

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: P229447

Luminaire Tested: **24ALNG-LD5-60-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229447  
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-L840-CD1-SVPD1-U  
Description: METALUX 2X4 ARCLINE LED TROFFER WITH CURVED LENS AND SENSOR  
Light Source: (252)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5863.0 lumens  
Efficiency: N/A  
Efficacy: 130.0 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

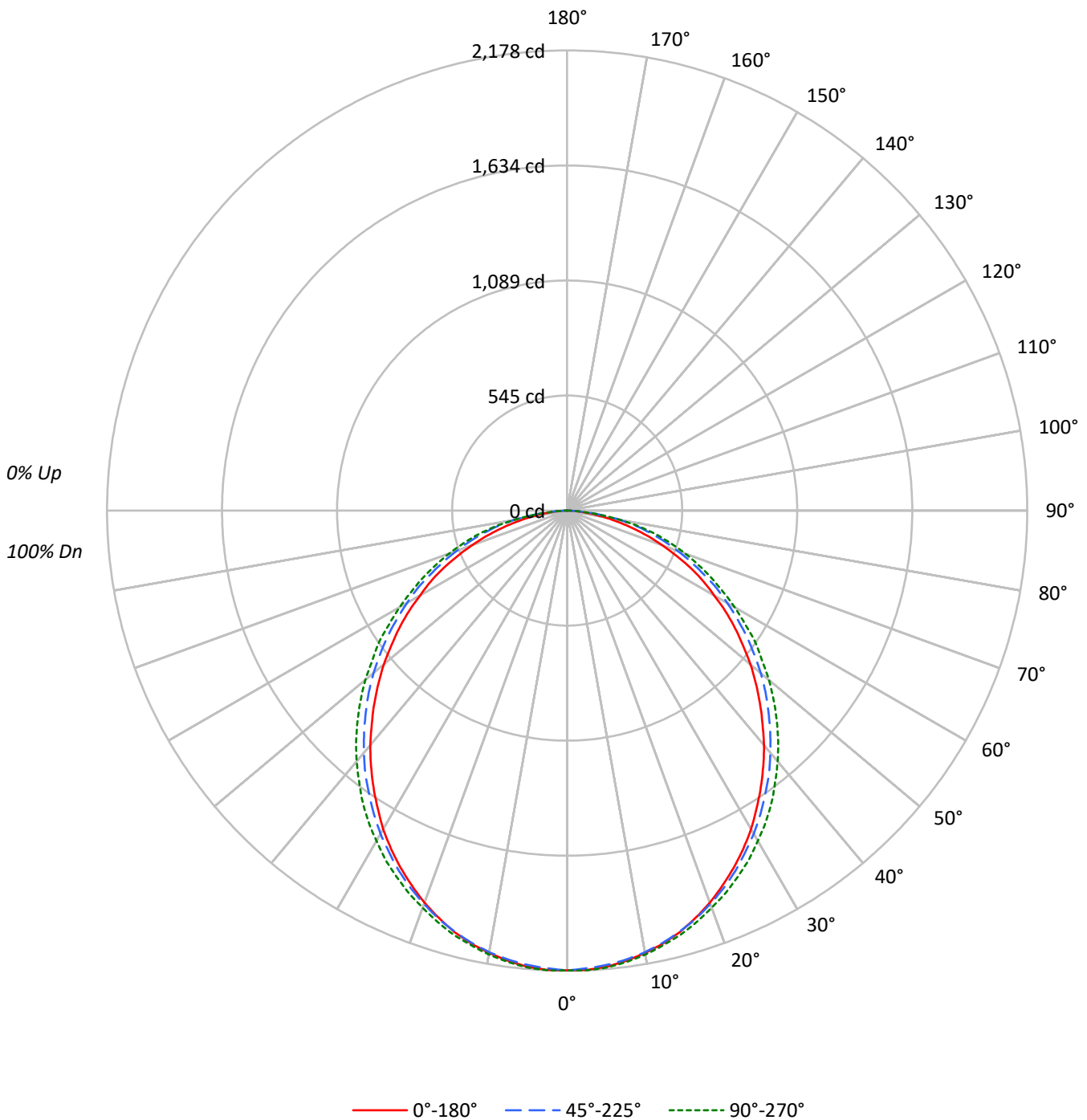
Input Watts (W): 45.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3333	3333	3333
5°	3331	3319	3337
10°	3306	3300	3318
15°	3273	3270	3295
20°	3219	3229	3260
25°	3152	3181	3230
30°	3080	3124	3192
35°	2988	3057	3155
40°	2898	2991	3099
45°	2796	2918	3039
50°	2699	2851	2970
55°	2591	2766	2906
60°	2463	2682	2806
65°	2347	2577	2732
70°	2146	2484	2657
75°	1876	2402	2585
80°	1568	2250	2233
85°	1086	1596	1427



