

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: P475858

Luminaire Tested: **24GR-LD5-72-FGW080-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475858
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-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6162.2 lumens
Efficiency: N/A
Efficacy: 126.5 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

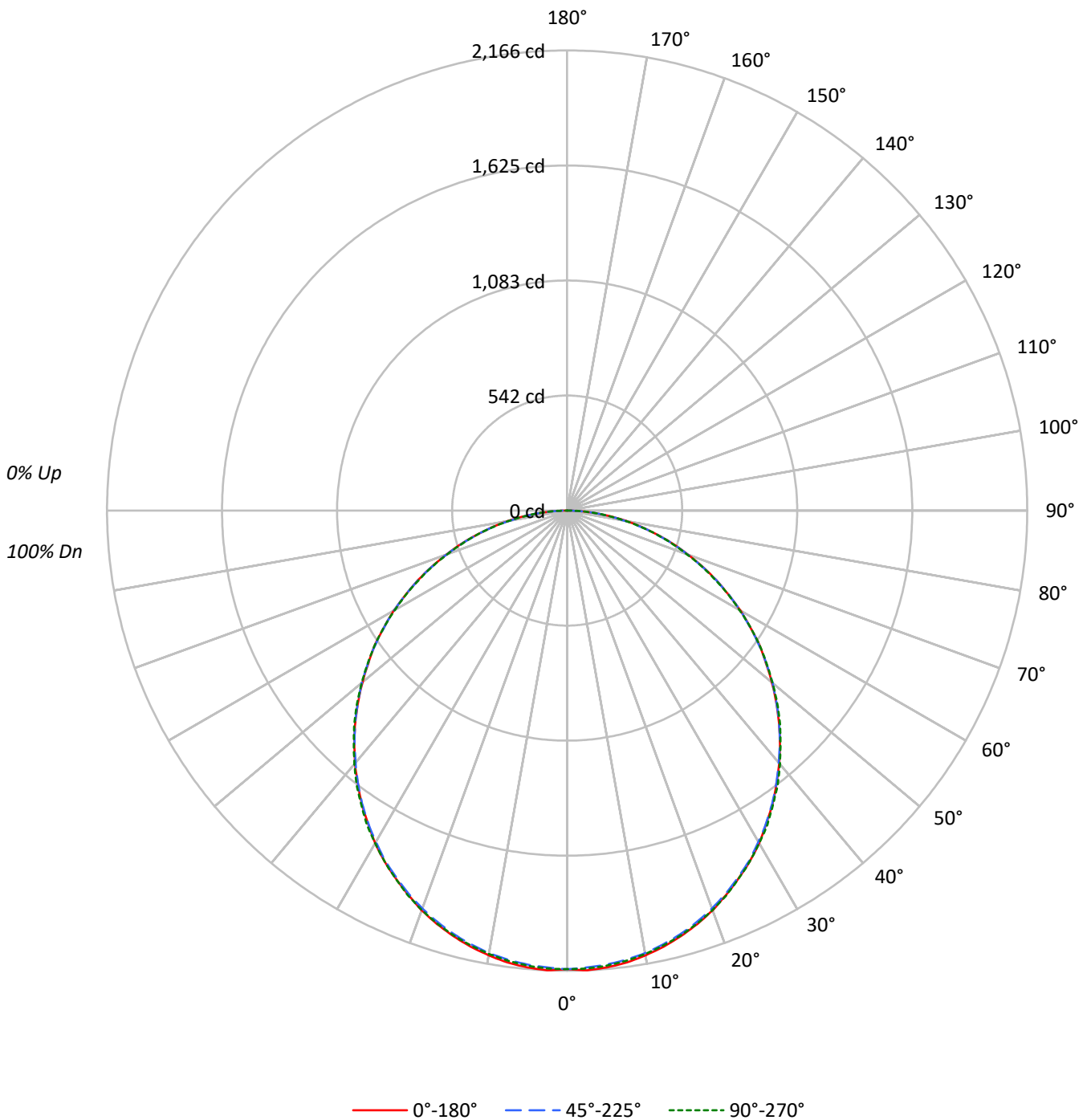
Input Watts (W): 48.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2904	2904	2904
5°	2915	2897	2904
10°	2904	2890	2895
15°	2888	2874	2882
20°	2867	2854	2865
25°	2836	2827	2838
30°	2808	2797	2808
35°	2768	2764	2774
40°	2729	2722	2736
45°	2684	2684	2696
50°	2633	2641	2641
55°	2596	2586	2594
60°	2537	2535	2518
65°	2465	2462	2447
70°	2378	2373	2359
75°	2287	2280	2284
80°	2183	2140	2151
85°	1937	1937	1959



