

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: P412560

Luminaire Tested: **24PD-70-PB1-L830**

Issue Date: 9/15/2020



**Test Information**

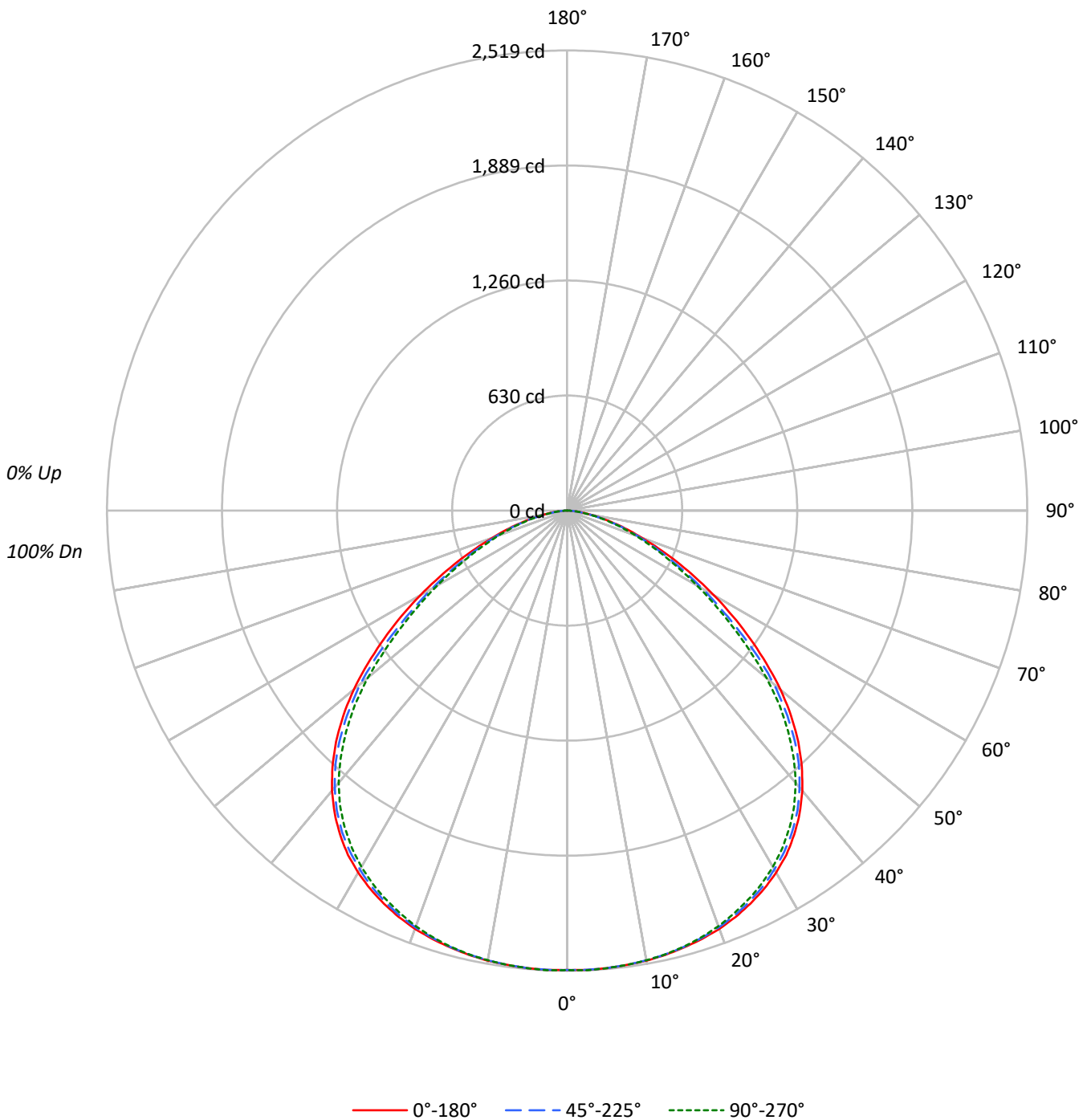
Test Method: LM-79-08  
Report Number: P412560  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-911-45)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24PD-70-PB1-L830  
Description: 7000 LUMEN 2X4 PERCEIVE LED TROFFER WITH BEVEL PATTERN OPTICS AND 80 CRI, 3000 CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6693.0 lumens  
Efficiency: N/A  
Efficacy: 128.0 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): 52.3  
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	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°	3384	3384	3384
5°	3395	3395	3395
10°	3418	3415	3416
15°	3449	3444	3441
20°	3488	3477	3467
25°	3524	3507	3487
30°	3555	3526	3499
35°	3559	3528	3484
40°	3518	3476	3418
45°	3404	3341	3255
50°	3192	3092	2979
55°	2868	2698	2587
60°	2497	2298	2210
65°	2101	1944	1859
70°	1712	1626	1561
75°	1372	1324	1268
80°	1054	971	945
85°	659	638	638



