

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: P475571

Luminaire Tested: **24GR-LD5-56-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475571
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-56-F1-UNV-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5807.7 lumens
Efficiency: N/A
Efficacy: 147.4 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

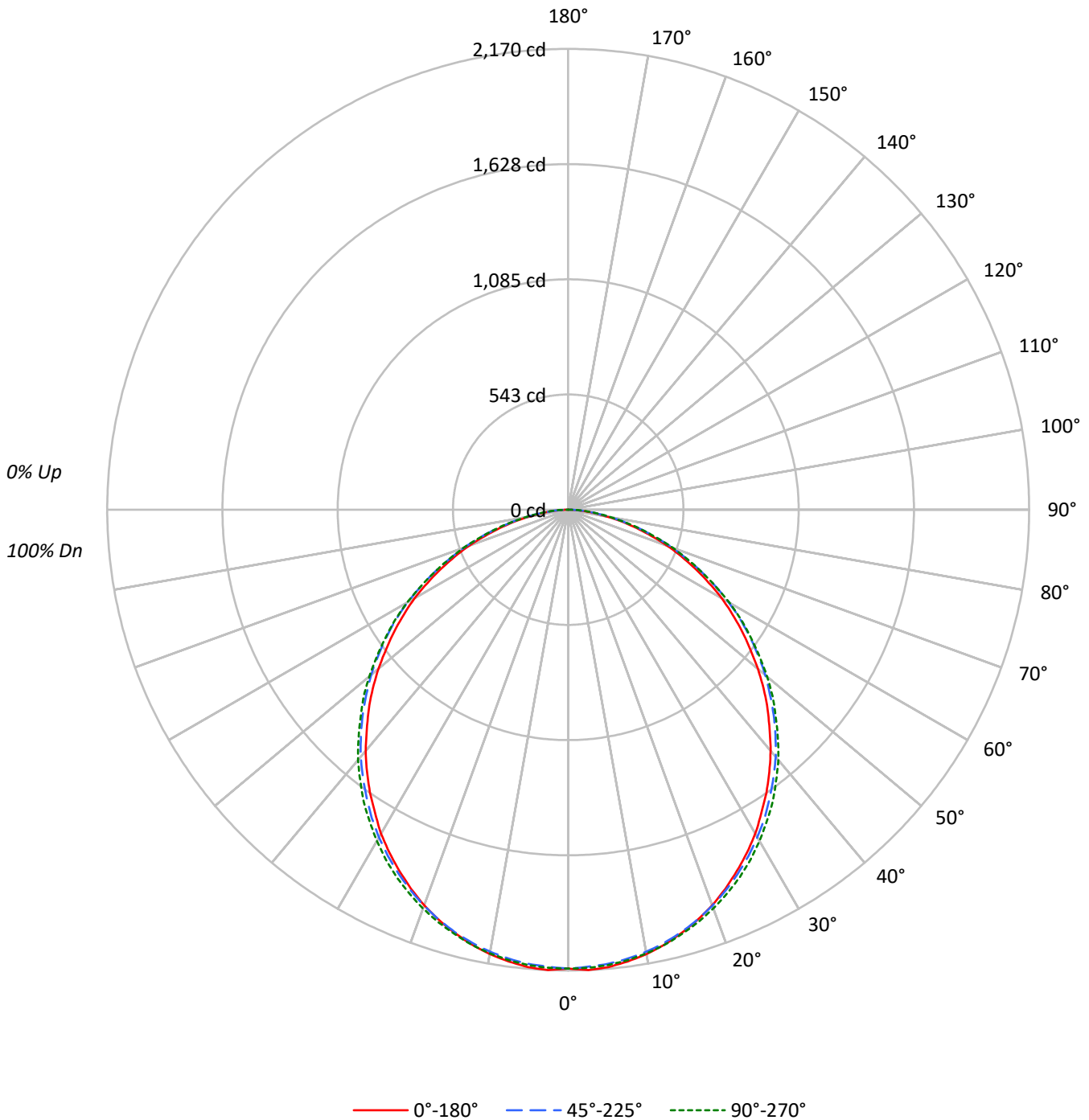
Input Watts (W): 39.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2907	2907	2907
5°	2920	2899	2907
10°	2903	2888	2898
15°	2874	2869	2882
20°	2838	2841	2861
25°	2788	2806	2835
30°	2737	2767	2798
35°	2672	2717	2758
40°	2604	2669	2703
45°	2526	2603	2630
50°	2440	2535	2557
55°	2345	2449	2462
60°	2249	2348	2357
65°	2107	2207	2202
70°	1952	2041	2061
75°	1729	1830	1842
80°	1439	1544	1580
85°	1090	1196	1345



