

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: P229449

Luminaire Tested: **24ALNG-LD5-74-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229449  
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-LD5-74-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: 7319.0 lumens  
Efficiency: N/A  
Efficacy: 120.1 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

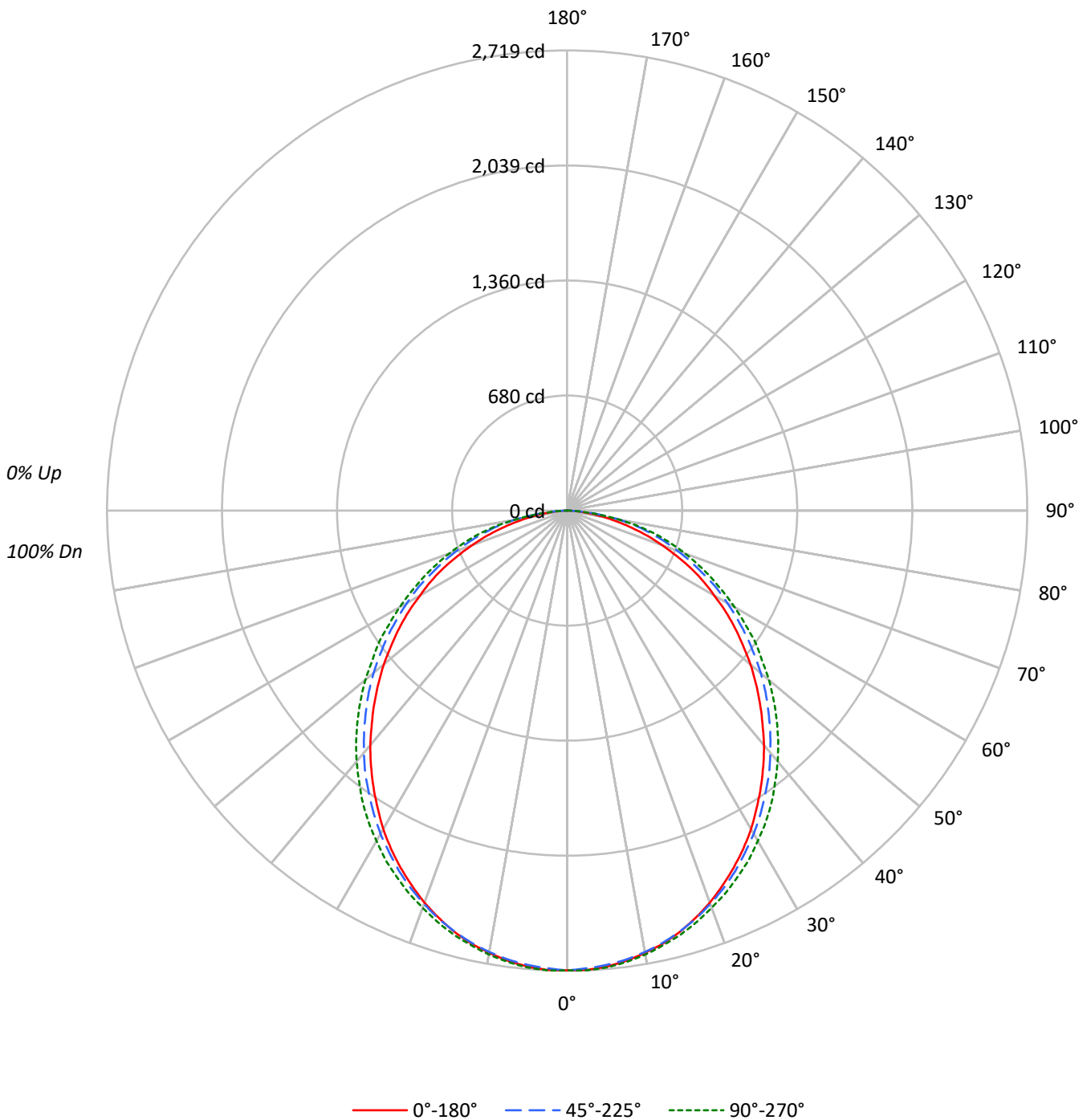
Input Watts (W): 60.94  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4161	4161	4161
5°	4158	4143	4166
10°	4127	4120	4143
15°	4086	4082	4113
20°	4019	4031	4070
25°	3935	3971	4032
30°	3845	3900	3985
35°	3731	3816	3938
40°	3618	3734	3869
45°	3491	3642	3794
50°	3369	3558	3708
55°	3234	3453	3627
60°	3075	3348	3503
65°	2929	3218	3410
70°	2679	3101	3317
75°	2342	2999	3227
80°	1958	2809	2788
85°	1357	1993	1780



