

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: P475576

Luminaire Tested: **24GR-LD5-100-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475576
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-100-F1-UNV-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10244.5 lumens
Efficiency: N/A
Efficacy: 152.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

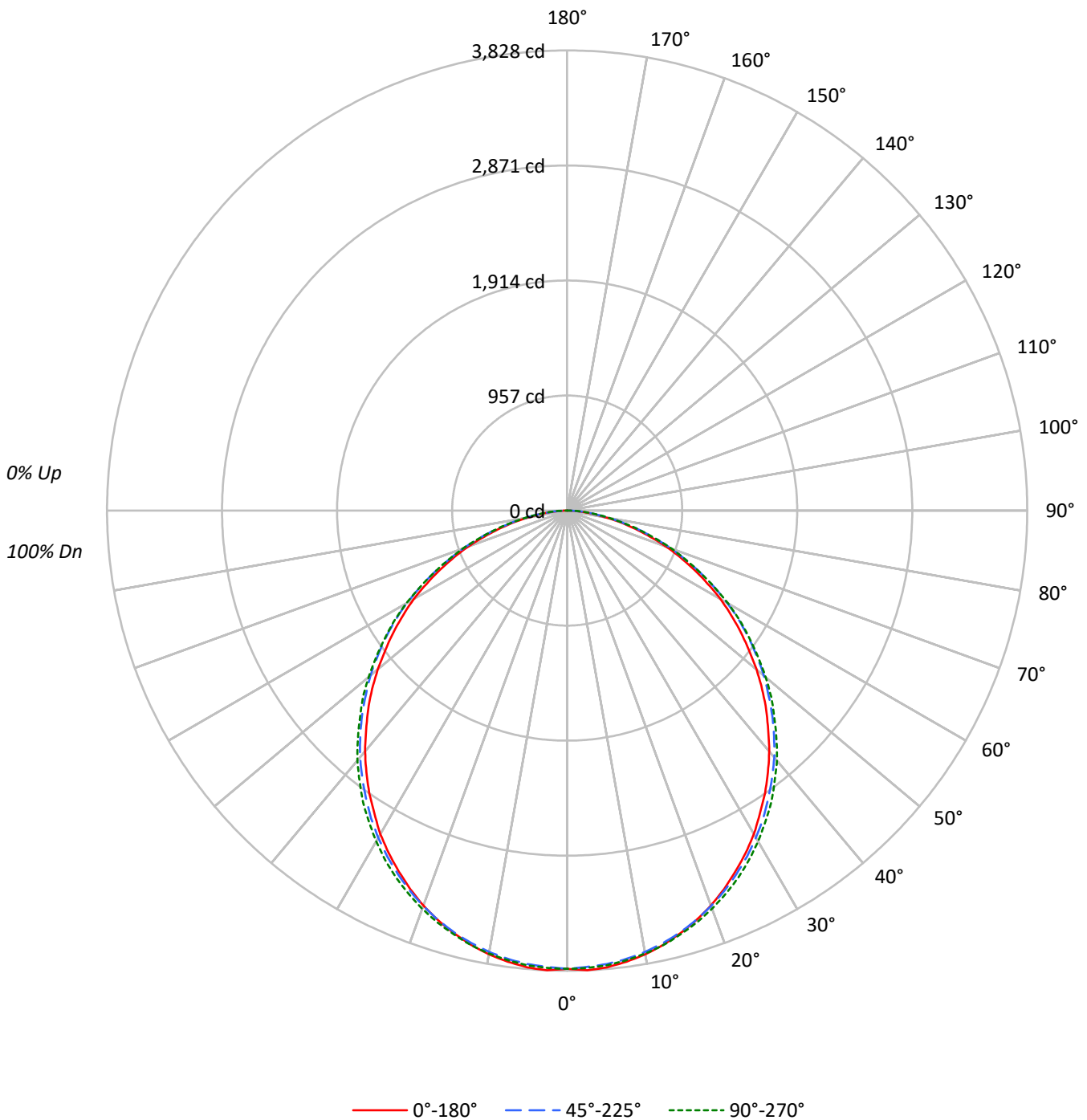
Input Watts (W): 67.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475576

CATALOG NUMBER: 24GR-LD5-100-F1-UNV-L850-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475576

