

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: P293582

Luminaire Tested: **24GR-LD5-85-A-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293582  
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-L93050-W2A1-U-4500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7833.0 lumens  
Efficiency: N/A  
Efficacy: 120.5 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

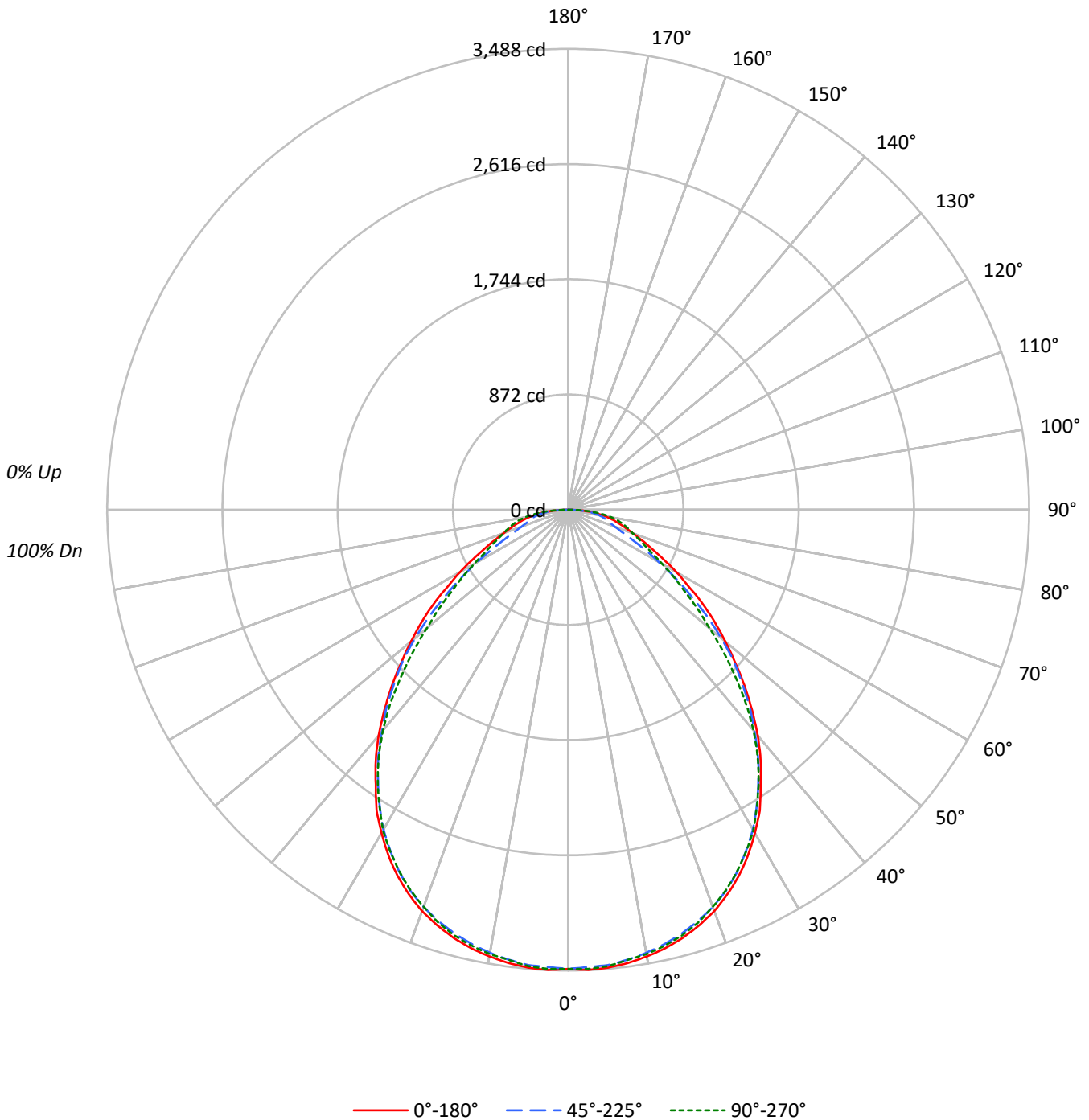
Input Watts (W): 65.023926  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4676	4676	4676
5°	4699	4673	4684
10°	4690	4652	4666
15°	4673	4625	4645
20°	4628	4581	4579
25°	4538	4489	4486
30°	4388	4343	4352
35°	4168	4120	4126
40°	3919	3851	3828
45°	3592	3544	3403
50°	3247	3159	2920
55°	2915	2654	2518
60°	2553	2136	2214
65°	2227	1680	2038
70°	2037	1466	2037
75°	2038	1560	2246
80°	2213	1838	2560
85°	2428	2073	2746



