

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: P229865

Luminaire Tested: **24RLN-LD5-80-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229865  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36062)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-80-UNV-L840-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR  
Light Source: (252)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7958.0 lumens  
Efficiency: N/A  
Efficacy: 118.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

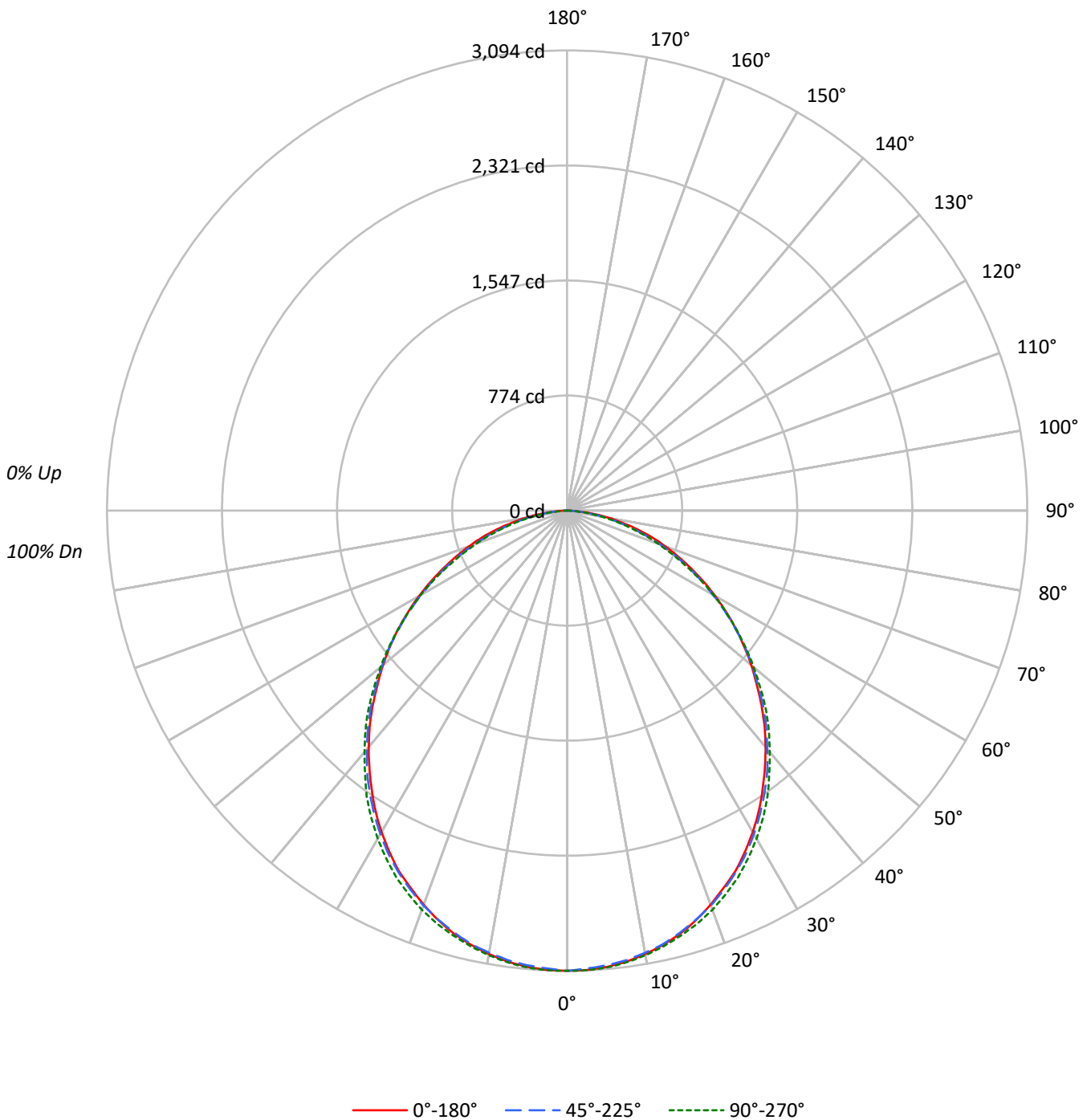
Input Watts (W): 67.45  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	76	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	31	42	35	30	41	35	30	28
10	54	41	33	28	53	40	33	28	39	33	28	39	32	28	38	32	28	26