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.1	3.3
10°-20°	583.0	9.5
20°-30°	879.0	14.3
30°-40°	1053.4	17.1
40°-50°	1088.3	17.7
50°-60°	985.6	16.0
60°-70°	763.5	12.4
70°-80°	463.0	7.5
80°-90°	142.2	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°	1666.2	27.0
0°-40°	2719.6	44.1
0°-60°	4793.5	77.8
0°-90°	6162.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6162.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2158	2158	2158	2158	2158	
5°	2158	2150	2145	2145	2150	205
15°	2073	2067	2064	2065	2069	585
25°	1910	1906	1904	1909	1912	881
35°	1686	1679	1683	1686	1689	1054
45°	1411	1408	1411	1413	1417	1088
55°	1107	1100	1102	1104	1106	986
65°	774	770	773	771	768	765
75°	440	440	439	434	439	467
85°	126	128	126	123	127	144
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2158.4	2158.4	2158.4	2158.4	2158.4
2.5°	2166.0	2158.4	2152.8	2152.8	2157.7
5°	2158.4	2150.0	2145.1	2145.1	2150.0
7.5°	2145.8	2136.7	2132.6	2132.6	2136.7
10°	2125.6	2118.6	2115.1	2115.1	2119.3
12.5°	2101.9	2095.6	2091.4	2092.1	2096.3
15°	2073.3	2067.0	2063.5	2064.9	2069.1
17.5°	2039.8	2033.5	2030.7	2032.8	2037.7
20°	2002.1	1994.5	1993.1	1995.2	2000.8
22.5°	1956.8	1951.9	1951.2	1954.7	1959.6
25°	1910.1	1905.9	1904.5	1908.7	1911.5
27.5°	1862.0	1854.3	1857.1	1857.8	1862.0
30°	1807.6	1800.6	1800.6	1803.4	1807.6
32.5°	1744.8	1740.6	1744.1	1747.6	1753.9
35°	1685.5	1679.3	1682.8	1685.5	1689.0
37.5°	1618.6	1617.2	1617.9	1622.1	1627.7
40°	1553.7	1549.6	1549.6	1555.1	1557.9
42.5°	1482.6	1479.1	1481.9	1484.7	1486.1
45°	1410.8	1408.0	1410.8	1412.9	1417.1
47.5°	1334.1	1334.8	1335.5	1336.9	1341.0
50°	1258.1	1260.8	1261.5	1264.3	1261.5
52.5°	1179.3	1179.9	1182.7	1183.4	1184.1
55°	1106.7	1100.4	1102.5	1103.9	1106.0
57.5°	1021.6	1019.6	1019.6	1021.6	1023.0
60°	942.8	938.7	942.1	938.0	935.9
62.5°	855.0	856.4	857.8	857.1	853.6
65°	774.1	769.9	773.4	771.3	768.5
67.5°	689.0	685.5	686.9	686.2	685.5
70°	604.6	604.6	603.2	599.7	599.7
72.5°	525.1	520.9	522.3	518.1	518.1
75°	440.0	440.0	438.6	434.5	439.3
77.5°	360.5	358.4	357.1	354.3	354.3
80°	281.7	276.9	276.2	276.2	277.6
82.5°	204.3	200.8	199.4	199.4	200.1
85°	125.5	127.6	125.5	123.4	126.9
87.5°	59.3	56.5	56.5	58.6	60.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)