

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: P229843

Luminaire Tested: **24RLN-LD5-67-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229843  
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-LD5-67-UNV-L830-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR  
Light Source: (252)3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6405.0 lumens  
Efficiency: N/A  
Efficacy: 118.8 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

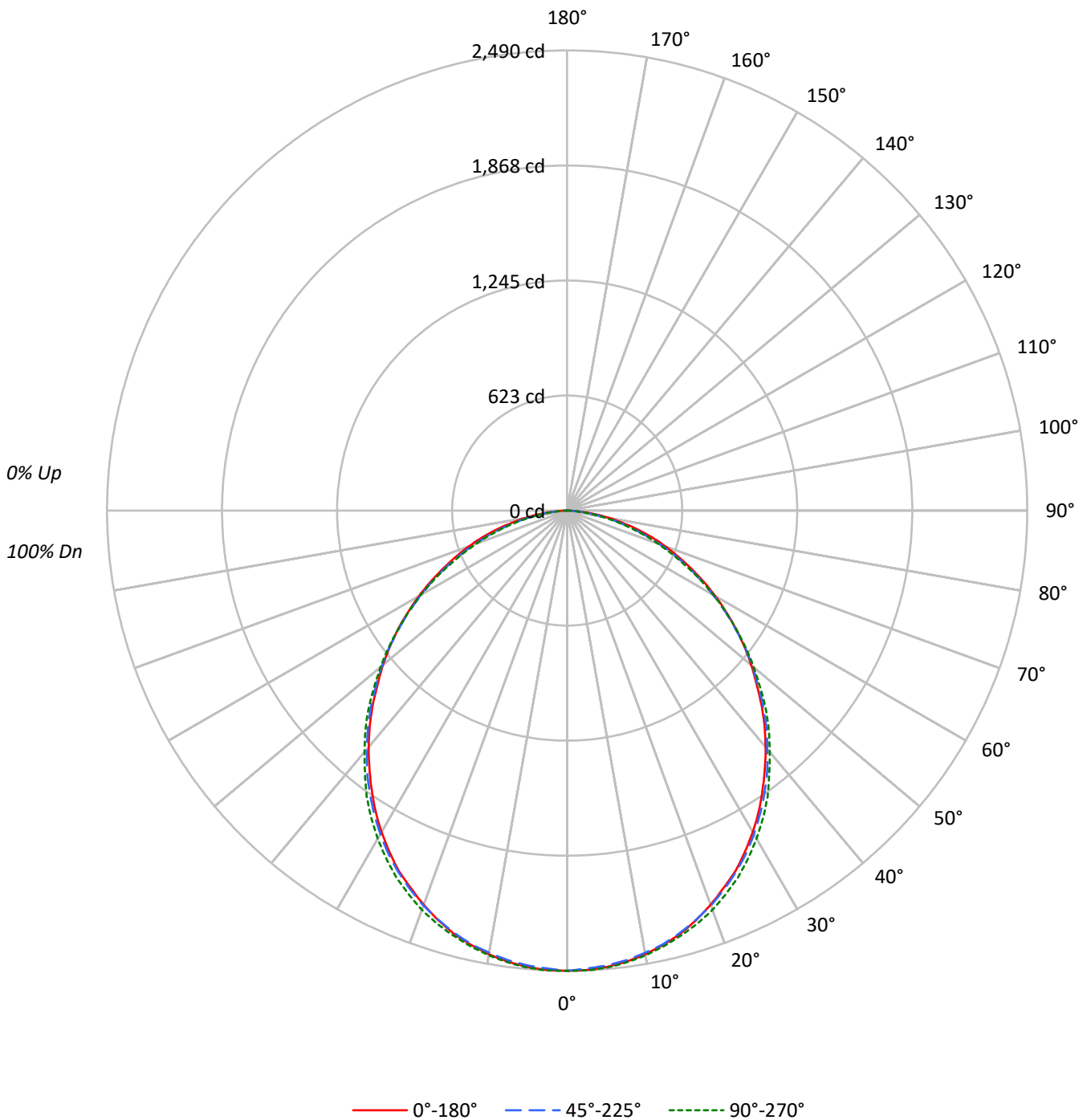
Input Watts (W): 53.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3814	3814	3814
5°	3810	3798	3816
10°	3791	3778	3800
15°	3758	3748	3774
20°	3700	3707	3747
25°	3640	3650	3699
30°	3553	3575	3625
35°	3448	3482	3535
40°	3340	3368	3409
45°	3221	3252	3296
50°	3101	3115	3140
55°	2979	2963	2974
60°	2837	2793	2805
65°	2676	2617	2572
70°	2530	2393	2338
75°	2329	2125	2052
80°	2051	1799	1691
85°	1613	1255	931