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

	0°	45°	90°
0°	4739	4739	4739
5°	4734	4718	4742
10°	4710	4694	4722
15°	4669	4657	4690
20°	4597	4606	4655
25°	4523	4535	4595
30°	4415	4442	4504
35°	4284	4326	4393
40°	4150	4185	4236
45°	4002	4040	4095
50°	3853	3871	3901
55°	3702	3681	3695
60°	3524	3470	3485
65°	3325	3251	3196
70°	3144	2974	2905
75°	2894	2639	2549
80°	2548	2235	2101
85°	2003	1559	1158



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	292.1	3.7
10°-20°	830.4	10.4
20°-30°	1237.7	15.6
30°-40°	1446.9	18.2
40°-50°	1436.9	18.1
50°-60°	1233.8	15.5
60°-70°	888.8	11.2
70°-80°	478.6	6.0
80°-90°	112.8	1.4
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°	2360.1	29.7
0°-40°	3807.0	47.8
0°-60°	6477.8	81.4
0°-90°	7958.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7958.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3094	3094	3094	3094	3094	
5°	3079	3076	3069	3079	3084	292
15°	2945	2937	2937	2955	2957	829
25°	2676	2666	2684	2712	2719	1230
35°	2291	2288	2314	2339	2349	1433
45°	1847	1842	1865	1880	1890	1425
55°	1386	1374	1379	1386	1384	1238
65°	917	902	897	890	882	911
75°	489	459	446	433	431	518
85°	114	104	89	71	66	137
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3094.2	3094.2	3094.2	3094.2	3094.2
2.5°	3091.7	3089.2	3081.6	3091.7	3094.2
5°	3079.0	3076.5	3068.9	3079.0	3084.1
7.5°	3058.7	3053.7	3048.6	3058.7	3063.8
10°	3028.3	3023.3	3018.2	3030.9	3035.9
12.5°	2990.3	2985.3	2985.3	2995.4	3000.5
15°	2944.7	2937.1	2937.1	2954.8	2957.4
17.5°	2886.4	2881.4	2883.9	2904.2	2911.8
20°	2820.5	2818.0	2825.6	2848.4	2856.0
22.5°	2747.0	2744.5	2757.2	2785.1	2790.1
25°	2676.1	2665.9	2683.7	2711.6	2719.2
27.5°	2587.4	2579.8	2602.6	2627.9	2635.5
30°	2496.2	2488.6	2511.4	2539.2	2546.8
32.5°	2397.3	2392.3	2415.1	2442.9	2450.5
35°	2290.9	2288.4	2313.7	2339.0	2349.2
37.5°	2184.5	2181.9	2209.8	2230.1	2232.6
40°	2075.5	2070.4	2093.2	2116.0	2118.6
42.5°	1964.0	1956.4	1981.7	1999.5	2007.1
45°	1847.4	1842.3	1865.2	1880.4	1890.5
47.5°	1728.3	1728.3	1741.0	1758.7	1761.2
50°	1616.8	1609.2	1624.4	1634.5	1637.1
52.5°	1500.2	1492.6	1505.3	1507.8	1512.9
55°	1386.2	1373.5	1378.6	1386.2	1383.7
57.5°	1267.1	1246.8	1256.9	1256.9	1262.0
60°	1150.5	1132.8	1132.8	1132.8	1137.8
62.5°	1033.9	1016.2	1016.2	1013.7	1011.1
65°	917.4	902.2	897.1	889.5	881.9
67.5°	805.9	788.1	778.0	767.9	760.3
70°	702.0	671.6	664.0	648.7	648.7
72.5°	598.1	567.7	552.4	542.3	539.8
75°	489.1	458.7	446.0	433.3	430.8
77.5°	382.7	362.4	342.1	332.0	326.9
80°	288.9	271.2	253.4	235.7	238.2
82.5°	197.7	179.9	167.3	152.1	147.0
85°	114.0	103.9	88.7	71.0	65.9
87.5°	48.1	35.5	25.3	25.3	25.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)