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	329.1	4.2
10°-20°	939.2	12.0
20°-30°	1392.7	17.8
30°-40°	1571.1	20.1
40°-50°	1423.0	18.2
50°-60°	1026.6	13.1
60°-70°	612.9	7.8
70°-80°	378.8	4.8
80°-90°	159.6	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°	2661.0	34.0
0°-40°	4232.1	54.0
0°-60°	6681.6	85.3
0°-90°	7833.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7833.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3475	3475	3475	3475	3475	
5°	3479	3474	3460	3456	3468	331
15°	3354	3334	3320	3322	3335	946
25°	3057	3040	3024	3013	3022	1404
35°	2538	2534	2508	2510	2512	1588
45°	1888	1876	1862	1816	1788	1455
55°	1243	1204	1131	1076	1073	1109
65°	699	616	528	599	640	704
75°	392	340	300	374	432	419
85°	157	138	134	176	178	164
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3475.4	3475.4	3475.4	3475.4	3475.4
2.5°	3487.5	3477.8	3465.7	3473.0	3479.0
5°	3479.0	3474.2	3459.7	3456.0	3468.2
7.5°	3460.9	3448.8	3435.5	3441.5	3436.7
10°	3433.1	3422.2	3405.2	3406.4	3414.9
12.5°	3399.2	3385.9	3367.7	3372.6	3379.8
15°	3354.4	3333.8	3320.5	3321.7	3335.0
17.5°	3297.5	3281.8	3264.9	3268.5	3274.5
20°	3232.2	3223.7	3199.5	3192.2	3198.3
22.5°	3149.9	3134.2	3120.9	3117.2	3118.4
25°	3056.7	3039.8	3024.0	3013.2	3021.6
27.5°	2947.8	2933.3	2912.7	2909.1	2916.3
30°	2824.4	2813.5	2795.3	2790.5	2801.4
32.5°	2698.5	2680.4	2655.0	2655.0	2657.4
35°	2537.6	2534.0	2508.5	2509.8	2512.2
37.5°	2392.4	2375.4	2360.9	2346.4	2353.6
40°	2231.4	2212.1	2192.7	2183.0	2179.4
42.5°	2058.4	2043.9	2035.4	2000.3	1991.8
45°	1887.8	1875.7	1862.3	1816.4	1788.5
47.5°	1713.5	1711.1	1700.2	1619.1	1591.3
50°	1551.4	1547.7	1509.0	1423.1	1395.2
52.5°	1397.7	1373.5	1322.6	1237.9	1233.1
55°	1242.8	1204.1	1131.4	1075.8	1073.4
57.5°	1079.4	1033.4	959.6	929.4	945.1
60°	948.7	878.5	793.8	797.5	822.9
62.5°	813.2	734.5	651.0	687.3	717.6
65°	699.4	615.9	527.6	599.0	640.1
67.5°	600.2	522.8	438.1	533.7	573.6
70°	517.9	455.0	372.7	473.1	517.9
72.5°	452.6	394.5	330.4	424.7	476.8
75°	392.1	340.0	300.1	373.9	432.0
77.5°	340.0	289.2	271.1	330.4	387.2
80°	285.6	239.6	237.2	288.0	330.4
82.5°	222.7	191.2	191.2	240.8	266.2
85°	157.3	138.0	134.3	175.5	177.9
87.5°	81.1	77.4	70.2	92.0	92.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)