

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: P225678

Luminaire Tested: **24AC-LD5-39-RDP-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: P225678  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35755)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24AC-LD5-39-RDP-UNV-L840-CD1-U  
Description: METALUX Accord 2X4 LED TROFFER WITH RDP LENS  
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: 3471.6 lumens  
Efficiency: N/A  
Efficacy: 105.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.34 / 1.44  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

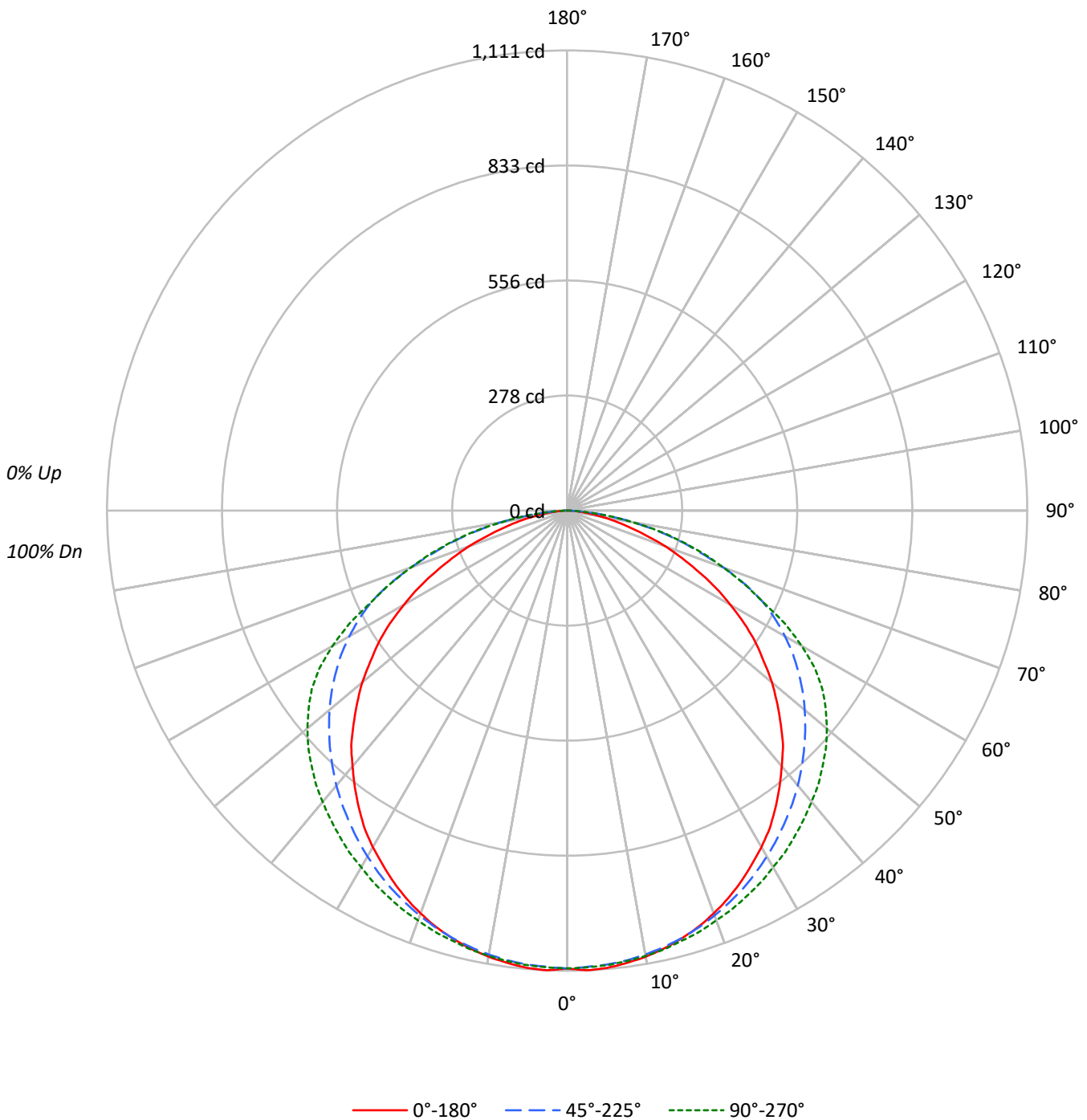
Input Watts (W): 32.94  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	90	93	90	88	89	87	85	83
2	98	90	82	77	95	88	81	76	84	79	74	81	76	72	78	74	70	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	51	44	38	49	43	38	36
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	45	38	34	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	30	25	36	29	24	35	29	24	23

