

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: P475845

Luminaire Tested: **24GR-LD5-90-FGW080-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475845  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-90-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: 7658.0 lumens  
Efficiency: N/A  
Efficacy: 125.1 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

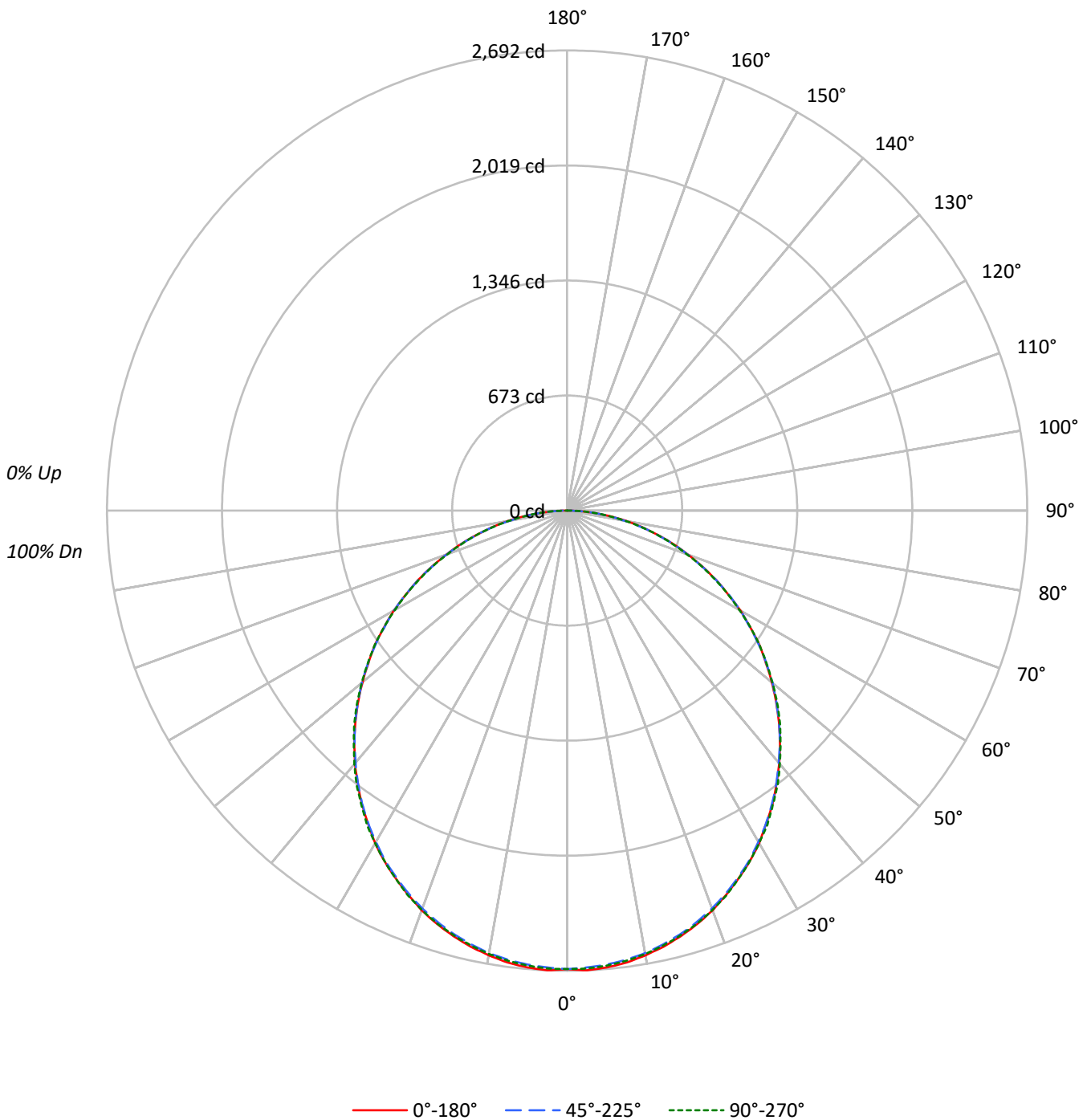
Input Watts (W): 61.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	3609	3609	3609
5°	3623	3601	3609
10°	3609	3591	3598
15°	3589	3572	3582
20°	3563	3547	3560
25°	3524	3514	3527
30°	3490	3477	3490
35°	3441	3435	3448
40°	3391	3382	3401
45°	3336	3336	3351
50°	3273	3282	3282
55°	3226	3214	3224
60°	3153	3151	3130
65°	3063	3060	3040
70°	2956	2949	2932
75°	2843	2834	2838
80°	2713	2659	2672
85°	2408	2408	2435