CATALOG NUMBER: 24GR-LD5-100-F1-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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5129	5129	5129
5°	5151	5114	5128
10°	5121	5094	5112
15°	5070	5061	5083
20°	5006	5012	5047
25°	4918	4950	5001
30°	4828	4881	4936
35°	4713	4792	4865
40°	4593	4708	4768
45°	4456	4592	4640
50°	4305	4471	4511
55°	4136	4320	4344
60°	3966	4142	4158
65°	3717	3893	3883
70°	3443	3601	3636
75°	3050	3228	3249
80°	2538	2724	2787
85°	1924	2109	2373



TEST NUMBER: P475576

CATALOG NUMBER: 24GR-LD5-100-F1-UNV-L850-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	360.2	3.5
10°-20°	1025.7	10.0
20°-30°	1536.8	15.0
30°-40°	1823.3	17.8
40°-50°	1851.7	18.1
50°-60°	1630.7	15.9
60°-70°	1198.3	11.7
70°-80°	651.7	6.4
80°-90°	166.0	1.6
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°	2922.7	28.5
0°-40°	4746.1	46.3
0°-60°	8228.5	80.3
0°-90°	10244.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10244.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3812	3812	3812	3812	3812	
5°	3814	3798	3787	3787	3797	362
15°	3640	3633	3633	3638	3649	1026
25°	3312	3316	3335	3354	3369	1526
35°	2869	2886	2918	2947	2962	1794
45°	2342	2361	2413	2441	2438	1805
55°	1763	1788	1842	1859	1852	1576
65°	1168	1186	1223	1232	1220	1157
75°	587	599	621	623	625	624
85°	125	128	137	149	154	151
90°	0	0	0	0	0	



TEST NUMBER: P475576

CATALOG NUMBER: 24GR-LD5-100-F1-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3811.8	3811.8	3811.8	3811.8	3811.8
2.5°	3827.9	3812.8	3799.8	3799.8	3808.8
5°	3813.8	3797.7	3786.7	3786.7	3796.7
7.5°	3784.7	3771.6	3762.6	3762.6	3773.6
10°	3748.5	3735.5	3728.4	3729.4	3741.5
12.5°	3700.3	3688.2	3685.2	3687.2	3702.3
15°	3640.0	3633.0	3633.0	3638.0	3649.1
17.5°	3572.7	3565.7	3570.7	3577.7	3591.8
20°	3496.3	3491.3	3500.4	3511.4	3524.5
22.5°	3408.9	3406.9	3422.0	3437.1	3450.1
25°	3312.5	3316.5	3334.6	3353.7	3368.7
27.5°	3213.0	3217.0	3242.2	3262.2	3277.3
30°	3107.5	3109.5	3141.7	3165.8	3176.8
32.5°	2985.0	3001.0	3035.2	3058.3	3068.3
35°	2869.4	2885.5	2917.6	2946.8	2961.8
37.5°	2743.8	2757.9	2800.1	2831.2	2836.3
40°	2615.2	2628.3	2680.5	2706.6	2714.7
42.5°	2474.6	2499.7	2546.9	2573.0	2578.0
45°	2341.9	2361.0	2413.3	2441.4	2438.4
47.5°	2200.3	2221.4	2272.6	2299.7	2304.8
50°	2056.6	2080.7	2136.0	2154.1	2155.1
52.5°	1905.9	1937.1	1987.3	2011.4	2003.4
55°	1763.2	1788.4	1841.6	1858.7	1851.7
57.5°	1616.6	1644.7	1693.9	1703.0	1704.0
60°	1473.9	1497.0	1539.2	1548.2	1545.2
62.5°	1317.2	1340.3	1378.4	1387.5	1380.5
65°	1167.5	1186.5	1222.7	1231.8	1219.7
67.5°	1018.8	1037.9	1066.0	1080.0	1067.0
70°	875.1	890.2	915.3	923.3	924.3
72.5°	722.4	749.5	767.6	766.6	763.6
75°	586.7	598.8	620.9	622.9	624.9
77.5°	457.1	460.2	483.3	489.3	485.3
80°	327.5	338.6	351.6	358.7	359.7
82.5°	216.0	224.0	235.1	247.2	247.2
85°	124.6	127.6	136.6	148.7	153.7
87.5°	50.2	55.3	64.3	73.3	74.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)