

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: P475834

Luminaire Tested: **24GR-LD5-150-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475834  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-150-FGW080-UNV-L830-CD1-U  
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12370.2 lumens  
Efficiency: N/A  
Efficacy: 119.6 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

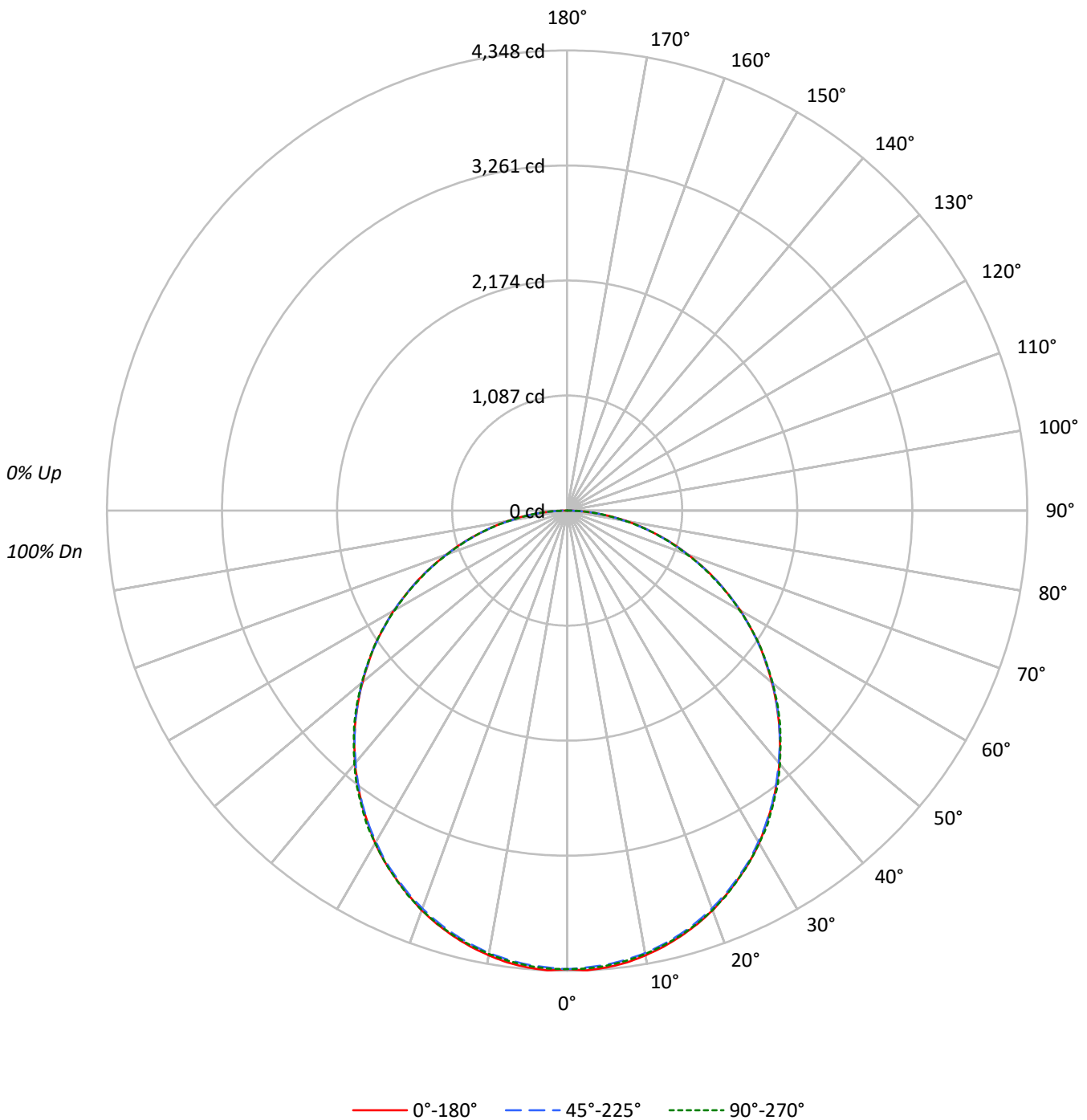
Input Watts (W): 103.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5830	5830	5830
5°	5852	5816	5829
10°	5830	5801	5812
15°	5797	5770	5786
20°	5755	5729	5751
25°	5692	5676	5697
30°	5638	5616	5638
35°	5558	5548	5569
40°	5478	5463	5493
45°	5389	5389	5413
50°	5286	5301	5301
55°	5212	5192	5208
60°	5093	5089	5056
65°	4947	4943	4911
70°	4775	4764	4736
75°	4592	4577	4585
80°	4382	4296	4317
85°	3890	3890	3934



