

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: P293453

Luminaire Tested: **24GR-LD5-85-A-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P293453  
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-L83050-W2A1-U-3000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7925.0 lumens  
Efficiency: N/A  
Efficacy: 127.2 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

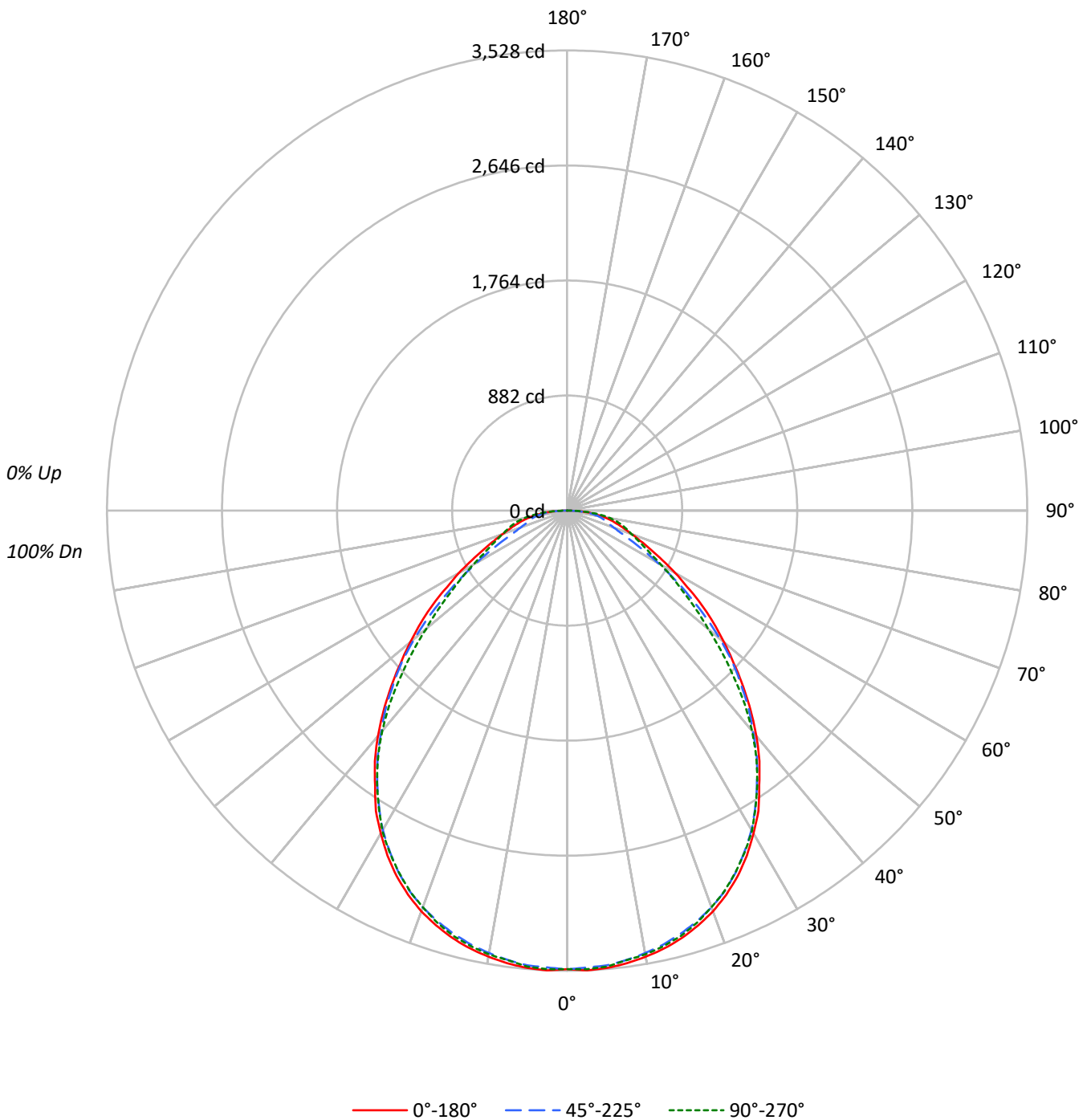
Input Watts (W): 62.31  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63					63			
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43					43			
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39					39			
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35					35			
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32					32			
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29					29			