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	253.7	3.3
10°-20°	724.6	9.5
20°-30°	1092.4	14.3
30°-40°	1309.1	17.1
40°-50°	1352.5	17.7
50°-60°	1224.8	16.0
60°-70°	948.8	12.4
70°-80°	575.5	7.5
80°-90°	176.7	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°	2070.6	27.0
0°-40°	3379.7	44.1
0°-60°	5957.0	77.8
0°-90°	7658.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7658.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2682	2682	2682	2682	2682	
5°	2682	2672	2666	2666	2672	255
15°	2576	2569	2564	2566	2571	727
25°	2374	2368	2367	2372	2376	1095
35°	2095	2087	2091	2095	2099	1310
45°	1753	1750	1753	1756	1761	1352
55°	1375	1368	1370	1372	1374	1225
65°	962	957	961	958	955	951
75°	547	547	545	540	546	580
85°	156	159	156	153	158	179
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2682.3	2682.3	2682.3	2682.3	2682.3
2.5°	2691.8	2682.3	2675.3	2675.3	2681.4
5°	2682.3	2671.9	2665.8	2665.8	2671.9
7.5°	2666.7	2655.4	2650.2	2650.2	2655.4
10°	2641.5	2632.9	2628.5	2628.5	2633.7
12.5°	2612.1	2604.3	2599.1	2599.9	2605.1
15°	2576.5	2568.7	2564.4	2566.1	2571.3
17.5°	2534.9	2527.1	2523.7	2526.3	2532.3
20°	2488.1	2478.6	2476.9	2479.5	2486.4
22.5°	2431.8	2425.7	2424.9	2429.2	2435.3
25°	2373.7	2368.5	2366.8	2372.0	2375.5
27.5°	2313.9	2304.4	2307.9	2308.7	2313.9
30°	2246.3	2237.7	2237.7	2241.1	2246.3
32.5°	2168.3	2163.1	2167.5	2171.8	2179.6
35°	2094.7	2086.9	2091.2	2094.7	2099.0
37.5°	2011.5	2009.7	2010.6	2015.8	2022.7
40°	1930.9	1925.7	1925.7	1932.6	1936.1
42.5°	1842.5	1838.1	1841.6	1845.1	1846.8
45°	1753.2	1749.7	1753.2	1755.8	1761.0
47.5°	1657.9	1658.7	1659.6	1661.3	1666.5
50°	1563.4	1566.9	1567.8	1571.2	1567.8
52.5°	1465.5	1466.4	1469.8	1470.7	1471.6
55°	1375.4	1367.6	1370.2	1371.9	1374.5
57.5°	1269.6	1267.0	1267.0	1269.6	1271.4
60°	1171.7	1166.5	1170.8	1165.6	1163.0
62.5°	1062.5	1064.2	1066.0	1065.1	1060.8
65°	962.0	956.8	961.1	958.5	955.0
67.5°	856.2	851.9	853.6	852.8	851.9
70°	751.4	751.4	749.6	745.3	745.3
72.5°	652.6	647.4	649.1	643.9	643.9
75°	546.9	546.9	545.1	539.9	546.0
77.5°	448.1	445.5	443.7	440.3	440.3
80°	350.1	344.1	343.2	343.2	344.9
82.5°	253.9	249.6	247.9	247.9	248.7
85°	156.0	158.6	156.0	153.4	157.7
87.5°	73.7	70.2	70.2	72.8	74.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)