



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-D3-30-80-FW-W
MONARCH - 4' Downlight - White Housing, Frosted White Lens

Test Number

IES-P00350

Test Date

Thu Sep 23 12:31:08 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.



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

MON-PR-4-D3-30-80-FW-W
MONARCH - 4' Downlight - White Housing, Frosted White Lens
LED (3000K 80+ CRI)

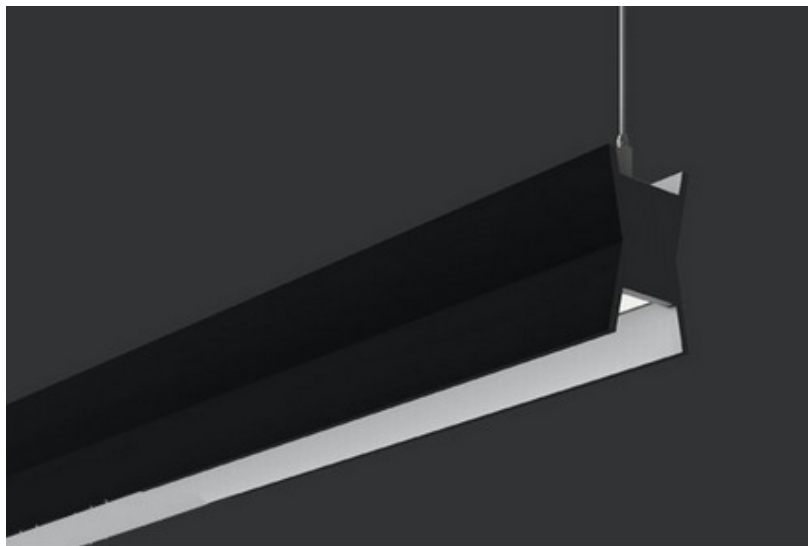


Image may differ slightly from actual unit.

Summary of Results

Output:

Watts:	14.64 W
Lumens:	1,434.75 lm
Efficiency:	N/A
Efficacy:	95.74 lm/W

Spacing Criterion

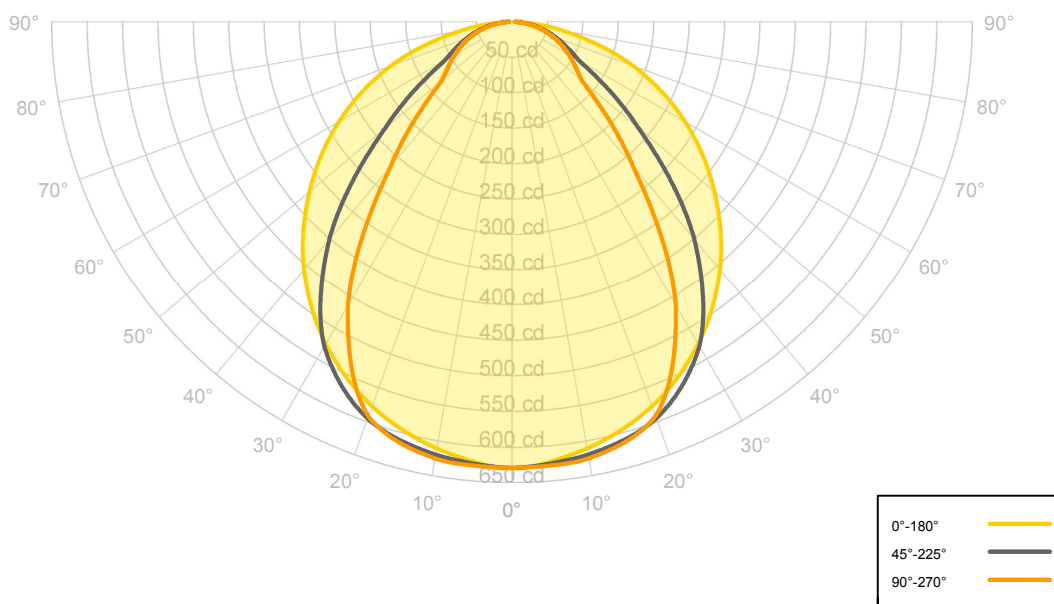
Two luminaires, plane 0°	1.24
Two luminaires, plane 90°	1.11
Four luminaires	1.25