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	256.4	3.5
10°-20°	727.6	9.9
20°-30°	1084.7	14.8
30°-40°	1280.5	17.5
40°-50°	1298.0	17.7
50°-60°	1151.1	15.7
60°-70°	873.1	11.9
70°-80°	517.1	7.1
80°-90°	130.4	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°	2068.7	28.3
0°-40°	3349.2	45.8
0°-60°	5798.4	79.2
0°-90°	7319.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7319.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2717	2717	2717	2717	2717	
5°	2705	2702	2695	2705	2709	257
15°	2577	2577	2574	2586	2594	726
25°	2328	2333	2350	2379	2386	1072
35°	1995	2012	2041	2087	2106	1248
45°	1612	1633	1682	1732	1752	1244
55°	1211	1235	1293	1341	1358	1082
65°	808	832	888	926	941	796
75°	396	449	507	533	545	424
85°	77	116	113	104	101	98
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2716.7	2716.7	2716.7	2716.7	2716.7
2.5°	2716.7	2714.2	2707.0	2716.7	2719.1
5°	2704.6	2702.2	2694.9	2704.6	2709.4
7.5°	2682.9	2682.9	2675.6	2685.3	2690.1
10°	2653.9	2653.9	2649.1	2658.8	2663.6
12.5°	2620.2	2620.2	2615.3	2627.4	2629.8
15°	2576.7	2576.7	2574.3	2586.4	2593.6
17.5°	2523.6	2523.6	2528.5	2545.4	2547.8
20°	2465.7	2468.2	2473.0	2494.7	2497.1
22.5°	2398.2	2405.4	2415.1	2439.2	2446.4
25°	2328.2	2333.0	2349.9	2378.9	2386.1
27.5°	2253.4	2260.7	2277.6	2313.7	2325.8
30°	2173.8	2178.6	2205.2	2241.4	2253.4
32.5°	2084.5	2096.6	2125.6	2169.0	2183.5
35°	1995.3	2012.2	2041.1	2087.0	2106.3
37.5°	1903.6	1918.1	1959.1	2004.9	2019.4
40°	1809.5	1824.0	1867.4	1918.1	1935.0
42.5°	1708.2	1729.9	1775.7	1826.4	1845.7
45°	1611.7	1633.4	1681.6	1732.3	1751.6
47.5°	1512.7	1534.5	1589.9	1633.4	1655.1
50°	1413.8	1440.4	1493.4	1539.3	1556.2
52.5°	1310.1	1336.6	1392.1	1437.9	1450.0
55°	1211.2	1235.3	1293.2	1341.4	1358.3
57.5°	1109.8	1136.4	1191.9	1240.1	1244.9
60°	1003.7	1032.6	1092.9	1131.5	1143.6
62.5°	909.6	933.7	998.8	1030.2	1037.4
65°	808.2	832.4	887.9	926.5	940.9
67.5°	699.7	733.4	791.4	830.0	839.6
70°	598.3	639.4	692.4	733.4	740.7
72.5°	497.0	540.4	600.8	634.5	641.8
75°	395.7	448.8	506.7	533.2	545.3
77.5°	306.4	357.1	415.0	439.1	436.7
80°	222.0	272.6	318.5	318.5	316.1
82.5°	142.3	193.0	217.1	209.9	205.1
85°	77.2	115.8	113.4	103.7	101.3
87.5°	31.4	38.6	29.0	21.7	16.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)