

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: P475527

Luminaire Tested: **24GR-LD5-64-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475527
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-64-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: 6116.0 lumens
Efficiency: N/A
Efficacy: 140.9 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

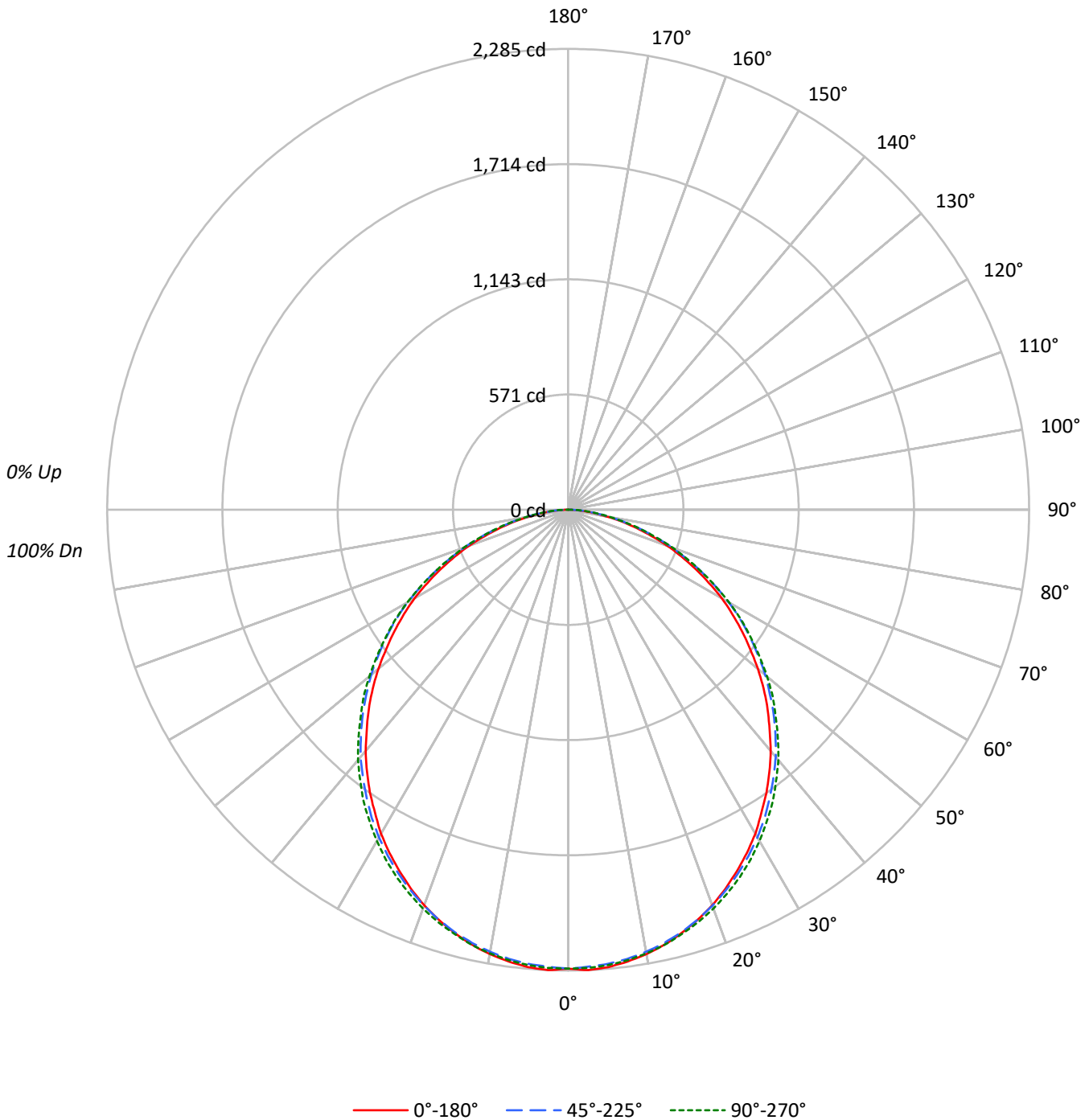
Input Watts (W): 43.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3062	3062	3062
5°	3075	3053	3061
10°	3058	3041	3052
15°	3027	3021	3035
20°	2989	2992	3013
25°	2936	2955	2986
30°	2882	2914	2947
35°	2814	2861	2904
40°	2742	2811	2847
45°	2660	2741	2770
50°	2570	2669	2693
55°	2469	2579	2593
60°	2368	2473	2482
65°	2219	2324	2318
70°	2055	2150	2171
75°	1821	1927	1940
80°	1515	1626	1664
85°	1149	1260	1417



