



PICASSO LIGHTING INDUSTRIES, LLC
46 Sellers Street, Kearny, NJ 07032
201.246.8188

Indoor Distribution Test Report

Picasso Lighting Industries, LLC

46 Sellers St.
Kearny, NJ 07032

Photopia Photometric Analysis & Optical Design

Catalog Number

ECO-PR-4x8-D5-I5-30-80-FW/MC

ECHO 4'x8" - Sound Absorbing Panels - Direct/Indirect - Frosted/Matte Clear Lenses

Test Number

IES-P00249

Test Date

Wed Oct 09 15:07:23 2019

The results contained in this report pertain only to the tested sample.
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ECO-PR-4x8-D5-I5-30-80-FW/MC
ECHO 4'x8" - Sound Absorbing Panels - Direct/Indirect - Frosted/Matte Clear Lenses
LED (3000K 80+ CRI)

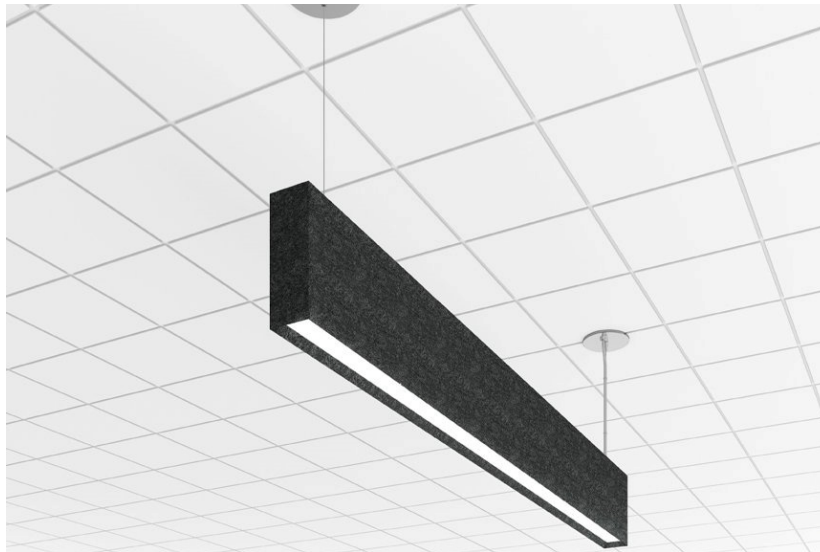


Image may differ slightly from actual unit.

Summary of Results

Output:

Watts:	44.69 W
Lumens:	4,104.83 lm
Efficiency:	N/A
Efficacy:	89.83 lm/W

Spacing Criterion

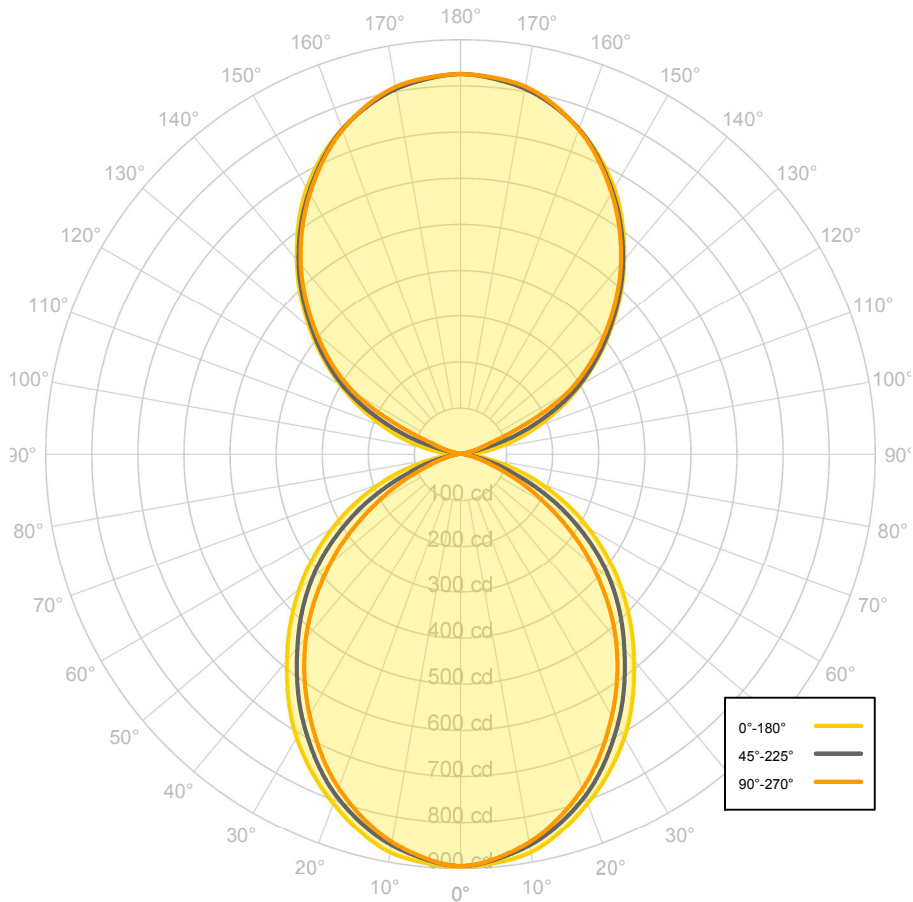
Two luminaires, plane 0°	1.18
Two luminaires, plane 90°	1.1
Four luminaires	1.24

