

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: P225694

Luminaire Tested: **24AC-LD5-31-SQP-UNV-L835-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: P225694  
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-LD5-31-SQP-UNV-L835-CD1-U  
Description: METALUX Accord 2X4 LED TROFFER WITH SQP LENS  
Light Source: (168)3500K CCT, 85 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2563.4 lumens  
Efficiency: N/A  
Efficacy: 100.9 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

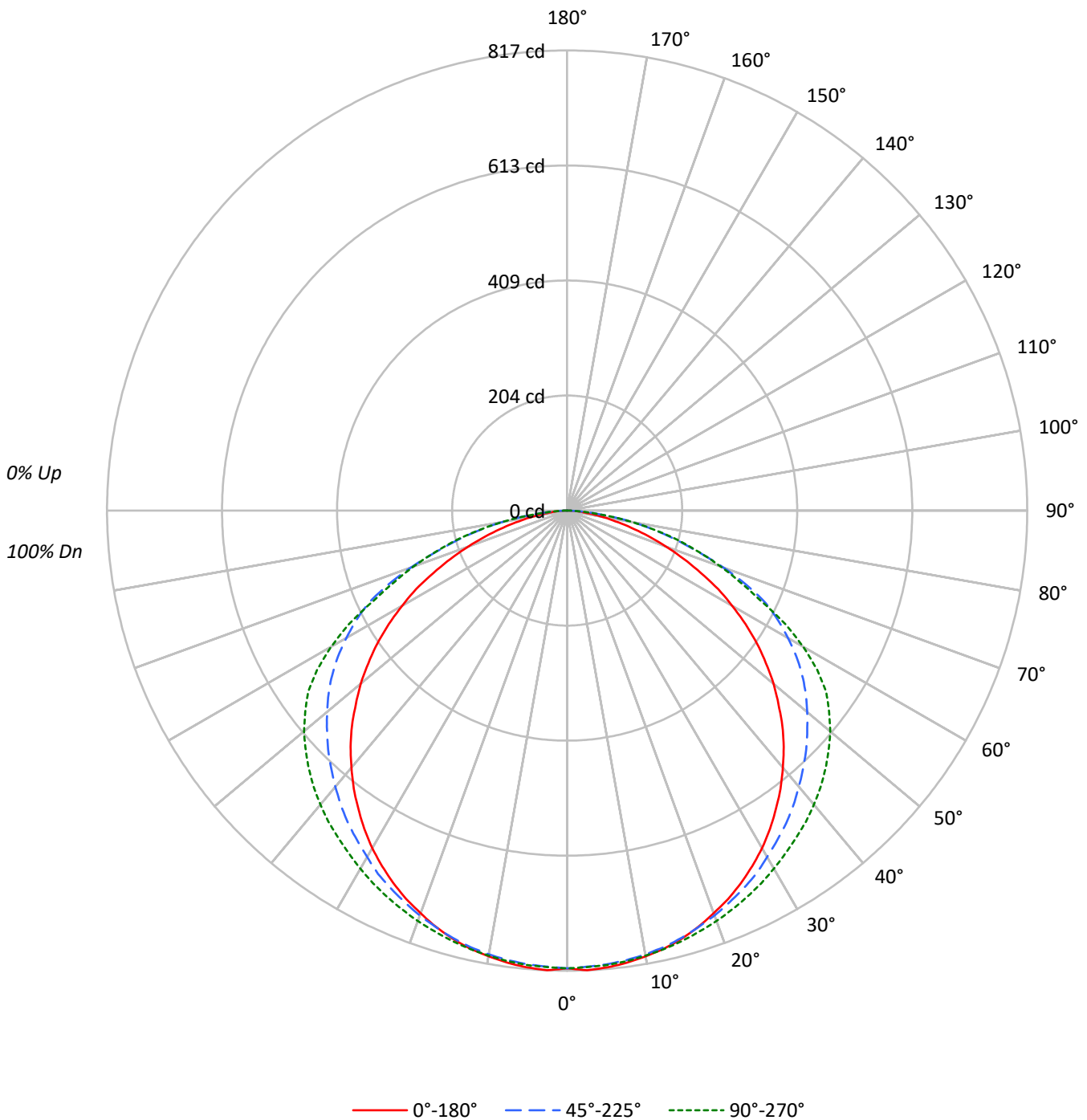
Input Watts (W): 25.41  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1093	1093	1093
5°	1100	1092	1094
10°	1098	1093	1096
15°	1096	1094	1102
20°	1089	1095	1110
25°	1084	1099	1123
30°	1075	1103	1141
35°	1062	1113	1164
40°	1046	1124	1197
45°	1028	1142	1234
50°	1002	1165	1277
55°	965	1195	1317
60°	910	1218	1303
65°	833	1240	1209
70°	734	1162	1140
75°	613	1043	1065
80°	484	908	903
85°	347	574	563