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	235.1	3.7
10°-20°	668.3	10.4
20°-30°	996.1	15.6
30°-40°	1164.6	18.2
40°-50°	1156.5	18.1
50°-60°	993.1	15.5
60°-70°	715.4	11.2
70°-80°	385.2	6.0
80°-90°	90.8	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°	1899.5	29.7
0°-40°	3064.1	47.8
0°-60°	5213.6	81.4
0°-90°	6405.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6405.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2490	2490	2490	2490	2490	
5°	2478	2476	2470	2478	2482	235
15°	2370	2364	2364	2378	2380	668
25°	2154	2146	2160	2182	2188	990
35°	1844	1842	1862	1883	1891	1153
45°	1487	1483	1501	1513	1522	1147
55°	1116	1106	1110	1116	1114	996
65°	738	726	722	716	710	733
75°	394	369	359	349	347	417
85°	92	84	71	57	53	110
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2490.4	2490.4	2490.4	2490.4	2490.4
2.5°	2488.3	2486.3	2480.2	2488.3	2490.4
5°	2478.2	2476.1	2470.0	2478.2	2482.2
7.5°	2461.8	2457.8	2453.7	2461.8	2465.9
10°	2437.4	2433.3	2429.2	2439.4	2443.5
12.5°	2406.8	2402.7	2402.7	2410.8	2414.9
15°	2370.1	2363.9	2363.9	2378.2	2380.2
17.5°	2323.1	2319.1	2321.1	2337.4	2343.5
20°	2270.1	2268.1	2274.2	2292.5	2298.7
22.5°	2211.0	2208.9	2219.1	2241.6	2245.6
25°	2153.8	2145.7	2160.0	2182.4	2188.5
27.5°	2082.5	2076.3	2094.7	2115.1	2121.2
30°	2009.0	2002.9	2021.3	2043.7	2049.8
32.5°	1929.5	1925.4	1943.8	1966.2	1972.3
35°	1843.8	1841.8	1862.2	1882.6	1890.7
37.5°	1758.2	1756.1	1778.6	1794.9	1796.9
40°	1670.5	1666.4	1684.7	1703.1	1705.1
42.5°	1580.7	1574.6	1595.0	1609.3	1615.4
45°	1486.9	1482.8	1501.2	1513.4	1521.6
47.5°	1391.0	1391.0	1401.2	1415.5	1417.5
50°	1301.3	1295.2	1307.4	1315.6	1317.6
52.5°	1207.5	1201.3	1211.5	1213.6	1217.7
55°	1115.7	1105.5	1109.6	1115.7	1113.6
57.5°	1019.8	1003.5	1011.7	1011.7	1015.7
60°	926.0	911.7	911.7	911.7	915.8
62.5°	832.2	817.9	817.9	815.9	813.8
65°	738.3	726.1	722.0	715.9	709.8
67.5°	648.6	634.3	626.2	618.0	611.9
70°	565.0	540.5	534.4	522.1	522.1
72.5°	481.4	456.9	444.6	436.5	434.4
75°	393.6	369.2	359.0	348.8	346.7
77.5°	308.0	291.7	275.4	267.2	263.1
80°	232.5	218.2	204.0	189.7	191.7
82.5°	159.1	144.8	134.6	122.4	118.3
85°	91.8	83.6	71.4	57.1	53.0
87.5°	38.8	28.6	20.4	20.4	20.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)