Full Beam Angle

0° - 180°	263.3°
90° - 270°	265.74°

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°	150.76	3.67%	90° - 100°	19.17	0.47%
10° - 20°	230.26	5.61%	100° - 110°	86.22	2.10%
20° - 30°	334.45	8.15%	100° - 120°	293.31	7.15%
30° - 40°	381.42	9.29%	120° - 130°	314.85	7.67%
40° - 50°	370.17	9.02%	130° - 140°	369.65	9.01%
50° - 60°	302.08	7.36%	140° - 150°	373.74	9.10%
60° - 70°	191.08	4.65%	150° - 160°	321.26	7.83%
70° - 80°	78.84	1.92%	160° - 170°	217.29	5.29%
80° - 90°	16.59	0.40%	170° - 180°	139.93	3.41%
0° - 90°	2,055.64	50.08%	0° - 180°	4,104.83	100.00%



Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	896.26	896.26	896.26	896.26	896.26
10.00°	878.67	865.82	863.99	859.42	857.41
20.00°	806.76	800.56	791.39	779.80	774.42
30.00°	710.83	697.01	681.41	660.48	656.91
40.00°	585.40	576.78	552.83	532.06	523.89
50.00°	455.78	446.84	422.42	387.66	370.17
60.00°	320.41	311.91	271.65	223.43	207.09
70.00°	184.28	169.11	118.31	82.90	72.00
80.00°	63.22	42.18	18.56	11.59	10.40
90.00°	8.34	2.64	2.73	2.76	2.74
100.00°	77.36	55.04	16.48	12.00	12.23
110.00°	179.11	178.44	147.17	87.31	66.46
120.00°	300.38	301.18	295.41	283.02	271.24
130.00°	427.54	426.27	422.23	417.08	410.53
140.00°	552.40	552.51	548.70	544.81	541.48
150.00°	667.56	664.63	659.04	655.66	655.00
160.00°	751.91	750.47	751.17	748.09	750.09
170.00°	806.30	810.83	805.69	804.89	810.30
180.00°	825.32	825.32	825.32	825.32	825.32

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	10,309	10,309	10,309
45.00°	7,296	2,527	1,882
55.00°	6,330	1,717	1,137
65.00°	5,108	950	532
75.00°	3,438	339	157
85.00°	1,665	55	26



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	4,399	4,399	4,399	4,399	4,058	4,058	4,058	4,058	3,422	3,422	3,422	2,841	2,841	2,841	2,307	2,307	2,307	2,056
	1	4,041	3,874	3,724	3,589	3,725	3,583	3,455	3,340	3,040	2,948	2,865	2,540	2,477	2,419	2,079	2,038	2,000	1,785
	2	3,699	3,411	3,173	2,973	3,407	3,161	2,955	2,781	2,692	2,541	2,411	2,259	2,152	2,058	1,859	1,785	1,720	1,533
	3	3,389	3,018	2,731	2,502	3,120	2,802	2,551	2,350	2,394	2,207	2,053	2,017	1,881	1,767	1,668	1,572	1,491	1,325
	4	3,112	2,686	2,375	2,137	2,866	2,498	2,224	2,013	2,142	1,934	1,770	1,813	1,658	1,534	1,505	1,395	1,304	1,158
	5	2,865	2,406	2,085	1,847	2,640	2,241	1,957	1,745	1,929	1,710	1,543	1,639	1,474	1,345	1,368	1,248	1,152	1,022
	6	2,647	2,168	1,846	1,615	2,441	2,023	1,737	1,529	1,748	1,525	1,358	1,491	1,321	1,191	1,251	1,125	1,027	911
	7	2,454	1,965	1,648	1,426	2,265	1,837	1,553	1,352	1,593	1,370	1,207	1,365	1,193	1,064	1,151	1,022	924	819
	8	2,283	1,791	1,482	1,270	2,110	1,677	1,400	1,207	1,460	1,239	1,082	1,256	1,084	959	1,064	934	837	743
	9	2,131	1,642	1,343	1,140	1,972	1,540	1,270	1,086	1,345	1,129	977	1,162	992	870	989	859	765	678
	10	1,995	1,513	1,224	1,031	1,849	1,421	1,160	984	1,245	1,035	889	1,080	913	795	923	795	703	624

Cone of Light

Mtg Height	Light Level	0°-180° Beam Diameter	90°-270° Beam Diameter
6 ft	25 fc	0 ft	0 ft
8 ft	14 fc	0 ft	0 ft
10 ft	9 fc	0 ft	0 ft
12 ft	6 fc	0 ft	0 ft
15 ft	4 fc	0 ft	0 ft