

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: P229825

Luminaire Tested: **24RLN-LD5-80-RDP-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229825  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-80-RDP-UNV-L935-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (252)3500K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5752.0 lumens  
Efficiency: N/A  
Efficacy: 85.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

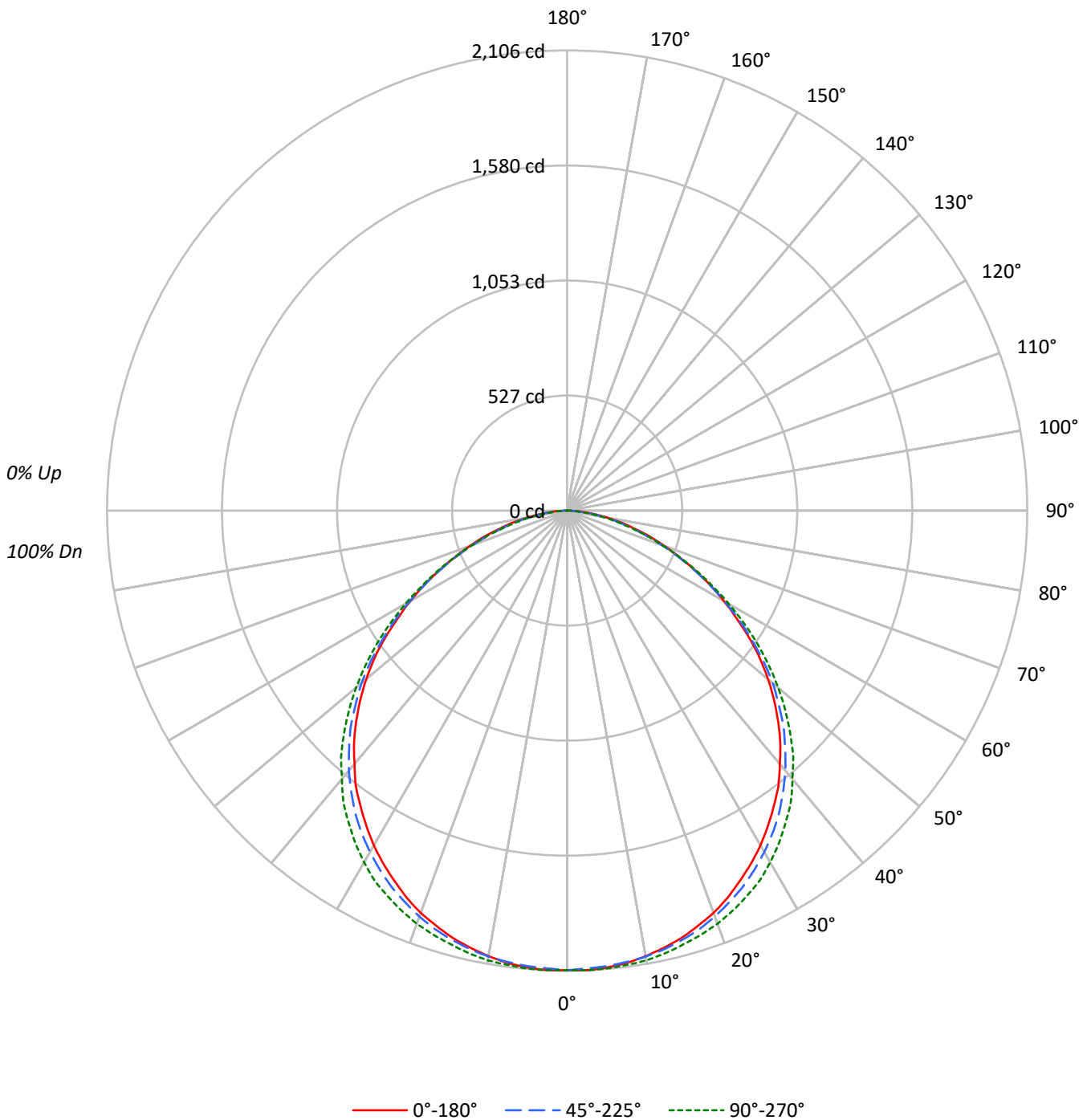
Input Watts (W): 67.45  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	90	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	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	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	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	3222	3222	3222
5°	3228	3217	3234
10°	3221	3224	3251
15°	3211	3225	3259
20°	3194	3222	3279
25°	3160	3212	3289
30°	3130	3192	3288
35°	3085	3162	3260
40°	3028	3106	3207
45°	2959	3034	3129
50°	2860	2927	3005
55°	2721	2756	2838
60°	2540	2554	2620
65°	2333	2317	2372
70°	2120	2062	2072
75°	1885	1782	1769
80°	1636	1462	1425
85°	1343	1035	805



