

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: P229850

Luminaire Tested: **24RLN-LD5-50-UNV-L835-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229850  
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-LD5-50-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: 4939.0 lumens  
Efficiency: N/A  
Efficacy: 130.7 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

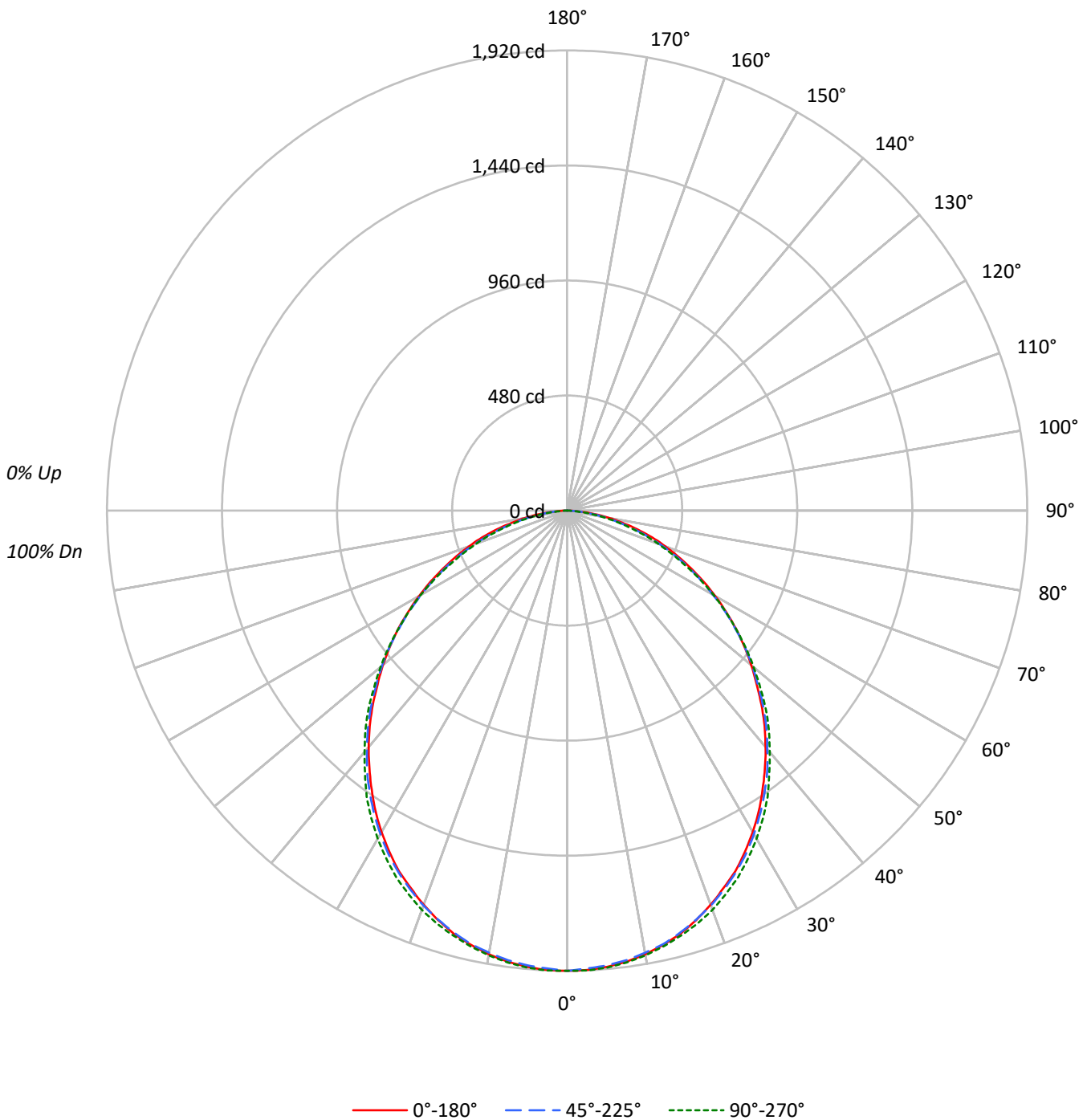
Input Watts (W): 37.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2941	2941	2941
5°	2938	2929	2943
10°	2923	2913	2930
15°	2898	2891	2910
20°	2853	2858	2889
25°	2807	2815	2852
30°	2740	2757	2796
35°	2659	2685	2726
40°	2575	2597	2629
45°	2484	2507	2541
50°	2391	2402	2421
55°	2297	2285	2293
60°	2187	2154	2163
65°	2064	2018	1984
70°	1951	1846	1803
75°	1796	1638	1582
80°	1582	1387	1304
85°	1244	967	719



