

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: P229427

Luminaire Tested: **24ALNG-LD5-60-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229427  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36086)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24ALNG-LD5-60-UNV-L830-CD1-SVPD1-U  
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS AND SENSOR  
Light Source: (252)3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5628.0 lumens  
Efficiency: N/A  
Efficacy: 124.8 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.24 / 1.33  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

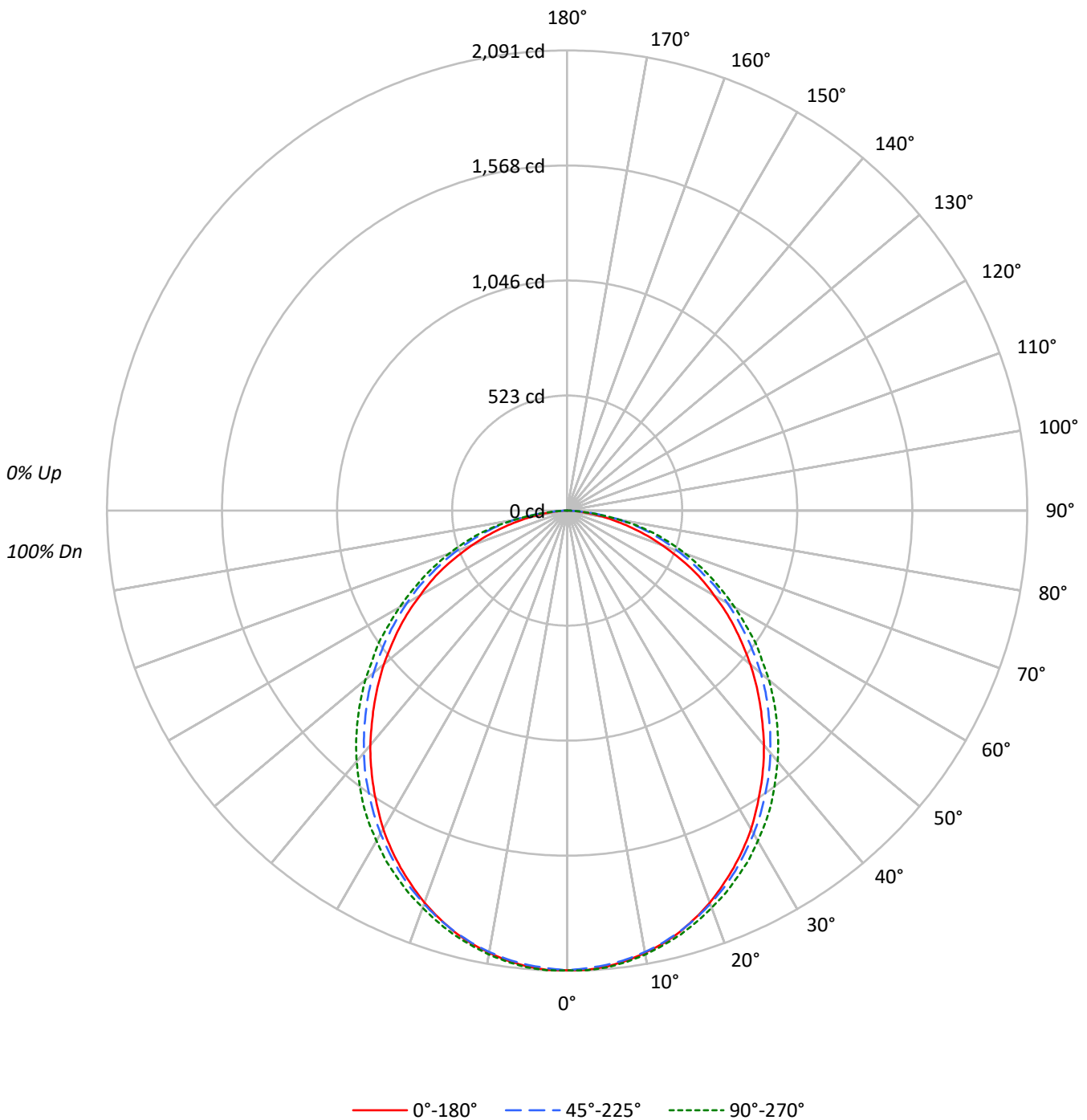
Input Watts (W): 45.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	75	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	64	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	50
5	76	63	54	48	74	62	54	47	60	53	47	58	51	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

