



PICASSO LIGHTING INDUSTRIES, LLC
320 West Commerical Ave., Moonachie, NJ 07074
201.246.8188

Indoor Distribution Test Report

Picasso Lighting Industries, LLC

320 West Commerical Ave.
Moonachie, NJ 07074

Photopia Photometric Analysis & Optical Design

Catalog Number

MON-PR-4-D3-I5-30-80-FW-CL-W
MONARCH - 4' Down-Uplight - White Housing, Frosted White-Clear Lenses

Test Number

IES-P00354

Test Date

Fri Sep 24 09:06:02 2021

The results contained in this report pertain only to the tested sample.
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MON-PR-4-D3-I5-30-80-FW-CL-W
MONARCH - 4' Down-Uplight - White Housing, Frosted White-Clear Lenses
LED (3000K 80+ CRI)

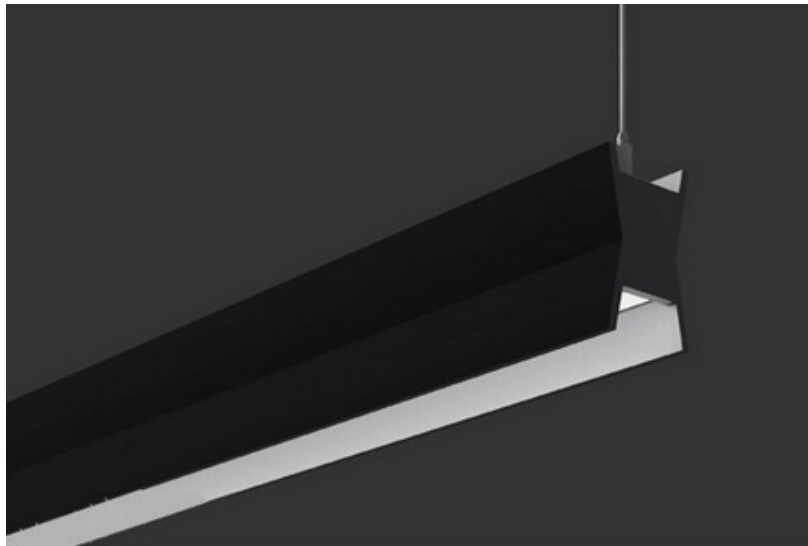


Image may differ slightly from actual unit.

Summary of Results

Output:

Watts:	30.41 W
Lumens:	3,463.32 lm
Efficiency:	N/A
Efficacy:	111.85 lm/W

Spacing Criterion

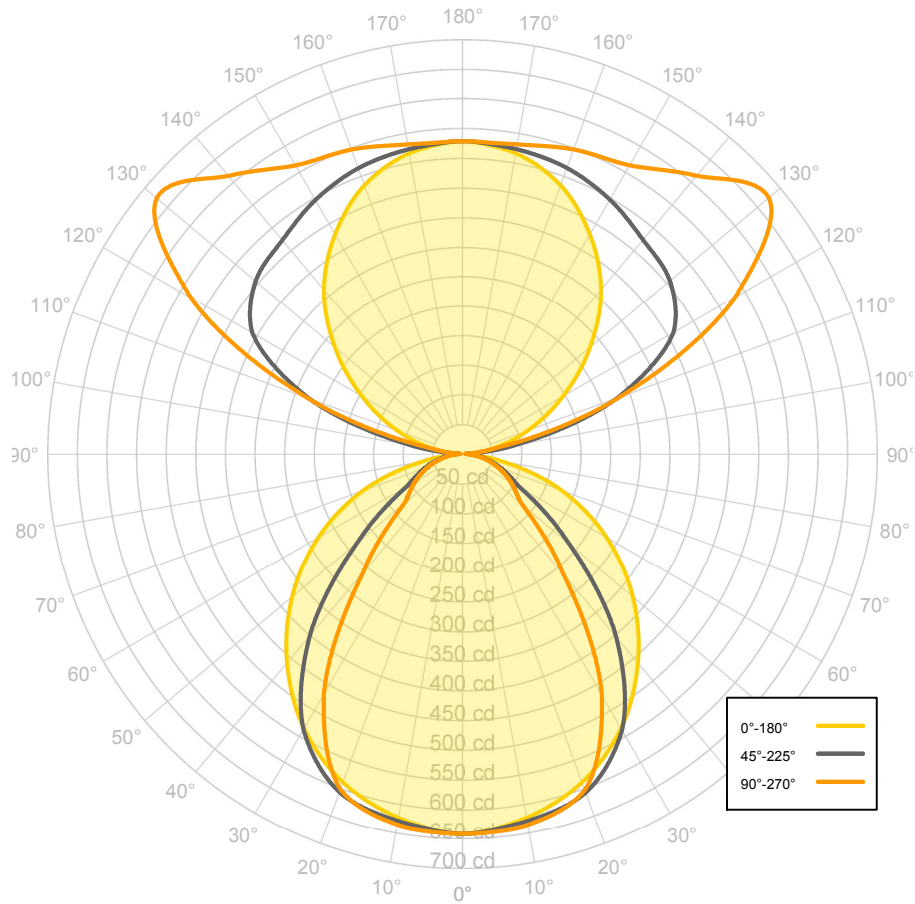
Two luminaires, plane 0°	1.23
Two luminaires, plane 90°	1.11
Four luminaires	1.24

Full Beam Angle

0° - 180°	273.61°
90° - 270°	224.23°

Calculated results may not be representative of field performance.
Ballast factors have not been applied.

