

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: P475861

Luminaire Tested: **24GR-LD5-100-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475861  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-100-FGW080-UNV-L840-CD1-U  
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8699.0 lumens  
Efficiency: N/A  
Efficacy: 129.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

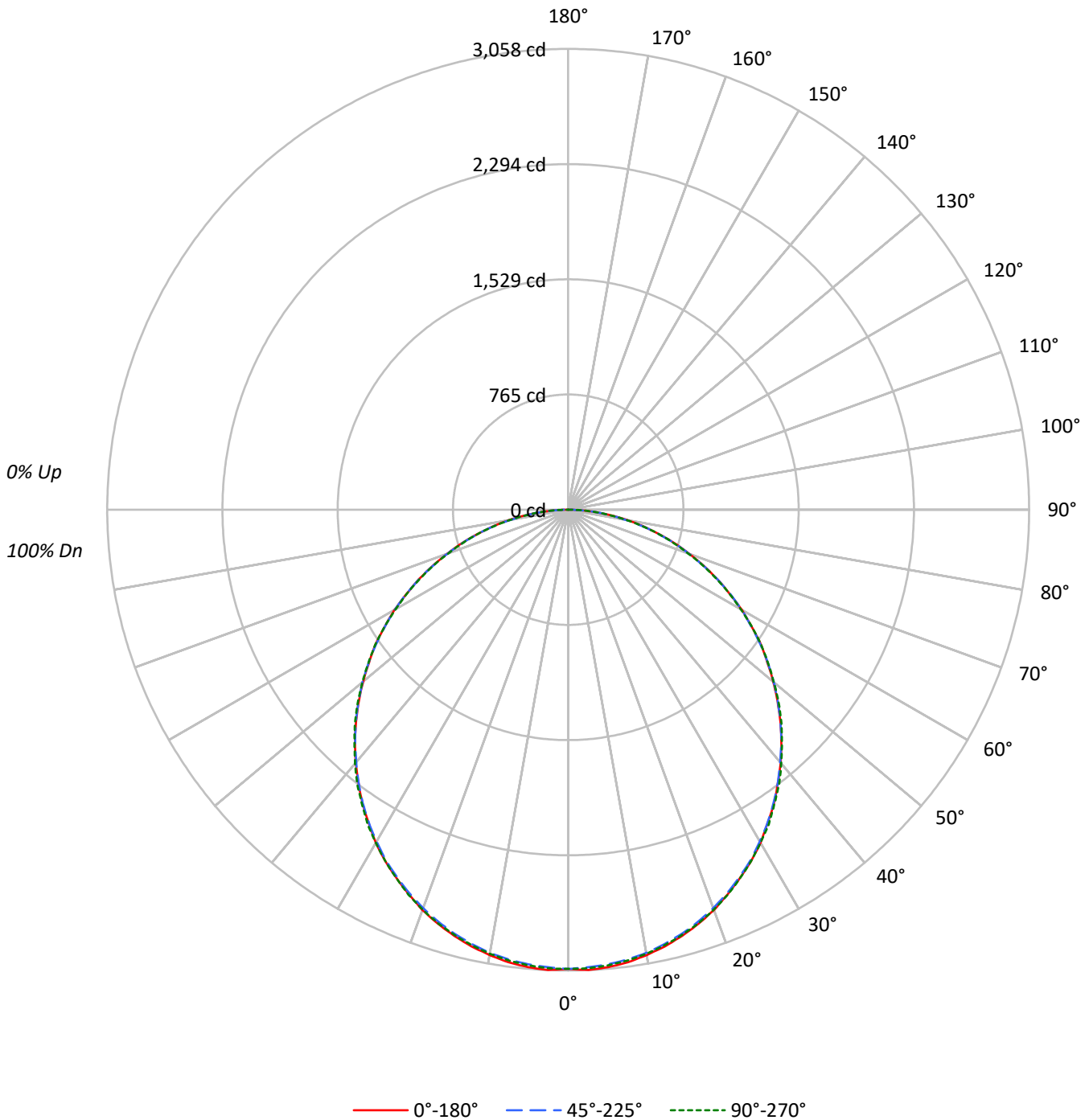
Input Watts (W): 67.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	85	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	50	45	55	49	45	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	35	47	40	35	46	40	35	33
8	60	46	38	32	58	46	38	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	4100	4100	4100
5°	4115	4090	4099
10°	4100	4079	4088
15°	4077	4058	4069
20°	4047	4029	4044
25°	4003	3991	4006
30°	3964	3949	3964
35°	3908	3902	3916
40°	3853	3842	3863
45°	3789	3789	3806
50°	3718	3728	3728
55°	3665	3651	3662
60°	3582	3579	3555
65°	3479	3476	3454
70°	3358	3350	3330
75°	3229	3219	3224
80°	3082	3020	3036
85°	2736	2736	2766