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	181.3	3.7
10°-20°	515.3	10.4
20°-30°	768.1	15.6
30°-40°	898.0	18.2
40°-50°	891.8	18.1
50°-60°	765.8	15.5
60°-70°	551.6	11.2
70°-80°	297.0	6.0
80°-90°	70.0	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°	1464.8	29.7
0°-40°	2362.8	47.8
0°-60°	4020.3	81.4
0°-90°	4939.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4939.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1911	1909	1905	1911	1914	181
15°	1828	1823	1823	1834	1835	515
25°	1661	1655	1666	1683	1688	764
35°	1422	1420	1436	1452	1458	889
45°	1147	1143	1158	1167	1173	884
55°	860	852	856	860	859	768
65°	569	560	557	552	547	566
75°	304	285	277	269	267	322
85°	71	64	55	44	41	85
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1920.4	1920.4	1920.4	1920.4	1920.4
2.5°	1918.8	1917.2	1912.5	1918.8	1920.4
5°	1910.9	1909.4	1904.7	1910.9	1914.1
7.5°	1898.4	1895.2	1892.1	1898.4	1901.5
10°	1879.5	1876.3	1873.2	1881.1	1884.2
12.5°	1855.9	1852.7	1852.7	1859.0	1862.2
15°	1827.6	1822.9	1822.9	1833.9	1835.4
17.5°	1791.4	1788.3	1789.8	1802.4	1807.1
20°	1750.5	1748.9	1753.7	1767.8	1772.5
22.5°	1704.9	1703.3	1711.2	1728.5	1731.6
25°	1660.9	1654.6	1665.6	1682.9	1687.6
27.5°	1605.8	1601.1	1615.3	1631.0	1635.7
30°	1549.2	1544.5	1558.6	1575.9	1580.7
32.5°	1487.9	1484.7	1498.9	1516.2	1520.9
35°	1421.8	1420.2	1436.0	1451.7	1458.0
37.5°	1355.7	1354.2	1371.5	1384.1	1385.6
40°	1288.1	1285.0	1299.1	1313.3	1314.9
42.5°	1218.9	1214.2	1229.9	1240.9	1245.7
45°	1146.6	1143.4	1157.6	1167.0	1173.3
47.5°	1072.6	1072.6	1080.5	1091.5	1093.1
50°	1003.4	998.7	1008.2	1014.5	1016.0
52.5°	931.1	926.4	934.2	935.8	939.0
55°	860.3	852.5	855.6	860.3	858.7
57.5°	786.4	773.8	780.1	780.1	783.3
60°	714.0	703.0	703.0	703.0	706.2
62.5°	641.7	630.7	630.7	629.1	627.5
65°	569.4	559.9	556.8	552.0	547.3
67.5°	500.1	489.1	482.8	476.6	471.8
70°	435.7	416.8	412.1	402.6	402.6
72.5°	371.2	352.3	342.9	336.6	335.0
75°	303.5	284.7	276.8	268.9	267.4
77.5°	237.5	224.9	212.3	206.0	202.9
80°	179.3	168.3	157.3	146.3	147.8
82.5°	122.7	111.7	103.8	94.4	91.2
85°	70.8	64.5	55.0	44.0	40.9
87.5°	29.9	22.0	15.7	15.7	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)