

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: P229762

Luminaire Tested: **24RLN-LD5-60-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229762  
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-LD5-60-UNV-L935-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER  
Light Source: (252)3500K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

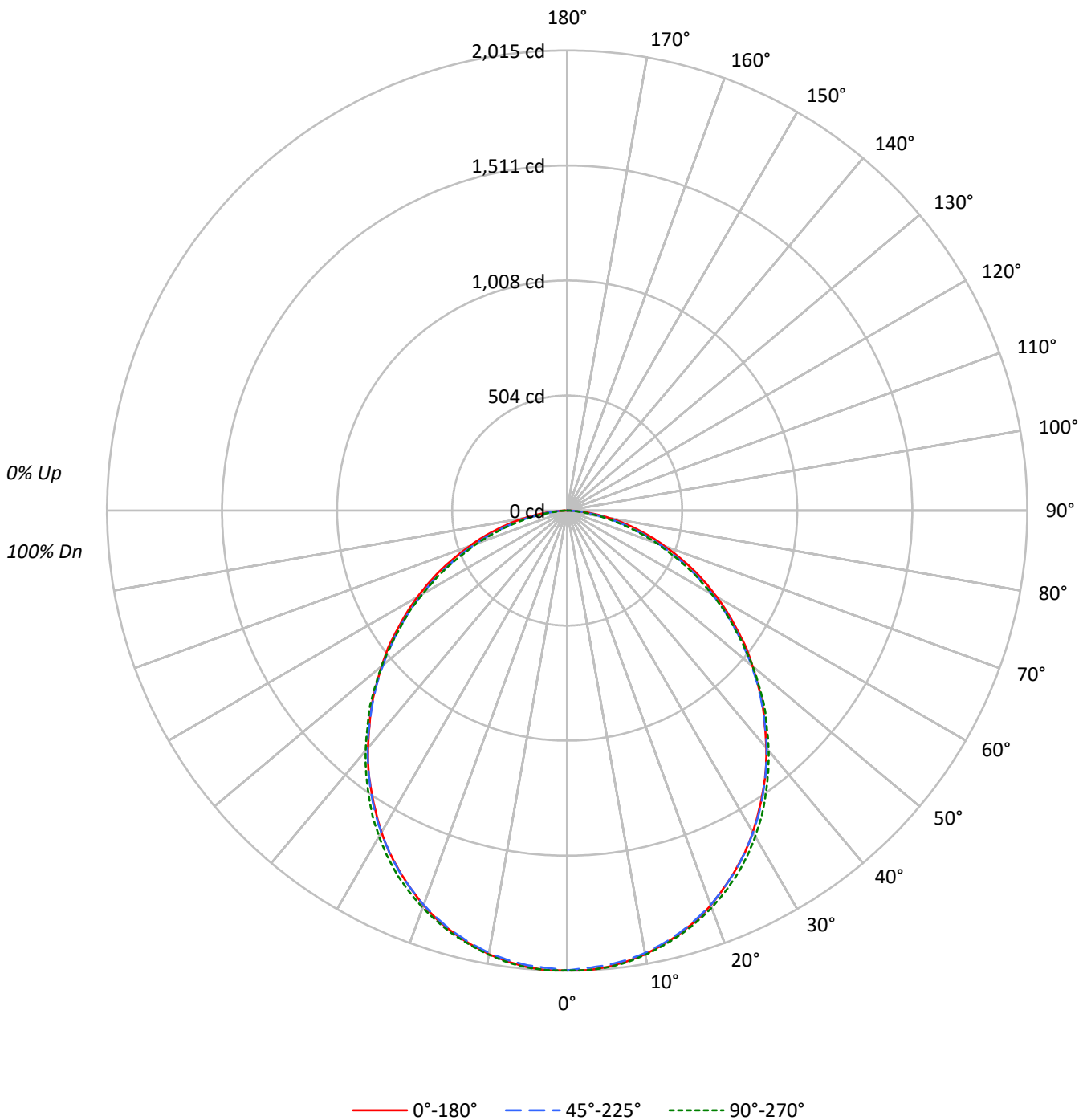
Lumens per Lamp: N/A  
Luminaire Lumens: 5165.0 lumens  
Efficiency: N/A  
Efficacy: 108.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

