

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: P475541

Luminaire Tested: **24GR-LD5-56-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475541
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-L835-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5693.8 lumens
Efficiency: N/A
Efficacy: 144.5 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

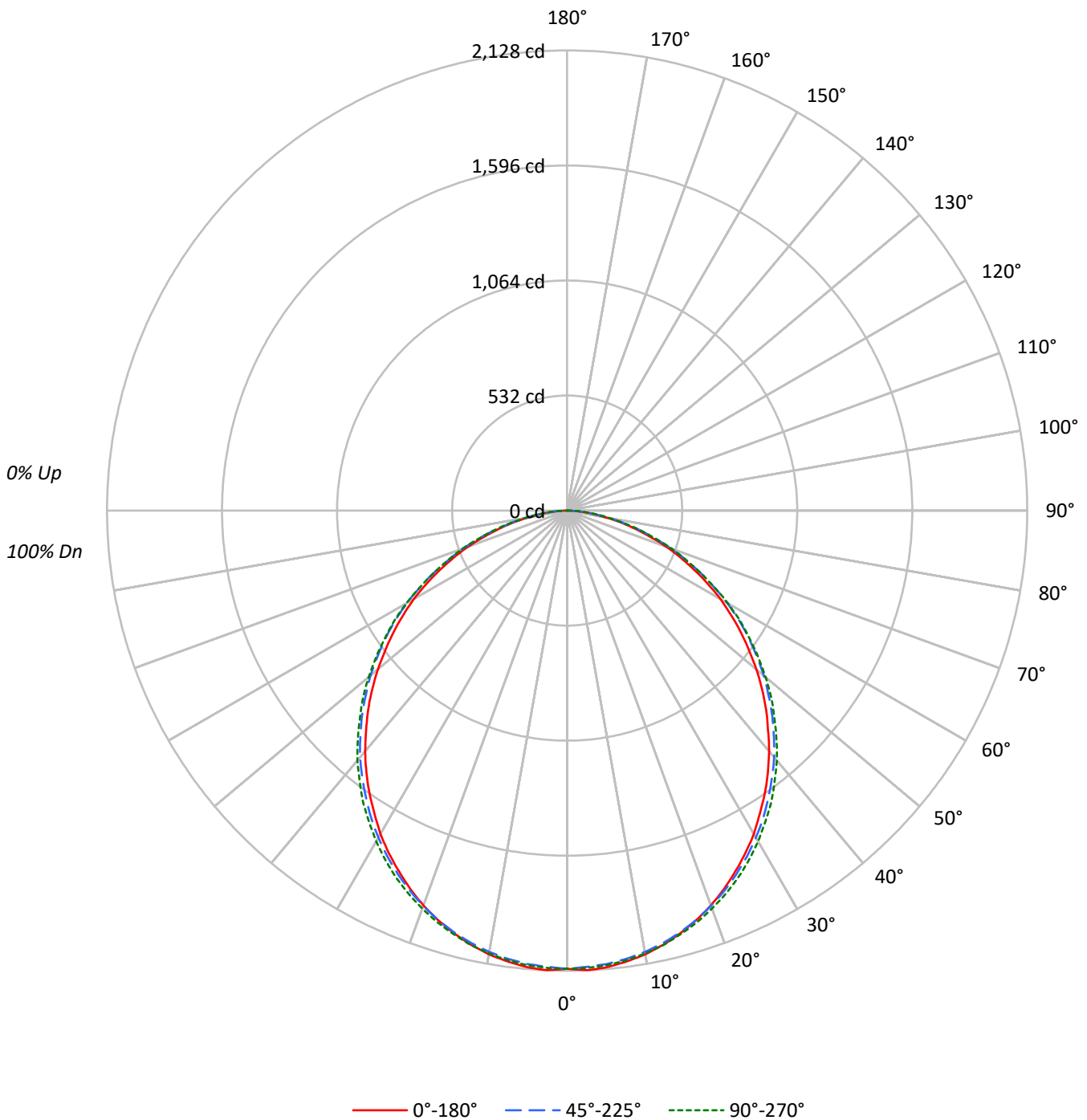
Input Watts (W): 39.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2851	2851	2851
5°	2863	2843	2850
10°	2846	2831	2841
15°	2818	2813	2825
20°	2782	2786	2805
25°	2733	2751	2780
30°	2683	2713	2743
35°	2620	2664	2704
40°	2553	2617	2650
45°	2477	2552	2579
50°	2393	2485	2507
55°	2299	2401	2414
60°	2204	2302	2311
65°	2066	2164	2158
70°	1913	2001	2021
75°	1695	1794	1805
80°	1410	1514	1549
85°	1068	1172	1318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.2	3.5
10°-20°	570.1	10.0
20°-30°	854.1	15.0
30°-40°	1013.4	17.8
40°-50°	1029.2	18.1
50°-60°	906.3	15.9
60°-70°	666.0	11.7
70°-80°	362.2	6.4
80°-90°	92.3	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°	1624.4	28.5
0°-40°	2637.8	46.3
0°-60°	4573.3	80.3
0°-90°	5693.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5693.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2119	2119	2119	2119	2119	
5°	2120	2111	2105	2105	2110	201
15°	2023	2019	2019	2022	2028	570
25°	1841	1843	1853	1864	1872	848
35°	1595	1604	1622	1638	1646	997
45°	1302	1312	1341	1357	1355	1003
55°	980	994	1024	1033	1029	876
65°	649	660	680	685	678	643
