

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: P225688

Luminaire Tested: **24AC-LD5-44-SQP-UNV-L830-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: P225688  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35754)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24AC-LD5-44-SQP-UNV-L830-CD1-U  
Description: METALUX Accord 2X4 LED TROFFER WITH SQP LENS  
Light Source: (168)3000K CCT, 85 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3513.7 lumens  
Efficiency: N/A  
Efficacy: 92.7 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.35 / 1.45  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

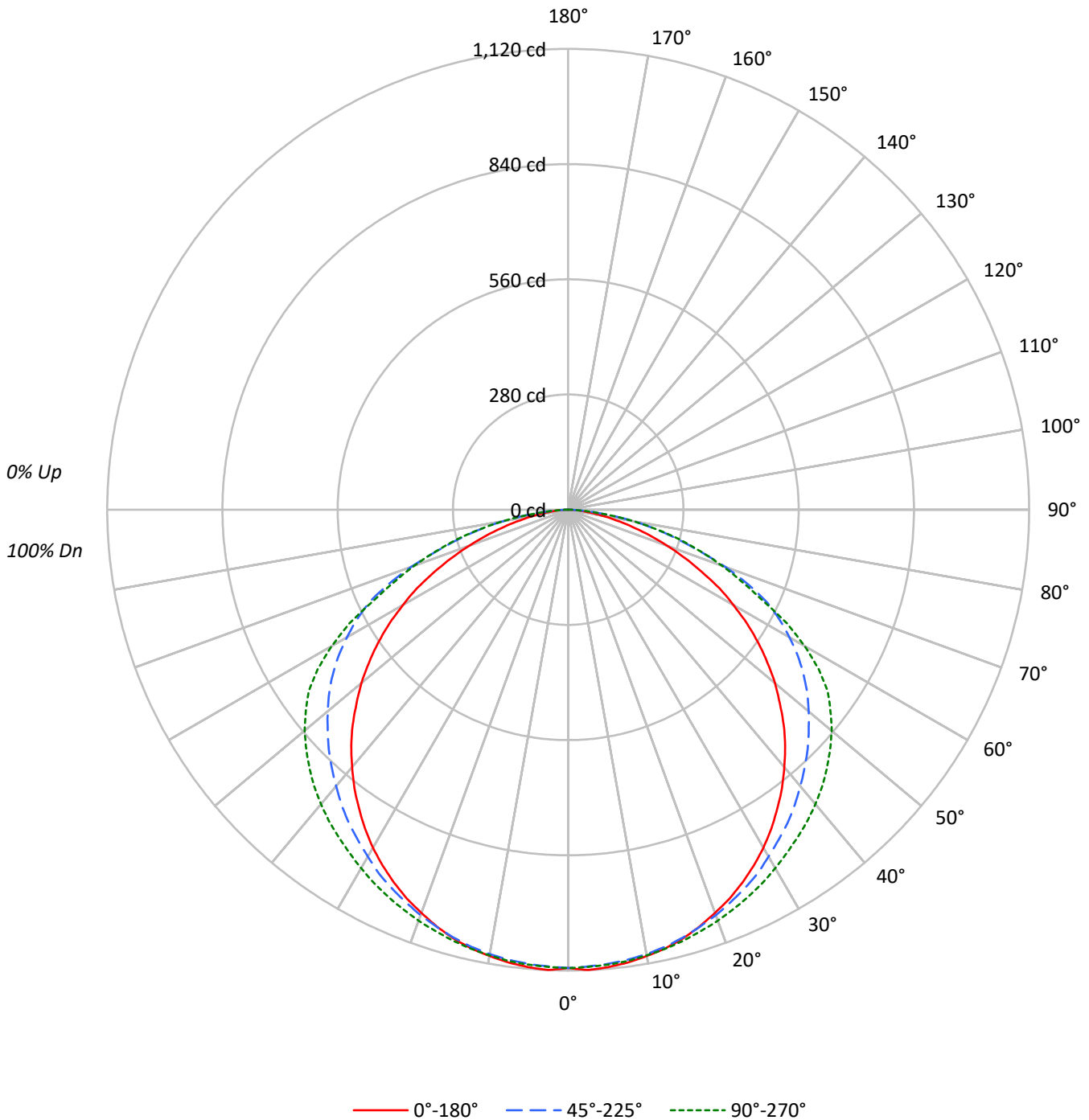
Input Watts (W): 37.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	95	106	101	97	93	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	62	74	67	61	71	65	60	68	63	59	57
4	81	69	60	53	79	68	59	53	65	58	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41
6	69	55	46	39	67	54	45	39	52	44	39	50	44	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31
8	59	45	37	31	58	45	36	30	43	36	30	42	35	30	41	35	30	28
9	55	41	33	27	54	41	33	27	40	32	27	39	32	27	38	31	27	25
10	52	38	30	25	50	38	30	25	37	29	25	36	29	24	35	29	24	23

