



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-I3-30-80-FW/MC

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

Test Number

IES-P00210

Test Date

Wed Oct 09 13:17:30 2019

The results contained in this report pertain only to the tested sample.
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ECO-PR-4x8-D5-I3-30-80-FW/MC
ECHO 4'x8" - Sound Absorbing Panels - Direct/Indirect - Frosted/Matte Clear Lenses
LED (3000K 80+ CRI)

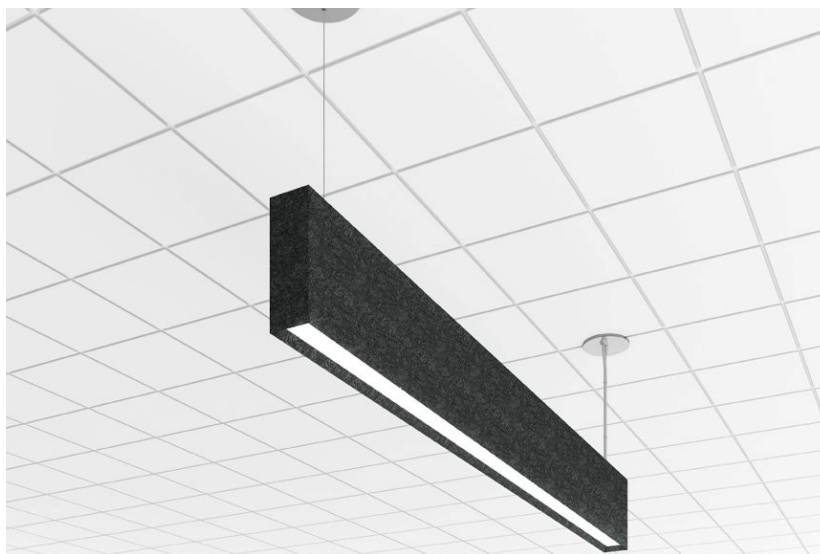


Image may differ slightly from actual unit.

Summary of Results

Output:

Watts:	39.62 W
Lumens:	3,487.85 lm
Efficiency:	N/A
Efficacy:	86.07 lm/W

Spacing Criterion

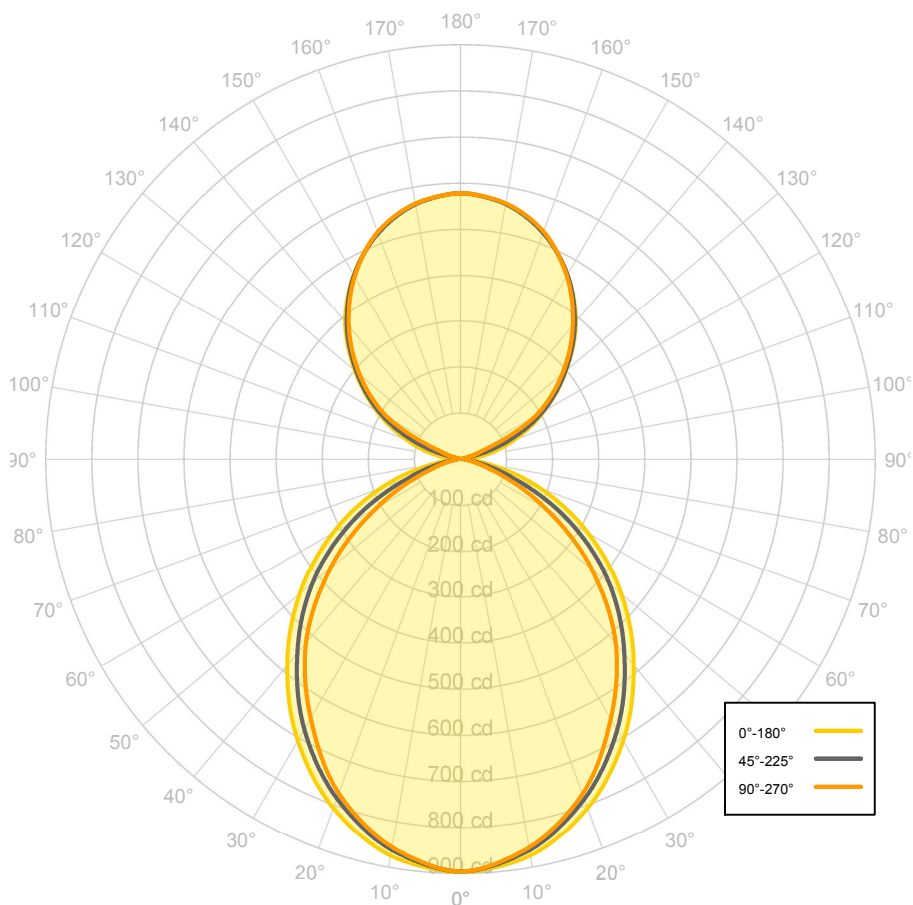
Two luminaires, plane 0°	1.17
Two luminaires, plane 90°	1.1
Four luminaires	1.24

