

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: P229864

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229864  
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-LD5-74-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: 7342.0 lumens  
Efficiency: N/A  
Efficacy: 119.2 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

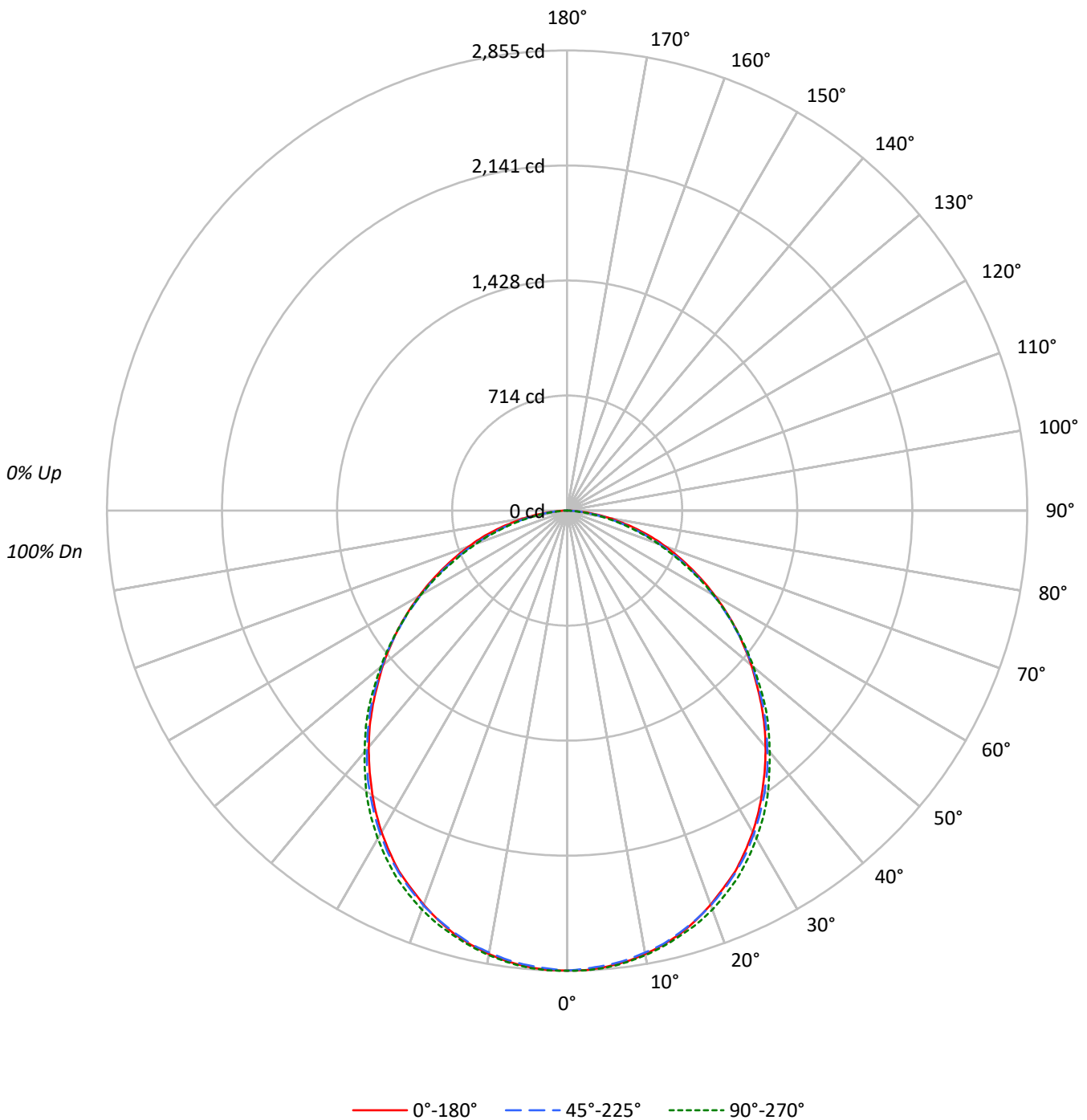
Input Watts (W): 61.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4372	4372	4372
5°	4368	4353	4375
10°	4345	4331	4356
15°	4308	4297	4327
20°	4241	4249	4295
25°	4172	4184	4240
30°	4073	4098	4156
35°	3952	3991	4052
40°	3829	3861	3908
45°	3692	3727	3778
50°	3554	3571	3599
55°	3415	3396	3409
60°	3252	3201	3216
65°	3068	3000	2949
70°	2900	2743	2680
75°	2670	2435	2352
80°	2351	2062	1939
85°	1849	1438	1068



