

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: P475529

Luminaire Tested: **24GR-LD5-85-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475529
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-F1-UNV-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8239.8 lumens
Efficiency: N/A
Efficacy: 139.2 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

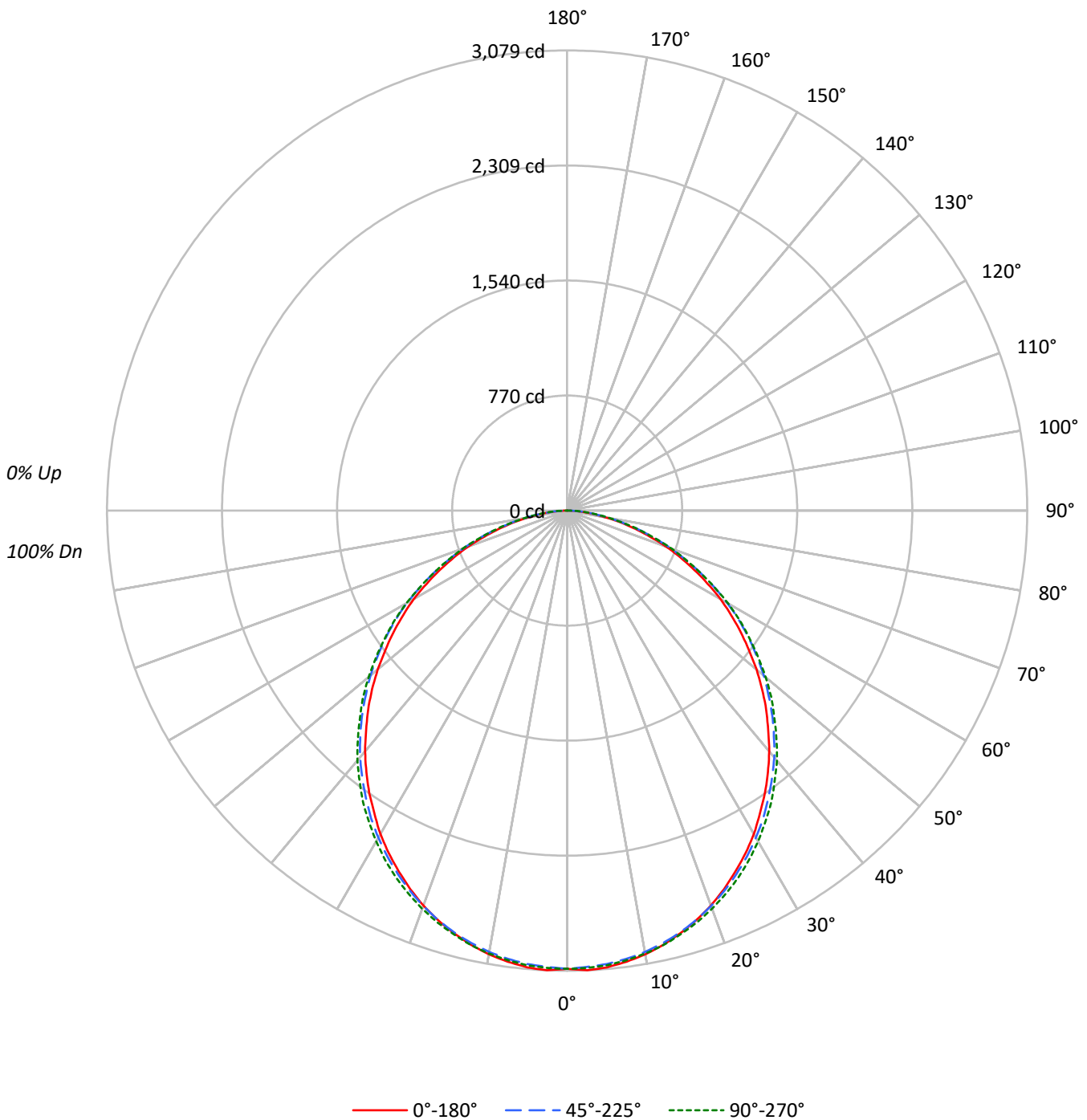
Input Watts (W): 59.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60					60			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4125	4125	4125
5°	4143	4114	4125
10°	4119	4097	4111
15°	4078	4070	4088
20°	4027	4031	4059
25°	3955	3982	4022
30°	3883	3926	3970
35°	3791	3855	3913
40°	3695	3787	3835
45°	3584	3693	3732
50°	3463	3596	3628
55°	3327	3475	3494
60°	3190	3331	3344
65°	2989	3131	3123
70°	2769	2896	2924
75°	2453	2596	2613
80°	2041	2191	2242
85°	1547	1697	1908



