

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: P295951

Luminaire Tested: **24RLN-LD5-80-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295951  
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-5700K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8406.0 lumens  
Efficiency: N/A  
Efficacy: 134.7 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

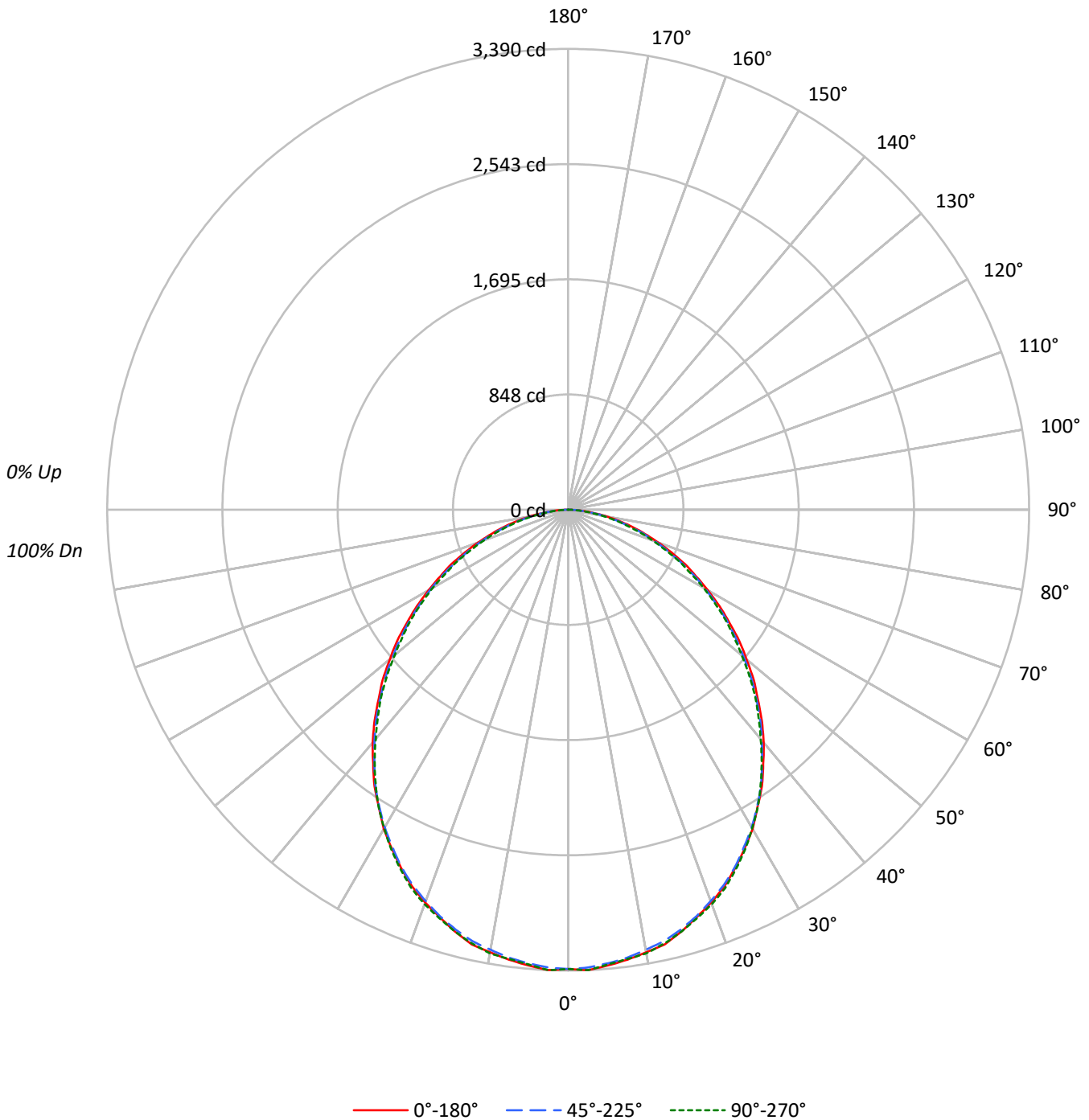
Input Watts (W): 62.403  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4546	4546	4546
5°	4545	4523	4534
10°	4517	4491	4528
15°	4476	4454	4476
20°	4403	4388	4423
25°	4316	4308	4332
30°	4213	4192	4205
35°	4080	4062	4053
40°	3930	3892	3868
45°	3751	3715	3700
50°	3582	3525	3485
55°	3391	3340	3308
60°	3189	3131	3094
65°	3013	2901	2875
70°	2763	2657	2603
75°	2537	2383	2284
80°	2228	2080	1954
85°	1800	1675	1423



