

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: P412850

Luminaire Tested: **24PD-40-PP3-L840**

Issue Date: 9/15/2020



**Test Information**

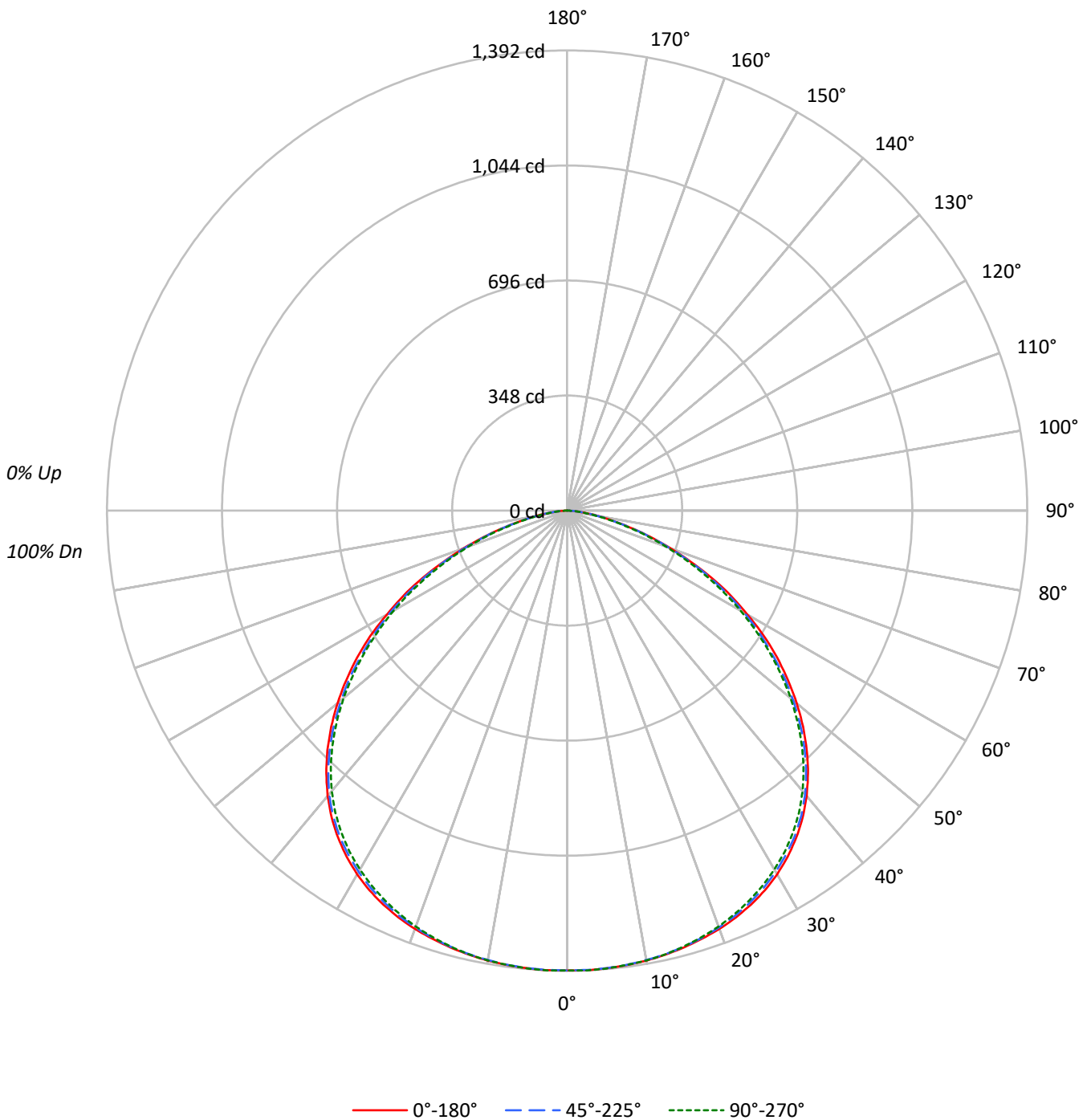
Test Method: LM-79-08  
Report Number: P412850  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-911-47)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24PD-40-PP3-L840  
Description: 4000 LUMEN 2X4 PERCEIVE LED TROFFER WITH PRISM PATTERN OPTICS AND 80 CRI, 4000 CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4048.0 lumens  
Efficiency: N/A  
Efficacy: 136.3 lumens/watt  
Spacing Criteria (0/90/45): 1.35 / 1.33 / 1.43  
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 (A<sub>in</sub>): 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	98	95	93	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	63	60
4	83	72	63	56	81	70	62	56	68	61	55	65	59	54	63	58	54	52
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	46	41	52	46	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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

