

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: P229721

Luminaire Tested: **24RLN-LD5-55-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229721
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-L830-CD1-U
Description: METALUX 2X4 RLN LED TROFFER
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5332.0 lumens
Efficiency: N/A
Efficacy: 124.9 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

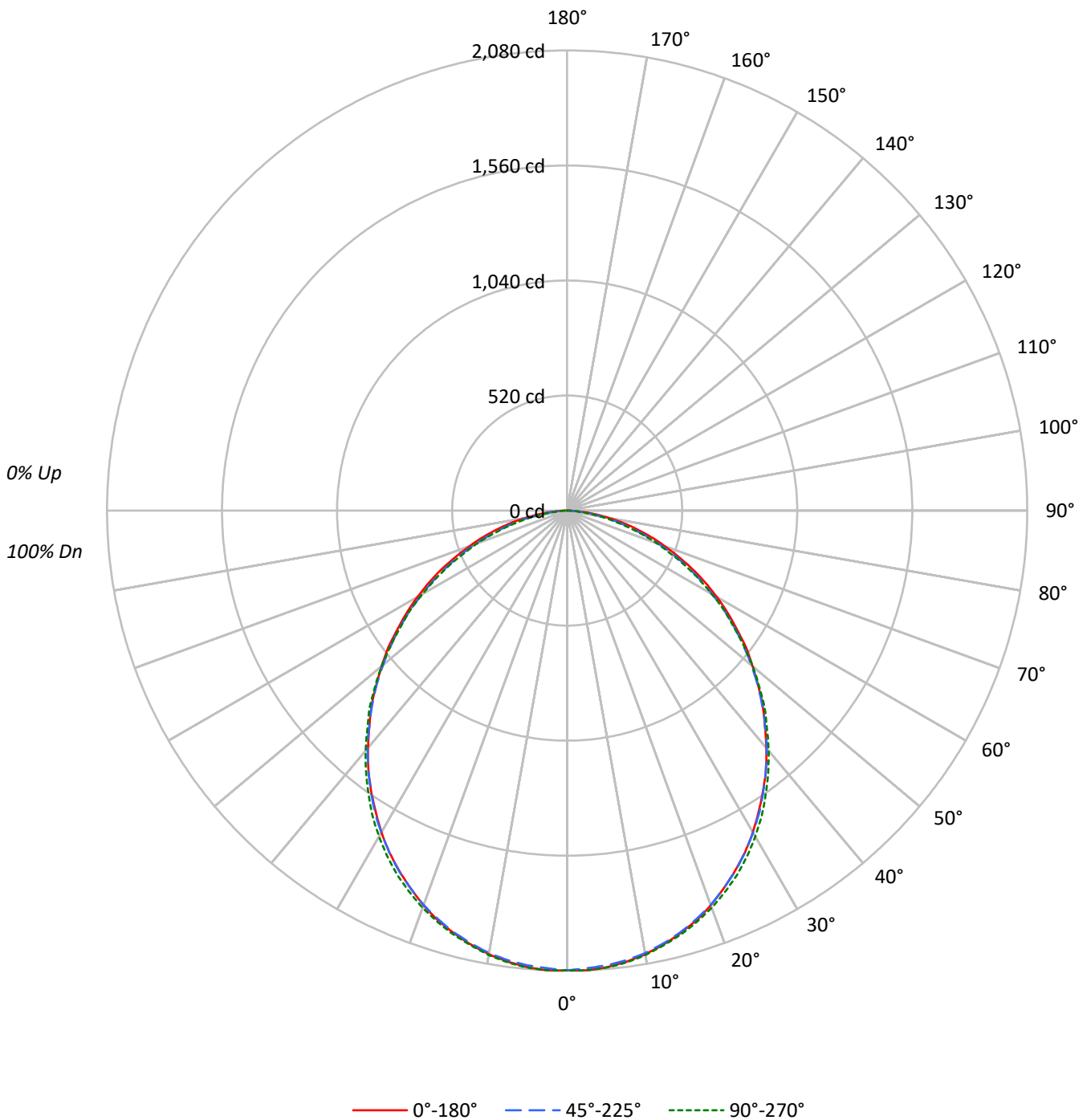
Input Watts (W): 42.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	77	73	71					71			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	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	32					32			
9	58	44	36	31	56	44	36	31	43	36	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°	3183	3183	3183
5°	3185	3172	3188
10°	3167	3159	3172
15°	3136	3130	3146
20°	3095	3092	3114
25°	3036	3039	3070
30°	2970	2973	3008
35°	2888	2892	2926
40°	2800	2807	2834
45°	2710	2703	2736
50°	2606	2590	2610
55°	2499	2468	2459
60°	2394	2323	2312
65°	2262	2164	2134
70°	2096	1968	1931
75°	1926	1737	1648
80°	1686	1450	1317
85°	1385	1002	796



