

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P413271

Luminaire Tested: **24PD-85-PC3-L830**

Issue Date: 9/15/2020



**Test Information**

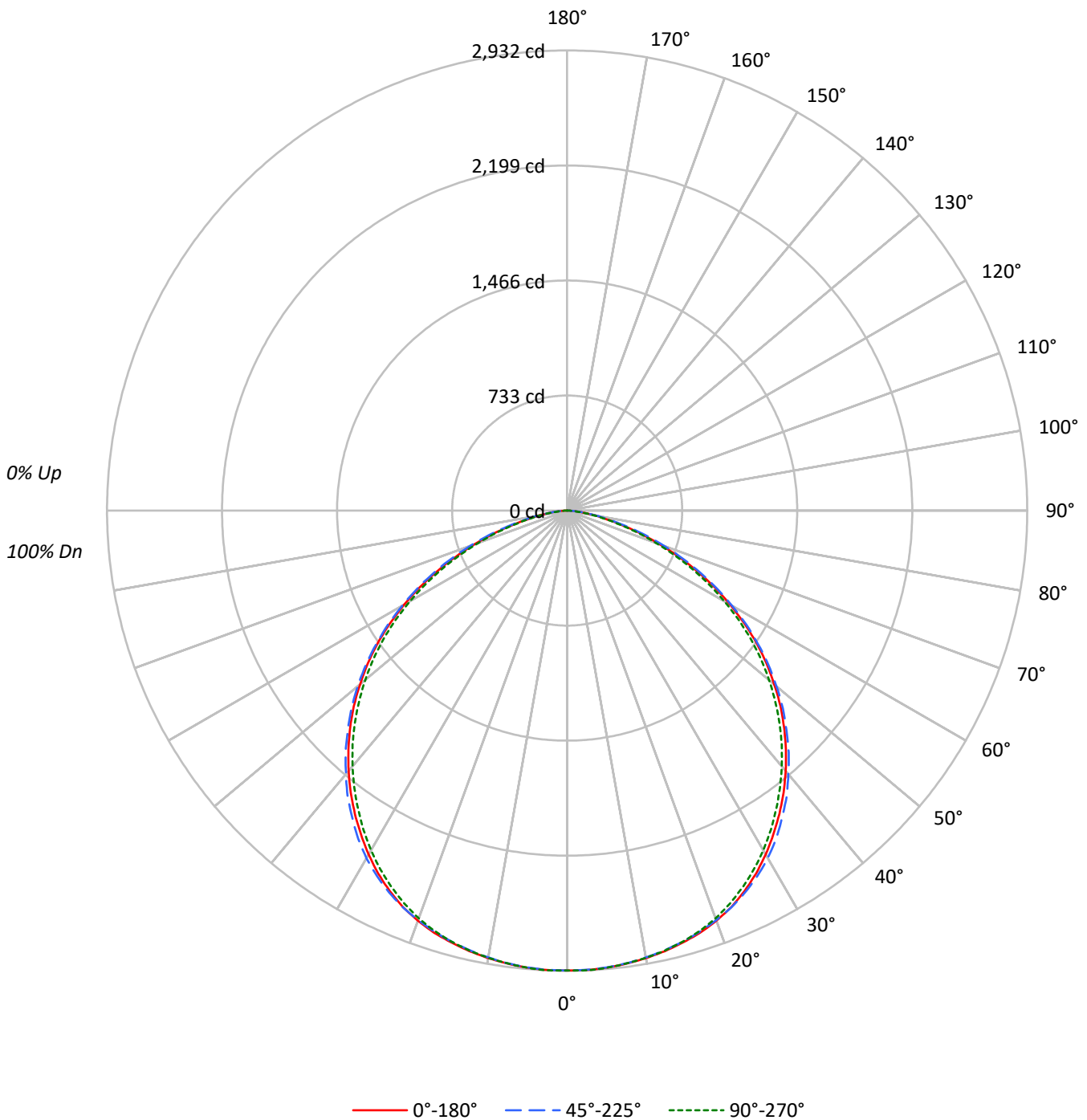
Test Method: LM-79-08  
Report Number: P413271  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-911-46)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24PD-85-PC3-L830  
Description: 8500 LUMEN 2X4 PERCEIVE LED TROFFER WITH PYRAMID PATTERN OPTICS AND 80 CRI, 3000 CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8010.0 lumens  
Efficiency: N/A  
Efficacy: 124.2 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.26 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 64.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20			
RC	80				70				50				30				10	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	105	101	97	107	103	99	96	99	96	93		95	92	90		91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	77		83	79	75		80	77	74	72
3	91	81	73	67	89	80	72	66	77	70	65		74	69	64		71	67	63	61
4	84	72	63	57	81	71	63	57	68	61	56		66	60	55		64	59	54	52
5	77	64	56	49	75	63	55	49	61	54	48		59	53	48		57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42		54	47	42		52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38		49	42	37		47	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34		45	38	33		44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27		38	32	27		37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3943	3943	3943
5°	3948	3946	3949
10°	3956	3950	3954
15°	3969	3961	3962
20°	3982	3976	3959
25°	3971	3985	3930
30°	3931	3973	3882
35°	3873	3923	3815
40°	3805	3851	3737
45°	3719	3760	3642
50°	3604	3645	3516
55°	3456	3487	3353
60°	3226	3264	3115
65°	2907	2980	2794
70°	2469	2577	2369
75°	1912	2051	1823
80°	1422	1485	1289
85°	877	940	815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	278.0	3.5
10°-20°	803.6	10.0
20°-30°	1230.7	15.4
30°-40°	1480.6	18.5
40°-50°	1509.7	18.8
50°-60°	1308.9	16.3
60°-70°	907.4	11.3
70°-80°	414.4	5.2
