

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: P229852

Luminaire Tested: **24RLN-LD5-60-UNV-L835-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229852  
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-LD5-60-UNV-L835-CD1-SVPD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH SENSOR  
Light Source: (252)3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5925.0 lumens  
Efficiency: N/A  
Efficacy: 124.2 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

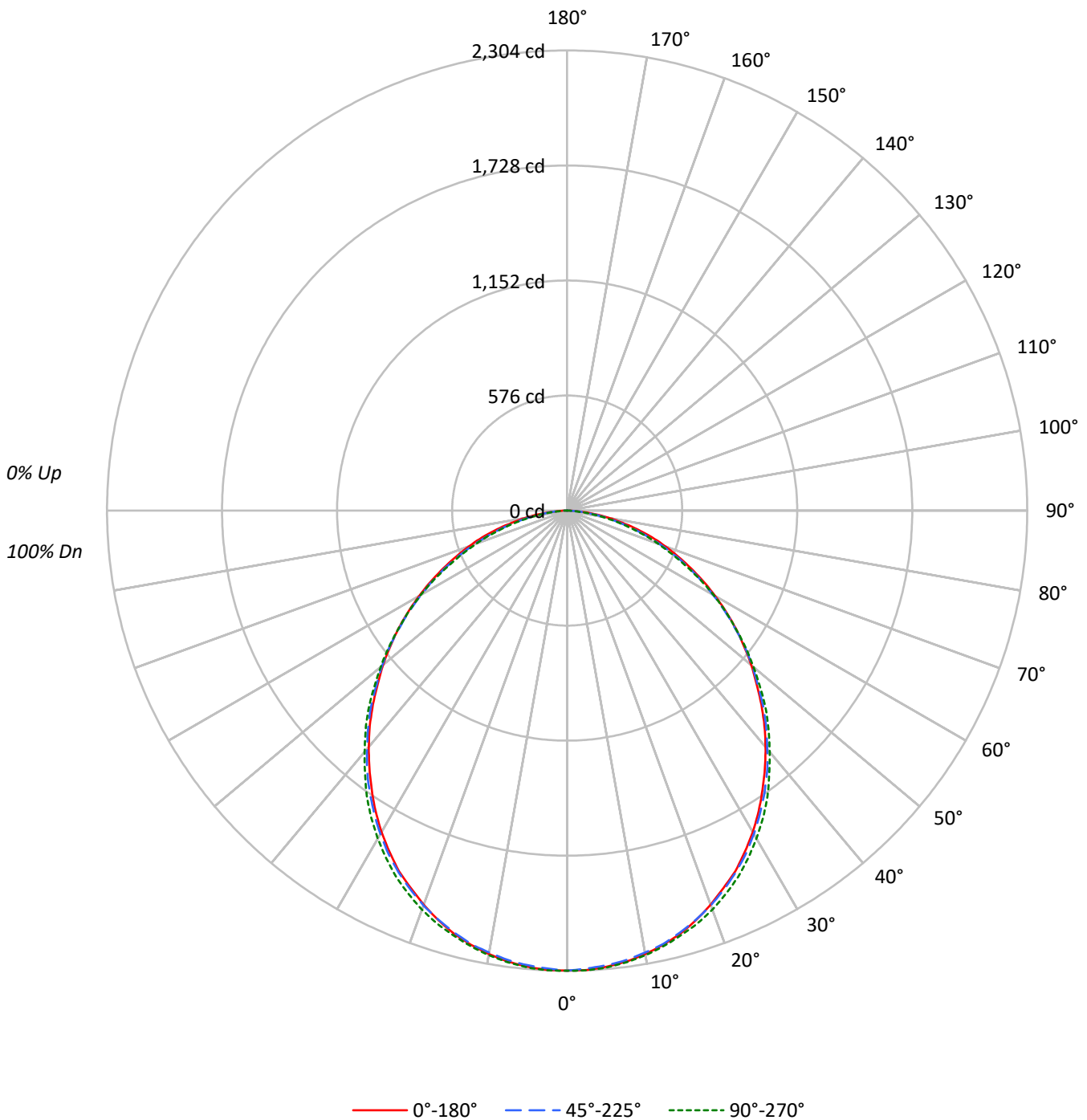
Input Watts (W): 47.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3529	3529	3529
5°	3525	3513	3530
10°	3507	3495	3516
15°	3476	3468	3492
20°	3423	3429	3466
25°	3367	3377	3421
30°	3287	3307	3354
35°	3189	3221	3270
40°	3090	3116	3154
45°	2979	3008	3049
50°	2868	2882	2904
55°	2756	2741	2751
60°	2624	2584	2595
65°	2475	2421	2380
70°	2340	2214	2163
75°	2155	1965	1898
80°	1897	1664	1565
85°	1492	1160	863