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	269.5	3.7
10°-20°	766.1	10.4
20°-30°	1141.9	15.6
30°-40°	1334.9	18.2
40°-50°	1325.6	18.1
50°-60°	1138.4	15.5
60°-70°	820.0	11.2
70°-80°	441.5	6.0
80°-90°	104.1	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°	2177.4	29.7
0°-40°	3512.4	47.8
0°-60°	5976.4	81.4
0°-90°	7342.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7342.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2855	2855	2855	2855	2855	
5°	2841	2838	2831	2841	2845	270
15°	2717	2710	2710	2726	2728	765
25°	2469	2460	2476	2502	2509	1135
35°	2114	2111	2135	2158	2167	1322
45°	1704	1700	1721	1735	1744	1315
55°	1279	1267	1272	1279	1277	1142
65°	846	832	828	821	814	841
75°	451	423	412	400	398	478
85°	105	96	82	66	61	127
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2854.7	2854.7	2854.7	2854.7	2854.7
2.5°	2852.4	2850.0	2843.0	2852.4	2854.7
5°	2840.7	2838.3	2831.3	2840.7	2845.4
7.5°	2822.0	2817.3	2812.6	2822.0	2826.7
10°	2793.9	2789.2	2784.6	2796.3	2800.9
12.5°	2758.9	2754.2	2754.2	2763.5	2768.2
15°	2716.8	2709.8	2709.8	2726.1	2728.5
17.5°	2663.0	2658.3	2660.7	2679.4	2686.4
20°	2602.2	2599.9	2606.9	2627.9	2634.9
22.5°	2534.4	2532.1	2543.8	2569.5	2574.2
25°	2468.9	2459.6	2476.0	2501.7	2508.7
27.5°	2387.1	2380.1	2401.1	2424.5	2431.5
30°	2302.9	2295.9	2317.0	2342.7	2349.7
32.5°	2211.8	2207.1	2228.1	2253.8	2260.9
35°	2113.6	2111.2	2134.6	2158.0	2167.3
37.5°	2015.4	2013.0	2038.7	2057.5	2059.8
40°	1914.8	1910.2	1931.2	1952.2	1954.6
42.5°	1812.0	1804.9	1828.3	1844.7	1851.7
45°	1704.4	1699.7	1720.8	1734.8	1744.2
47.5°	1594.5	1594.5	1606.2	1622.6	1624.9
50°	1491.7	1484.6	1498.7	1508.0	1510.4
52.5°	1384.1	1377.1	1388.8	1391.1	1395.8
55°	1278.9	1267.2	1271.9	1278.9	1276.6
57.5°	1169.0	1150.3	1159.7	1159.7	1164.3
60°	1061.5	1045.1	1045.1	1045.1	1049.8
62.5°	953.9	937.5	937.5	935.2	932.9
65°	846.4	832.3	827.7	820.6	813.6
67.5°	743.5	727.1	717.8	708.4	701.4
70°	647.6	619.6	612.6	598.5	598.5
72.5°	551.8	523.7	509.7	500.3	498.0
75°	451.2	423.2	411.5	399.8	397.5
77.5°	353.0	334.3	315.6	306.3	301.6
80°	266.5	250.2	233.8	217.4	219.8
82.5°	182.4	166.0	154.3	140.3	135.6
85°	105.2	95.9	81.8	65.5	60.8
87.5°	44.4	32.7	23.4	23.4	23.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)