

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: P229364

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229364  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36066)  
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-U  
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS  
Light Source: (252)3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5786.0 lumens  
Efficiency: N/A  
Efficacy: 128.3 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

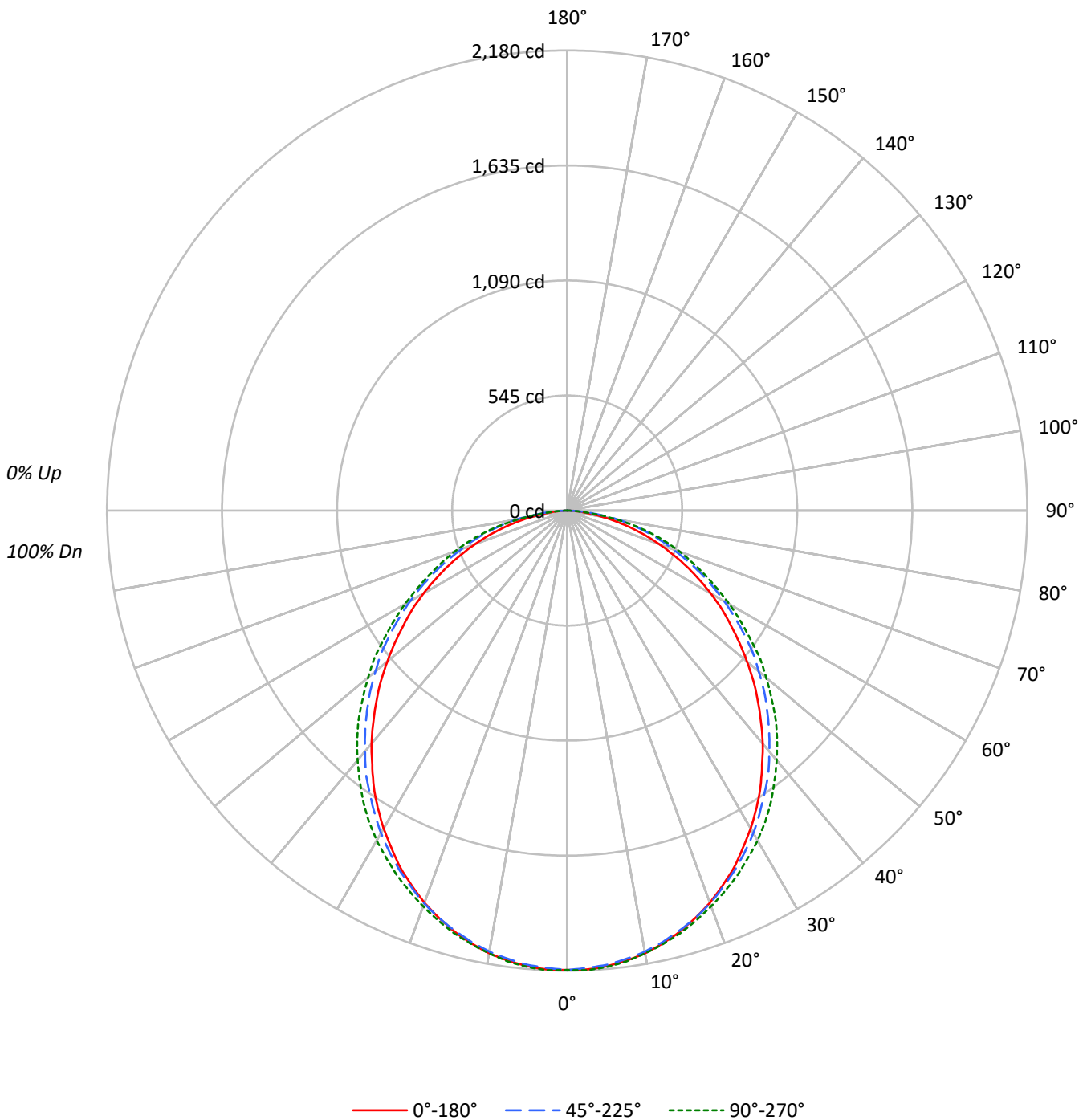
Input Watts (W): 45.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	70					70			
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	66	62	59					59			
4	83	71	62	56	81	70	62	55	67	60	54	65	59	54	63	57	53	51					51			
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	41	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34					34			
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

