

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: P412508

Luminaire Tested: **24PD-40-PB1-L840**

Issue Date: 9/15/2020



**Test Information**

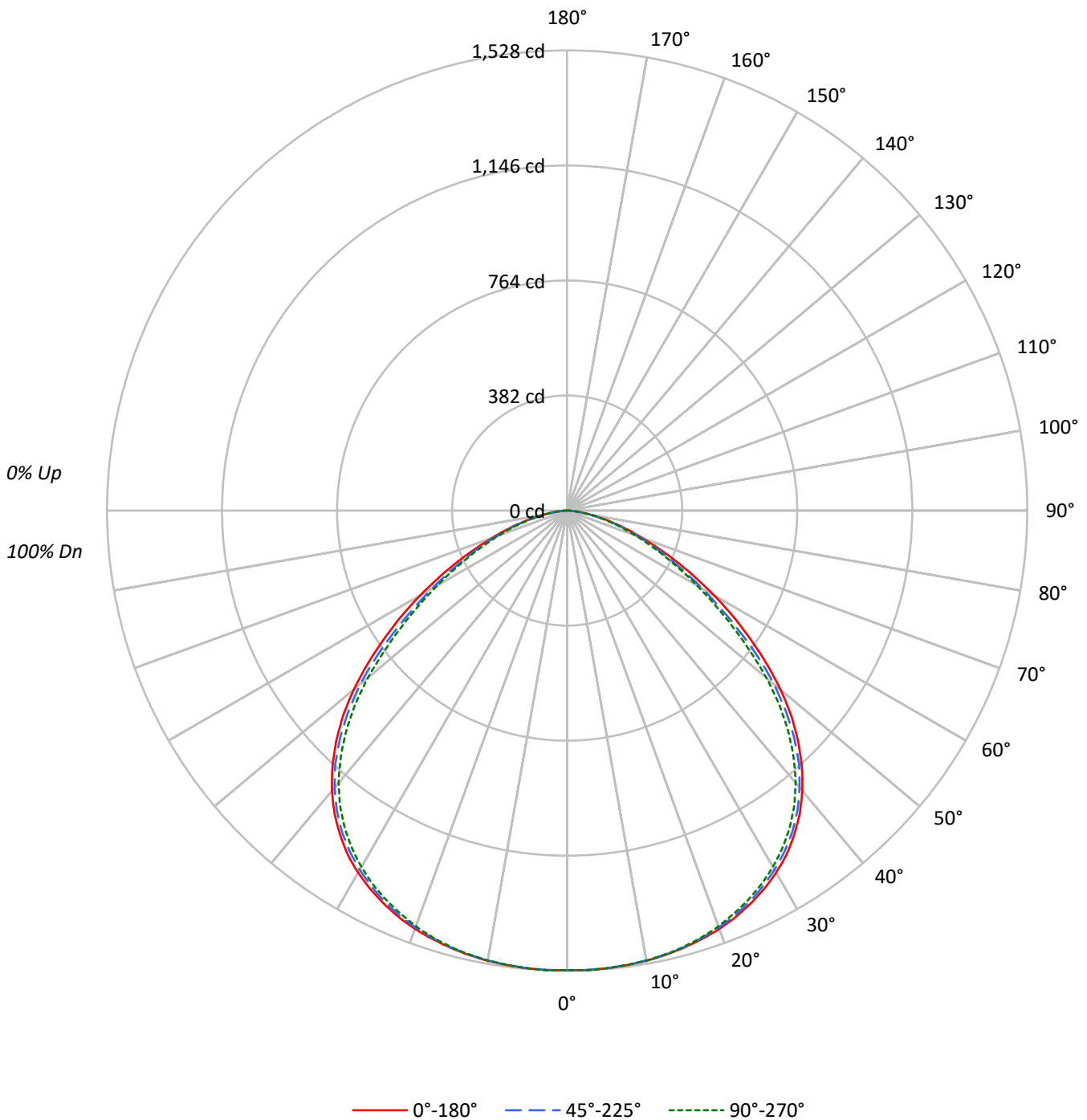
Test Method: LM-79-08  
Report Number: P412508  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-911-45)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24PD-40-PB1-L840  
Description: 4000 LUMEN 2X4 PERCEIVE LED TROFFER WITH BEVEL PATTERN OPTICS AND 80 CRI, 4000 CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4061.0 lumens  
Efficiency: N/A  
Efficacy: 136.7 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): 29.7  
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	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					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63					63			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47					47			
6	72	60	51	45	70	59	51	45	57	50	44	55	49	44	54	48	43	41					41			
7	67	54	46	40	65	53	45	40	52	45	39	50	44	39	49	43	39	37					37			
8	63	49	41	35	61	49	41	35	47	40	35	46	40	35	45	39	35	33					33			
9	58	45	37	32	57	45	37	32	44	37	32	43	36	32	42	36	31	30					30			
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	39	33	29	27					27			