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	77.0	3.0
10°-20°	222.1	8.7
20°-30°	341.8	13.3
30°-40°	424.0	16.5
40°-50°	460.6	18.0
50°-60°	443.8	17.3
60°-70°	350.1	13.7
70°-80°	198.5	7.7
80°-90°	45.5	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°	640.9	25.0
0°-40°	1064.9	41.5
0°-60°	1969.3	76.8
0°-90°	2563.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2563.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	813	813	813	813	813	
5°	814	811	808	807	810	77
15°	787	785	785	787	791	222
25°	730	731	740	750	757	336
35°	646	655	678	698	709	404
45°	540	559	600	634	648	416
55°	411	449	510	547	561	367
65°	262	324	390	385	380	260
75°	118	187	201	204	205	127
85°	22	36	37	37	36	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	812.7	812.7	812.7	812.7	812.7
2.5°	816.9	812.7	810.6	809.2	811.3
5°	814.1	810.6	808.5	807.1	809.9
7.5°	809.9	806.4	805.0	803.6	807.1
10°	803.6	800.8	800.1	799.4	802.2
12.5°	796.6	793.7	793.7	794.4	797.3
15°	786.7	784.6	785.3	786.7	790.9
17.5°	774.8	772.7	775.5	778.3	783.2
20°	760.8	760.8	765.0	769.2	775.5
22.5°	746.7	746.7	753.0	760.1	766.4
25°	729.9	730.6	740.4	749.5	756.6
27.5°	711.6	713.7	727.1	737.6	746.0
30°	692.0	695.5	710.2	725.7	734.1
32.5°	670.2	675.1	694.1	713.0	721.5
35°	646.4	654.8	677.9	698.3	708.8
37.5°	622.5	631.6	659.7	683.6	696.2
40°	595.8	609.9	640.1	668.1	681.5
42.5°	569.2	583.9	620.4	652.0	666.0
45°	540.4	558.6	600.0	634.4	648.5
47.5°	508.8	532.7	578.3	615.5	629.5
50°	478.6	506.0	556.5	595.1	609.9
52.5°	444.9	477.2	534.1	573.4	586.0
55°	411.3	449.2	509.5	547.4	561.4
57.5°	375.5	418.3	482.8	517.9	526.4
60°	338.3	388.8	452.7	484.2	484.2
62.5°	302.5	356.5	422.5	435.8	437.2
65°	261.8	324.2	389.5	385.3	379.7
67.5°	223.9	292.7	344.6	332.0	332.7
70°	186.7	258.3	295.5	288.4	289.8
72.5°	150.9	222.5	243.5	246.3	246.3
75°	117.9	187.4	200.7	203.5	204.9
77.5°	87.7	150.2	159.3	161.4	160.0
80°	62.5	102.5	117.2	115.8	116.5
82.5°	39.3	66.0	74.4	75.8	73.7
85°	22.5	36.5	37.2	37.2	36.5
87.5°	7.7	11.2	11.9	11.2	11.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)