Full Beam Angle

0° - 180°	112.74°
90° - 270°	75.02°

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°	107.14	7.47%	90° - 100°	3.22	0.22%
10° - 20°	169.52	11.82%	100° - 110°	0.67	0.05%
20° - 30°	251.02	17.50%	100° - 120°	0.98	0.07%
30° - 40°	275.13	19.18%	120° - 130°	0.14	0.01%
40° - 50°	239.15	16.67%	130° - 140°	0.05	0.00%
50° - 60°	178.36	12.43%	140° - 150°	0.01	0.00%
60° - 70°	120.20	8.38%	150° - 160°	0.00	0.00%
70° - 80°	66.66	4.65%	160° - 170°	0.00	0.00%
80° - 90°	23.14	1.61%	170° - 180°	0.01	0.00%
0° - 90°	1,430.32	99.69%	0° - 180°	1,434.75	100.00%



Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	630.21	630.21	630.21	630.21	630.21
10.00°	611.22	615.10	620.99	623.52	626.39
20.00°	577.67	585.52	596.42	594.70	593.03
30.00°	525.76	539.76	529.84	487.30	463.34
40.00°	456.76	466.79	401.09	301.42	266.00
50.00°	373.13	364.89	233.14	146.75	129.24
60.00°	282.06	234.60	109.40	91.99	92.76
70.00°	181.62	108.39	66.76	63.10	61.57
80.00°	71.74	37.30	32.47	30.59	29.68
90.00°	5.99	6.21	5.31	4.04	3.39
100.00°	0.34	1.46	1.23	0.46	0.02
110.00°	0.10	0.61	0.71	0.32	0.01
120.00°	0.02	0.27	0.36	0.17	0.01
130.00°	0.01	0.10	0.18	0.09	0.01
140.00°	0.00	0.03	0.07	0.03	0.00
150.00°	0.01	0.01	0.02	0.01	0.01
160.00°	0.01	0.00	0.00	0.01	0.00
170.00°	0.00	0.02	0.01	0.01	0.01
180.00°	0.12	0.12	0.12	0.12	0.12

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	10,277	10,277	10,277
45.00°	9,569	7,313	4,557
55.00°	9,314	4,869	3,156
65.00°	8,946	3,399	2,977
75.00°	7,981	3,126	2,875
85.00°	7,272	3,534	3,094



Coefficients of Utilization – Zonal Cavity Method

Values are lumens delivered to the workplane.

RCR	pf	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
	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%	0%
	0	1,707	1,707	1,707	1,707	1,667	1,667	1,667	1,667	1,592	1,592	1,592	1,523	1,523	1,523	1,460	1,460	1,460	1,430
	1	1,577	1,516	1,462	1,413	1,539	1,484	1,434	1,389	1,423	1,382	1,345	1,367	1,334	1,303	1,315	1,289	1,264	1,235
	2	1,452	1,347	1,260	1,187	1,416	1,320	1,240	1,172	1,270	1,203	1,145	1,223	1,167	1,118	1,180	1,134	1,093	1,064
	3	1,340	1,204	1,099	1,016	1,306	1,182	1,085	1,007	1,140	1,057	989	1,101	1,030	971	1,065	1,005	955	925
	4	1,240	1,084	971	884	1,208	1,066	960	878	1,030	938	865	997	918	854	967	899	842	813
	5	1,151	983	866	779	1,122	967	857	775	938	841	767	910	825	758	884	810	750	722
	6	1,072	897	780	695	1,046	884	773	692	858	760	686	835	747	680	813	735	675	647
	7	1,001	823	708	627	978	812	702	624	790	692	620	770	682	616	751	672	611	585
	8	939	760	647	570	917	750	643	568	731	634	564	714	626	561	698	618	558	532
	9	883	704	595	521	863	696	592	520	680	585	517	665	578	515	651	571	512	488
10	833	656	551	480	815	649	548	479	635	542	477	622	536	475	610	530	473	450	

Cone of Light

Mtg Height	Light Level	0°-180° Beam Diameter	90°-270° Beam Diameter
6 ft	18 fc	18 ft	9 ft
8 ft	10 fc	24 ft	12 ft
10 ft	6 fc	30 ft	15 ft
12 ft	4 fc	36 ft	18 ft
15 ft	3 fc	45 ft	23 ft