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.5	3.6
10°-20°	699.0	10.4
20°-30°	1088.9	16.3
30°-40°	1339.6	20.0
40°-50°	1345.6	20.1
50°-60°	1037.1	15.5
60°-70°	615.7	9.2
70°-80°	274.1	4.1
80°-90°	53.5	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°	2027.4	30.3
0°-40°	3367.0	50.3
0°-60°	5749.7	85.9
0°-90°	6693.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6693.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2515	2515	2515	2515	2515	
5°	2514	2515	2514	2511	2514	240
15°	2476	2476	2473	2469	2471	700
25°	2374	2373	2362	2351	2349	1095
35°	2167	2163	2148	2130	2121	1353
45°	1789	1784	1756	1727	1711	1373
55°	1223	1199	1150	1115	1103	1093
65°	660	631	611	587	584	660
75°	264	259	255	246	244	286
85°	43	41	41	39	41	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2515.3	2515.3	2515.3	2515.3	2515.3
2.5°	2516.6	2516.0	2516.0	2513.3	2518.6
5°	2514.0	2514.6	2514.0	2511.3	2514.0
7.5°	2508.6	2509.3	2508.0	2505.3	2508.0
10°	2502.0	2502.0	2499.3	2498.0	2500.0
12.5°	2490.6	2490.6	2488.0	2486.0	2488.0
15°	2476.0	2476.0	2472.6	2468.6	2470.6
17.5°	2458.0	2458.0	2452.6	2447.3	2448.6
20°	2436.0	2435.3	2428.0	2420.6	2421.3
22.5°	2408.0	2407.3	2398.0	2389.3	2386.6
25°	2374.0	2373.3	2362.0	2351.3	2348.6
27.5°	2334.6	2332.0	2319.3	2307.3	2304.6
30°	2288.0	2286.0	2269.3	2257.3	2252.0
32.5°	2234.0	2228.7	2213.3	2198.7	2191.3
35°	2166.7	2163.3	2148.0	2130.0	2121.3
37.5°	2090.7	2087.3	2070.7	2050.7	2040.7
40°	2002.7	2000.0	1979.3	1958.7	1946.0
42.5°	1901.3	1899.3	1877.3	1848.7	1835.3
45°	1788.7	1784.0	1756.0	1726.7	1710.7
47.5°	1663.3	1655.3	1621.3	1593.3	1576.0
50°	1524.7	1514.0	1477.3	1441.3	1423.3
52.5°	1374.7	1356.0	1318.0	1276.7	1259.3
55°	1222.7	1199.3	1150.0	1115.3	1102.7
57.5°	1074.0	1040.0	993.3	968.7	956.0
60°	928.0	890.7	854.0	830.0	821.3
62.5°	788.7	757.3	726.0	702.0	696.7
65°	660.0	631.3	610.7	587.3	584.0
67.5°	540.0	526.7	508.0	488.0	485.3
70°	435.3	430.0	413.3	401.3	396.7
72.5°	347.3	342.0	330.0	321.3	320.0
75°	264.0	258.7	254.7	246.0	244.0
77.5°	188.0	188.7	185.3	180.7	182.0
80°	136.0	128.0	125.3	122.7	122.0
82.5°	83.3	78.7	76.7	76.0	77.3
85°	42.7	40.7	41.3	39.3	41.3
87.5°	14.7	14.7	15.3	14.7	16.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)