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

	0°	45°	90°
0°	4731	4731	4731
5°	4754	4728	4739
10°	4746	4707	4720
15°	4727	4680	4700
20°	4682	4635	4633
25°	4591	4542	4539
30°	4440	4394	4403
35°	4217	4169	4175
40°	3965	3897	3873
45°	3634	3585	3443
50°	3286	3196	2955
55°	2950	2685	2548
60°	2583	2161	2240
65°	2253	1699	2062
70°	2061	1483	2061
75°	2062	1578	2272
80°	2239	1860	2590
85°	2458	2098	2779



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	333.0	4.2
10°-20°	950.3	12.0
20°-30°	1409.0	17.8
30°-40°	1589.5	20.1
40°-50°	1439.7	18.2
50°-60°	1038.6	13.1
60°-70°	620.2	7.8
70°-80°	383.3	4.8
80°-90°	161.5	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°	2692.2	34.0
0°-40°	4281.8	54.0
0°-60°	6760.1	85.3
0°-90°	7925.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7925.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3516	3516	3516	3516	3516	
5°	3520	3515	3500	3497	3509	334
15°	3394	3373	3360	3361	3374	957
25°	3093	3076	3060	3048	3057	1421
35°	2567	2564	2538	2539	2542	1606
45°	1910	1898	1884	1838	1810	1472
55°	1257	1218	1145	1088	1086	1122
65°	708	623	534	606	648	712
75°	397	344	304	378	437	424
85°	159	140	136	178	180	166
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3516.2	3516.2	3516.2	3516.2	3516.2
2.5°	3528.5	3518.7	3506.4	3513.8	3519.9
5°	3519.9	3515.0	3500.3	3496.6	3508.9
7.5°	3501.5	3489.3	3475.8	3481.9	3477.1
10°	3473.4	3462.4	3445.2	3446.4	3455.0
12.5°	3439.1	3425.6	3407.3	3412.2	3419.5
15°	3393.8	3373.0	3359.5	3360.7	3374.2
17.5°	3336.3	3320.3	3303.2	3306.9	3313.0
20°	3270.1	3261.6	3237.1	3229.7	3235.9
22.5°	3186.9	3171.0	3157.5	3153.8	3155.1
25°	3092.6	3075.5	3059.6	3048.5	3057.1
27.5°	2982.4	2967.7	2946.9	2943.3	2950.6
30°	2857.5	2846.5	2828.2	2823.3	2834.3
32.5°	2730.2	2711.9	2686.1	2686.1	2688.6
35°	2567.4	2563.7	2538.0	2539.2	2541.7
37.5°	2420.5	2403.3	2388.6	2373.9	2381.3
40°	2257.6	2238.0	2218.5	2208.7	2205.0
42.5°	2082.6	2067.9	2059.3	2023.8	2015.2
45°	1909.9	1897.7	1884.2	1837.7	1809.5
47.5°	1733.6	1731.2	1720.2	1638.1	1610.0
50°	1569.6	1565.9	1526.7	1439.8	1411.6
52.5°	1414.1	1389.6	1338.2	1252.5	1247.6
55°	1257.4	1218.2	1144.7	1088.4	1086.0
57.5°	1092.1	1045.6	970.9	940.3	956.2
60°	959.9	888.9	803.2	806.8	832.5
62.5°	822.7	743.2	658.7	695.4	726.0
65°	707.7	623.2	533.8	606.0	647.7
67.5°	607.3	528.9	443.2	539.9	580.3
70°	524.0	460.3	377.1	478.7	524.0
72.5°	457.9	399.1	334.2	429.7	482.4
75°	396.7	344.0	303.6	378.3	437.1
77.5°	344.0	292.6	274.2	334.2	391.8
80°	288.9	242.4	240.0	291.4	334.2
82.5°	225.3	193.4	193.4	243.6	269.3
85°	159.2	139.6	135.9	177.5	180.0
87.5°	82.0	78.4	71.0	93.0	93.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)