

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: P229731

Luminaire Tested: **24RLN-LD5-55-UNV-L835-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229731  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36038)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-55-UNV-L835-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER  
Light Source: (252)3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5554.0 lumens  
Efficiency: N/A  
Efficacy: 130.1 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

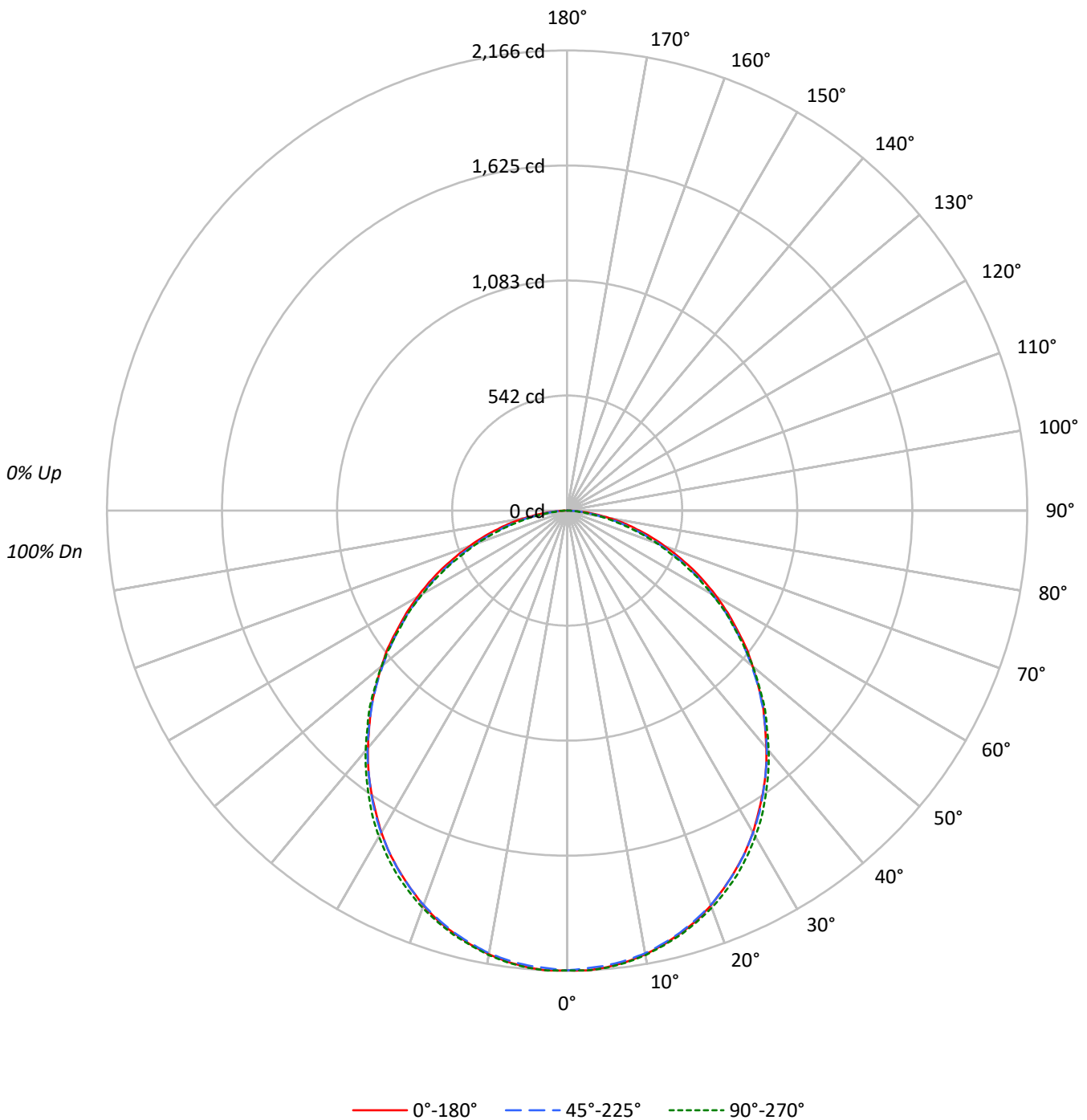
Input Watts (W): 42.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	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	32
9	58	44	36	31	56	44	36	31	43	36	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°	3316	3316	3316
5°	3318	3304	3320
10°	3299	3291	3304
15°	3266	3261	3277
20°	3224	3221	3244
25°	3162	3165	3198
30°	3093	3096	3133
35°	3009	3012	3048
40°	2917	2924	2952
45°	2823	2816	2850
50°	2715	2698	2719
55°	2603	2571	2561
60°	2494	2419	2408
65°	2356	2254	2223
70°	2183	2050	2011
75°	2006	1810	1716
80°	1757	1510	1372
85°	1443	1044	829