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

	0°	45°	90°
0°	1487	1487	1487
5°	1497	1486	1488
10°	1494	1487	1492
15°	1489	1488	1497
20°	1482	1490	1508
25°	1471	1493	1524
30°	1457	1498	1545
35°	1440	1507	1575
40°	1416	1522	1613
45°	1387	1541	1659
50°	1352	1568	1714
55°	1303	1600	1766
60°	1224	1633	1760
65°	1117	1659	1656
70°	993	1577	1577
75°	809	1453	1472
80°	624	1254	1234
85°	432	824	769



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	104.8	3.0
10°-20°	302.0	8.7
20°-30°	464.3	13.4
30°-40°	574.4	16.5
40°-50°	621.9	17.9
50°-60°	596.4	17.2
60°-70°	473.4	13.6
70°-80°	271.9	7.8
80°-90°	62.5	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°	871.1	25.1
0°-40°	1445.5	41.6
0°-60°	2663.8	76.7
0°-90°	3471.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3471.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1106	1106	1106	1106	1106	
5°	1108	1103	1100	1098	1102	105
15°	1069	1067	1068	1070	1075	302
25°	991	993	1006	1019	1027	456
35°	877	888	917	945	959	548
45°	729	757	810	855	872	563
55°	555	604	682	734	753	495
65°	351	434	521	528	520	349
75°	156	251	280	282	283	169
85°	28	49	53	51	50	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1105.5	1105.5	1105.5	1105.5	1105.5
2.5°	1110.9	1105.5	1102.8	1100.9	1103.7
5°	1108.2	1102.8	1100.0	1098.2	1101.8
7.5°	1101.8	1097.3	1095.5	1094.6	1097.3
10°	1093.7	1089.2	1088.3	1087.4	1091.9
12.5°	1082.9	1079.2	1079.2	1079.2	1084.7
15°	1069.3	1066.6	1068.4	1070.2	1074.7
17.5°	1053.9	1051.2	1055.7	1059.3	1065.7
20°	1034.9	1034.9	1040.3	1045.8	1053.0
22.5°	1014.1	1015.9	1024.0	1033.1	1041.2
25°	990.6	993.3	1006.0	1018.6	1026.8
27.5°	964.3	969.8	986.1	1002.3	1012.3
30°	938.1	943.5	964.3	984.2	994.2
32.5°	910.1	916.4	941.7	965.2	978.8
35°	876.6	888.4	917.3	945.3	958.9
37.5°	842.2	858.5	892.9	924.5	939.0
40°	806.0	825.9	866.6	902.8	918.2
42.5°	771.7	792.5	838.6	879.3	897.4
45°	729.1	757.2	809.7	854.9	872.1
47.5°	687.5	721.0	779.8	827.7	847.6
50°	645.9	683.0	749.0	801.5	818.7
52.5°	598.9	644.1	716.5	768.9	787.0
55°	555.4	604.3	682.1	733.7	752.7
57.5°	507.5	562.7	646.8	697.5	709.2
60°	455.0	520.2	607.0	650.4	654.1
62.5°	405.3	478.6	566.3	593.4	594.3
65°	351.0	434.2	521.1	528.3	520.2
67.5°	300.3	387.2	465.0	459.6	462.3
70°	252.4	342.9	400.8	403.5	400.8
72.5°	199.9	296.7	337.4	343.8	344.7
75°	155.6	250.6	279.5	282.2	283.2
77.5°	118.5	200.8	218.0	222.5	225.3
80°	80.5	140.2	161.9	163.7	159.2
82.5°	52.5	90.5	103.1	103.1	102.2
85°	28.0	48.9	53.4	50.7	49.8
87.5°	10.0	14.5	16.3	16.3	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)