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.4	3.5
10°-20°	582.9	9.9
20°-30°	868.9	14.8
30°-40°	1025.8	17.5
40°-50°	1039.8	17.7
50°-60°	922.1	15.7
60°-70°	699.4	11.9
70°-80°	414.2	7.1
80°-90°	104.5	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°	1657.2	28.3
0°-40°	2683.0	45.8
0°-60°	4644.9	79.2
0°-90°	5863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5863.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2176	2176	2176	2176	2176	
5°	2167	2165	2159	2167	2170	205
15°	2064	2064	2062	2072	2078	581
25°	1865	1869	1882	1906	1911	859
35°	1598	1612	1635	1672	1687	1000
45°	1291	1308	1347	1388	1403	996
55°	970	990	1036	1075	1088	867
65°	648	667	711	742	754	638
75°	317	360	406	427	437	340
85°	62	93	91	83	81	79
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2176.2	2176.2	2176.2	2176.2	2176.2
2.5°	2176.2	2174.3	2168.5	2176.2	2178.2
5°	2166.6	2164.6	2158.8	2166.6	2170.4
7.5°	2149.2	2149.2	2143.4	2151.1	2155.0
10°	2126.0	2126.0	2122.1	2129.8	2133.7
12.5°	2098.9	2098.9	2095.0	2104.7	2106.6
15°	2064.1	2064.1	2062.2	2071.9	2077.7
17.5°	2021.6	2021.6	2025.5	2039.0	2040.9
20°	1975.2	1977.2	1981.0	1998.4	2000.3
22.5°	1921.1	1926.9	1934.6	1954.0	1959.8
25°	1865.1	1868.9	1882.5	1905.6	1911.4
27.5°	1805.1	1810.9	1824.5	1853.5	1863.1
30°	1741.4	1745.2	1766.5	1795.5	1805.1
32.5°	1669.9	1679.5	1702.7	1737.5	1749.1
35°	1598.3	1611.9	1635.1	1671.8	1687.2
37.5°	1524.9	1536.5	1569.4	1606.1	1617.7
40°	1449.5	1461.1	1495.9	1536.5	1550.0
42.5°	1368.4	1385.7	1422.5	1463.1	1478.5
45°	1291.0	1308.4	1347.1	1387.7	1403.1
47.5°	1211.8	1229.2	1273.6	1308.4	1325.8
50°	1132.6	1153.8	1196.3	1233.1	1246.6
52.5°	1049.5	1070.7	1115.2	1151.9	1161.6
55°	970.2	989.5	1035.9	1074.6	1088.1
57.5°	889.0	910.3	954.8	993.4	997.3
60°	804.0	827.2	875.5	906.4	916.1
62.5°	728.6	748.0	800.1	825.3	831.1
65°	647.5	666.8	711.2	742.2	753.8
67.5°	560.5	587.5	633.9	664.8	672.6
70°	479.3	512.2	554.7	587.5	593.3
72.5°	398.1	432.9	481.2	508.3	514.1
75°	317.0	359.5	405.9	427.1	436.8
77.5°	245.5	286.0	332.4	351.8	349.8
80°	177.8	218.4	255.1	255.1	253.2
82.5°	114.0	154.6	173.9	168.1	164.3
85°	61.8	92.8	90.8	83.1	81.2
87.5°	25.1	30.9	23.2	17.4	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)