



**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-D5-I3-30-80-FW-CL-W  
MONARCH - 4' Down-Uplight - White Housing, Frosted White-Clear Lenses

**Test Number**

IES-P00356

**Test Date**

Fri Sep 24 10:38:07 2021

The results contained in this report pertain only to the tested sample.  
This report shall not be reproduced, except in full, without written approval of Picasso Lighting Industries, LLC.

MON-PR-4-D5-I3-30-80-FW-CL-W  
 MONARCH - 4' Down-Uplight - White Housing, Frosted White-Clear Lenses  
 LED (3000K 80+ CRI)

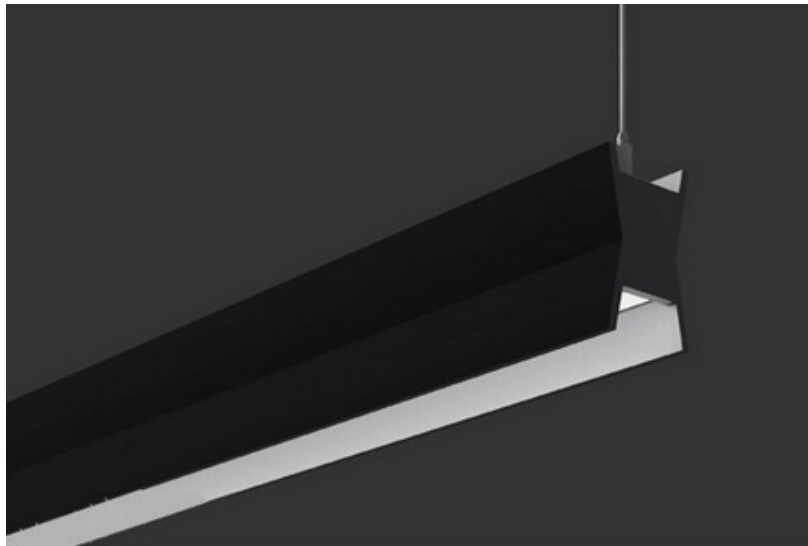


Image may differ slightly from actual unit.

**Summary of Results**

**Output:**

<b>Watts:</b>	32.19 W
<b>Lumens:</b>	3,473.54 lm
<b>Efficiency:</b>	N/A
<b>Efficacy:</b>	105.81 lm/W

**Spacing Criterion**

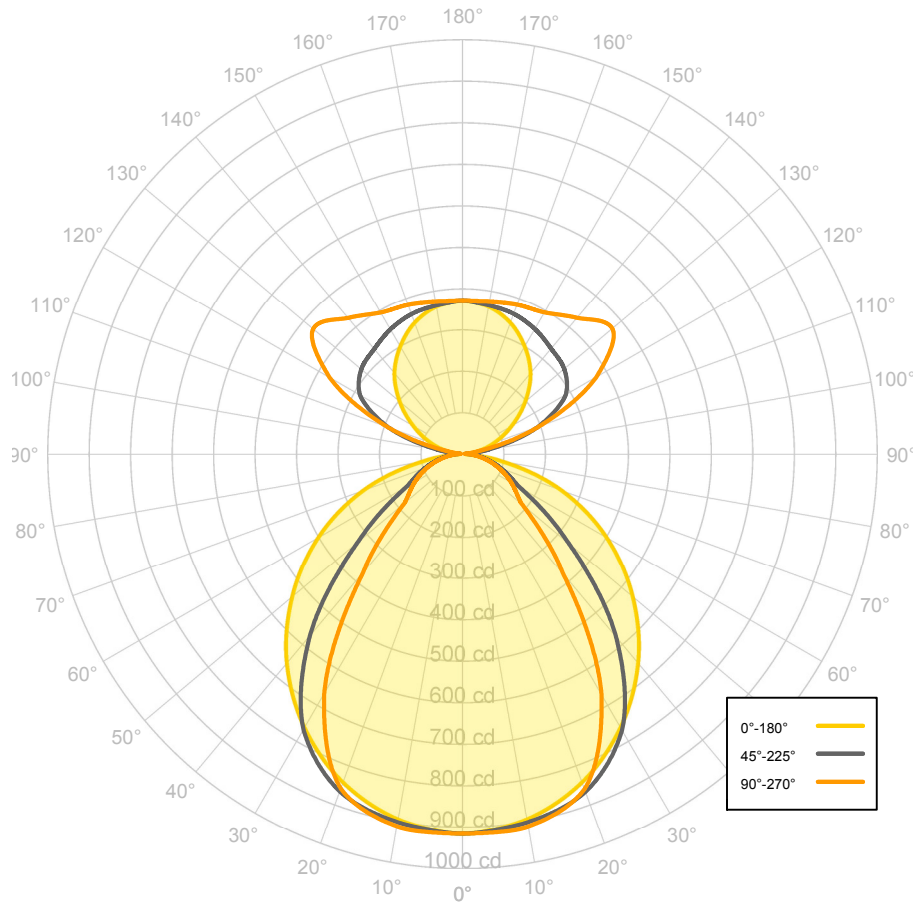
<b>Two luminaires, plane 0°</b>	1.23
<b>Two luminaires, plane 90°</b>	1.11
<b>Four luminaires</b>	1.24