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

	0°	45°	90°
0°	3334	3334	3334
5°	3332	3322	3336
10°	3313	3300	3313
15°	3273	3265	3286
20°	3223	3229	3252
25°	3158	3177	3223
30°	3075	3120	3191
35°	2987	3050	3149
40°	2883	2979	3088
45°	2769	2904	3026
50°	2648	2824	2931
55°	2527	2737	2827
60°	2407	2633	2717
65°	2261	2517	2604
70°	2076	2385	2536
75°	1823	2287	2411
80°	1471	2136	2023
85°	1042	1409	1128



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.5	3.6
10°-20°	582.4	10.1
20°-30°	867.8	15.0
30°-40°	1023.7	17.7
40°-50°	1033.5	17.9
50°-60°	907.7	15.7
60°-70°	677.0	11.7
70°-80°	394.3	6.8
80°-90°	94.2	1.6
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°	1655.6	28.6
0°-40°	2679.3	46.3
0°-60°	4620.6	79.9
0°-90°	5786.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5786.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2176	2176	2176	2176	2176	
5°	2167	2165	2160	2167	2170	206
15°	2064	2063	2059	2069	2072	582
25°	1869	1870	1880	1901	1907	859
35°	1598	1607	1631	1670	1684	997
45°	1278	1298	1341	1381	1397	987
55°	946	975	1025	1057	1059	848
65°	624	650	694	715	719	616
75°	308	345	386	406	407	328
85°	59	87	80	67	64	74
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2176.5	2176.5	2176.5	2176.5	2176.5
2.5°	2176.5	2174.9	2168.5	2174.9	2179.7
5°	2166.9	2165.3	2160.5	2166.9	2170.1
7.5°	2150.9	2149.3	2142.8	2152.5	2154.1
10°	2130.0	2126.8	2122.0	2128.4	2130.0
12.5°	2099.5	2097.9	2093.1	2101.1	2102.7
15°	2064.3	2062.6	2059.4	2069.1	2072.3
17.5°	2022.6	2024.2	2022.6	2033.8	2035.4
20°	1977.6	1979.2	1980.8	1993.7	1995.3
22.5°	1923.1	1924.7	1929.5	1947.2	1952.0
25°	1868.6	1870.2	1879.8	1900.7	1907.1
27.5°	1802.8	1809.2	1823.7	1849.3	1855.7
30°	1738.7	1745.1	1764.3	1794.8	1804.4
32.5°	1669.7	1676.1	1698.6	1732.2	1746.7
35°	1597.5	1607.1	1631.2	1669.7	1684.1
37.5°	1517.3	1535.0	1567.0	1603.9	1613.6
40°	1441.9	1454.8	1490.0	1535.0	1544.6
42.5°	1360.1	1377.8	1416.3	1461.2	1472.4
45°	1278.3	1297.6	1340.9	1381.0	1397.0
47.5°	1198.1	1219.0	1265.5	1307.2	1312.0
50°	1111.5	1137.2	1185.3	1225.4	1230.2
52.5°	1028.1	1058.6	1109.9	1142.0	1153.2
55°	946.3	975.2	1024.9	1057.0	1058.6
57.5°	869.3	893.4	941.5	968.8	973.6
60°	785.9	810.0	859.7	882.2	887.0
62.5°	702.5	728.2	776.3	798.8	802.0
65°	623.9	649.6	694.5	715.4	718.6
67.5°	540.5	572.6	611.1	638.4	641.6
70°	463.5	495.6	532.5	559.8	566.2
72.5°	386.5	423.4	460.3	481.2	489.2
75°	308.0	344.8	386.5	405.8	407.4
77.5°	235.8	271.1	314.4	325.6	320.8
80°	166.8	205.3	242.2	240.6	229.4
82.5°	105.9	142.7	157.2	147.6	141.1
85°	59.3	86.6	80.2	67.4	64.2
87.5°	24.1	25.7	19.2	12.8	11.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)