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.4	3.7
10°-20°	557.8	10.5
20°-30°	830.0	15.6
30°-40°	969.7	18.2
40°-50°	964.0	18.1
50°-60°	828.3	15.5
60°-70°	594.8	11.2
70°-80°	316.8	5.9
80°-90°	74.2	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°	1584.2	29.7
0°-40°	2553.9	47.9
0°-60°	4346.2	81.5
0°-90°	5332.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5332.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2078	2078	2078	2078	2078	
5°	2072	2068	2063	2070	2073	197
15°	1978	1978	1974	1981	1984	558
25°	1796	1796	1798	1812	1817	827
35°	1545	1542	1546	1563	1565	966
45°	1251	1241	1248	1255	1263	963
55°	936	924	924	924	921	840
65°	624	606	597	590	589	617
75°	325	307	294	285	278	347
85°	79	67	57	47	45	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2078.2	2078.2	2078.2	2078.2	2078.2
2.5°	2079.9	2076.6	2069.9	2078.2	2079.9
5°	2071.5	2068.2	2063.1	2069.9	2073.2
7.5°	2056.4	2053.1	2049.7	2056.4	2059.8
10°	2036.3	2034.6	2031.3	2039.7	2039.7
12.5°	2009.5	2007.8	2004.4	2012.8	2012.8
15°	1977.6	1977.6	1974.2	1981.0	1984.3
17.5°	1942.4	1940.7	1937.3	1945.7	1949.1
20°	1898.8	1898.8	1897.1	1907.2	1910.5
22.5°	1848.4	1848.4	1848.4	1861.9	1865.2
25°	1796.4	1796.4	1798.1	1811.5	1816.6
27.5°	1741.1	1739.4	1741.1	1756.2	1761.2
30°	1679.0	1675.7	1680.7	1695.8	1700.8
32.5°	1611.9	1608.6	1617.0	1630.4	1637.1
35°	1544.8	1541.5	1546.5	1563.3	1565.0
37.5°	1476.1	1467.7	1476.1	1491.2	1492.8
40°	1400.6	1393.9	1403.9	1410.7	1417.4
42.5°	1323.4	1320.1	1325.1	1336.9	1336.9
45°	1251.3	1241.2	1248.0	1254.7	1263.0
47.5°	1170.8	1165.8	1169.1	1174.1	1177.5
50°	1093.6	1085.2	1086.9	1092.0	1095.3
52.5°	1021.5	1004.7	1004.7	1008.1	1008.1
55°	936.0	924.2	924.2	924.2	920.9
57.5°	860.5	845.4	843.7	843.7	843.7
60°	781.6	763.2	758.2	758.2	754.8
62.5°	702.8	686.0	679.3	672.6	672.6
65°	624.0	605.5	597.1	590.4	588.8
67.5°	543.5	530.0	520.0	511.6	503.2
70°	468.0	452.9	439.5	431.1	431.1
72.5°	397.5	380.8	367.3	357.3	352.2
75°	325.4	307.0	293.5	285.2	278.4
77.5°	261.7	241.5	228.1	216.4	209.7
80°	191.2	176.1	164.4	152.6	149.3
82.5°	132.5	120.8	107.4	99.0	95.6
85°	78.8	67.1	57.0	47.0	45.3
87.5°	31.9	23.5	18.5	18.5	18.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)