

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: P475844

Luminaire Tested: **24GR-LD5-85-FGW080-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475844  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-85-FGW080-UNV-L835-CD1-U  
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7257.7 lumens  
Efficiency: N/A  
Efficacy: 122.6 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

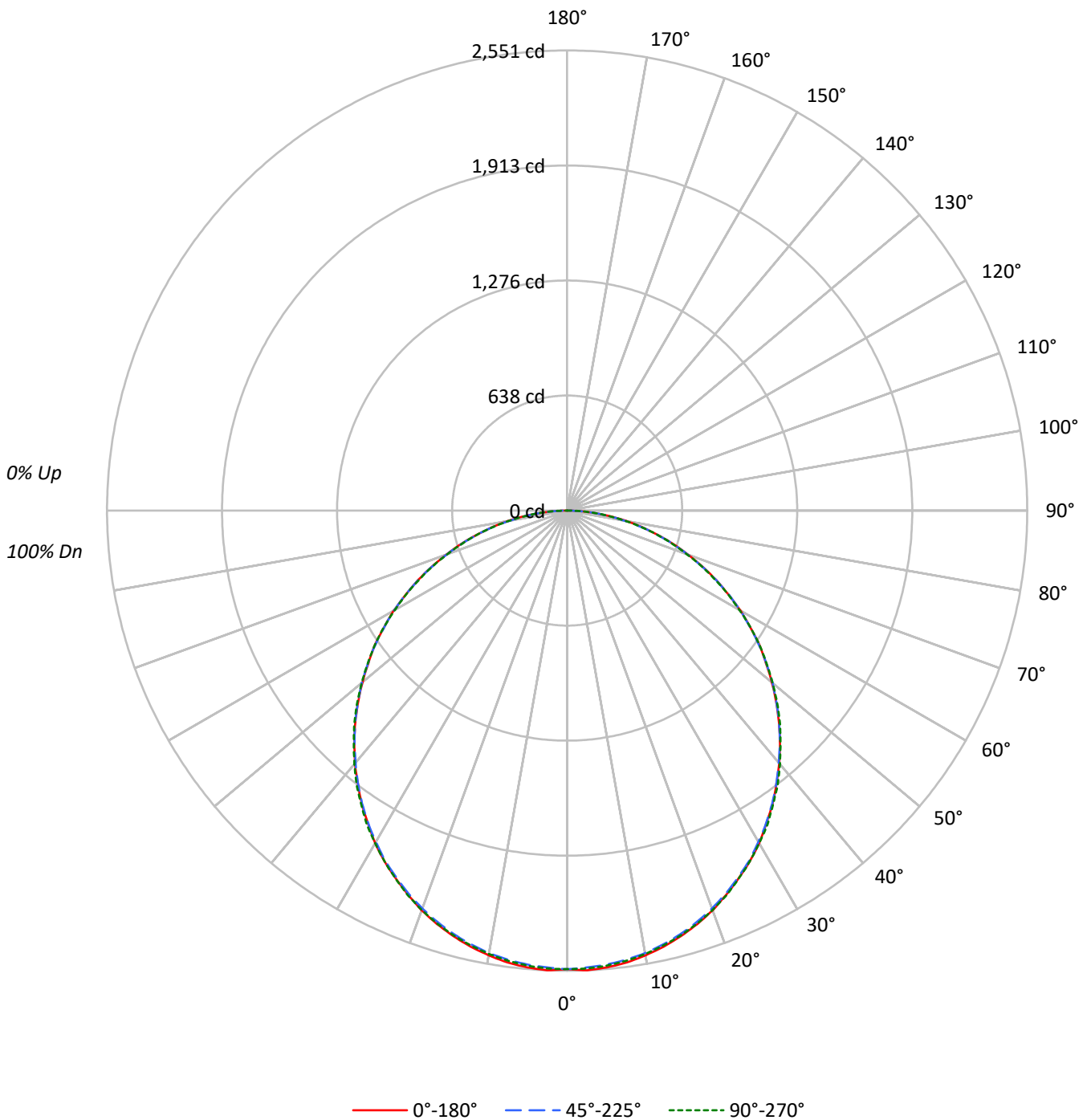
Input Watts (W): 59.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3420	3420	3420
5°	3433	3412	3420
10°	3420	3403	3410
15°	3401	3385	3394
20°	3376	3361	3374
25°	3340	3330	3342
30°	3308	3295	3308
35°	3261	3255	3268
40°	3214	3205	3223
45°	3162	3162	3176
50°	3102	3110	3110
55°	3058	3046	3056
60°	2988	2986	2966
65°	2903	2900	2882
70°	2801	2795	2779
75°	2694	2686	2690
80°	2571	2520	2533
85°	2282	2282	2308