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	217.5	3.7
10°-20°	618.2	10.4
20°-30°	921.5	15.6
30°-40°	1077.3	18.2
40°-50°	1069.8	18.1
50°-60°	918.6	15.5
60°-70°	661.8	11.2
70°-80°	356.3	6.0
80°-90°	84.0	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°	1757.2	29.7
0°-40°	2834.5	47.8
0°-60°	4822.9	81.4
0°-90°	5925.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5925.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2304	2304	2304	2304	2304	
5°	2292	2290	2285	2292	2296	218
15°	2192	2187	2187	2200	2202	618
25°	1992	1985	1998	2019	2024	916
35°	1706	1704	1723	1742	1749	1067
45°	1376	1372	1389	1400	1408	1061
55°	1032	1023	1026	1032	1030	922
65°	683	672	668	662	657	678
75°	364	342	332	323	321	386
85°	85	77	66	53	49	102
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2303.8	2303.8	2303.8	2303.8	2303.8
2.5°	2301.9	2300.0	2294.3	2301.9	2303.8
5°	2292.4	2290.5	2284.9	2292.4	2296.2
7.5°	2277.3	2273.6	2269.8	2277.3	2281.1
10°	2254.7	2250.9	2247.2	2256.6	2260.4
12.5°	2226.4	2222.6	2222.6	2230.2	2233.9
15°	2192.4	2186.8	2186.8	2200.0	2201.9
17.5°	2149.0	2145.3	2147.2	2162.2	2167.9
20°	2100.0	2098.1	2103.8	2120.7	2126.4
22.5°	2045.3	2043.4	2052.8	2073.6	2077.3
25°	1992.4	1984.9	1998.1	2018.9	2024.5
27.5°	1926.4	1920.7	1937.7	1956.6	1962.2
30°	1858.5	1852.8	1869.8	1890.6	1896.2
32.5°	1784.9	1781.1	1798.1	1818.9	1824.5
35°	1705.6	1703.8	1722.6	1741.5	1749.0
37.5°	1626.4	1624.5	1645.3	1660.4	1662.3
40°	1545.3	1541.5	1558.5	1575.5	1577.3
42.5°	1462.3	1456.6	1475.5	1488.7	1494.3
45°	1375.5	1371.7	1388.7	1400.0	1407.5
47.5°	1286.8	1286.8	1296.2	1309.4	1311.3
50°	1203.8	1198.1	1209.4	1217.0	1218.9
52.5°	1117.0	1111.3	1120.7	1122.6	1126.4
55°	1032.1	1022.6	1026.4	1032.1	1030.2
57.5°	943.4	928.3	935.8	935.8	939.6
60°	856.6	843.4	843.4	843.4	847.2
62.5°	769.8	756.6	756.6	754.7	752.8
65°	683.0	671.7	667.9	662.3	656.6
67.5°	600.0	586.8	579.2	571.7	566.0
70°	522.6	500.0	494.3	483.0	483.0
72.5°	445.3	422.6	411.3	403.8	401.9
75°	364.1	341.5	332.1	322.6	320.8
77.5°	284.9	269.8	254.7	247.2	243.4
80°	215.1	201.9	188.7	175.5	177.4
82.5°	147.2	134.0	124.5	113.2	109.4
85°	84.9	77.4	66.0	52.8	49.1
87.5°	35.8	26.4	18.9	18.9	18.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)