

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: P475876

Luminaire Tested: **24GR-LD5-100-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475876
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-100-FGW080-UNV-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8707.6 lumens
Efficiency: N/A
Efficacy: 129.8 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

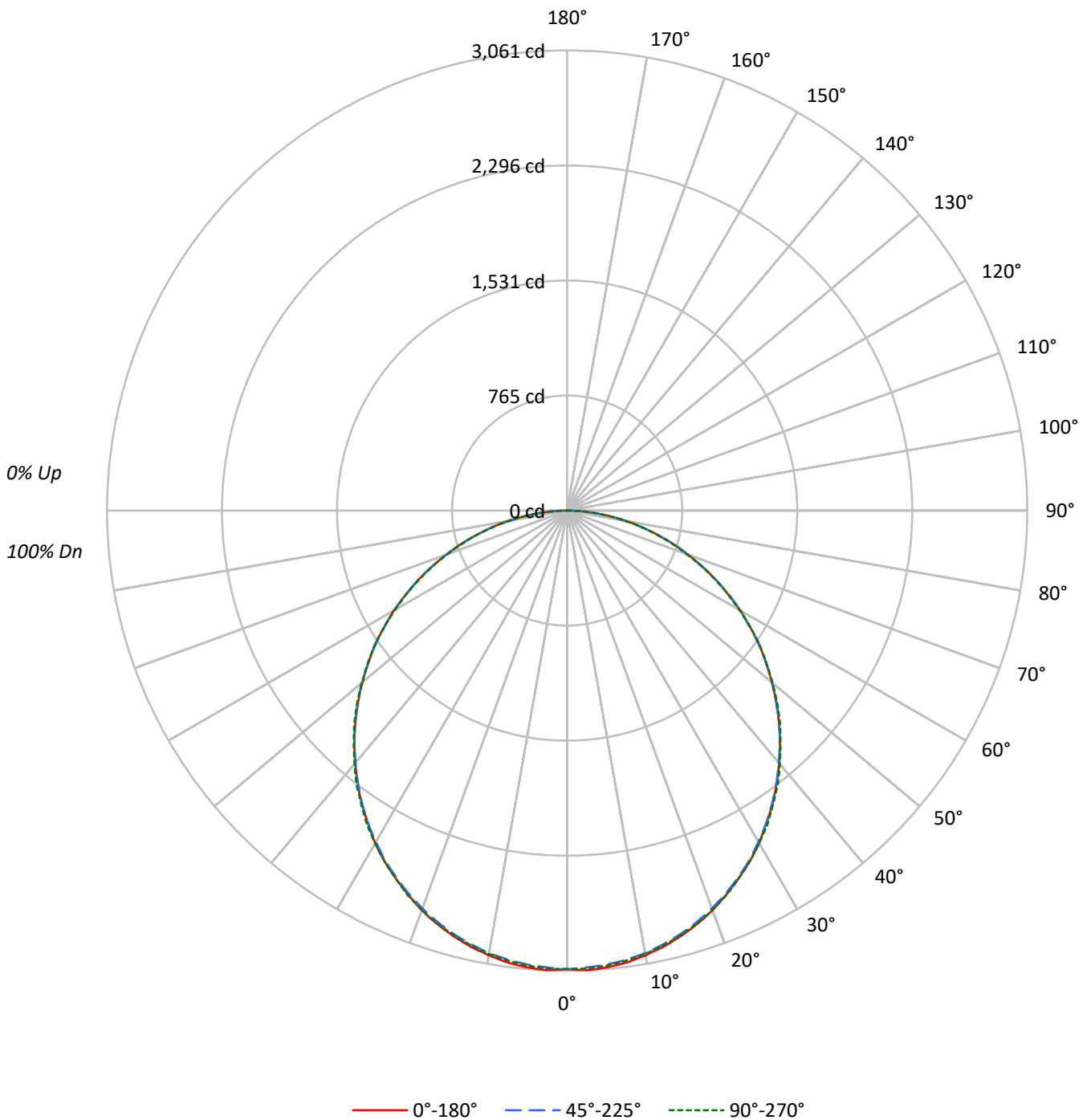
Input Watts (W): 67.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4104	4104	4104
5°	4119	4094	4103
10°	4104	4083	4091
15°	4081	4062	4073
20°	4051	4032	4048
25°	4007	3995	4010
30°	3968	3953	3968
35°	3912	3906	3920
40°	3856	3846	3867
45°	3793	3793	3810
50°	3721	3731	3731
55°	3669	3655	3666
60°	3585	3583	3559
65°	3482	3479	3457
70°	3361	3353	3334
75°	3232	3222	3227
80°	3085	3023	3039
85°	2739	2739	2768