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	318.8	3.8
10°-20°	903.8	10.8
20°-30°	1336.9	15.9
30°-40°	1543.0	18.4
40°-50°	1507.0	17.9
50°-60°	1272.6	15.1
60°-70°	906.4	10.8
70°-80°	490.8	5.8
80°-90°	126.6	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°	2559.6	30.4
0°-40°	4102.6	48.8
0°-60°	6882.1	81.9
0°-90°	8406.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8406.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3379	3379	3379	3379	3379	
5°	3365	3365	3349	3357	3357	319
15°	3214	3200	3197	3211	3214	905
25°	2907	2891	2902	2912	2918	1338
35°	2484	2465	2473	2465	2468	1550
45°	1972	1955	1952	1944	1944	1524
55°	1445	1426	1424	1410	1410	1296
65°	946	928	911	900	903	933
75°	488	472	458	448	439	517
85°	117	114	108	95	92	137
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3379.0	3379.0	3379.0	3379.0	3379.0
2.5°	3389.8	3376.3	3370.8	3373.5	3389.8
5°	3365.4	3365.4	3349.1	3357.3	3357.3
7.5°	3338.3	3341.0	3324.7	3338.3	3332.9
10°	3305.8	3297.6	3286.8	3308.5	3313.9
12.5°	3275.9	3256.9	3251.5	3265.1	3267.8
15°	3213.5	3200.0	3197.3	3210.8	3213.5
17.5°	3143.0	3145.8	3134.9	3153.9	3151.2
20°	3075.2	3069.8	3064.4	3086.1	3088.8
22.5°	2999.3	2983.0	2988.5	3007.4	3012.9
25°	2907.1	2890.8	2901.7	2912.5	2918.0
27.5°	2809.5	2801.3	2798.6	2812.2	2817.6
30°	2711.9	2698.3	2698.3	2714.6	2706.4
32.5°	2592.5	2581.7	2587.1	2592.5	2595.2
35°	2484.1	2465.1	2473.2	2465.1	2467.8
37.5°	2356.6	2343.0	2340.3	2337.6	2337.6
40°	2237.3	2226.4	2215.6	2215.6	2202.0
42.5°	2107.1	2093.6	2088.1	2080.0	2071.9
45°	1971.5	1955.2	1952.5	1944.4	1944.4
47.5°	1849.5	1825.1	1822.4	1806.1	1806.1
50°	1711.2	1694.9	1684.1	1673.2	1665.1
52.5°	1586.4	1570.2	1553.9	1543.0	1534.9
55°	1445.4	1426.4	1423.7	1410.2	1410.2
57.5°	1318.0	1301.7	1290.8	1274.6	1277.3
60°	1185.1	1168.8	1163.4	1149.8	1149.8
62.5°	1060.3	1046.8	1038.6	1025.1	1014.2
65°	946.4	927.5	911.2	900.3	903.0
67.5°	821.7	800.0	791.9	781.0	772.9
70°	702.4	688.8	675.3	661.7	661.7
72.5°	591.2	577.6	569.5	553.2	547.8
75°	488.1	471.9	458.3	447.5	439.3
77.5°	385.1	368.8	360.7	347.1	347.1
80°	287.5	276.6	268.5	263.1	252.2
82.5°	198.0	192.5	184.4	176.3	168.1
85°	116.6	113.9	108.5	94.9	92.2
87.5°	46.1	46.1	40.7	38.0	35.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)