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.8	3.5
10°-20°	825.0	10.0
20°-30°	1236.1	15.0
30°-40°	1466.5	17.8
40°-50°	1489.4	18.1
50°-60°	1311.6	15.9
60°-70°	963.8	11.7
70°-80°	524.2	6.4
80°-90°	133.5	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°	2350.8	28.5
0°-40°	3817.3	46.3
0°-60°	6618.3	80.3
0°-90°	8239.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8239.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3066	3066	3066	3066	3066	
5°	3068	3055	3046	3046	3054	291
15°	2928	2922	2922	2926	2935	826
25°	2664	2668	2682	2697	2710	1228
35°	2308	2321	2347	2370	2382	1443
45°	1884	1899	1941	1964	1961	1452
55°	1418	1438	1481	1495	1489	1268
65°	939	954	984	991	981	931
75°	472	482	499	501	503	502
85°	100	103	110	120	124	121
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3065.9	3065.9	3065.9	3065.9	3065.9
2.5°	3078.8	3066.7	3056.2	3056.2	3063.5
5°	3067.5	3054.6	3045.7	3045.7	3053.8
7.5°	3044.1	3033.6	3026.3	3026.3	3035.2
10°	3015.0	3004.5	2998.8	2999.6	3009.3
12.5°	2976.2	2966.5	2964.1	2965.7	2977.8
15°	2927.7	2922.1	2922.1	2926.1	2935.0
17.5°	2873.6	2867.9	2872.0	2877.6	2888.9
20°	2812.2	2808.1	2815.4	2824.3	2834.8
22.5°	2741.9	2740.2	2752.4	2764.5	2775.0
25°	2664.3	2667.5	2682.1	2697.4	2709.5
27.5°	2584.3	2587.5	2607.7	2623.9	2636.0
30°	2499.4	2501.1	2526.9	2546.3	2555.2
32.5°	2400.8	2413.8	2441.3	2459.8	2467.9
35°	2307.9	2320.8	2346.7	2370.1	2382.3
37.5°	2206.9	2218.2	2252.2	2277.2	2281.2
40°	2103.5	2114.0	2156.0	2177.0	2183.5
42.5°	1990.3	2010.5	2048.5	2069.5	2073.6
45°	1883.7	1899.0	1941.0	1963.7	1961.2
47.5°	1769.7	1786.7	1827.9	1849.7	1853.8
50°	1654.2	1673.6	1718.0	1732.6	1733.4
52.5°	1533.0	1558.0	1598.4	1617.8	1611.3
55°	1418.2	1438.4	1481.2	1495.0	1489.3
57.5°	1300.2	1322.8	1362.4	1369.7	1370.5
60°	1185.5	1204.1	1238.0	1245.3	1242.8
62.5°	1059.4	1078.0	1108.7	1116.0	1110.3
65°	939.0	954.4	983.5	990.7	981.0
67.5°	819.4	834.8	857.4	868.7	858.2
70°	703.8	716.0	736.2	742.6	743.4
72.5°	581.0	602.8	617.4	616.6	614.2
75°	471.9	481.6	499.4	501.0	502.6
77.5°	367.7	370.1	388.7	393.5	390.3
80°	263.4	272.3	282.8	288.5	289.3
82.5°	173.7	180.2	189.1	198.8	198.8
85°	100.2	102.6	109.9	119.6	123.6
87.5°	40.4	44.4	51.7	59.0	59.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)