

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: P475828

Luminaire Tested: **24GR-LD5-72-FGW080-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475828
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-72-FGW080-UNV-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5835.7 lumens
Efficiency: N/A
Efficacy: 119.8 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

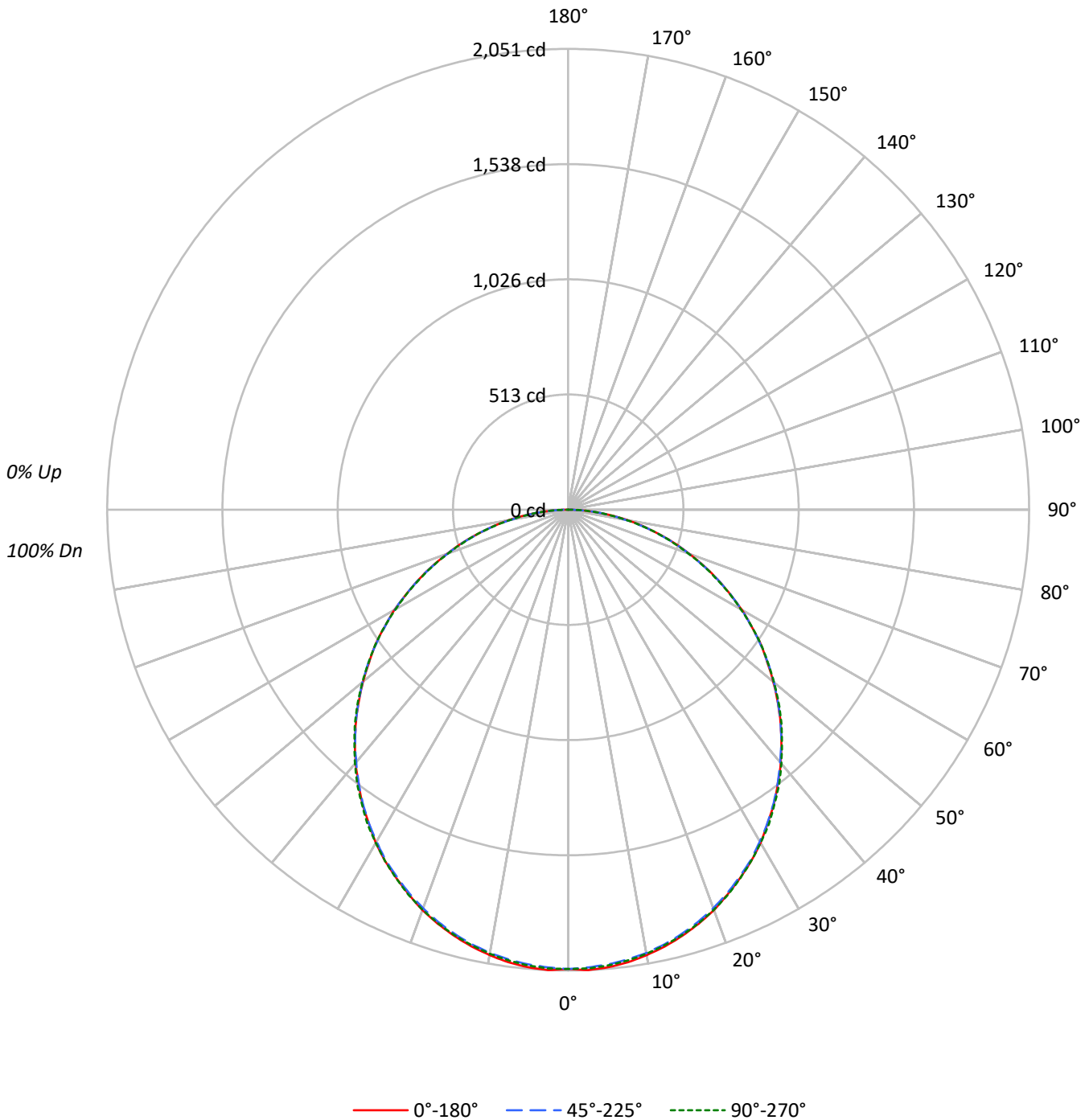
Input Watts (W): 48.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2750	2750	2750
5°	2761	2744	2750
10°	2750	2737	2742
15°	2735	2722	2729
20°	2715	2703	2713
25°	2685	2678	2687
30°	2660	2649	2660
35°	2622	2618	2627
40°	2584	2577	2591
45°	2542	2542	2554
50°	2494	2501	2501
55°	2459	2449	2457
60°	2403	2401	2385
65°	2334	2332	2317
70°	2253	2247	2234
75°	2166	2159	2163
80°	2067	2026	2036
85°	1836	1836	1856



