

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: P225703

Luminaire Tested: **24AC-LD5-31-SQP-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: P225703  
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-L840-CD1-U  
Description: METALUX Accord 2X4 LED TROFFER WITH SQP 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: 2614.7 lumens  
Efficiency: N/A  
Efficacy: 102.9 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

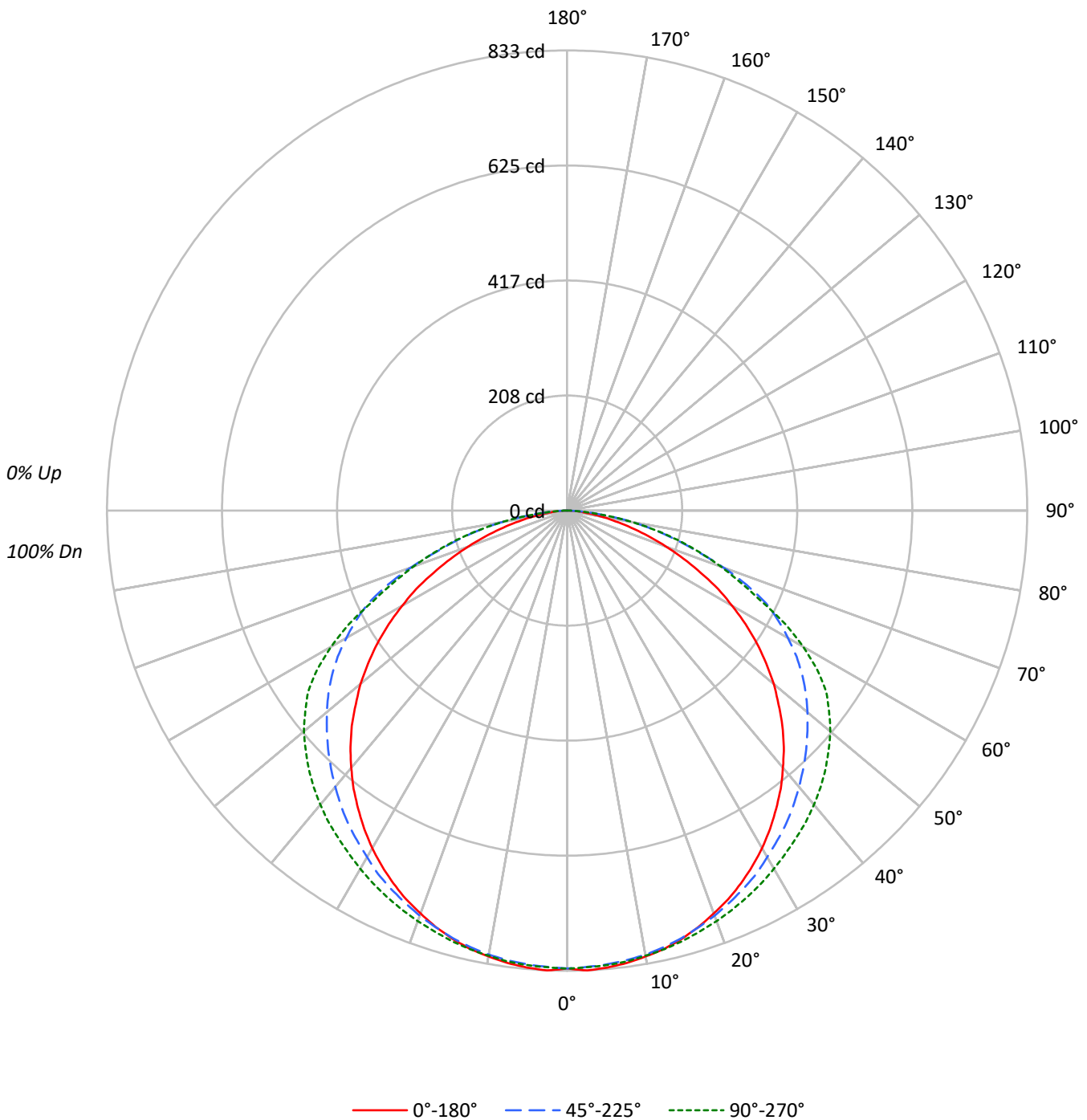
Input Watts (W): 25.41  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1115	1115	1115
5°	1122	1114	1116
10°	1120	1115	1118
15°	1118	1116	1124
20°	1111	1117	1133
25°	1105	1121	1146
30°	1097	1125	1163
35°	1083	1136	1188
40°	1068	1147	1221
45°	1049	1165	1259
50°	1022	1188	1302
55°	984	1219	1343
60°	928	1242	1329
65°	850	1265	1233
70°	749	1186	1163
75°	625	1064	1087
80°	494	926	921
85°	354	585	574



