

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: P293534

Luminaire Tested: **24GR-LD5-85-A-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293534  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-85-A-UNV-L82765-W2A1-U-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8519.0 lumens  
Efficiency: N/A  
Efficacy: 133.9 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

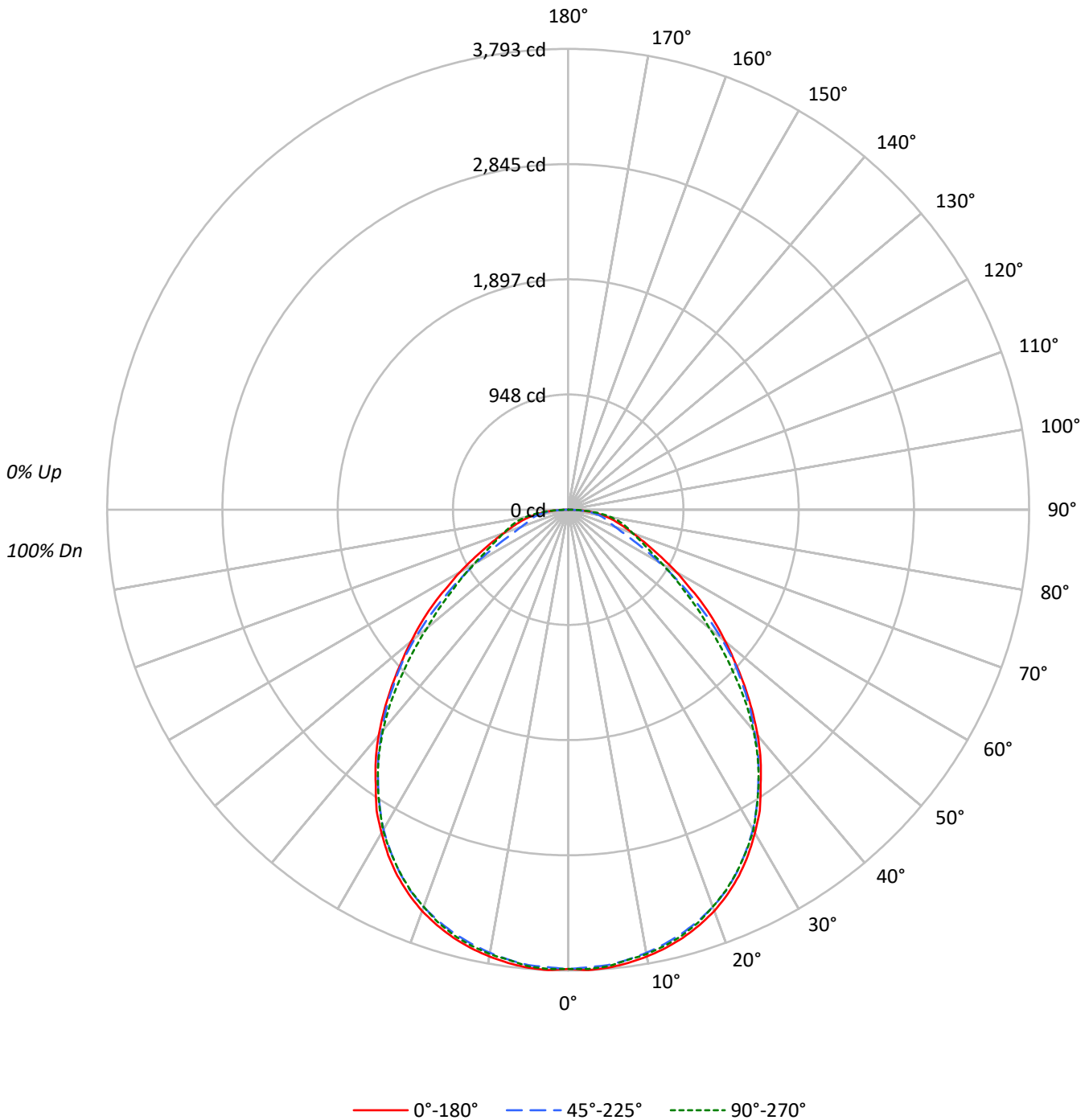
Input Watts (W): 63.612  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86																												
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																												
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63																												
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55																												
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																												
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43																												
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39																												
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35																												
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32																												
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29																												

