

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: P475561

Luminaire Tested: **24GR-LD5-100-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475561
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-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10234.5 lumens
Efficiency: N/A
Efficacy: 152.5 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

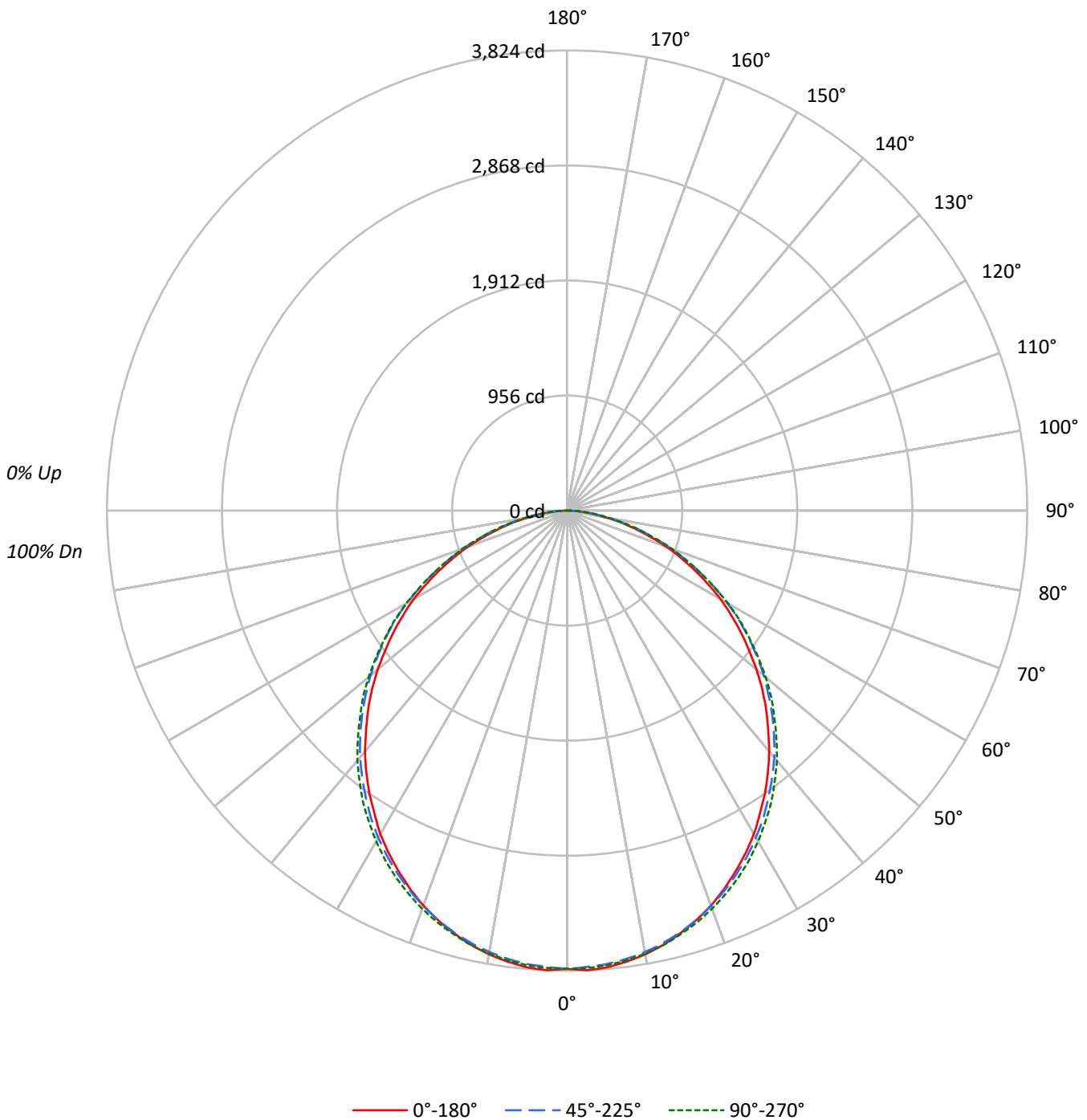
Input Watts (W): 67.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	5124	5124	5124
5°	5146	5109	5123
10°	5116	5089	5107
15°	5065	5056	5078
20°	5001	5007	5042
25°	4913	4946	4996
30°	4823	4876	4931
35°	4709	4788	4860
40°	4589	4703	4763
45°	4452	4587	4635
50°	4301	4467	4507
55°	4132	4316	4339
60°	3962	4138	4154
65°	3713	3889	3879
70°	3439	3597	3633
75°	3047	3225	3245
80°	2535	2722	2784
85°	1922	2107	2371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	359.9	3.5
10°-20°	1024.7	10.0
20°-30°	1535.3	15.0
30°-40°	1821.5	17.8
40°-50°	1849.9	18.1
50°-60°	1629.1	15.9
60°-70°	1197.1	11.7
70°-80°	651.1	6.4
80°-90°	165.9	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°	2919.9	28.5
0°-40°	4741.4	46.3
0°-60°	8220.5	80.3
0°-90°	10234.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10234.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3808	3808	3808	3808	3808	
5°	3810	3794	3783	3783	3793	361
15°	3636	3629	3629	3634	3646	1025
25°	3309	3313	3331	3350	3365	1525
35°	2867	2883	2915	2944	2959	1792
45°	2340	2359	2411	2439	2436	1803
55°	1762	1787	1840	1857	1850	1575
65°	1166	1185	1222	1230	1218	1156
