

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: P229761

Luminaire Tested: **24RLN-LD5-55-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229761  
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-L935-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER  
Light Source: (252)3500K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

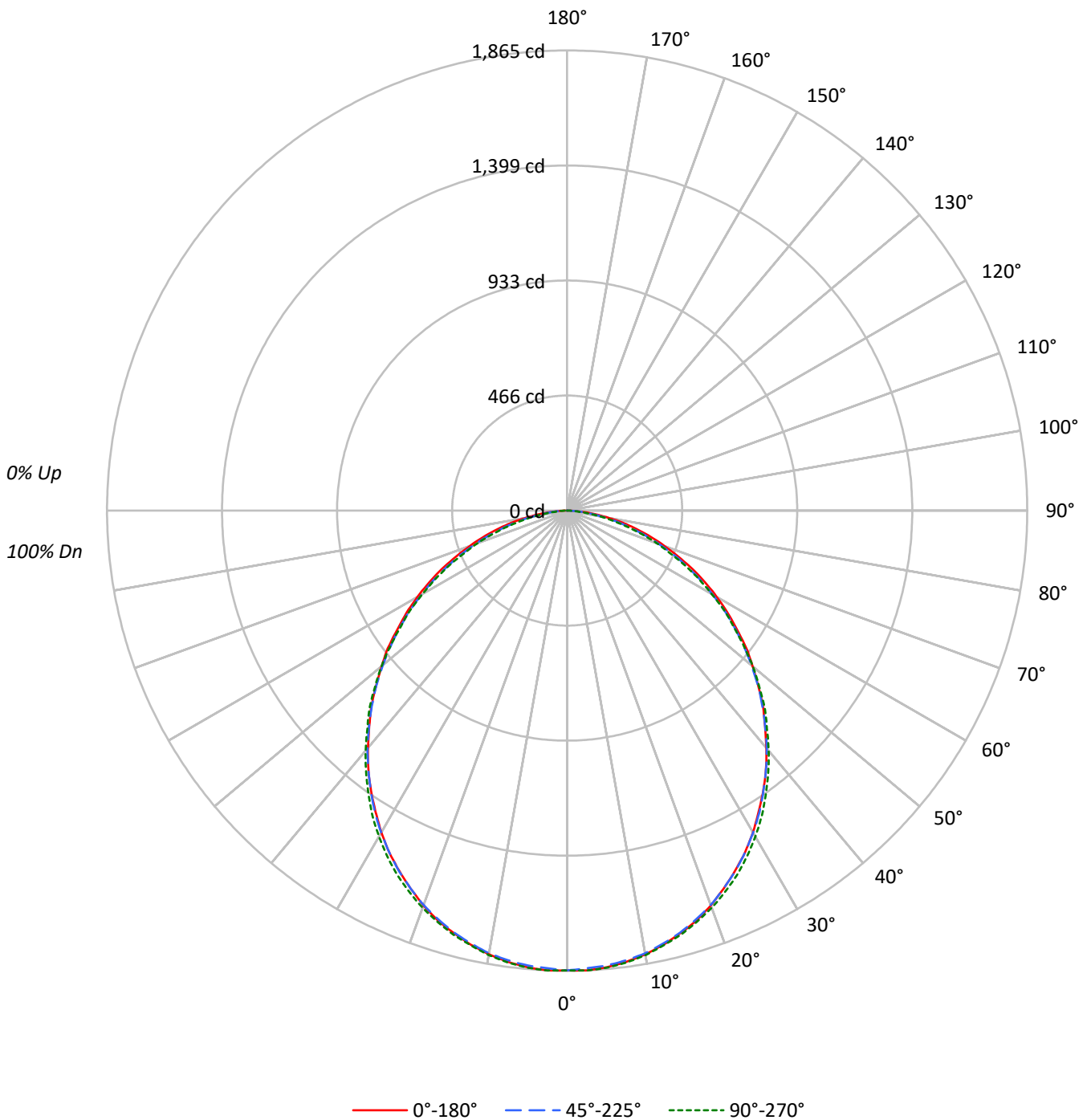
Lumens per Lamp: N/A  
Luminaire Lumens: 4782.0 lumens  
Efficiency: N/A  
Efficacy: 112.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

