

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: P229734

Luminaire Tested: **24RLN-LD5-74-UNV-L835-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229734  
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-LD5-74-UNV-L835-CD1-U  
Description: METALUX 2X4 RLN LED TROFFER  
Light Source: (252)3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

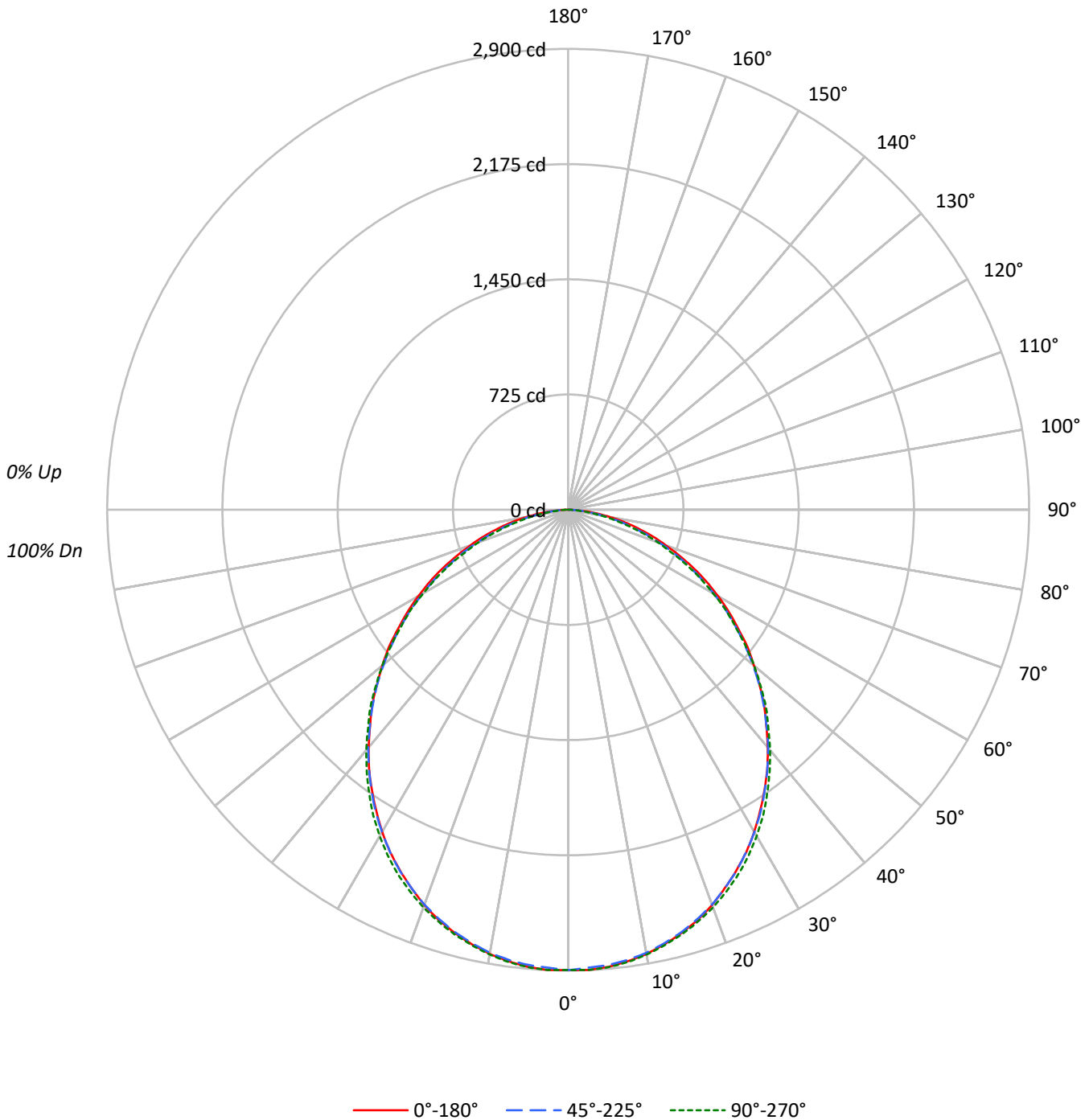
Lumens per Lamp: N/A  
Luminaire Lumens: 7433.0 lumens  
Efficiency: N/A  
Efficacy: 120.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.31  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 61.6  
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