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	193.3	3.3
10°-20°	552.1	9.5
20°-30°	832.4	14.3
30°-40°	997.6	17.1
40°-50°	1030.7	17.7
50°-60°	933.4	16.0
60°-70°	723.0	12.4
70°-80°	438.5	7.5
80°-90°	134.6	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°	1577.9	27.0
0°-40°	2575.5	44.1
0°-60°	4539.5	77.8
0°-90°	5835.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5835.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2044	2044	2044	2044	2044	
5°	2044	2036	2031	2031	2036	194
15°	1963	1958	1954	1956	1959	554
25°	1809	1805	1804	1808	1810	834
35°	1596	1590	1594	1596	1600	998
45°	1336	1333	1336	1338	1342	1030
55°	1048	1042	1044	1045	1047	934
65°	733	729	732	730	728	725
75°	417	417	415	411	416	442
85°	119	121	119	117	120	137
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2044.0	2044.0	2044.0	2044.0	2044.0
2.5°	2051.2	2044.0	2038.7	2038.7	2043.3
5°	2044.0	2036.1	2031.4	2031.4	2036.1
7.5°	2032.1	2023.5	2019.5	2019.5	2023.5
10°	2012.9	2006.3	2003.0	2003.0	2007.0
12.5°	1990.5	1984.5	1980.6	1981.2	1985.2
15°	1963.4	1957.5	1954.2	1955.5	1959.4
17.5°	1931.7	1925.8	1923.1	1925.1	1929.7
20°	1896.0	1888.8	1887.5	1889.4	1894.7
22.5°	1853.1	1848.5	1847.8	1851.1	1855.8
25°	1808.9	1804.9	1803.6	1807.6	1810.2
27.5°	1763.3	1756.0	1758.7	1759.3	1763.3
30°	1711.8	1705.2	1705.2	1707.8	1711.8
32.5°	1652.4	1648.4	1651.7	1655.0	1660.9
35°	1596.2	1590.3	1593.6	1596.2	1599.5
37.5°	1532.8	1531.5	1532.2	1536.1	1541.4
40°	1471.4	1467.4	1467.4	1472.7	1475.4
42.5°	1404.0	1400.7	1403.4	1406.0	1407.3
45°	1336.0	1333.4	1336.0	1338.0	1342.0
47.5°	1263.4	1264.0	1264.7	1266.0	1270.0
50°	1191.4	1194.0	1194.7	1197.3	1194.7
52.5°	1116.8	1117.4	1120.1	1120.7	1121.4
55°	1048.1	1042.1	1044.1	1045.4	1047.4
57.5°	967.5	965.5	965.5	967.5	968.8
60°	892.9	888.9	892.2	888.3	886.3
62.5°	809.7	811.0	812.3	811.6	808.3
65°	733.1	729.1	732.4	730.4	727.8
67.5°	652.5	649.2	650.5	649.8	649.2
70°	572.6	572.6	571.3	568.0	568.0
72.5°	497.3	493.3	494.7	490.7	490.7
75°	416.7	416.7	415.4	411.4	416.1
77.5°	341.4	339.5	338.1	335.5	335.5
80°	266.8	262.2	261.5	261.5	262.8
82.5°	193.5	190.2	188.9	188.9	189.5
85°	118.9	120.9	118.9	116.9	120.2
87.5°	56.1	53.5	53.5	55.5	56.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)