	0°	45°	90°
0°	1872	1872	1872
5°	1877	1876	1877
10°	1889	1886	1888
15°	1905	1902	1901
20°	1928	1922	1917
25°	1952	1942	1933
30°	1974	1960	1948
35°	1985	1973	1955
40°	1979	1967	1945
45°	1951	1932	1910
50°	1898	1867	1848
55°	1819	1776	1753
60°	1695	1665	1632
65°	1536	1506	1462
70°	1311	1288	1246
75°	1024	1014	965
80°	755	724	683
85°	455	455	425



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	132.4	3.3
10°-20°	386.2	9.5
20°-30°	603.7	14.9
30°-40°	750.3	18.5
40°-50°	781.7	19.3
50°-60°	678.3	16.8
60°-70°	466.4	11.5
70°-80°	210.5	5.2
80°-90°	38.6	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°	1122.3	27.7
0°-40°	1872.5	46.3
0°-60°	3332.5	82.3
0°-90°	4048.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4048.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1391	1391	1391	1391	1391	
5°	1390	1390	1389	1388	1390	132
15°	1368	1368	1366	1364	1365	387
25°	1315	1315	1308	1303	1302	607
35°	1208	1208	1201	1194	1190	755
45°	1026	1026	1015	1008	1004	789
55°	776	771	757	748	747	691
65°	483	481	473	462	459	476
75°	197	198	195	190	186	214
85°	30	29	30	29	28	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1391.2	1391.2	1391.2	1391.2	1391.2
2.5°	1391.6	1391.6	1390.8	1389.6	1392.4
5°	1389.6	1390.0	1389.2	1387.9	1390.0
7.5°	1386.7	1387.1	1385.9	1384.7	1386.3
10°	1382.3	1381.9	1380.7	1379.9	1381.9
12.5°	1375.8	1375.4	1374.2	1373.4	1375.0
15°	1367.7	1367.7	1365.7	1364.5	1364.9
17.5°	1358.0	1358.0	1355.2	1352.3	1353.2
20°	1346.7	1346.3	1342.2	1339.4	1339.0
22.5°	1332.5	1332.5	1326.9	1323.2	1322.0
25°	1315.1	1314.7	1308.3	1303.0	1302.2
27.5°	1295.3	1294.5	1286.8	1281.6	1279.5
30°	1270.6	1269.8	1261.7	1256.1	1253.6
32.5°	1241.5	1242.7	1233.4	1226.9	1224.5
35°	1208.3	1208.3	1201.1	1194.2	1190.1
37.5°	1170.3	1170.3	1163.4	1156.6	1151.7
40°	1127.0	1127.4	1120.1	1111.6	1107.6
42.5°	1078.5	1079.3	1069.6	1062.7	1058.3
45°	1025.5	1025.9	1015.4	1007.7	1004.0
47.5°	968.0	967.2	955.5	949.0	945.4
50°	906.6	904.9	892.0	885.9	882.7
52.5°	842.2	839.0	827.7	818.8	815.9
55°	775.5	771.0	756.9	748.0	747.2
57.5°	705.9	700.6	688.9	680.4	677.2
60°	629.9	628.6	618.9	608.8	606.4
62.5°	558.7	555.0	546.5	534.4	533.2
65°	482.6	480.6	472.9	461.6	459.1
67.5°	404.1	406.1	399.7	389.6	386.3
70°	333.3	334.5	327.3	318.0	316.7
72.5°	262.1	264.2	258.1	252.0	250.8
75°	197.0	197.8	195.0	189.7	185.7
77.5°	140.0	142.8	139.6	135.9	132.7
80°	97.5	93.0	93.4	91.8	88.2
82.5°	58.7	56.6	56.2	54.6	53.0
85°	29.5	29.1	29.5	29.1	27.5
87.5°	9.7	10.5	10.9	10.9	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)