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	240.4	3.3
10°-20°	686.7	9.5
20°-30°	1035.3	14.3
30°-40°	1240.7	17.1
40°-50°	1281.8	17.7
50°-60°	1160.8	16.0
60°-70°	899.2	12.4
70°-80°	545.4	7.5
80°-90°	167.4	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°	1962.4	27.0
0°-40°	3203.0	44.1
0°-60°	5645.7	77.8
0°-90°	7257.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7257.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2542	2542	2542	2542	2542	
5°	2542	2532	2526	2526	2532	241
15°	2442	2434	2430	2432	2437	689
25°	2250	2245	2243	2248	2251	1037
35°	1985	1978	1982	1985	1989	1241
45°	1662	1658	1662	1664	1669	1281
55°	1304	1296	1298	1300	1303	1161
65°	912	907	911	908	905	901
75°	518	518	517	512	517	550
85°	148	150	148	145	150	170
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2542.0	2542.0	2542.0	2542.0	2542.0
2.5°	2551.1	2542.0	2535.5	2535.5	2541.2
5°	2542.0	2532.2	2526.4	2526.4	2532.2
7.5°	2527.3	2516.6	2511.6	2511.6	2516.6
10°	2503.4	2495.2	2491.1	2491.1	2496.0
12.5°	2475.5	2468.1	2463.2	2464.0	2468.9
15°	2441.8	2434.4	2430.3	2432.0	2436.9
17.5°	2402.4	2395.0	2391.7	2394.2	2399.9
20°	2358.1	2349.0	2347.4	2349.8	2356.4
22.5°	2304.7	2298.9	2298.1	2302.2	2308.0
25°	2249.6	2244.7	2243.1	2248.0	2251.3
27.5°	2193.0	2183.9	2187.2	2188.0	2193.0
30°	2128.9	2120.7	2120.7	2124.0	2128.9
32.5°	2055.0	2050.1	2054.2	2058.3	2065.7
35°	1985.2	1977.8	1981.9	1985.2	1989.3
37.5°	1906.3	1904.7	1905.5	1910.4	1917.0
40°	1829.9	1825.0	1825.0	1831.6	1834.9
42.5°	1746.2	1742.1	1745.3	1748.6	1750.3
45°	1661.6	1658.3	1661.6	1664.0	1669.0
47.5°	1571.2	1572.0	1572.9	1574.5	1579.4
50°	1481.7	1485.0	1485.8	1489.1	1485.8
52.5°	1388.9	1389.7	1393.0	1393.8	1394.6
55°	1303.5	1296.1	1298.5	1300.2	1302.6
57.5°	1203.3	1200.8	1200.8	1203.3	1204.9
60°	1110.4	1105.5	1109.6	1104.7	1102.2
62.5°	1007.0	1008.6	1010.2	1009.4	1005.3
65°	911.7	906.8	910.9	908.4	905.1
67.5°	811.5	807.4	809.0	808.2	807.4
70°	712.1	712.1	710.5	706.3	706.3
72.5°	618.5	613.5	615.2	610.3	610.3
75°	518.3	518.3	516.6	511.7	517.4
77.5°	424.6	422.2	420.5	417.2	417.2
80°	331.8	326.1	325.2	325.2	326.9
82.5°	240.7	236.5	234.9	234.9	235.7
85°	147.8	150.3	147.8	145.4	149.5
87.5°	69.8	66.5	66.5	69.0	70.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)