Full Beam Angle

0° - 180°	296.02°
90° - 270°	297.18°

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°	150.69	4.32%	90° - 100°	13.66	0.39%
10° - 20°	229.72	6.59%	100° - 110°	60.33	1.73%
20° - 30°	333.72	9.57%	100° - 120°	205.11	5.88%
30° - 40°	380.99	10.92%	120° - 130°	220.31	6.32%
40° - 50°	369.91	10.61%	130° - 140°	259.07	7.43%
50° - 60°	302.03	8.66%	140° - 150°	261.95	7.51%
60° - 70°	191.12	5.48%	150° - 160°	224.80	6.45%
70° - 80°	78.79	2.26%	160° - 170°	151.88	4.35%
80° - 90°	16.24	0.47%	170° - 180°	97.86	2.81%
0° - 90°	2,053.21	58.87%	0° - 180°	3,487.85	100.00%



Candela Distribution

	0.00°	22.50°	45.00°	67.50°	90.00°
0.00°	897.08	897.08	897.08	897.08	897.08
10.00°	874.34	863.00	863.24	859.44	857.20
20.00°	806.31	799.74	786.48	776.86	774.77
30.00°	705.77	698.09	679.95	661.09	652.05
40.00°	584.59	576.30	552.75	531.83	523.93
50.00°	455.09	447.02	421.51	387.40	369.95
60.00°	319.18	312.06	271.92	224.31	207.45
70.00°	184.12	169.34	117.97	82.56	72.16
80.00°	62.67	42.29	18.74	11.54	10.57
90.00°	6.91	2.22	2.18	2.17	2.20
100.00°	54.36	38.53	11.43	8.64	8.50
110.00°	124.47	124.66	102.95	61.34	46.89
120.00°	209.74	210.88	206.09	197.83	189.79
130.00°	298.93	299.04	296.19	291.04	288.21
140.00°	389.09	387.99	385.56	380.39	378.84
150.00°	463.33	464.81	462.61	460.68	459.96
160.00°	524.31	526.08	522.65	523.22	525.49
170.00°	564.11	566.15	562.22	566.42	563.62
180.00°	577.27	577.27	577.27	577.27	577.27

Average Luminaire Luminance [cd/m²]

	0.00°	45.00°	90.00°
0.00°	10,319	10,319	10,319
45.00°	7,286	2,525	1,882
55.00°	6,314	1,715	1,138
65.00°	5,094	950	533
75.00°	3,428	338	157
85.00°	1,618	54	25



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%	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	3,811	3,811	3,811	3,811	3,555	3,555	3,555	3,555	3,078	3,078	3,078	2,642	2,642	2,642	2,242	2,242	2,242	2,053
	1	3,506	3,364	3,236	3,121	3,269	3,147	3,036	2,936	2,740	2,659	2,585	2,367	2,309	2,255	2,023	1,983	1,945	1,783
	2	3,212	2,966	2,762	2,591	2,993	2,779	2,601	2,450	2,429	2,295	2,180	2,107	2,008	1,921	1,808	1,738	1,675	1,531
	3	2,946	2,628	2,382	2,186	2,743	2,467	2,250	2,075	2,164	1,997	1,860	1,883	1,758	1,652	1,623	1,531	1,452	1,324
	4	2,707	2,342	2,075	1,871	2,522	2,203	1,965	1,782	1,939	1,753	1,607	1,694	1,552	1,437	1,466	1,359	1,271	1,156
	5	2,496	2,101	1,826	1,622	2,326	1,979	1,733	1,549	1,749	1,553	1,404	1,534	1,382	1,262	1,333	1,217	1,124	1,020
	6	2,308	1,897	1,621	1,423	2,153	1,790	1,542	1,361	1,587	1,388	1,239	1,397	1,240	1,120	1,220	1,098	1,003	909
	7	2,142	1,723	1,451	1,260	2,000	1,628	1,382	1,208	1,449	1,250	1,104	1,280	1,121	1,003	1,122	998	903	818
	8	1,995	1,574	1,309	1,126	1,865	1,490	1,249	1,081	1,330	1,133	993	1,180	1,021	905	1,038	913	819	741
	9	1,865	1,445	1,188	1,015	1,745	1,370	1,136	976	1,227	1,034	899	1,093	936	823	966	840	748	677
10	1,749	1,334	1,086	921	1,639	1,267	1,040	887	1,138	950	820	1,017	863	754	902	778	688	623	

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