80°-90°	76.5	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2312.4	28.9
0°-40°	3792.9	47.4
0°-60°	6611.6	82.5
0°-90°	8010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8010.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2930	2930	2930	2930	2930	
5°	2923	2923	2922	2920	2924	278
15°	2849	2848	2844	2841	2844	805
25°	2675	2682	2684	2661	2647	1232
35°	2358	2383	2388	2357	2322	1475
45°	1955	1979	1976	1949	1914	1506
55°	1473	1482	1486	1450	1430	1313
65°	913	933	936	904	878	903
75°	368	388	394	382	351	402
85°	57	58	61	58	53	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2930.5	2930.5	2930.5	2930.5	2930.5
2.5°	2930.5	2930.5	2928.8	2927.2	2932.1
5°	2923.2	2923.2	2921.5	2919.9	2924.0
7.5°	2911.8	2911.0	2909.4	2907.7	2910.2
10°	2895.6	2894.7	2891.5	2890.7	2893.9
12.5°	2875.3	2874.5	2869.6	2869.6	2872.0
15°	2849.3	2848.5	2843.6	2841.2	2844.4
17.5°	2820.1	2819.3	2813.6	2807.1	2808.7
20°	2781.1	2781.1	2777.0	2767.3	2764.9
22.5°	2734.0	2736.5	2736.5	2717.8	2710.5
25°	2674.8	2682.1	2684.5	2661.0	2647.2
27.5°	2607.4	2618.7	2625.2	2595.2	2577.3
30°	2530.3	2548.9	2557.1	2524.6	2498.6
32.5°	2445.8	2469.4	2479.1	2447.5	2414.2
35°	2358.2	2383.3	2388.2	2357.4	2322.5
37.5°	2264.8	2290.8	2297.3	2269.7	2226.7
40°	2166.6	2192.6	2192.6	2169.8	2127.6
42.5°	2062.7	2090.3	2089.5	2061.9	2023.7
45°	1954.7	1979.1	1975.8	1949.0	1914.1
47.5°	1843.5	1858.9	1863.0	1831.3	1798.1
50°	1721.8	1737.2	1741.2	1705.5	1679.5
52.5°	1601.6	1611.4	1617.0	1575.6	1557.0
55°	1473.4	1482.3	1486.3	1449.8	1429.5
57.5°	1337.8	1349.2	1354.0	1317.5	1294.8
60°	1199.0	1211.2	1212.8	1178.7	1157.6
62.5°	1057.7	1074.0	1077.2	1043.1	1018.0
65°	913.2	932.7	936.0	904.3	877.5
67.5°	768.7	794.7	795.5	769.6	737.9
70°	627.5	655.9	655.1	633.2	602.3
72.5°	492.7	518.7	524.4	504.1	474.1
75°	367.7	388.0	394.5	381.5	350.7
77.5°	261.4	280.1	285.7	273.6	250.8
80°	183.5	184.3	191.6	181.8	166.4
82.5°	113.6	112.0	114.5	110.4	101.5
85°	56.8	58.4	60.9	57.6	52.8
87.5°	19.5	20.3	21.9	21.9	19.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)