TEST NUMBER: P229734  
CATALOG NUMBER: 24RLN-LD5-74-UNV-L835-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P229734

CATALOG NUMBER: 24RLN-LD5-74-UNV-L835-CD1-U

**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°	4437	4437	4437
5°	4440	4422	4444
10°	4415	4404	4422
15°	4371	4364	4386
20°	4314	4311	4341
25°	4232	4236	4280
30°	4140	4144	4193
35°	4027	4031	4079
40°	3904	3913	3951
45°	3779	3768	3814
50°	3633	3610	3638
55°	3484	3441	3428
60°	3338	3238	3223
65°	3152	3017	2974
70°	2922	2743	2691
75°	2684	2422	2297
80°	2352	2022	1836
85°	1931	1397	1109



TEST NUMBER: P229734

CATALOG NUMBER: 24RLN-LD5-74-UNV-L835-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	273.8	3.7
10°-20°	777.6	10.5
20°-30°	1157.0	15.6
30°-40°	1351.8	18.2
40°-50°	1343.8	18.1
50°-60°	1154.7	15.5
60°-70°	829.2	11.2
70°-80°	441.6	5.9
80°-90°	103.4	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°	2208.4	29.7
0°-40°	3560.2	47.9
0°-60°	6058.7	81.5
0°-90°	7433.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7433.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2897	2897	2897	2897	2897	
5°	2888	2883	2876	2886	2890	274
15°	2757	2757	2752	2762	2766	777
25°	2504	2504	2507	2525	2532	1153
35°	2154	2149	2156	2179	2182	1347
45°	1744	1730	1740	1749	1761	1343
55°	1305	1288	1288	1288	1284	1170
65°	870	844	832	823	821	860
75°	454	428	409	398	388	483
85°	110	94	80	66	63	128
90°	0	0	0	0	0	



TEST NUMBER: P229734

CATALOG NUMBER: 24RLN-LD5-74-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2897.1	2897.1	2897.1	2897.1	2897.1
2.5°	2899.5	2894.8	2885.5	2897.1	2899.5
5°	2887.8	2883.1	2876.1	2885.5	2890.1
7.5°	2866.7	2862.1	2857.4	2866.7	2871.4
10°	2838.7	2836.3	2831.7	2843.4	2843.4
12.5°	2801.3	2798.9	2794.3	2805.9	2805.9
15°	2756.8	2756.8	2752.2	2761.5	2766.2
17.5°	2707.7	2705.4	2700.7	2712.4	2717.1
20°	2646.9	2646.9	2644.6	2658.6	2663.3
22.5°	2576.8	2576.8	2576.8	2595.5	2600.2
25°	2504.3	2504.3	2506.6	2525.4	2532.4
27.5°	2427.1	2424.8	2427.1	2448.2	2455.2
30°	2340.6	2336.0	2343.0	2364.0	2371.0
32.5°	2247.1	2242.4	2254.1	2272.8	2282.2
35°	2153.6	2148.9	2155.9	2179.3	2181.6
37.5°	2057.7	2046.0	2057.7	2078.7	2081.1
40°	1952.5	1943.1	1957.1	1966.5	1975.9
42.5°	1844.9	1840.2	1847.2	1863.6	1863.6
45°	1744.4	1730.3	1739.7	1749.0	1760.7
47.5°	1632.1	1625.1	1629.8	1636.8	1641.5
50°	1524.6	1512.9	1515.2	1522.2	1526.9
52.5°	1424.0	1400.6	1400.6	1405.3	1405.3
55°	1304.8	1288.4	1288.4	1288.4	1283.7
57.5°	1199.5	1178.5	1176.2	1176.2	1176.2
60°	1089.6	1063.9	1056.9	1056.9	1052.2
62.5°	979.7	956.4	947.0	937.7	937.7
65°	869.8	844.1	832.4	823.1	820.7
67.5°	757.6	738.9	724.9	713.2	701.5
70°	652.4	631.3	612.6	600.9	600.9
72.5°	554.2	530.8	512.1	498.1	491.0
75°	453.6	427.9	409.2	397.5	388.2
77.5°	364.8	336.7	318.0	301.6	292.3
80°	266.6	245.5	229.2	212.8	208.1
82.5°	184.7	168.4	149.7	138.0	133.3
85°	109.9	93.5	79.5	65.5	63.1
87.5°	44.4	32.7	25.7	25.7	25.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)