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.4	3.3
10°-20°	823.9	9.5
20°-30°	1242.1	14.3
30°-40°	1488.5	17.1
40°-50°	1537.9	17.7
50°-60°	1392.7	16.0
60°-70°	1078.9	12.4
70°-80°	654.3	7.5
80°-90°	200.9	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°	2354.4	27.0
0°-40°	3842.9	44.1
0°-60°	6773.5	77.8
0°-90°	8707.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8707.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3050	3050	3050	3050	3050	
5°	3050	3038	3031	3031	3038	290
15°	2930	2921	2916	2918	2924	827
25°	2699	2693	2691	2697	2701	1245
35°	2382	2373	2378	2382	2387	1489
45°	1994	1990	1994	1996	2002	1537
55°	1564	1555	1558	1560	1563	1393
65°	1094	1088	1093	1090	1086	1081
75°	622	622	620	614	621	659
85°	177	180	177	174	179	204
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3049.9	3049.9	3049.9	3049.9	3049.9
2.5°	3060.7	3049.9	3042.0	3042.0	3048.9
5°	3049.9	3038.0	3031.1	3031.1	3038.0
7.5°	3032.1	3019.3	3013.4	3013.4	3019.3
10°	3003.6	2993.7	2988.8	2988.8	2994.7
12.5°	2970.1	2961.2	2955.3	2956.3	2962.2
15°	2929.7	2920.8	2915.9	2917.8	2923.7
17.5°	2882.4	2873.5	2869.5	2872.5	2879.4
20°	2829.1	2818.3	2816.3	2819.3	2827.2
22.5°	2765.1	2758.2	2757.2	2762.1	2769.0
25°	2699.1	2693.2	2691.2	2697.1	2701.0
27.5°	2631.1	2620.2	2624.2	2625.2	2631.1
30°	2554.2	2544.4	2544.4	2548.3	2554.2
32.5°	2465.5	2459.6	2464.5	2469.5	2478.3
35°	2381.8	2372.9	2377.8	2381.8	2386.7
37.5°	2287.2	2285.2	2286.2	2292.1	2300.0
40°	2195.5	2189.6	2189.6	2197.5	2201.4
42.5°	2095.0	2090.1	2094.0	2098.0	2099.9
45°	1993.5	1989.6	1993.5	1996.5	2002.4
47.5°	1885.1	1886.1	1887.1	1889.0	1895.0
50°	1777.7	1781.6	1782.6	1786.6	1782.6
52.5°	1666.3	1667.3	1671.3	1672.3	1673.2
55°	1563.9	1555.0	1557.9	1559.9	1562.9
57.5°	1443.6	1440.7	1440.7	1443.6	1445.6
60°	1332.3	1326.4	1331.3	1325.4	1322.4
62.5°	1208.1	1210.1	1212.1	1211.1	1206.2
65°	1093.8	1087.9	1092.8	1089.9	1085.9
67.5°	973.6	968.7	970.6	969.7	968.7
70°	854.4	854.4	852.4	847.5	847.5
72.5°	742.0	736.1	738.1	732.2	732.2
75°	621.8	621.8	619.8	613.9	620.8
77.5°	509.5	506.5	504.5	500.6	500.6
80°	398.1	391.2	390.2	390.2	392.2
82.5°	288.7	283.8	281.8	281.8	282.8
85°	177.4	180.3	177.4	174.4	179.3
87.5°	83.8	79.8	79.8	82.8	84.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)