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

	0°	45°	90°
0°	5086	5086	5086
5°	5110	5082	5094
10°	5101	5060	5074
15°	5082	5030	5052
20°	5033	4982	4981
25°	4935	4883	4879
30°	4772	4723	4733
35°	4533	4481	4488
40°	4263	4189	4163
45°	3907	3854	3701
50°	3532	3435	3176
55°	3171	2886	2738
60°	2777	2323	2408
65°	2422	1827	2216
70°	2216	1595	2216
75°	2217	1697	2442
80°	2407	1999	2784
85°	2641	2255	2987



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	357.9	4.2
10°-20°	1021.5	12.0
20°-30°	1514.6	17.8
30°-40°	1708.7	20.1
40°-50°	1547.6	18.2
50°-60°	1116.5	13.1
60°-70°	666.6	7.8
70°-80°	412.0	4.8
80°-90°	173.6	2.0
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°	2894.0	34.0
0°-40°	4602.7	54.0
0°-60°	7266.8	85.3
0°-90°	8519.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8519.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3780	3780	3780	3780	3780	
5°	3784	3778	3763	3759	3772	360
15°	3648	3626	3611	3613	3627	1028
25°	3324	3306	3289	3277	3286	1527
35°	2760	2756	2728	2730	2732	1727
45°	2053	2040	2025	1975	1945	1582
55°	1352	1310	1230	1170	1167	1207
65°	761	670	574	652	696	765
75°	426	370	326	407	470	455
85°	171	150	146	191	194	179
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3779.8	3779.8	3779.8	3779.8	3779.8
2.5°	3792.9	3782.4	3769.3	3777.1	3783.7
5°	3783.7	3778.5	3762.7	3758.7	3771.9
7.5°	3764.0	3750.8	3736.4	3742.9	3737.7
10°	3733.7	3721.9	3703.4	3704.8	3714.0
12.5°	3696.9	3682.4	3662.7	3667.9	3675.8
15°	3648.2	3625.8	3611.3	3612.6	3627.1
17.5°	3586.3	3569.2	3550.8	3554.7	3561.3
20°	3515.2	3506.0	3479.7	3471.8	3478.4
22.5°	3425.8	3408.6	3394.2	3390.2	3391.5
25°	3324.4	3306.0	3288.9	3277.0	3286.3
27.5°	3206.0	3190.2	3167.8	3163.9	3171.8
30°	3071.7	3059.9	3040.1	3034.9	3046.7
32.5°	2934.9	2915.1	2887.5	2887.5	2890.1
35°	2759.8	2755.9	2728.2	2729.5	2732.2
37.5°	2601.9	2583.5	2567.7	2551.9	2559.8
40°	2426.9	2405.8	2384.7	2374.2	2370.3
42.5°	2238.7	2222.9	2213.6	2175.5	2166.3
45°	2053.1	2039.9	2025.4	1975.4	1945.2
47.5°	1863.6	1860.9	1849.1	1760.9	1730.6
50°	1687.2	1683.3	1641.2	1547.7	1517.4
52.5°	1520.1	1493.8	1438.5	1346.3	1341.1
55°	1351.6	1309.5	1230.5	1170.0	1167.4
57.5°	1173.9	1123.9	1043.7	1010.7	1027.9
60°	1031.8	955.5	863.3	867.3	894.9
62.5°	884.4	798.9	708.1	747.5	780.4
65°	760.7	669.9	573.8	651.5	696.2
67.5°	652.8	568.5	476.4	580.4	623.8
70°	563.3	494.8	405.4	514.6	563.3
72.5°	492.2	429.0	359.3	461.9	518.5
75°	426.4	369.8	326.4	406.7	469.8
77.5°	369.8	314.5	294.8	359.3	421.1
80°	310.6	260.6	258.0	313.2	359.3
82.5°	242.2	207.9	207.9	261.9	289.5
85°	171.1	150.0	146.1	190.8	193.5
87.5°	88.2	84.2	76.3	100.0	100.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)