

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: P295948

Luminaire Tested: **24RLN-LD5-80-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295948  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-80-UNV-L82765-W2A1-U-4500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8191.0 lumens  
Efficiency: N/A  
Efficacy: 132.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

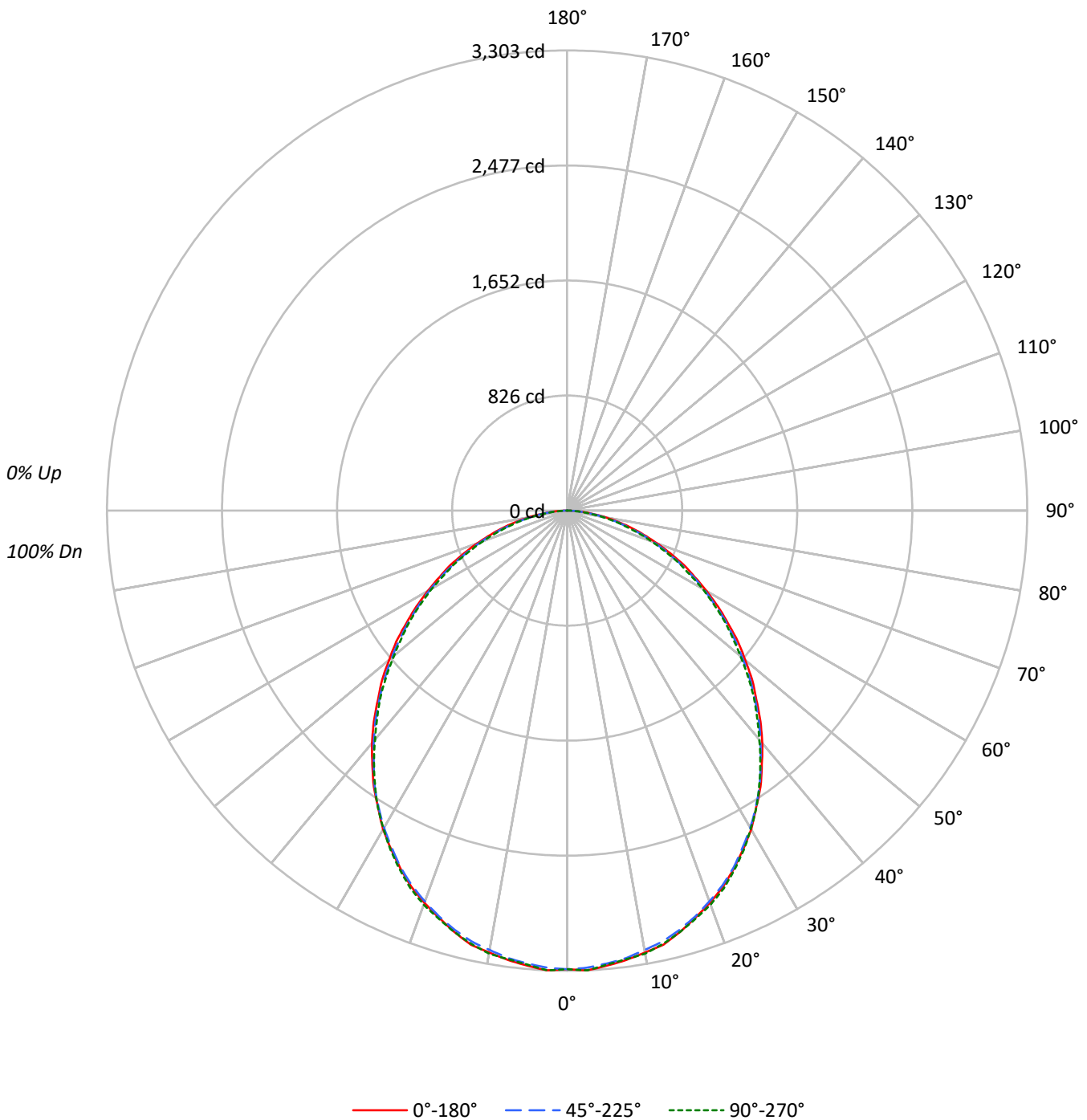
Input Watts (W): 61.845  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	74	72
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26