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	199.5	3.5
10°-20°	575.1	10.0
20°-30°	877.9	15.3
30°-40°	1058.3	18.4
40°-50°	1079.2	18.8
50°-60°	923.6	16.1
60°-70°	636.2	11.1
70°-80°	326.2	5.7
80°-90°	75.9	1.3
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°	1652.5	28.7
0°-40°	2710.8	47.1
0°-60°	4713.7	81.9
0°-90°	5752.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5752.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2104	2104	2104	2104	2104	
5°	2099	2095	2093	2099	2104	199
15°	2025	2023	2034	2049	2056	571
25°	1870	1877	1901	1933	1946	862
35°	1650	1656	1691	1728	1744	1032
45°	1366	1368	1401	1436	1444	1052
55°	1019	1012	1032	1054	1063	909
65°	644	628	639	644	655	640
75°	319	306	301	301	299	343
85°	76	68	59	52	46	89
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2103.5	2103.5	2103.5	2103.5	2103.5
2.5°	2105.7	2101.3	2097.0	2101.3	2105.7
5°	2099.2	2094.8	2092.6	2099.2	2103.5
7.5°	2088.3	2083.9	2083.9	2092.6	2097.0
10°	2070.8	2068.6	2073.0	2081.7	2090.4
12.5°	2049.0	2049.0	2055.5	2066.4	2075.2
15°	2025.0	2022.8	2033.7	2049.0	2055.5
17.5°	1992.2	1994.4	2009.7	2027.2	2035.9
20°	1959.5	1961.7	1977.0	2001.0	2011.9
22.5°	1918.1	1922.4	1939.9	1970.4	1981.3
25°	1870.0	1876.6	1900.6	1933.3	1946.4
27.5°	1822.0	1828.6	1854.8	1891.9	1909.3
30°	1769.7	1778.4	1804.6	1843.9	1859.1
32.5°	1710.8	1717.3	1750.0	1789.3	1804.6
35°	1649.7	1656.2	1691.1	1728.2	1743.5
37.5°	1588.6	1588.6	1623.5	1667.1	1682.4
40°	1514.4	1516.5	1553.6	1595.1	1603.8
42.5°	1444.5	1444.5	1477.3	1516.5	1531.8
45°	1366.0	1368.2	1400.9	1435.8	1444.5
47.5°	1285.2	1285.2	1313.6	1346.3	1355.1
50°	1200.1	1195.8	1228.5	1254.7	1261.2
52.5°	1112.9	1106.3	1132.5	1154.3	1163.1
55°	1019.0	1012.5	1032.1	1053.9	1062.7
57.5°	920.8	912.1	933.9	953.6	957.9
60°	829.2	816.1	833.6	844.5	855.4
62.5°	737.5	722.3	735.4	741.9	750.6
65°	643.7	628.4	639.4	643.7	654.6
67.5°	554.2	543.3	545.5	552.1	556.4
70°	473.5	460.4	460.4	460.4	462.6
72.5°	399.3	379.7	377.5	379.7	379.7
75°	318.6	305.5	301.1	301.1	298.9
77.5°	255.3	237.8	235.7	231.3	226.9
80°	185.5	170.2	165.8	163.7	161.5
82.5°	128.7	115.7	111.3	106.9	100.4
85°	76.4	67.6	58.9	52.4	45.8
87.5°	28.4	26.2	21.8	19.6	19.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)