

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: P475756

Luminaire Tested: **24GR-LD5-100-A-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475756  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-100-A-UNV-L850-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9937.7 lumens  
Efficiency: N/A  
Efficacy: 148.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.28  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

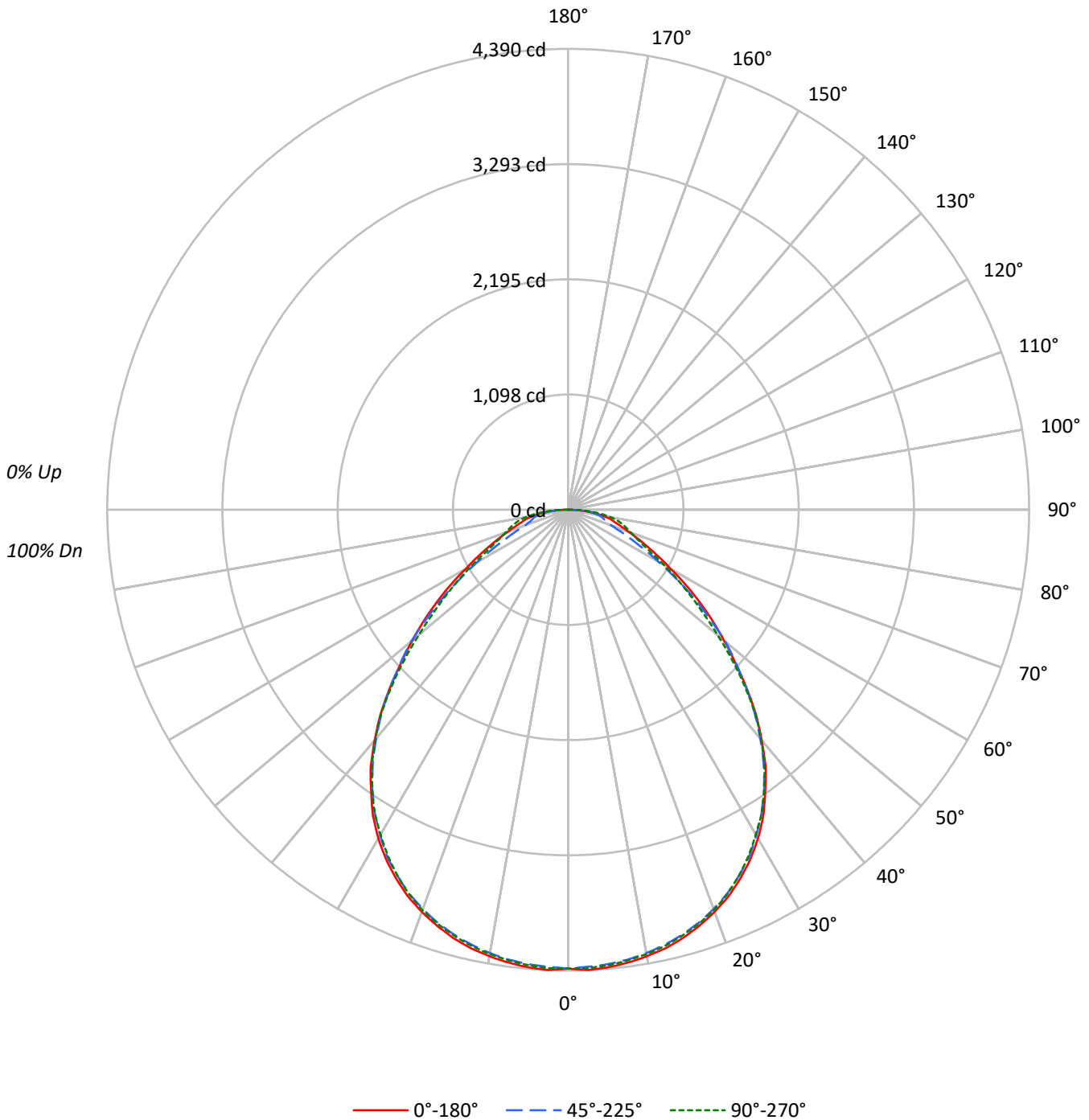
Input Watts (W): 67.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P475756

CATALOG NUMBER: 24GR-LD5-100-A-UNV-L850-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P475756