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

	0°	45°	90°
0°	2053	2053	2053
5°	2060	2060	2060
10°	2074	2072	2072
15°	2093	2090	2088
20°	2116	2109	2104
25°	2138	2128	2116
30°	2157	2139	2123
35°	2159	2141	2114
40°	2134	2109	2074
45°	2065	2027	1975
50°	1936	1876	1808
55°	1740	1637	1569
60°	1515	1394	1341
65°	1275	1180	1128
70°	1039	987	947
75°	833	803	769
80°	639	589	573
85°	400	387	387



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.3	3.6
10°-20°	424.1	10.4
20°-30°	660.7	16.3
30°-40°	812.8	20.0
40°-50°	816.4	20.1
50°-60°	629.2	15.5
60°-70°	373.6	9.2
70°-80°	166.3	4.1
80°-90°	32.5	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°	1230.1	30.3
0°-40°	2043.0	50.3
0°-60°	3488.6	85.9
0°-90°	4061.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4061.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1526	1526	1526	1526	1526	
5°	1525	1526	1525	1524	1525	145
15°	1502	1502	1500	1498	1499	425
25°	1440	1440	1433	1427	1425	664
35°	1315	1313	1303	1292	1287	821
45°	1085	1082	1066	1048	1038	833
55°	742	728	698	677	669	663
65°	400	383	370	356	354	400
75°	160	157	154	149	148	173
85°	26	25	25	24	25	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1526.2	1526.2	1526.2	1526.2	1526.2
2.5°	1527.0	1526.6	1526.6	1525.0	1528.2
5°	1525.4	1525.8	1525.4	1523.7	1525.4
7.5°	1522.1	1522.5	1521.7	1520.1	1521.7
10°	1518.1	1518.1	1516.5	1515.7	1516.9
12.5°	1511.2	1511.2	1509.6	1508.4	1509.6
15°	1502.3	1502.3	1500.3	1497.9	1499.1
17.5°	1491.4	1491.4	1488.2	1484.9	1485.7
20°	1478.0	1477.6	1473.2	1468.7	1469.1
22.5°	1461.1	1460.6	1455.0	1449.7	1448.1
25°	1440.4	1440.0	1433.1	1426.7	1425.1
27.5°	1416.6	1414.9	1407.3	1400.0	1398.4
30°	1388.2	1387.0	1376.9	1369.6	1366.4
32.5°	1355.5	1352.2	1342.9	1334.0	1329.6
35°	1314.6	1312.6	1303.3	1292.4	1287.1
37.5°	1268.5	1266.5	1256.4	1244.2	1238.2
40°	1215.1	1213.5	1201.0	1188.4	1180.7
42.5°	1153.6	1152.4	1139.1	1121.7	1113.6
45°	1085.3	1082.4	1065.5	1047.7	1037.9
47.5°	1009.2	1004.4	983.7	966.8	956.2
50°	925.1	918.6	896.4	874.5	863.6
52.5°	834.1	822.8	799.7	774.6	764.1
55°	741.9	727.7	697.8	676.7	669.0
57.5°	651.6	631.0	602.7	587.7	580.1
60°	563.1	540.4	518.2	503.6	498.3
62.5°	478.5	459.5	440.5	425.9	422.7
65°	400.5	383.1	370.5	356.4	354.3
67.5°	327.6	319.6	308.2	296.1	294.5
70°	264.1	260.9	250.8	243.5	240.7
72.5°	210.7	207.5	200.2	195.0	194.2
75°	160.2	156.9	154.5	149.3	148.0
77.5°	114.1	114.5	112.5	109.6	110.4
80°	82.5	77.7	76.0	74.4	74.0
82.5°	50.6	47.7	46.5	46.1	46.9
85°	25.9	24.7	25.1	23.9	25.1
87.5°	8.9	8.9	9.3	8.9	9.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)