°	0.00	0.00%
10° - 20°	241.13	37.64%	100° - 110°	0.00	0.00%
20° - 30°	225.00	35.12%	100° - 120°	0.00	0.00%
30° - 40°	119.81	18.70%	120° - 130°	0.00	0.00%
40° - 50°	42.90	6.70%	130° - 140°	0.00	0.00%
50° - 60°	13.01	2.03%	140° - 150°	0.00	0.00%
60° - 70°	4.05	0.63%	150° - 160°	0.00	0.00%
70° - 80°	0.60	0.09%	160° - 170°	0.00	0.00%
80° - 90°	0.00	0.00%	170° - 180°	0.00	0.00%
0° - 90°	747.46	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°	842.86	842.86	842.86	842.86	842.86	842.86	842.86
5.00°	857.67	862.56	866.24	858.45	856.28	859.19	865.57
10.00°	843.18	847.90	855.04	844.59	843.08	845.68	857.58
15.00°	759.71	761.31	771.70	761.70	756.02	763.80	772.80
20.00°	615.13	616.36	626.34	617.74	607.67	618.05	626.49
25.00°	416.56	421.10	430.79	422.54	412.38	419.19	428.59
30.00°	266.56	272.36	280.73	273.41	264.47	269.42	275.57
35.00°	156.71	162.33	167.22	162.30	156.78	160.55	163.33
40.00°	79.79	83.62	85.93	83.85	81.38	85.04	85.92
45.00°	42.08	44.27	45.92	44.36	43.59	45.61	46.52
50.00°	21.72	22.66	23.10	22.38	22.08	22.77	23.27
55.00°	10.77	11.14	11.23	11.07	11.11	11.06	10.81
60.00°	5.87	6.20	6.42	6.24	6.31	6.25	5.78
65.00°	3.12	3.38	3.49	3.34	3.44	3.40	3.13
70.00°	1.41	1.43	1.46	1.39	1.41	1.38	1.34
75.00°	0.31	0.27	0.28	0.28	0.28	0.27	0.28
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	890	890	890	890	869	869	869	869	831	831	831	795	795	795	763	763	747
	1	850	830	812	796	832	814	798	783	784	771	759	756	746	737	730	723	708
	2	810	775	746	721	793	762	736	713	738	716	698	716	698	683	695	681	668
	3	771	725	689	661	756	715	682	655	695	668	645	677	654	635	661	642	629
	4	734	680	641	610	721	672	635	607	656	624	599	641	614	593	627	605	593
	5	700	640	598	567	688	633	594	565	620	586	560	607	578	555	596	570	560
	6	667	603	560	530	656	597	557	528	586	551	524	576	545	521	566	539	530
	7	636	570	527	497	627	565	524	496	556	519	493	547	515	490	539	510	501
	8	608	540	497	468	599	536	495	467	528	491	465	520	487	463	513	483	476
	9	581	512	470	442	573	509	468	441	502	465	440	495	462	438	489	459	452
	10	556	487	446	418	549	484	444	418	478	442	417	472	439	415	467	436	430

Cone of Light

Mtg Height	Light Level	Beam Diameter
6.0 ft	23.4 fc	5.5 ft
8.0 ft	13.2 fc	7.4 ft
10.0 ft	8.4 fc	9.2 ft
12.0 ft	5.9 fc	11.1 ft
14.0 ft	4.3 fc	12.9 ft
16.0 ft	3.3 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	12.6	13.6	13.0	13.9	14.2	12.6	13.5	12.9	13.9	14.2
	3H	12.7	13.6	13.1	13.9	14.3	12.7	13.6	13.1	13.9	14.3
	4H	12.6	13.4	13.1	13.8	14.2	12.6	13.4	13.0	13.8	14.2
	6H	12.5	13.3	13.0	13.6	14.0	12.5	13.2	12.9	13.6	14.0
	8H	12.5	13.2	12.9	13.6	14.0	12.4	13.1	12.9	13.5	13.9
	12H	12.4	13.1	12.9	13.5	13.9	12.4	13.0	12.8	13.4	13.9
4H	2H	12.5	13.4	13.0	13.7	14.1	12.5	13.3	12.9	13.7	14.1
	3H	12.7	13.4	13.1	13.8	14.2	12.7	13.3	13.1	13.7	14.2
	4H	12.6	13.2	13.1	13.6	14.1	12.6	13.2	13.0	13.6	14.0
	6H	12.5	13.0	13.0	13.5	13.9	12.5	13.0	12.9	13.4	13.9
	8H	12.4	12.9	12.9	13.4	13.8	12.4	12.9	12.9	13.3	13.8
	12H	12.4	12.8	12.9	13.3	13.7	12.3	12.7	12.8	13.2	13.7
8H	4H	12.5	12.9	12.9	13.4	13.8	12.4	12.9	12.9	13.3	13.8
	6H	12.3	12.7	12.8	13.2	13.7	12.3	12.7	12.8	13.2	13.7
	8H	12.3	12.6	12.8	13.1	13.6	12.2	12.5	12.8	13.1	13.6
	12H	12.2	12.5	12.7	13.0	13.6	12.2	12.4	12.7	12.9	13.5
12H	4H	12.4	12.8	12.9	13.3	13.8	12.4	12.8	12.8	13.2	13.7
	6H	12.3	12.6	12.8	13.1	13.6	12.2	12.6	12.8	13.0	13.6
	8H	12.2	12.5	12.7	13.0	13.6	12.2	12.4	12.7	12.9	13.5

Corrected UGR values based on total output energy
SHR = 1.0

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	580638	580638	580638
45.00°	40996	43217	45322
55.00°	12935	13296	12983
65.00°	5086	5444	5102
75.00°	825	745	745
85.00°	0	0	0