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	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°	3083	3083	3083
5°	3085	3073	3088
10°	3068	3060	3073
15°	3038	3032	3048
20°	2998	2995	3017
25°	2941	2944	2974
30°	2876	2879	2914
35°	2798	2801	2835
40°	2713	2719	2745
45°	2626	2619	2650
50°	2524	2509	2528
55°	2421	2391	2382
60°	2320	2250	2240
65°	2190	2096	2067
70°	2030	1906	1870
75°	1865	1682	1596
80°	1634	1404	1275
85°	1343	970	771



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	190.2	3.7
10°-20°	540.4	10.5
20°-30°	804.0	15.6
30°-40°	939.3	18.2
40°-50°	933.8	18.1
50°-60°	802.4	15.5
60°-70°	576.2	11.2
70°-80°	306.9	5.9
80°-90°	71.9	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°	1534.6	29.7
0°-40°	2473.9	47.9
0°-60°	4210.1	81.5
0°-90°	5165.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5165.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2013	2013	2013	2013	2013	
5°	2007	2003	1998	2005	2008	190
15°	1916	1916	1912	1919	1922	540
25°	1740	1740	1742	1755	1760	801
35°	1496	1493	1498	1514	1516	936
45°	1212	1202	1209	1215	1224	933
55°	907	895	895	895	892	813
65°	604	587	578	572	570	598
75°	315	297	284	276	270	336
85°	76	65	55	46	44	89
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2013.1	2013.1	2013.1	2013.1	2013.1
2.5°	2014.8	2011.5	2005.0	2013.1	2014.8
5°	2006.6	2003.4	1998.5	2005.0	2008.3
7.5°	1992.0	1988.8	1985.5	1992.0	1995.3
10°	1972.5	1970.9	1967.7	1975.8	1975.8
12.5°	1946.5	1944.9	1941.7	1949.8	1949.8
15°	1915.7	1915.7	1912.4	1918.9	1922.2
17.5°	1881.5	1879.9	1876.7	1884.8	1888.0
20°	1839.3	1839.3	1837.7	1847.4	1850.7
22.5°	1790.5	1790.5	1790.5	1803.5	1806.8
25°	1740.2	1740.2	1741.8	1754.8	1759.7
27.5°	1686.6	1684.9	1686.6	1701.2	1706.1
30°	1626.4	1623.2	1628.1	1642.7	1647.6
32.5°	1561.4	1558.2	1566.3	1579.3	1585.8
35°	1496.5	1493.2	1498.1	1514.3	1516.0
37.5°	1429.8	1421.7	1429.8	1444.5	1446.1
40°	1356.7	1350.2	1360.0	1366.5	1373.0
42.5°	1282.0	1278.7	1283.6	1295.0	1295.0
45°	1212.1	1202.4	1208.9	1215.4	1223.5
47.5°	1134.1	1129.2	1132.5	1137.4	1140.6
50°	1059.4	1051.3	1052.9	1057.8	1061.0
52.5°	989.5	973.3	973.3	976.5	976.5
55°	906.6	895.3	895.3	895.3	892.0
57.5°	833.5	818.9	817.3	817.3	817.3
60°	757.2	739.3	734.4	734.4	731.2
62.5°	680.8	664.6	658.1	651.6	651.6
65°	604.4	586.6	578.4	571.9	570.3
67.5°	526.4	513.4	503.7	495.6	487.4
70°	453.3	438.7	425.7	417.6	417.6
72.5°	385.1	368.8	355.8	346.1	341.2
75°	315.2	297.3	284.3	276.2	269.7
77.5°	253.5	234.0	221.0	209.6	203.1
80°	185.2	170.6	159.2	147.9	144.6
82.5°	128.4	117.0	104.0	95.9	92.6
85°	76.4	65.0	55.2	45.5	43.9
87.5°	30.9	22.7	17.9	17.9	17.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)