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	215.1	3.5
10°-20°	612.3	10.0
20°-30°	917.5	15.0
30°-40°	1088.5	17.8
40°-50°	1105.5	18.1
50°-60°	973.5	15.9
60°-70°	715.4	11.7
70°-80°	389.1	6.4
80°-90°	99.1	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°	1744.9	28.5
0°-40°	2833.4	46.3
0°-60°	4912.4	80.3
0°-90°	6116.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6116.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2276	2276	2276	2276	2276	
5°	2277	2267	2261	2261	2267	216
15°	2173	2169	2169	2172	2178	613
25°	1978	1980	1991	2002	2011	911
35°	1713	1723	1742	1759	1768	1071
45°	1398	1410	1441	1458	1456	1078
55°	1053	1068	1099	1110	1105	941
65°	697	708	730	735	728	691
75°	350	358	371	372	373	373
85°	74	76	82	89	92	90
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2275.6	2275.6	2275.6	2275.6	2275.6
2.5°	2285.2	2276.2	2268.4	2268.4	2273.8
5°	2276.8	2267.2	2260.6	2260.6	2266.6
7.5°	2259.5	2251.7	2246.3	2246.3	2252.9
10°	2237.9	2230.1	2225.9	2226.5	2233.7
12.5°	2209.1	2201.9	2200.1	2201.3	2210.3
15°	2173.1	2168.9	2168.9	2171.9	2178.5
17.5°	2132.9	2128.7	2131.7	2135.9	2144.3
20°	2087.3	2084.3	2089.7	2096.3	2104.1
22.5°	2035.1	2033.9	2042.9	2051.9	2059.7
25°	1977.5	1979.9	1990.7	2002.1	2011.1
27.5°	1918.2	1920.6	1935.6	1947.6	1956.6
30°	1855.2	1856.4	1875.6	1890.0	1896.6
32.5°	1782.0	1791.6	1812.0	1825.8	1831.8
35°	1713.0	1722.6	1741.8	1759.2	1768.2
37.5°	1638.1	1646.5	1671.6	1690.2	1693.2
40°	1561.3	1569.1	1600.3	1615.9	1620.7
42.5°	1477.3	1492.3	1520.5	1536.1	1539.1
45°	1398.1	1409.5	1440.7	1457.5	1455.7
47.5°	1313.6	1326.2	1356.7	1372.9	1375.9
50°	1227.8	1242.2	1275.2	1286.0	1286.6
52.5°	1137.8	1156.4	1186.4	1200.8	1196.0
55°	1052.7	1067.6	1099.4	1109.6	1105.4
57.5°	965.1	981.9	1011.3	1016.7	1017.3
60°	879.9	893.7	918.9	924.3	922.5
62.5°	786.3	800.1	822.9	828.3	824.1
65°	697.0	708.4	730.0	735.4	728.2
67.5°	608.2	619.6	636.4	644.8	637.0
70°	522.4	531.4	546.4	551.2	551.8
72.5°	431.3	447.5	458.2	457.6	455.8
75°	350.3	357.5	370.7	371.9	373.1
77.5°	272.9	274.7	288.5	292.1	289.7
80°	195.5	202.1	209.9	214.1	214.7
82.5°	129.0	133.8	140.4	147.6	147.6
85°	74.4	76.2	81.6	88.8	91.8
87.5°	30.0	33.0	38.4	43.8	44.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)