

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: P412588

Luminaire Tested: **24PD-85-PB1-L835**

Issue Date: 9/15/2020



**Test Information**

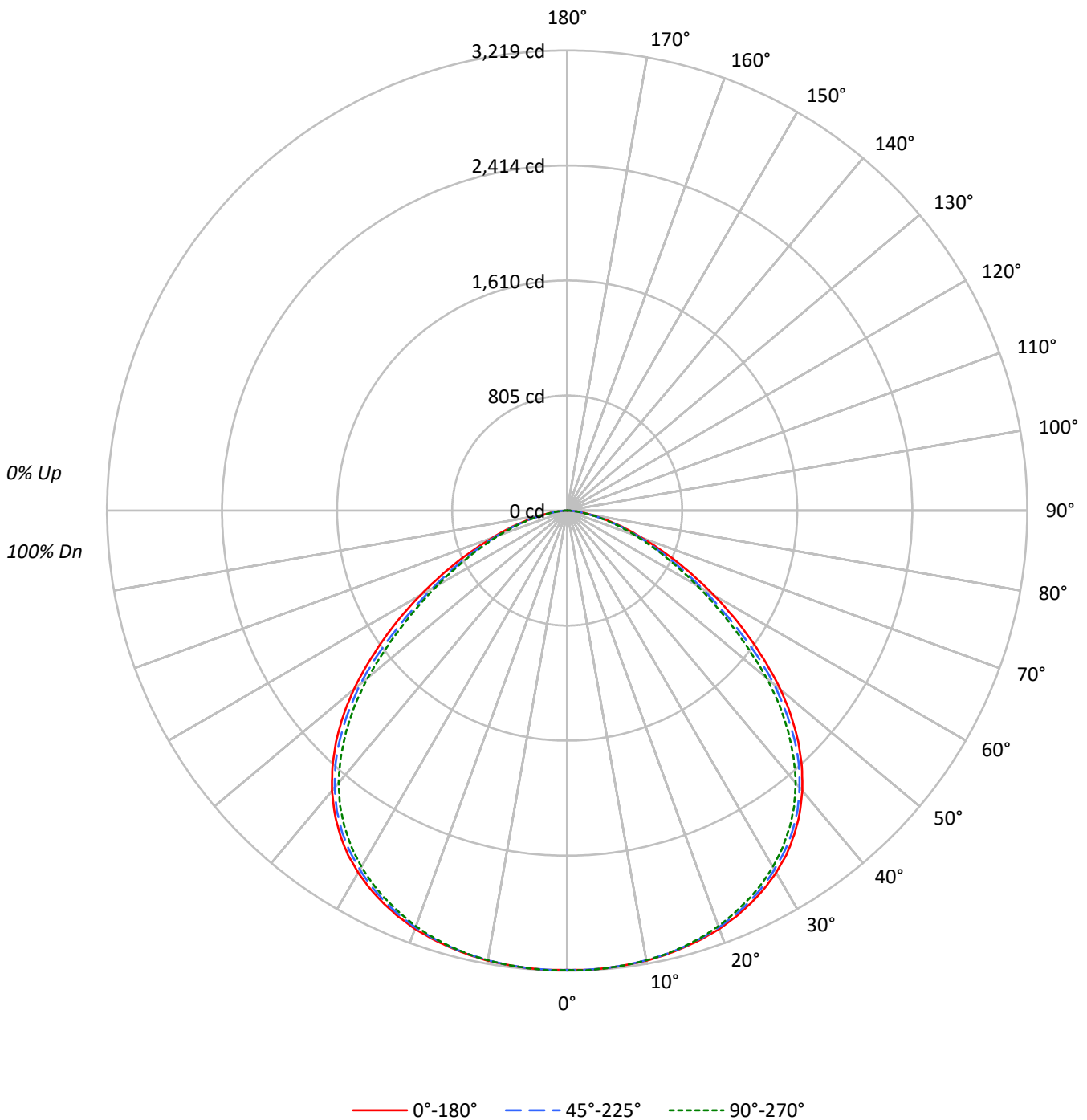
Test Method: LM-79-08  
Report Number: P412588  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-911-45)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24PD-85-PB1-L835  
Description: 8500 LUMEN 2X4 PERCEIVE LED TROFFER WITH BEVEL PATTERN OPTICS AND 80 CRI, 3500 CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8553.0 lumens  
Efficiency: N/A  
Efficacy: 132.6 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.32 / 1.41  
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

