

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: P225685

Luminaire Tested: **24AC-LD5-31-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: P225685  
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-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: 2465.6 lumens  
Efficiency: N/A  
Efficacy: 97.1 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

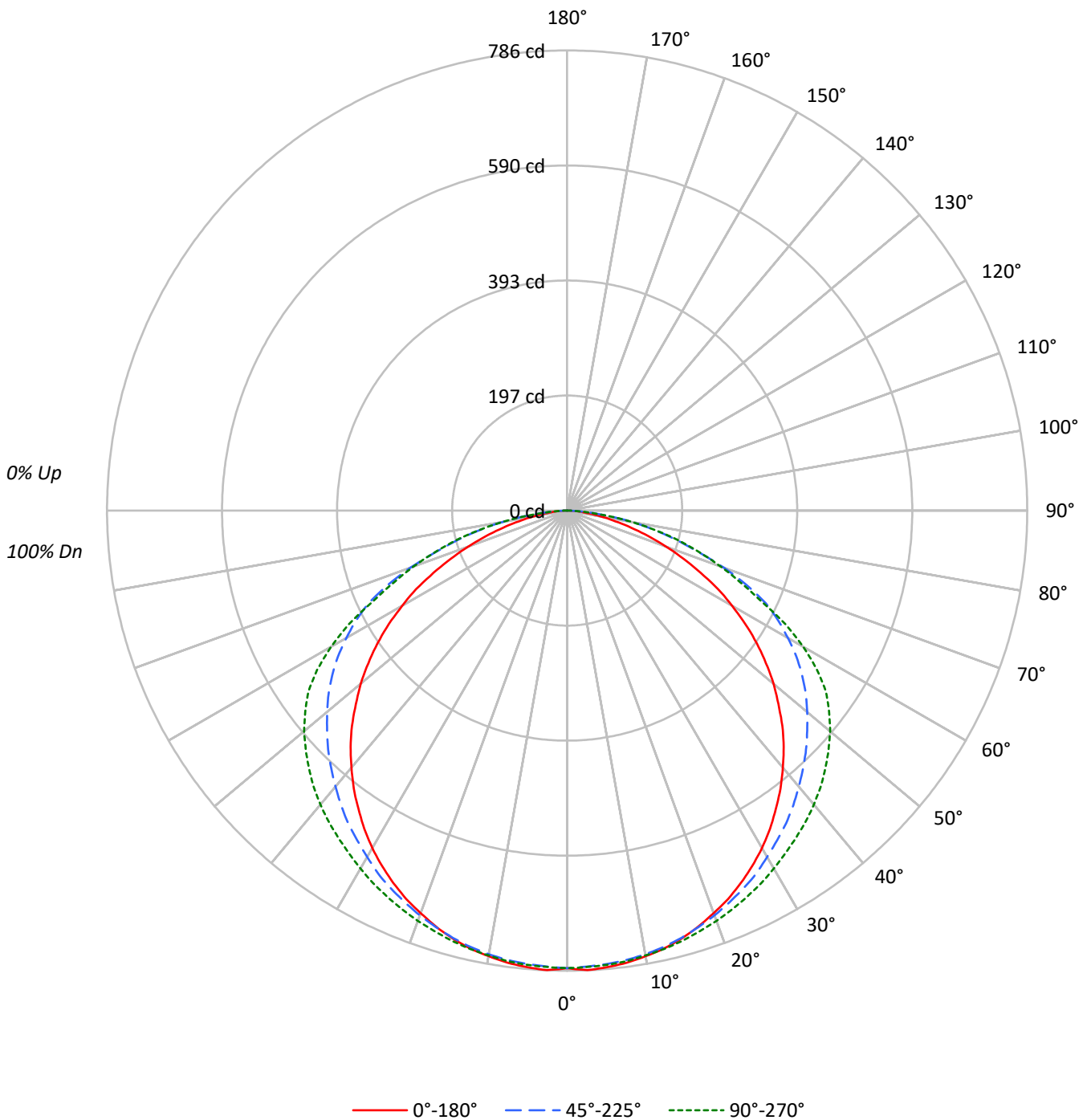
Input Watts (W): 25.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	1052	1052	1052
5°	1058	1050	1052
10°	1056	1051	1054
15°	1054	1052	1060
20°	1048	1054	1068
25°	1042	1057	1080
30°	1034	1061	1097
35°	1021	1071	1120
40°	1007	1081	1151
45°	989	1098	1187
50°	964	1120	1228
55°	928	1150	1267
60°	876	1172	1253
65°	802	1193	1163
70°	707	1118	1097
75°	590	1004	1025
80°	466	873	869
85°	333	553	542



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.1	3.0
10°-20°	213.6	8.7
20°-30°	328.8	13.3
30°-40°	407.8	16.5
40°-50°	443.1	18.0
50°-60°	426.8	17.3
60°-70°	336.8	13.7
70°-80°	190.9	7.7
80°-90°	43.8	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°	616.4	25.0
0°-40°	1024.2	41.5
0°-60°	1894.2	76.8
0°-90°	2465.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2465.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	782	782	782	782	782	
5°	783	780	778	776	779	74
15°	757	755	755	757	761	213
25°	702	703	712	721	728	323
35°	622	630	652	672	682	389
45°	520	537	577	610	624	400
55°	396	432	490	526	540	353
65°	252	312	375	371	365	250
75°	113	180	193	196	197	122
85°	22	35	36	36	35	26
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	781.7	781.7	781.7	781.7	781.7
2.5°	785.7	781.7	779.7	778.3	780.3
5°	783.0	779.7	777.6	776.3	779.0
7.5°	779.0	775.6	774.3	772.9	776.3
10°	772.9	770.2	769.5	768.9	771.6
12.5°	766.2	763.5	763.5	764.1	766.8
15°	756.7	754.7	755.4	756.7	760.8
17.5°	745.2	743.2	745.9	748.6	753.3
20°	731.7	731.7	735.8	739.8	745.9
22.5°	718.2	718.2	724.3	731.1	737.1
25°	702.0	702.7	712.2	720.9	727.7
27.5°	684.5	686.5	699.3	709.5	717.6
30°	665.6	669.0	683.1	698.0	706.1
32.5°	644.7	649.4	667.6	685.8	693.9
35°	621.7	629.8	652.1	671.7	681.8
37.5°	598.8	607.5	634.5	657.5	669.6
40°	573.1	586.6	615.6	642.6	655.5
42.5°	547.5	561.6	596.7	627.1	640.6
45°	519.8	537.3	577.2	610.2	623.7
47.5°	489.4	512.4	556.2	592.0	605.5
50°	460.4	486.7	535.3	572.4	586.6
52.5°	428.0	459.0	513.7	551.5	563.7
55°	395.6	432.0	490.1	526.5	540.0
57.5°	361.1	402.3	464.4	498.2	506.3
60°	325.4	374.0	435.4	465.8	465.8
62.5°	290.9	342.9	406.4	419.2	420.6
65°	251.8	311.9	374.6	370.6	365.2
67.5°	215.3	281.5	331.4	319.3	320.0
70°	179.6	248.4	284.2	277.4	278.8
72.5°	145.1	214.0	234.2	236.9	236.9
75°	113.4	180.2	193.1	195.8	197.1
77.5°	84.4	144.5	153.2	155.3	153.9
80°	60.1	98.6	112.7	111.4	112.1
82.5°	37.8	63.5	71.6	72.9	70.9
85°	21.6	35.1	35.8	35.8	35.1
87.5°	7.4	10.8	11.5	10.8	11.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)