75°	586	598	620	622	624	623
85°	124	128	136	148	154	151
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3808.1	3808.1	3808.1	3808.1	3808.1
2.5°	3824.1	3809.1	3796.0	3796.0	3805.1
5°	3810.1	3794.0	3783.0	3783.0	3793.0
7.5°	3781.0	3767.9	3758.9	3758.9	3769.9
10°	3744.8	3731.8	3724.8	3725.8	3737.8
12.5°	3696.7	3684.6	3681.6	3683.6	3698.7
15°	3636.4	3629.4	3629.4	3634.4	3645.5
17.5°	3569.2	3562.2	3567.2	3574.2	3588.3
20°	3492.9	3487.9	3496.9	3508.0	3521.0
22.5°	3405.6	3403.6	3418.6	3433.7	3446.7
25°	3309.2	3313.2	3331.3	3350.4	3365.4
27.5°	3209.9	3213.9	3239.0	3259.0	3274.1
30°	3104.5	3106.5	3138.6	3162.7	3173.7
32.5°	2982.0	2998.1	3032.2	3055.3	3065.3
35°	2866.6	2882.7	2914.8	2943.9	2958.9
37.5°	2741.1	2755.2	2797.3	2828.5	2833.5
40°	2612.7	2625.7	2677.9	2704.0	2712.0
42.5°	2472.1	2497.2	2544.4	2570.5	2575.5
45°	2339.6	2358.7	2410.9	2439.0	2436.0
47.5°	2198.1	2219.2	2270.4	2297.5	2302.5
50°	2054.6	2078.7	2133.9	2152.0	2153.0
52.5°	1904.0	1935.2	1985.3	2009.4	2001.4
55°	1761.5	1786.6	1839.8	1856.9	1849.8
57.5°	1615.0	1643.1	1692.3	1701.3	1702.3
60°	1472.4	1495.5	1537.7	1546.7	1543.7
62.5°	1315.9	1338.9	1377.1	1386.1	1379.1
65°	1166.3	1185.4	1221.5	1230.5	1218.5
67.5°	1017.8	1036.8	1064.9	1079.0	1065.9
70°	874.2	889.3	914.4	922.4	923.4
72.5°	721.7	748.8	766.8	765.8	762.8
75°	586.2	598.2	620.3	622.3	624.3
77.5°	456.7	459.7	482.8	488.8	484.8
80°	327.2	338.3	351.3	358.3	359.3
82.5°	215.8	223.8	234.9	246.9	246.9
85°	124.5	127.5	136.5	148.5	153.6
87.5°	50.2	55.2	64.2	73.3	74.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)