

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: P225653

Luminaire Tested: **24AC-LD5-48-UNV-L840-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P225653  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35753)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24AC-LD5-48-UNV-L840-CD1-U  
Description: METALUX Accord 2X4 LED TROFFER  
Light Source: (168)4000K CCT, 85 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

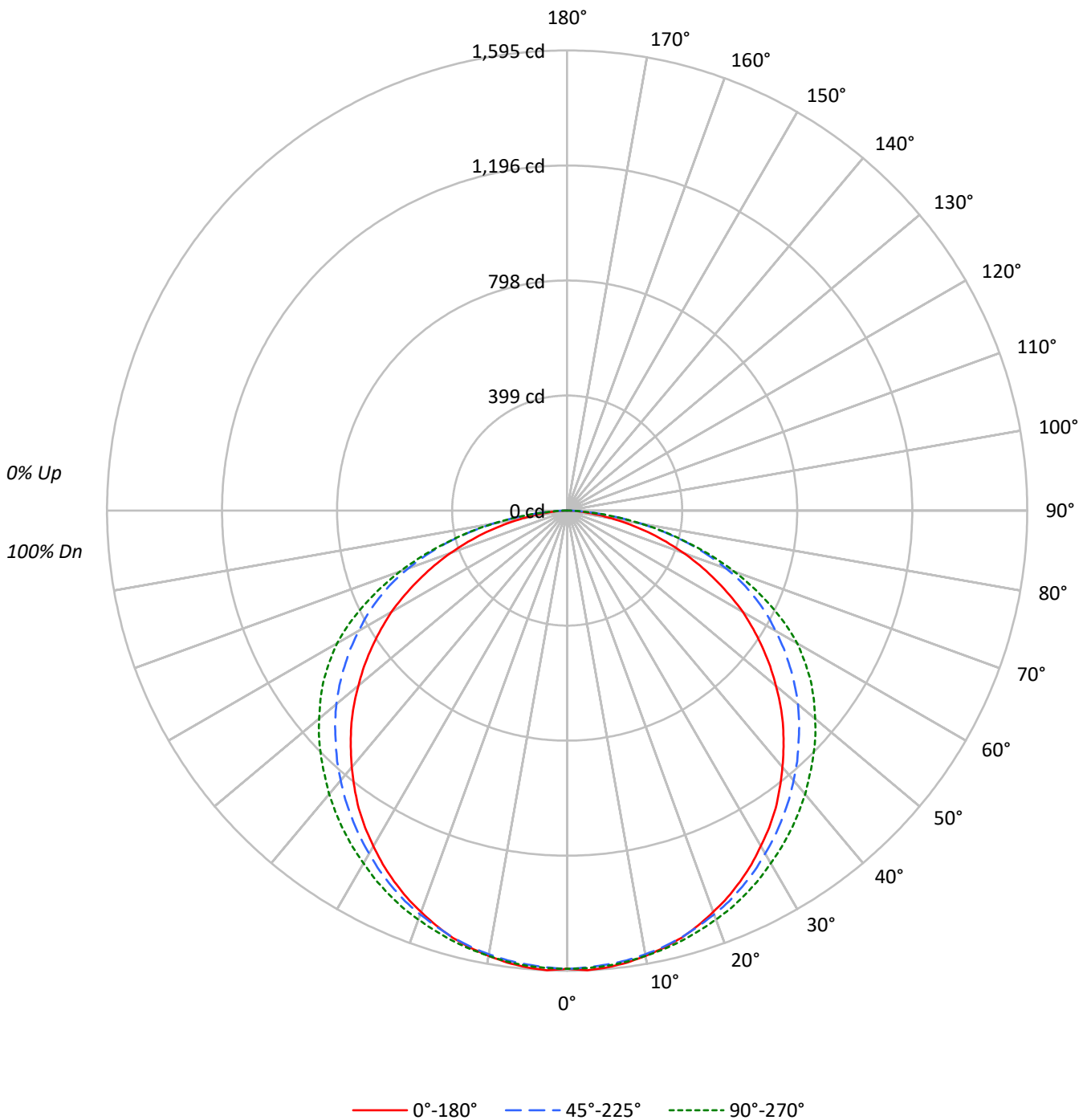
Lumens per Lamp: N/A  
Luminaire Lumens: 4990.0 lumens  
Efficiency: N/A  
Efficacy: 119.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 41.88  
Input Voltage (V): 120  
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	108	103	99	94	105	101	97	93	96	93	90	93	90	87	89	87	85	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	72	77	73	70	68
3	89	78	69	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56
4	81	69	59	52	79	67	59	52	65	57	51	62	56	51	60	54	50	48
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	68	55	45	39	67	54	45	39	52	44	38	50	43	38	49	42	38	35
7	63	49	40	34	62	49	40	34	47	39	34	46	39	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	41	34	30	28
9	55	41	33	27	54	41	33	27	40	32	27	38	32	27	37	31	27	25
10	52	38	30	25	50	38	30	25	37	29	24	36	29	24	35	29	24	22