CATALOG NUMBER: 24GR-LD5-100-A-UNV-L850-CD1-U

**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	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	58	56
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39
8	64	51	43	38	62	50	43	37	49	42	37	48	42	37	47	41	37	35
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29

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

	0°	45°	90°
0°	5881	5881	5881
5°	5910	5870	5884
10°	5901	5861	5873
15°	5884	5838	5851
20°	5838	5796	5812
25°	5757	5715	5710
30°	5617	5565	5552
35°	5376	5342	5342
40°	5030	5001	5022
45°	4567	4560	4522
50°	4051	4082	3881
55°	3560	3404	3324
60°	3031	2688	2828
65°	2648	2090	2495
70°	2394	1721	2491
75°	2396	1836	2782
80°	2638	2259	3185
85°	2719	2538	3475



TEST NUMBER: P475756

CATALOG NUMBER: 24GR-LD5-100-A-UNV-L850-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	413.9	4.2
10°-20°	1184.9	11.9
20°-30°	1772.5	17.8
30°-40°	2028.4	20.4
40°-50°	1837.8	18.5
50°-60°	1301.1	13.1
60°-70°	751.6	7.6
70°-80°	455.7	4.6
80°-90°	191.8	1.9
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°	3371.3	33.9
0°-40°	5399.7	54.3
0°-60°	8538.6	85.9
0°-90°	9937.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9937.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4371	4371	4371	4371	4371	
5°	4376	4360	4346	4346	4356	416
15°	4224	4208	4191	4191	4201	1191
25°	3878	3862	3849	3846	3846	1784
35°	3273	3258	3252	3248	3252	2042
45°	2400	2395	2396	2379	2377	1849
55°	1518	1467	1451	1408	1417	1360
65°	832	746	657	752	784	836
75°	461	413	353	454	535	494
85°	176	158	164	210	225	189
90°	0	0	0	0	0	



TEST NUMBER: P475756

CATALOG NUMBER: 24GR-LD5-100-A-UNV-L850-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4370.9	4370.9	4370.9	4370.9	4370.9
2.5°	4389.5	4372.9	4358.2	4360.1	4370.9
5°	4375.8	4360.1	4346.4	4345.5	4356.2
7.5°	4352.3	4338.6	4323.0	4323.0	4331.8
10°	4319.1	4305.4	4289.7	4288.7	4298.5
12.5°	4279.9	4262.3	4245.7	4245.7	4256.4
15°	4224.1	4207.5	4190.9	4190.9	4200.7
17.5°	4155.6	4141.0	4127.3	4128.2	4136.1
20°	4077.4	4062.7	4048.0	4050.0	4058.8
22.5°	3987.3	3969.7	3958.0	3957.0	3962.9
25°	3877.8	3862.1	3849.4	3846.4	3846.4
27.5°	3755.4	3738.8	3730.0	3716.3	3720.2
30°	3615.5	3597.9	3582.2	3574.4	3573.4
32.5°	3458.0	3440.4	3426.7	3425.7	3429.6
35°	3273.0	3258.4	3252.5	3247.6	3252.5
37.5°	3090.1	3062.7	3057.8	3056.8	3069.5
40°	2864.0	2854.3	2847.4	2842.5	2859.1
42.5°	2646.8	2627.2	2629.2	2610.6	2640.0
45°	2400.2	2395.3	2396.3	2378.7	2376.7
47.5°	2155.6	2154.6	2169.3	2120.4	2117.5
50°	1935.5	1925.7	1950.1	1874.8	1854.2
52.5°	1725.1	1697.7	1689.9	1621.4	1621.4
55°	1517.6	1466.8	1451.1	1408.0	1416.9
57.5°	1321.0	1248.6	1216.3	1215.3	1230.0
60°	1126.2	1044.0	999.0	1034.3	1050.9
62.5°	971.6	881.6	813.1	879.7	895.3
65°	831.7	745.6	656.6	751.5	783.8
67.5°	711.4	639.9	528.4	652.7	695.7
70°	608.6	545.0	437.4	575.4	633.1
72.5°	527.4	474.6	380.6	513.7	583.2
75°	460.9	412.9	353.2	454.0	535.2
77.5°	408.0	351.3	330.7	397.3	480.4
80°	340.5	288.7	291.6	341.5	411.0
82.5°	262.2	223.1	234.8	282.8	322.9
85°	176.1	158.5	164.4	210.4	225.1
87.5°	87.1	84.2	90.0	123.3	123.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)