TEST NUMBER: P412588  
CATALOG NUMBER: 24PD-85-PB1-L835

### 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	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					100			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88					86				
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75					73				
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65					63				
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56					54				
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49					47				
6	72	60	51	45	70	59	51	45	57	50	44	55	49	44	54	48	43					41				
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39					37				
8	63	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35					33				
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31					30				
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	39	33	29					27				

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

	0°	45°	90°
0°	4325	4325	4325
5°	4339	4339	4339
10°	4368	4364	4365
15°	4407	4401	4398
20°	4457	4443	4430
25°	4504	4481	4456
30°	4543	4506	4471
35°	4548	4509	4453
40°	4495	4443	4368
45°	4349	4270	4160
50°	4078	3952	3807
55°	3665	3447	3305
60°	3191	2937	2824
65°	2685	2485	2376
70°	2188	2078	1994
75°	1754	1692	1621
80°	1347	1241	1208
85°	841	815	815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	306.0	3.6
10°-20°	893.2	10.4
20°-30°	1391.6	16.3
30°-40°	1711.9	20.0
40°-50°	1719.5	20.1
50°-60°	1325.3	15.5
60°-70°	786.8	9.2
70°-80°	350.3	4.1
80°-90°	68.4	0.8
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°	2590.8	30.3
0°-40°	4302.7	50.3
0°-60°	7347.6	85.9
0°-90°	8553.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8553.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3214	3214	3214	3214	3214	
5°	3213	3214	3213	3209	3213	306
15°	3164	3164	3160	3155	3157	895
25°	3034	3033	3018	3005	3001	1399
35°	2769	2764	2745	2722	2711	1729
45°	2286	2280	2244	2206	2186	1754
55°	1562	1533	1470	1425	1409	1397
65°	843	807	780	750	746	843
75°	337	330	325	314	312	365
85°	54	52	53	50	53	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3214.3	3214.3	3214.3	3214.3	3214.3
2.5°	3216.0	3215.2	3215.2	3211.8	3218.6
5°	3212.6	3213.5	3212.6	3209.2	3212.6
7.5°	3205.8	3206.7	3205.0	3201.5	3205.0
10°	3197.3	3197.3	3193.9	3192.2	3194.7
12.5°	3182.8	3182.8	3179.4	3176.8	3179.4
15°	3164.1	3164.1	3159.8	3154.7	3157.2
17.5°	3141.1	3141.1	3134.2	3127.4	3129.1
20°	3112.9	3112.1	3102.7	3093.4	3094.2
22.5°	3077.2	3076.3	3064.4	3053.3	3049.9
25°	3033.7	3032.9	3018.4	3004.8	3001.3
27.5°	2983.5	2980.0	2963.9	2948.5	2945.1
30°	2923.8	2921.3	2900.0	2884.6	2877.8
32.5°	2854.8	2848.0	2828.4	2809.7	2800.3
35°	2768.8	2764.5	2744.9	2721.9	2710.8
37.5°	2671.6	2667.4	2646.1	2620.5	2607.8
40°	2559.2	2555.8	2529.4	2503.0	2486.8
42.5°	2429.7	2427.1	2399.0	2362.4	2345.4
45°	2285.7	2279.8	2244.0	2206.5	2186.0
47.5°	2125.6	2115.3	2071.9	2036.1	2014.0
50°	1948.4	1934.7	1887.9	1841.9	1818.9
52.5°	1756.7	1732.8	1684.3	1631.4	1609.3
55°	1562.4	1532.6	1469.6	1425.3	1409.1
57.5°	1372.5	1329.0	1269.4	1237.9	1221.7
60°	1185.9	1138.2	1091.3	1060.7	1049.6
62.5°	1007.8	967.8	927.8	897.1	890.3
65°	843.4	806.8	780.4	750.5	746.3
67.5°	690.1	673.0	649.2	623.6	620.2
70°	556.3	549.5	528.2	512.9	506.9
72.5°	443.9	437.0	421.7	410.6	408.9
75°	337.4	330.5	325.4	314.4	311.8
77.5°	240.2	241.1	236.8	230.9	232.6
80°	173.8	163.6	160.2	156.8	155.9
82.5°	106.5	100.5	98.0	97.1	98.8
85°	54.5	52.0	52.8	50.3	52.8
87.5°	18.7	18.7	19.6	18.7	20.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)