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

	0°	45°	90°
0°	3200	3200	3200
5°	3197	3186	3203
10°	3174	3168	3185
15°	3142	3139	3162
20°	3090	3099	3130
25°	3026	3054	3101
30°	2956	2999	3065
35°	2869	2935	3028
40°	2782	2871	2975
45°	2684	2801	2917
50°	2591	2736	2851
55°	2487	2655	2789
60°	2364	2574	2694
65°	2252	2474	2622
70°	2060	2385	2551
75°	1801	2306	2481
80°	1506	2160	2143
85°	1044	1532	1369



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	197.2	3.5
10°-20°	559.5	9.9
20°-30°	834.1	14.8
30°-40°	984.7	17.5
40°-50°	998.1	17.7
50°-60°	885.2	15.7
60°-70°	671.4	11.9
70°-80°	397.7	7.1
80°-90°	100.3	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°	1590.8	28.3
0°-40°	2575.4	45.8
0°-60°	4458.7	79.2
0°-90°	5628.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5628.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2089	2089	2089	2089	2089	
5°	2080	2078	2072	2080	2083	197
15°	1981	1981	1980	1989	1994	558
25°	1790	1794	1807	1829	1835	824
35°	1534	1547	1570	1605	1620	960
45°	1239	1256	1293	1332	1347	956
55°	931	950	994	1032	1044	832
65°	622	640	683	712	724	612
75°	304	345	390	410	419	326
85°	59	89	87	80	78	76
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2089.0	2089.0	2089.0	2089.0	2089.0
2.5°	2089.0	2087.1	2081.6	2089.0	2090.8
5°	2079.7	2077.9	2072.3	2079.7	2083.4
7.5°	2063.0	2063.0	2057.5	2064.9	2068.6
10°	2040.8	2040.8	2037.0	2044.5	2048.2
12.5°	2014.8	2014.8	2011.1	2020.4	2022.2
15°	1981.4	1981.4	1979.5	1988.8	1994.4
17.5°	1940.6	1940.6	1944.3	1957.3	1959.1
20°	1896.0	1897.9	1901.6	1918.3	1920.2
22.5°	1844.1	1849.7	1857.1	1875.6	1881.2
25°	1790.3	1794.0	1807.0	1829.3	1834.8
27.5°	1732.8	1738.4	1751.3	1779.2	1788.4
30°	1671.6	1675.3	1695.7	1723.5	1732.8
32.5°	1602.9	1612.2	1634.5	1667.9	1679.0
35°	1534.3	1547.3	1569.5	1604.8	1619.6
37.5°	1463.8	1474.9	1506.5	1541.7	1552.8
40°	1391.4	1402.6	1436.0	1474.9	1487.9
42.5°	1313.5	1330.2	1365.5	1404.4	1419.3
45°	1239.3	1256.0	1293.1	1332.1	1346.9
47.5°	1163.2	1179.9	1222.6	1256.0	1272.7
50°	1087.2	1107.6	1148.4	1183.6	1196.6
52.5°	1007.4	1027.8	1070.5	1105.7	1115.0
55°	931.3	949.9	994.4	1031.5	1044.5
57.5°	853.4	873.8	916.5	953.6	957.3
60°	771.8	794.0	840.4	870.1	879.4
62.5°	699.4	718.0	768.1	792.2	797.8
65°	621.5	640.1	682.7	712.4	723.5
67.5°	538.0	564.0	608.5	638.2	645.6
70°	460.1	491.6	532.5	564.0	569.6
72.5°	382.2	415.6	462.0	487.9	493.5
75°	304.3	345.1	389.6	410.0	419.3
77.5°	235.6	274.6	319.1	337.7	335.8
80°	170.7	209.6	244.9	244.9	243.0
82.5°	109.5	148.4	167.0	161.4	157.7
85°	59.4	89.1	87.2	79.8	77.9
87.5°	24.1	29.7	22.3	16.7	13.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)