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	204.6	3.7
10°-20°	581.0	10.5
20°-30°	864.5	15.6
30°-40°	1010.1	18.2
40°-50°	1004.1	18.1
50°-60°	862.8	15.5
60°-70°	619.6	11.2
70°-80°	330.0	5.9
80°-90°	77.3	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°	1650.1	29.7
0°-40°	2660.2	47.9
0°-60°	4527.1	81.5
0°-90°	5554.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5554.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2165	2165	2165	2165	2165	
5°	2158	2154	2149	2156	2160	205
15°	2060	2060	2056	2063	2067	581
25°	1871	1871	1873	1887	1892	862
35°	1609	1606	1611	1628	1630	1006
45°	1303	1293	1300	1307	1316	1003
55°	975	963	963	963	959	875
65°	650	631	622	615	613	643
75°	339	320	306	297	290	361
85°	82	70	59	49	47	96
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2164.8	2164.8	2164.8	2164.8	2164.8
2.5°	2166.5	2163.0	2156.0	2164.8	2166.5
5°	2157.8	2154.3	2149.0	2156.0	2159.5
7.5°	2142.1	2138.6	2135.1	2142.1	2145.5
10°	2121.1	2119.3	2115.8	2124.6	2124.6
12.5°	2093.1	2091.4	2087.9	2096.6	2096.6
15°	2059.9	2059.9	2056.4	2063.4	2066.9
17.5°	2023.2	2021.5	2018.0	2026.7	2030.2
20°	1977.8	1977.8	1976.1	1986.6	1990.0
22.5°	1925.4	1925.4	1925.4	1939.4	1942.9
25°	1871.2	1871.2	1873.0	1887.0	1892.2
27.5°	1813.6	1811.8	1813.6	1829.3	1834.5
30°	1748.9	1745.4	1750.7	1766.4	1771.7
32.5°	1679.0	1675.6	1684.3	1698.3	1705.3
35°	1609.2	1605.7	1610.9	1628.4	1630.1
37.5°	1537.5	1528.8	1537.5	1553.3	1555.0
40°	1458.9	1451.9	1462.4	1469.4	1476.4
42.5°	1378.5	1375.0	1380.3	1392.5	1392.5
45°	1303.4	1292.9	1299.9	1306.9	1315.6
47.5°	1219.5	1214.3	1217.8	1223.0	1226.5
50°	1139.2	1130.4	1132.2	1137.4	1140.9
52.5°	1064.0	1046.6	1046.6	1050.1	1050.1
55°	974.9	962.7	962.7	962.7	959.2
57.5°	896.3	880.6	878.8	878.8	878.8
60°	814.2	795.0	789.7	789.7	786.2
62.5°	732.1	714.6	707.6	700.6	700.6
65°	650.0	630.7	622.0	615.0	613.3
67.5°	566.1	552.1	541.6	532.9	524.2
70°	487.5	471.7	457.8	449.0	449.0
72.5°	414.1	396.6	382.6	372.2	366.9
75°	339.0	319.7	305.8	297.0	290.0
77.5°	272.6	251.6	237.6	225.4	218.4
80°	199.2	183.5	171.2	159.0	155.5
82.5°	138.0	125.8	111.8	103.1	99.6
85°	82.1	69.9	59.4	48.9	47.2
87.5°	33.2	24.5	19.2	19.2	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)