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	78.5	3.0
10°-20°	226.5	8.7
20°-30°	348.7	13.3
30°-40°	432.5	16.5
40°-50°	469.9	18.0
50°-60°	452.6	17.3
60°-70°	357.1	13.7
70°-80°	202.5	7.7
80°-90°	46.4	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°	653.7	25.0
0°-40°	1086.2	41.5
0°-60°	2008.7	76.8
0°-90°	2614.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2614.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	829	829	829	829	829	
5°	830	827	825	823	826	79
15°	802	800	801	802	807	226
25°	744	745	755	764	772	343
35°	659	668	692	712	723	413
45°	551	570	612	647	661	424
55°	420	458	520	558	573	374
65°	267	331	397	393	387	265
75°	120	191	205	208	209	129
85°	23	37	38	38	37	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	829.0	829.0	829.0	829.0	829.0
2.5°	833.2	829.0	826.8	825.4	827.5
5°	830.4	826.8	824.7	823.2	826.1
7.5°	826.1	822.5	821.1	819.6	823.2
10°	819.6	816.8	816.1	815.3	818.2
12.5°	812.5	809.6	809.6	810.3	813.2
15°	802.5	800.3	801.0	802.5	806.8
17.5°	790.3	788.1	791.0	793.9	798.9
20°	776.0	776.0	780.3	784.6	791.0
22.5°	761.7	761.7	768.1	775.3	781.7
25°	744.5	745.2	755.2	764.5	771.7
27.5°	725.9	728.0	741.6	752.4	760.9
30°	705.8	709.4	724.4	740.2	748.8
32.5°	683.6	688.6	708.0	727.3	735.9
35°	659.3	667.9	691.5	712.3	723.0
37.5°	635.0	644.3	672.9	697.2	710.1
40°	607.8	622.1	652.9	681.5	695.1
42.5°	580.6	595.6	632.8	665.0	679.3
45°	551.2	569.8	612.0	647.1	661.4
47.5°	519.0	543.3	589.9	627.8	642.1
50°	488.2	516.1	567.7	607.0	622.1
52.5°	453.8	486.8	544.8	584.8	597.7
55°	419.5	458.1	519.7	558.4	572.7
57.5°	383.0	426.6	492.5	528.3	536.9
60°	345.0	396.6	461.7	493.9	493.9
62.5°	308.5	363.6	430.9	444.5	446.0
65°	267.0	330.7	397.3	393.0	387.3
67.5°	228.4	298.5	351.5	338.6	339.3
70°	190.4	263.4	301.4	294.2	295.6
72.5°	153.9	226.9	248.4	251.3	251.3
75°	120.3	191.1	204.7	207.6	209.0
77.5°	89.5	153.2	162.5	164.6	163.2
80°	63.7	104.5	119.5	118.1	118.8
82.5°	40.1	67.3	75.9	77.3	75.2
85°	22.9	37.2	37.9	37.9	37.2
87.5°	7.9	11.5	12.2	11.5	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)