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

	0°	45°	90°
0°	4430	4430	4430
5°	4429	4408	4418
10°	4401	4376	4412
15°	4362	4340	4362
20°	4291	4275	4310
25°	4206	4198	4221
30°	4105	4085	4097
35°	3976	3959	3950
40°	3829	3792	3769
45°	3655	3620	3605
50°	3490	3435	3396
55°	3304	3254	3223
60°	3108	3050	3015
65°	2936	2827	2802
70°	2692	2589	2537
75°	2472	2322	2226
80°	2170	2027	1905
85°	1754	1632	1386



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	310.7	3.8
10°-20°	880.7	10.8
20°-30°	1302.7	15.9
30°-40°	1503.5	18.4
40°-50°	1468.5	17.9
50°-60°	1240.0	15.1
60°-70°	883.2	10.8
70°-80°	478.2	5.8
80°-90°	123.4	1.5
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°	2494.1	30.4
0°-40°	3997.6	48.8
0°-60°	6706.1	81.9
0°-90°	8191.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8191.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3292	3292	3292	3292	3292	
5°	3279	3279	3264	3271	3271	311
15°	3131	3118	3116	3129	3131	882
25°	2833	2817	2828	2838	2843	1304
35°	2420	2402	2410	2402	2405	1511
45°	1921	1905	1903	1895	1895	1485
55°	1408	1390	1387	1374	1374	1263
65°	922	904	888	877	880	909
75°	476	460	447	436	428	503
85°	114	111	106	92	90	134
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3292.5	3292.5	3292.5	3292.5	3292.5
2.5°	3303.1	3289.9	3284.6	3287.3	3303.1
5°	3279.3	3279.3	3263.5	3271.4	3271.4
7.5°	3252.9	3255.6	3239.7	3252.9	3247.6
10°	3221.2	3213.3	3202.7	3223.8	3229.1
12.5°	3192.1	3173.6	3168.4	3181.6	3184.2
15°	3131.4	3118.1	3115.5	3128.7	3131.4
17.5°	3062.7	3065.3	3054.7	3073.2	3070.6
20°	2996.6	2991.3	2986.0	3007.2	3009.8
22.5°	2922.6	2906.7	2912.0	2930.5	2935.8
25°	2832.8	2816.9	2827.5	2838.0	2843.3
27.5°	2737.6	2729.7	2727.1	2740.3	2745.6
30°	2642.5	2629.3	2629.3	2645.1	2637.2
32.5°	2526.2	2515.7	2520.9	2526.2	2528.9
35°	2420.5	2402.0	2410.0	2402.0	2404.7
37.5°	2296.3	2283.1	2280.5	2277.8	2277.8
40°	2180.1	2169.5	2158.9	2158.9	2145.7
42.5°	2053.2	2040.0	2034.7	2026.8	2018.9
45°	1921.1	1905.2	1902.6	1894.7	1894.7
47.5°	1802.2	1778.4	1775.8	1759.9	1759.9
50°	1667.4	1651.6	1641.0	1630.4	1622.5
52.5°	1545.9	1530.0	1514.1	1503.6	1495.7
55°	1408.4	1390.0	1387.3	1374.1	1374.1
57.5°	1284.3	1268.4	1257.8	1242.0	1244.6
60°	1154.8	1138.9	1133.6	1120.4	1120.4
62.5°	1033.2	1020.0	1012.1	998.9	988.3
65°	922.2	903.7	887.9	877.3	880.0
67.5°	800.7	779.5	771.6	761.0	753.1
70°	684.4	671.2	658.0	644.8	644.8
72.5°	576.1	562.9	554.9	539.1	533.8
75°	475.6	459.8	446.6	436.0	428.1
77.5°	375.2	359.4	351.5	338.2	338.2
80°	280.1	269.5	261.6	256.3	245.8
82.5°	192.9	187.6	179.7	171.8	163.8
85°	113.6	111.0	105.7	92.5	89.8
87.5°	44.9	44.9	39.6	37.0	34.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)