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°	2855	2855	2855
5°	2857	2845	2859
10°	2840	2833	2845
15°	2812	2808	2822
20°	2776	2773	2793
25°	2723	2725	2753
30°	2663	2666	2698
35°	2591	2593	2624
40°	2512	2518	2542
45°	2431	2424	2454
50°	2337	2323	2341
55°	2242	2213	2205
60°	2147	2083	2074
65°	2028	1941	1914
70°	1880	1765	1731
75°	1727	1558	1478
80°	1513	1300	1181
85°	1242	898	713



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	176.1	3.7
10°-20°	500.3	10.5
20°-30°	744.4	15.6
30°-40°	869.7	18.2
40°-50°	864.5	18.1
50°-60°	742.9	15.5
60°-70°	533.5	11.2
70°-80°	284.1	5.9
80°-90°	66.5	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°	1420.8	29.7
0°-40°	2290.5	47.9
0°-60°	3897.8	81.5
0°-90°	4782.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4782.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1864	1864	1864	1864	1864	
5°	1858	1855	1850	1856	1859	176
15°	1774	1774	1771	1777	1780	500
25°	1611	1611	1613	1625	1629	742
35°	1386	1382	1387	1402	1404	866
45°	1122	1113	1119	1125	1133	864
55°	839	829	829	829	826	753
65°	560	543	536	530	528	553
75°	292	275	263	256	250	311
85°	71	60	51	42	41	83
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1863.9	1863.9	1863.9	1863.9	1863.9
2.5°	1865.4	1862.4	1856.3	1863.9	1865.4
5°	1857.9	1854.8	1850.3	1856.3	1859.4
7.5°	1844.3	1841.3	1838.3	1844.3	1847.3
10°	1826.3	1824.8	1821.7	1829.3	1829.3
12.5°	1802.2	1800.7	1797.7	1805.2	1805.2
15°	1773.6	1773.6	1770.6	1776.6	1779.6
17.5°	1742.0	1740.5	1737.5	1745.0	1748.0
20°	1702.9	1702.9	1701.4	1710.4	1713.4
22.5°	1657.8	1657.8	1657.8	1669.8	1672.8
25°	1611.1	1611.1	1612.6	1624.7	1629.2
27.5°	1561.5	1560.0	1561.5	1575.0	1579.5
30°	1505.8	1502.8	1507.3	1520.9	1525.4
32.5°	1445.7	1442.7	1450.2	1462.2	1468.2
35°	1385.5	1382.5	1387.0	1402.0	1403.5
37.5°	1323.8	1316.3	1323.8	1337.4	1338.9
40°	1256.1	1250.1	1259.1	1265.1	1271.2
42.5°	1186.9	1183.9	1188.4	1199.0	1199.0
45°	1122.2	1113.2	1119.2	1125.2	1132.8
47.5°	1050.0	1045.5	1048.5	1053.0	1056.0
50°	980.8	973.3	974.8	979.3	982.3
52.5°	916.1	901.1	901.1	904.1	904.1
55°	839.4	828.9	828.9	828.9	825.9
57.5°	771.7	758.2	756.7	756.7	756.7
60°	701.0	684.5	680.0	680.0	676.9
62.5°	630.3	615.3	609.3	603.2	603.2
65°	559.6	543.1	535.5	529.5	528.0
67.5°	487.4	475.4	466.3	458.8	451.3
70°	419.7	406.2	394.1	386.6	386.6
72.5°	356.5	341.5	329.4	320.4	315.9
75°	291.8	275.3	263.3	255.7	249.7
77.5°	234.7	216.6	204.6	194.1	188.0
80°	171.5	158.0	147.4	136.9	133.9
82.5°	118.8	108.3	96.3	88.8	85.7
85°	70.7	60.2	51.1	42.1	40.6
87.5°	28.6	21.1	16.5	16.5	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)