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

	0°	45°	90°
0°	2137	2137	2137
5°	2147	2133	2139
10°	2141	2134	2141
15°	2135	2134	2149
20°	2120	2133	2160
25°	2106	2134	2177
30°	2087	2133	2194
35°	2069	2137	2221
40°	2039	2144	2254
45°	2015	2159	2296
50°	1977	2186	2349
55°	1940	2211	2419
60°	1894	2243	2479
65°	1802	2294	2477
70°	1690	2306	2423
75°	1512	2239	2268
80°	1213	2004	2012
85°	857	1456	1371



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.4	3.0
10°-20°	432.7	8.7
20°-30°	663.1	13.3
30°-40°	815.0	16.3
40°-50°	874.2	17.5
50°-60°	836.1	16.8
60°-70°	687.7	13.8
70°-80°	422.9	8.5
80°-90°	107.9	2.2
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°	1246.2	25.0
0°-40°	2061.2	41.3
0°-60°	3771.5	75.6
0°-90°	4990.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4990.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1588	1588	1588	1588	1588	
5°	1590	1583	1580	1577	1584	151
15°	1533	1527	1532	1534	1543	432
25°	1418	1418	1437	1453	1466	654
35°	1260	1268	1301	1334	1352	787
45°	1059	1079	1134	1184	1206	816
55°	827	867	942	1006	1031	739
65°	566	629	720	764	778	561
75°	291	377	431	438	436	307
85°	56	91	94	91	89	69
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1588.3	1588.3	1588.3	1588.3	1588.3
2.5°	1595.0	1587.2	1585.0	1581.7	1587.2
5°	1589.5	1582.8	1579.5	1577.2	1583.9
7.5°	1580.6	1573.9	1572.8	1570.6	1577.2
10°	1567.3	1561.7	1561.7	1560.6	1567.3
12.5°	1551.7	1545.1	1548.4	1549.5	1556.2
15°	1532.8	1527.3	1531.7	1534.0	1542.8
17.5°	1508.4	1504.0	1510.6	1517.3	1526.2
20°	1480.7	1479.6	1489.6	1498.4	1508.4
22.5°	1451.8	1451.8	1466.2	1476.2	1489.6
25°	1418.5	1418.5	1437.4	1452.9	1466.2
27.5°	1383.0	1385.2	1407.4	1426.3	1440.7
30°	1343.0	1349.7	1373.0	1396.3	1411.9
32.5°	1303.1	1308.6	1338.6	1368.6	1383.0
35°	1259.8	1267.6	1300.9	1334.2	1351.9
37.5°	1211.0	1222.1	1263.1	1299.8	1318.6
40°	1161.0	1175.4	1220.9	1263.1	1283.1
42.5°	1110.0	1129.9	1179.9	1223.2	1244.3
45°	1058.9	1078.9	1134.4	1184.3	1206.5
47.5°	1003.4	1027.8	1091.1	1142.1	1166.6
50°	944.6	973.4	1044.5	1097.7	1122.2
52.5°	886.9	920.2	994.5	1054.5	1077.8
55°	826.9	866.9	942.4	1005.6	1031.1
57.5°	764.8	810.3	890.2	954.6	976.8
60°	703.7	749.2	833.6	899.1	921.3
62.5°	634.9	690.4	780.3	841.3	853.6
65°	566.1	629.3	720.4	763.6	778.1
67.5°	498.4	567.2	658.2	689.3	698.2
70°	429.6	500.6	586.1	611.6	616.0
72.5°	359.6	439.5	511.7	526.1	528.3
75°	290.8	377.4	430.7	438.4	436.2
77.5°	223.1	308.6	346.3	349.6	350.7
80°	156.5	236.4	258.6	259.7	259.7
82.5°	101.0	164.3	175.4	173.2	175.4
85°	55.5	91.0	94.3	91.0	88.8
87.5°	17.8	26.6	28.9	27.7	27.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)