Candela Polar Plot



Zonal Lumen Summary

Zone	Lumens	% Fixture	Zone	Lumens	% Fixture
0° - 10°	109.17	3.15%	90° - 100°	43.35	1.25%
10° - 20°	172.87	4.99%	100° - 110°	161.89	4.67%
20° - 30°	255.48	7.38%	100° - 120°	467.19	13.49%
30° - 40°	277.79	8.02%	120° - 130°	379.48	10.96%
40° - 50°	238.96	6.90%	130° - 140°	364.69	10.53%
50° - 60°	177.13	5.11%	140° - 150°	303.88	8.77%
60° - 70°	118.60	3.42%	150° - 160°	231.44	6.68%
70° - 80°	64.61	1.87%	160° - 170°	145.82	4.21%
80° - 90°	22.73	0.66%	170° - 180°	90.13	2.60%
0° - 90°	1,437.33	41.50%	0° - 180°	3,463.32	100.00%



Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	642.20	642.20	642.20	642.20	642.20
10.00°	623.29	627.67	630.81	636.56	637.28
20.00°	589.54	597.36	609.05	606.45	604.32
30.00°	534.82	548.08	538.71	494.69	469.92
40.00°	460.36	470.84	402.85	300.15	263.50
50.00°	374.96	364.62	230.45	143.67	127.27
60.00°	280.90	231.92	107.61	92.15	92.58
70.00°	178.23	104.66	65.94	62.07	60.28
80.00°	67.02	35.56	31.11	29.05	28.39
90.00°	7.95	8.43	5.79	4.55	4.01
100.00°	46.68	76.32	96.65	71.34	57.51
110.00°	116.69	167.10	279.75	300.20	284.69
120.00°	195.35	250.46	411.47	520.42	533.28
130.00°	280.93	326.29	456.38	609.53	674.54
140.00°	363.75	390.70	473.18	562.95	613.87
150.00°	429.72	442.93	496.49	540.69	563.28
160.00°	483.88	487.33	514.22	536.01	547.52
170.00°	516.51	516.08	522.96	526.85	531.20
180.00°	528.67	528.67	528.67	528.67	528.67

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	10,472	10,472	10,472
45.00°	8,894	2,928	1,487
55.00°	8,336	1,533	801
65.00°	7,521	796	551
75.00°	5,900	465	326
85.00°	3,601	191	125



Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

	pf_c	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	
	pc_c	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%	0%
RCR	0	3,641	3,641	3,641	3,641	3,320	3,320	3,320	3,320	2,723	2,723	2,723	2,176	2,176	2,176	1,673	1,673	1,673	1,437
	1	3,337	3,195	3,068	2,954	3,040	2,921	2,814	2,717	2,409	2,334	2,266	1,937	1,888	1,842	1,503	1,473	1,444	1,243
	2	3,054	2,813	2,614	2,447	2,781	2,577	2,407	2,263	2,134	2,013	1,908	1,725	1,642	1,570	1,347	1,294	1,246	1,073
	3	2,799	2,491	2,252	2,061	2,548	2,286	2,080	1,914	1,901	1,751	1,628	1,544	1,440	1,352	1,213	1,144	1,085	934
	4	2,571	2,218	1,959	1,762	2,341	2,040	1,815	1,642	1,703	1,537	1,406	1,390	1,273	1,177	1,099	1,020	955	822
	5	2,368	1,987	1,721	1,524	2,158	1,831	1,598	1,424	1,535	1,361	1,227	1,260	1,134	1,035	1,002	917	848	731
	6	2,188	1,790	1,524	1,332	1,995	1,653	1,418	1,248	1,392	1,214	1,082	1,148	1,018	919	919	829	759	656
	7	2,028	1,622	1,360	1,175	1,852	1,500	1,268	1,104	1,269	1,091	962	1,051	920	822	848	755	685	593
	8	1,886	1,478	1,222	1,046	1,724	1,370	1,142	984	1,163	987	862	968	837	742	785	692	623	540
	9	1,759	1,354	1,106	938	1,610	1,257	1,036	884	1,071	899	778	896	766	673	731	638	570	495
	10	1,647	1,246	1,007	847	1,509	1,159	944	800	991	823	707	832	705	615	683	591	524	457

Cone of Light

Mtg Height	Light Level	0°-180° Beam Diameter	90°-270° Beam Diameter
6 ft	18 fc	0 ft	0 ft
8 ft	10 fc	0 ft	0 ft
10 ft	6 fc	0 ft	0 ft
12 ft	4 fc	0 ft	0 ft
15 ft	3 fc	0 ft	0 ft