

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: P412522

Luminaire Tested: **24PD-45-PB1-L940**

Issue Date: 9/15/2020



**Test Information**

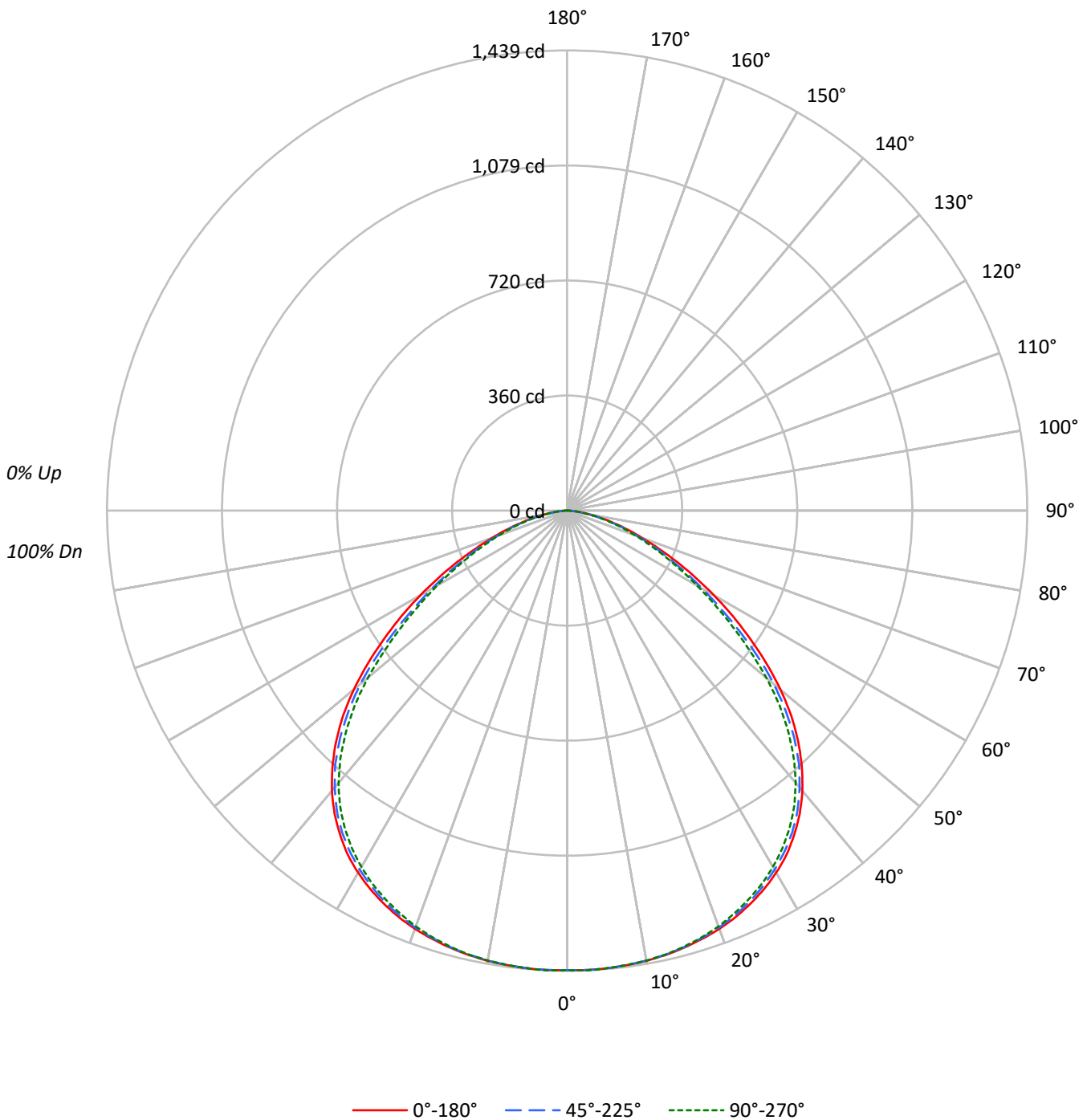
Test Method: LM-79-08  
Report Number: P412522  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-911-45)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24PD-45-PB1-L940  
Description: 4500 LUMEN 2X4 PERCEIVE LED TROFFER WITH BEVEL PATTERN OPTICS AND 90 CRI, 4000 CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3825.0 lumens  
Efficiency: N/A  
Efficacy: 114.5 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): 33.4  
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°	1934	1934	1934
5°	1940	1940	1940
10°	1954	1951	1952
15°	1971	1968	1967
20°	1993	1987	1981
25°	2014	2004	1993
30°	2032	2015	2000
35°	2034	2016	1991
40°	2010	1987	1953
45°	1945	1909	1860
50°	1824	1767	1703
55°	1639	1542	1478
60°	1427	1313	1263
65°	1201	1111	1062
70°	979	929	892
75°	784	756	725
80°	602	555	540
85°	377	364	364