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

	0°	45°	90°
0°	1499	1499	1499
5°	1507	1497	1499
10°	1505	1498	1502
15°	1502	1499	1510
20°	1493	1501	1522
25°	1485	1507	1540
30°	1474	1512	1563
35°	1455	1526	1596
40°	1434	1541	1641
45°	1409	1565	1691
50°	1373	1597	1750
55°	1322	1638	1805
60°	1248	1670	1786
65°	1142	1700	1657
70°	1007	1593	1563
75°	840	1430	1460
80°	663	1244	1237
85°	475	787	772



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.5	3.0
10°-20°	304.4	8.7
20°-30°	468.5	13.3
30°-40°	581.2	16.5
40°-50°	631.4	18.0
50°-60°	608.3	17.3
60°-70°	479.9	13.7
70°-80°	272.1	7.7
80°-90°	62.4	1.8
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°	878.4	25.0
0°-40°	1459.6	41.5
0°-60°	2699.3	76.8
0°-90°	3513.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3513.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1114	1114	1114	1114	1114	
5°	1116	1111	1108	1106	1110	106
15°	1078	1076	1076	1078	1084	304
25°	1000	1001	1015	1027	1037	461
35°	886	898	929	957	972	554
45°	741	766	822	870	889	570
55°	564	616	698	750	770	503
65°	359	444	534	528	520	356
75°	162	257	275	279	281	174
85°	31	50	51	51	50	38
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1114.0	1114.0	1114.0	1114.0	1114.0
2.5°	1119.7	1114.0	1111.1	1109.1	1112.0
5°	1115.9	1111.1	1108.2	1106.3	1110.1
7.5°	1110.1	1105.3	1103.4	1101.4	1106.3
10°	1101.4	1097.6	1096.6	1095.7	1099.5
12.5°	1091.8	1088.0	1088.0	1088.9	1092.8
15°	1078.4	1075.5	1076.4	1078.4	1084.1
17.5°	1062.0	1059.1	1063.0	1066.8	1073.5
20°	1042.8	1042.8	1048.5	1054.3	1063.0
22.5°	1023.5	1023.5	1032.2	1041.8	1050.5
25°	1000.4	1001.4	1014.9	1027.4	1037.0
27.5°	975.4	978.3	996.6	1011.0	1022.6
30°	948.5	953.3	973.5	994.7	1006.2
32.5°	918.7	925.4	951.4	977.4	988.9
35°	886.0	897.5	929.3	957.2	971.6
37.5°	853.3	865.8	904.2	937.0	954.3
40°	816.7	835.9	877.3	915.8	934.1
42.5°	780.2	800.4	850.4	893.7	912.9
45°	740.7	765.7	822.5	869.6	888.9
47.5°	697.4	730.1	792.7	843.6	862.9
50°	656.1	693.6	762.8	815.7	835.9
52.5°	609.9	654.1	732.1	785.9	803.2
55°	563.7	615.7	698.4	750.3	769.6
57.5°	514.6	573.3	661.8	709.9	721.5
60°	463.7	532.9	620.5	663.8	663.8
62.5°	414.6	488.7	579.1	597.4	599.3
65°	358.8	444.4	533.9	528.1	520.4
67.5°	306.9	401.1	472.3	455.0	456.0
70°	255.9	354.0	405.0	395.4	397.3
72.5°	206.8	304.9	333.8	337.6	337.6
75°	161.6	256.8	275.1	279.0	280.9
77.5°	120.2	205.9	218.4	221.3	219.3
80°	85.6	140.4	160.6	158.7	159.7
82.5°	53.9	90.4	102.0	103.9	101.0
85°	30.8	50.0	51.0	51.0	50.0
87.5°	10.6	15.4	16.4	15.4	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)