75°	326	333	345	346	347	347
85°	69	71	76	83	85	84
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2118.6	2118.6	2118.6	2118.6	2118.6
2.5°	2127.5	2119.1	2111.9	2111.9	2116.9
5°	2119.7	2110.8	2104.6	2104.6	2110.2
7.5°	2103.5	2096.2	2091.2	2091.2	2097.3
10°	2083.4	2076.1	2072.2	2072.8	2079.5
12.5°	2056.6	2049.9	2048.2	2049.3	2057.7
15°	2023.1	2019.2	2019.2	2022.0	2028.1
17.5°	1985.7	1981.8	1984.6	1988.5	1996.3
20°	1943.2	1940.4	1945.5	1951.6	1958.9
22.5°	1894.6	1893.5	1901.9	1910.3	1917.5
25°	1841.0	1843.3	1853.3	1863.9	1872.3
27.5°	1785.8	1788.0	1802.0	1813.1	1821.5
30°	1727.1	1728.2	1746.1	1759.5	1765.7
32.5°	1659.0	1667.9	1686.9	1699.8	1705.4
35°	1594.8	1603.7	1621.6	1637.8	1646.2
37.5°	1525.0	1532.8	1556.3	1573.6	1576.4
40°	1453.5	1460.8	1489.8	1504.3	1508.8
42.5°	1375.3	1389.3	1415.5	1430.1	1432.9
45°	1301.6	1312.2	1341.3	1356.9	1355.2
47.5°	1222.9	1234.6	1263.1	1278.2	1281.0
50°	1143.0	1156.4	1187.2	1197.2	1197.8
52.5°	1059.3	1076.6	1104.5	1117.9	1113.4
55°	980.0	994.0	1023.5	1033.0	1029.1
57.5°	898.5	914.1	941.5	946.5	947.0
60°	819.2	832.0	855.5	860.5	858.8
62.5°	732.1	744.9	766.1	771.1	767.2
65°	648.9	659.5	679.6	684.6	677.9
67.5°	566.2	576.8	592.5	600.3	593.0
70°	486.4	494.7	508.7	513.2	513.7
72.5°	401.5	416.6	426.6	426.1	424.4
75°	326.1	332.8	345.1	346.2	347.3
77.5°	254.1	255.7	268.6	271.9	269.7
80°	182.0	188.2	195.4	199.3	199.9
82.5°	120.1	124.5	130.7	137.4	137.4
85°	69.2	70.9	75.9	82.6	85.4
87.5°	27.9	30.7	35.7	40.8	41.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)