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	136.9	3.6
10°-20°	399.5	10.4
20°-30°	622.3	16.3
30°-40°	765.6	20.0
40°-50°	769.0	20.1
50°-60°	592.7	15.5
60°-70°	351.9	9.2
70°-80°	156.6	4.1
80°-90°	30.6	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°	1158.7	30.3
0°-40°	1924.2	50.3
0°-60°	3285.9	85.9
0°-90°	3825.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3825.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1438	1438	1438	1438	1438	
5°	1437	1437	1437	1435	1437	137
15°	1415	1415	1413	1411	1412	400
25°	1357	1356	1350	1344	1342	626
35°	1238	1236	1228	1217	1212	773
45°	1022	1020	1004	987	978	785
55°	699	685	657	637	630	625
65°	377	361	349	336	334	377
75°	151	148	146	141	139	163
85°	24	23	24	22	24	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1437.5	1437.5	1437.5	1437.5	1437.5
2.5°	1438.2	1437.9	1437.9	1436.3	1439.4
5°	1436.7	1437.1	1436.7	1435.2	1436.7
7.5°	1433.7	1434.1	1433.3	1431.8	1433.3
10°	1429.9	1429.9	1428.3	1427.6	1428.7
12.5°	1423.4	1423.4	1421.9	1420.7	1421.9
15°	1415.0	1415.0	1413.1	1410.8	1412.0
17.5°	1404.7	1404.7	1401.7	1398.6	1399.4
20°	1392.1	1391.8	1387.6	1383.4	1383.8
22.5°	1376.1	1375.8	1370.4	1365.5	1364.0
25°	1356.7	1356.3	1349.9	1343.8	1342.2
27.5°	1334.2	1332.7	1325.5	1318.6	1317.1
30°	1307.6	1306.4	1296.9	1290.0	1287.0
32.5°	1276.7	1273.7	1264.9	1256.5	1252.3
35°	1238.2	1236.3	1227.6	1217.3	1212.3
37.5°	1194.8	1192.9	1183.4	1171.9	1166.2
40°	1144.5	1143.0	1131.2	1119.4	1112.1
42.5°	1086.6	1085.4	1072.9	1056.5	1048.9
45°	1022.2	1019.5	1003.5	986.8	977.6
47.5°	950.6	946.0	926.6	910.6	900.7
50°	871.3	865.2	844.3	823.7	813.4
52.5°	785.6	774.9	753.2	729.6	719.7
55°	698.7	685.4	657.2	637.4	630.2
57.5°	613.8	594.3	567.7	553.6	546.3
60°	530.3	509.0	488.1	474.3	469.4
62.5°	450.7	432.8	414.9	401.2	398.1
65°	377.2	360.8	349.0	335.7	333.7
67.5°	308.6	301.0	290.3	278.9	277.4
70°	248.8	245.7	236.2	229.4	226.7
72.5°	198.5	195.4	188.6	183.6	182.9
75°	150.9	147.8	145.5	140.6	139.4
77.5°	107.4	107.8	105.9	103.2	104.0
80°	77.7	73.2	71.6	70.1	69.7
82.5°	47.6	45.0	43.8	43.4	44.2
85°	24.4	23.2	23.6	22.5	23.6
87.5°	8.4	8.4	8.8	8.4	9.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)