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	409.7	3.3
10°-20°	1170.4	9.5
20°-30°	1764.6	14.3
30°-40°	2114.6	17.1
40°-50°	2184.7	17.7
50°-60°	1978.5	16.0
60°-70°	1532.6	12.4
70°-80°	929.5	7.5
80°-90°	285.4	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°	3344.7	27.0
0°-40°	5459.3	44.1
0°-60°	9622.6	77.8
0°-90°	12370.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12370.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4333	4333	4333	4333	4333	
5°	4333	4316	4306	4306	4316	411
15°	4162	4149	4142	4145	4154	1174
25°	3834	3826	3823	3832	3837	1768
35°	3384	3371	3378	3384	3391	2115
45°	2832	2826	2832	2836	2845	2183
55°	2222	2209	2213	2216	2220	1979
65°	1554	1546	1552	1548	1543	1536
75°	883	883	880	872	882	937
85°	252	256	252	248	255	289
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4332.7	4332.7	4332.7	4332.7	4332.7
2.5°	4348.1	4332.7	4321.5	4321.5	4331.3
5°	4332.7	4315.9	4306.1	4306.1	4315.9
7.5°	4307.5	4289.3	4280.9	4280.9	4289.3
10°	4266.9	4252.9	4245.9	4245.9	4254.3
12.5°	4219.3	4206.7	4198.3	4199.7	4208.1
15°	4161.9	4149.3	4142.3	4145.1	4153.5
17.5°	4094.7	4082.1	4076.5	4080.7	4090.5
20°	4019.1	4003.7	4000.9	4005.1	4016.3
22.5°	3928.1	3918.3	3917.0	3923.9	3933.7
25°	3834.4	3826.0	3823.2	3831.6	3837.2
27.5°	3737.8	3722.4	3728.0	3729.4	3737.8
30°	3628.6	3614.6	3614.6	3620.2	3628.6
32.5°	3502.6	3494.2	3501.2	3508.2	3520.8
35°	3383.6	3371.0	3378.0	3383.6	3390.6
37.5°	3249.2	3246.4	3247.8	3256.2	3267.4
40°	3119.0	3110.6	3110.6	3121.8	3127.4
42.5°	2976.2	2969.2	2974.8	2980.4	2983.2
45°	2832.0	2826.4	2832.0	2836.2	2844.6
47.5°	2678.0	2679.4	2680.8	2683.6	2692.0
50°	2525.4	2531.0	2532.4	2538.0	2532.4
52.5°	2367.2	2368.6	2374.2	2375.6	2377.0
55°	2221.7	2209.1	2213.3	2216.1	2220.3
57.5°	2050.9	2046.7	2046.7	2050.9	2053.7
60°	1892.7	1884.3	1891.3	1882.9	1878.7
62.5°	1716.3	1719.1	1721.9	1720.5	1713.5
65°	1553.9	1545.5	1552.5	1548.3	1542.7
67.5°	1383.1	1376.1	1378.9	1377.5	1376.1
70°	1213.7	1213.7	1210.9	1203.9	1203.9
72.5°	1054.1	1045.7	1048.5	1040.1	1040.1
75°	883.3	883.3	880.5	872.1	881.9
77.5°	723.8	719.6	716.8	711.2	711.2
80°	565.6	555.8	554.4	554.4	557.2
82.5°	410.2	403.2	400.4	400.4	401.8
85°	252.0	256.2	252.0	247.8	254.8
87.5°	119.0	113.4	113.4	117.6	120.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)