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	288.1	3.3
10°-20°	823.1	9.5
20°-30°	1240.9	14.3
30°-40°	1487.1	17.1
40°-50°	1536.4	17.7
50°-60°	1391.3	16.0
60°-70°	1077.8	12.4
70°-80°	653.7	7.5
80°-90°	200.7	2.3
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°	2352.1	27.0
0°-40°	3839.1	44.1
0°-60°	6766.9	77.8
0°-90°	8699.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8699.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3047	3047	3047	3047	3047	
5°	3047	3035	3028	3028	3035	289
15°	2927	2918	2913	2915	2921	826
25°	2696	2690	2688	2694	2698	1243
35°	2379	2371	2376	2379	2384	1488
45°	1992	1988	1992	1994	2000	1535
55°	1562	1554	1556	1558	1561	1392
65°	1093	1087	1092	1089	1085	1080
75°	621	621	619	613	620	659
85°	177	180	177	174	179	204
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3046.9	3046.9	3046.9	3046.9	3046.9
2.5°	3057.7	3046.9	3039.0	3039.0	3045.9
5°	3046.9	3035.1	3028.2	3028.2	3035.1
7.5°	3029.2	3016.4	3010.5	3010.5	3016.4
10°	3000.6	2990.8	2985.8	2985.8	2991.8
12.5°	2967.1	2958.3	2952.4	2953.4	2959.3
15°	2926.8	2917.9	2913.0	2915.0	2920.9
17.5°	2879.5	2870.7	2866.7	2869.7	2876.6
20°	2826.4	2815.5	2813.6	2816.5	2824.4
22.5°	2762.4	2755.5	2754.5	2759.4	2766.3
25°	2696.4	2690.5	2688.5	2694.4	2698.4
27.5°	2628.5	2617.7	2621.6	2622.6	2628.5
30°	2551.7	2541.9	2541.9	2545.8	2551.7
32.5°	2463.1	2457.2	2462.1	2467.0	2475.9
35°	2379.4	2370.6	2375.5	2379.4	2384.3
37.5°	2284.9	2282.9	2283.9	2289.8	2297.7
40°	2193.4	2187.5	2187.5	2195.3	2199.3
42.5°	2092.9	2088.0	2092.0	2095.9	2097.9
45°	1991.5	1987.6	1991.5	1994.5	2000.4
47.5°	1883.3	1884.2	1885.2	1887.2	1893.1
50°	1776.0	1779.9	1780.9	1784.8	1780.9
52.5°	1664.7	1665.7	1669.6	1670.6	1671.6
55°	1562.3	1553.5	1556.4	1558.4	1561.3
57.5°	1442.2	1439.3	1439.3	1442.2	1444.2
60°	1331.0	1325.1	1330.0	1324.1	1321.1
62.5°	1206.9	1208.9	1210.9	1209.9	1205.0
65°	1092.7	1086.8	1091.8	1088.8	1084.9
67.5°	972.6	967.7	969.7	968.7	967.7
70°	853.5	853.5	851.6	846.6	846.6
72.5°	741.3	735.4	737.4	731.4	731.4
75°	621.2	621.2	619.2	613.3	620.2
77.5°	509.0	506.0	504.0	500.1	500.1
80°	397.7	390.8	389.8	389.8	391.8
82.5°	288.4	283.5	281.6	281.6	282.5
85°	177.2	180.2	177.2	174.2	179.2
87.5°	83.7	79.7	79.7	82.7	84.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)