**Full Beam Angle**

<b>0° - 180°</b>	111.49°
<b>90° - 270°</b>	266.01°

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°	156.12	4.49%	90° - 100°	32.38	0.93%
10° - 20°	247.10	7.11%	100° - 110°	113.75	3.27%
20° - 30°	364.71	10.50%	100° - 120°	327.60	9.43%
30° - 40°	396.70	11.42%	120° - 130°	265.76	7.65%
40° - 50°	341.62	9.83%	130° - 140°	255.47	7.35%
50° - 60°	253.03	7.28%	140° - 150°	212.84	6.13%
60° - 70°	169.14	4.87%	150° - 160°	161.98	4.66%
70° - 80°	92.25	2.66%	160° - 170°	101.98	2.94%
80° - 90°	31.76	0.91%	170° - 180°	63.08	1.82%
0° - 90°	2,052.44	59.09%	0° - 180°	3,473.54	100.00%



**Candela Distribution**

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	917.03	917.03	917.03	917.03	917.03
10.00°	894.50	897.36	904.22	909.97	914.12
20.00°	842.38	853.32	868.15	868.21	861.11
30.00°	761.70	783.51	769.58	705.19	669.60
40.00°	658.66	674.26	575.07	427.91	376.17
50.00°	535.62	522.21	328.73	205.93	182.34
60.00°	401.37	330.53	152.96	131.32	132.50
70.00°	254.37	149.38	93.74	88.74	86.21
80.00°	95.88	50.68	44.45	41.74	40.61
90.00°	9.23	10.01	7.44	5.62	4.67
100.00°	32.78	54.37	68.60	50.20	40.24
110.00°	81.92	117.22	195.83	210.39	200.15
120.00°	136.79	175.47	287.45	364.56	373.66
130.00°	197.34	228.74	319.50	427.53	471.21
140.00°	255.21	273.39	331.74	394.61	428.97
150.00°	299.85	310.70	348.14	378.26	394.64
160.00°	337.42	340.95	359.93	374.07	383.66
170.00°	361.66	361.24	364.74	368.92	373.51
180.00°	370.07	370.07	370.07	370.07	370.07

**Average Luminaire Luminance [cd/m²]**

	0.00°	45.00°	90.00°
0.00°	14,954	14,954	14,954
45.00°	12,717	4,178	2,125
55.00°	11,909	2,185	1,148
65.00°	10,741	1,132	788
75.00°	8,427	662	466
85.00°	5,049	268	175



**Coefficients of Utilization – Zonal Cavity Method**

Values are lumens delivered to the workplane.

	<b>pfc</b>	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	
	<b>pcc</b>	80%	80%	80%	80%	70%	70%	70%	70%	50%	50%	50%	30%	30%	30%	10%	10%	10%	0%
	<b>pw</b>	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
<b>RCR</b>	<b>0</b>	3,797	3,797	3,797	3,797	3,543	3,543	3,543	3,543	3,070	3,070	3,070	2,637	2,637	2,637	2,239	2,239	2,239	2,052
	<b>1</b>	3,491	3,347	3,219	3,103	3,255	3,132	3,021	2,920	2,728	2,647	2,572	2,358	2,299	2,245	2,016	1,975	1,937	1,776
	<b>2</b>	3,202	2,957	2,754	2,584	2,984	2,772	2,595	2,445	2,425	2,291	2,176	2,105	2,006	1,920	1,809	1,738	1,675	1,533
	<b>3</b>	2,942	2,627	2,384	2,190	2,741	2,468	2,253	2,080	2,167	2,002	1,867	1,889	1,765	1,661	1,631	1,540	1,462	1,335
	<b>4</b>	2,709	2,349	2,085	1,884	2,525	2,210	1,976	1,795	1,949	1,766	1,621	1,706	1,566	1,453	1,480	1,375	1,288	1,175
	<b>5</b>	2,502	2,113	1,842	1,641	2,334	1,992	1,750	1,568	1,764	1,572	1,424	1,551	1,401	1,284	1,352	1,238	1,146	1,044
	<b>6</b>	2,318	1,913	1,641	1,445	2,164	1,807	1,562	1,384	1,605	1,410	1,264	1,418	1,263	1,145	1,242	1,122	1,029	937
	<b>7</b>	2,155	1,741	1,473	1,285	2,014	1,648	1,405	1,233	1,470	1,274	1,131	1,303	1,147	1,030	1,146	1,024	931	847
	<b>8</b>	2,009	1,594	1,332	1,153	1,881	1,511	1,273	1,108	1,352	1,159	1,020	1,204	1,048	934	1,064	940	848	772
	<b>9</b>	1,880	1,466	1,213	1,042	1,762	1,392	1,161	1,003	1,250	1,060	927	1,117	963	852	991	868	778	708
	<b>10</b>	1,764	1,356	1,111	948	1,656	1,289	1,065	915	1,161	976	848	1,041	889	782	927	805	717	653

**Cone of Light**

Mtg Height	Light Level	0°-180° Beam Diameter	90°-270° Beam Diameter
6 ft	25 fc	18 ft	-13 ft
8 ft	14 fc	23 ft	-17 ft
10 ft	9 fc	29 ft	-21 ft
12 ft	6 fc	35 ft	-26 ft
15 ft	4 fc	44 ft	-32 ft