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	204.2	3.5
10°-20°	581.5	10.0
20°-30°	871.2	15.0
30°-40°	1033.7	17.8
40°-50°	1049.8	18.1
50°-60°	924.5	15.9
60°-70°	679.3	11.7
70°-80°	369.5	6.4
80°-90°	94.1	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°	1656.9	28.5
0°-40°	2690.6	46.3
0°-60°	4664.8	80.3
0°-90°	5807.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5807.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2161	2161	2161	2161	2161	
5°	2162	2153	2147	2147	2152	205
15°	2064	2060	2060	2062	2069	582
25°	1878	1880	1890	1901	1910	865
35°	1627	1636	1654	1670	1679	1017
45°	1328	1338	1368	1384	1382	1023
55°	1000	1014	1044	1054	1050	894
65°	662	673	693	698	692	656
75°	333	340	352	353	354	354
85°	71	72	78	84	87	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2160.9	2160.9	2160.9	2160.9	2160.9
2.5°	2170.1	2161.5	2154.1	2154.1	2159.2
5°	2162.1	2153.0	2146.7	2146.7	2152.4
7.5°	2145.6	2138.2	2133.0	2133.0	2139.3
10°	2125.1	2117.7	2113.7	2114.2	2121.1
12.5°	2097.7	2090.9	2089.2	2090.3	2098.9
15°	2063.5	2059.6	2059.6	2062.4	2068.7
17.5°	2025.4	2021.4	2024.2	2028.2	2036.2
20°	1982.1	1979.2	1984.4	1990.6	1998.0
22.5°	1932.5	1931.4	1939.9	1948.5	1955.9
25°	1877.9	1880.1	1890.4	1901.2	1909.8
27.5°	1821.5	1823.8	1838.0	1849.4	1857.9
30°	1761.7	1762.8	1781.0	1794.7	1801.0
32.5°	1692.2	1701.3	1720.7	1733.8	1739.5
35°	1626.7	1635.8	1654.0	1670.5	1679.1
37.5°	1555.5	1563.5	1587.4	1605.0	1607.9
40°	1482.6	1490.0	1519.6	1534.4	1539.0
42.5°	1402.8	1417.1	1443.9	1458.7	1461.5
45°	1327.7	1338.5	1368.1	1384.0	1382.3
47.5°	1247.4	1259.3	1288.4	1303.7	1306.6
50°	1165.9	1179.6	1210.9	1221.2	1221.7
52.5°	1080.5	1098.1	1126.6	1140.3	1135.7
55°	999.6	1013.8	1044.0	1053.7	1049.7
57.5°	916.4	932.4	960.3	965.4	966.0
60°	835.6	848.7	872.6	877.7	876.0
62.5°	746.7	759.8	781.4	786.6	782.6
65°	661.8	672.7	693.2	698.3	691.5
67.5°	577.5	588.4	604.3	612.3	604.9
70°	496.1	504.6	518.9	523.4	524.0
72.5°	409.5	424.9	435.1	434.6	432.9
75°	332.6	339.5	352.0	353.1	354.3
77.5°	259.2	260.9	274.0	277.4	275.1
80°	185.7	191.9	199.3	203.3	203.9
82.5°	122.5	127.0	133.3	140.1	140.1
85°	70.6	72.3	77.5	84.3	87.1
87.5°	28.5	31.3	36.5	41.6	42.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)