

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: P475871

Luminaire Tested: **24GR-LD5-56-FGW080-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475871  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-56-FGW080-UNV-L850-CD1-U  
Description: GR 2'X4' LED TROFFER w/ FGW080 LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4936.3 lumens  
Efficiency: N/A  
Efficacy: 125.3 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

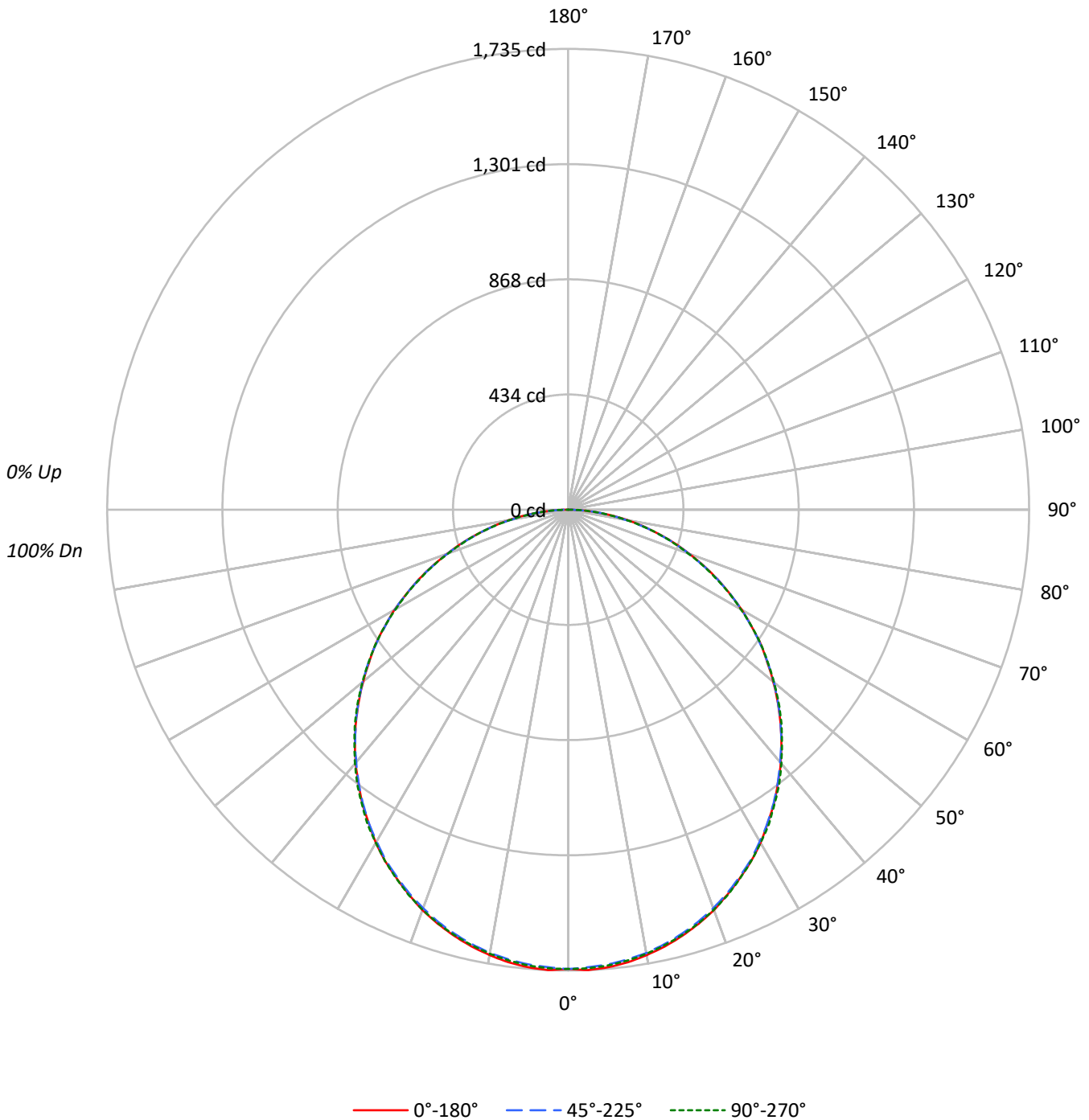
Input Watts (W): 39.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2326	2326	2326
5°	2335	2321	2326
10°	2326	2315	2319
15°	2313	2303	2309
20°	2297	2286	2295
25°	2272	2265	2273
30°	2250	2241	2250
35°	2218	2214	2222
40°	2186	2180	2192
45°	2150	2150	2160
50°	2110	2115	2115
55°	2080	2072	2078
60°	2032	2031	2017
65°	1974	1972	1960
70°	1905	1901	1890
75°	1832	1827	1829
80°	1749	1714	1722
85°	1553	1553	1570



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	163.5	3.3
10°-20°	467.1	9.5
20°-30°	704.1	14.3
30°-40°	843.9	17.1
40°-50°	871.8	17.7
50°-60°	789.5	16.0
60°-70°	611.6	12.4
70°-80°	370.9	7.5
80°-90°	113.9	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°	1334.7	27.0
0°-40°	2178.6	44.1
0°-60°	3839.9	77.8
0°-90°	4936.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4936.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1729	1729	1729	1729	1729	
5°	1729	1722	1718	1718	1722	164
15°	1661	1656	1653	1654	1658	469
25°	1530	1527	1526	1529	1531	706
35°	1350	1345	1348	1350	1353	844
45°	1130	1128	1130	1132	1135	871
55°	887	882	883	884	886	790
65°	620	617	620	618	616	613
75°	352	352	351	348	352	374
85°	101	102	101	99	102	116
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1729.0	1729.0	1729.0	1729.0	1729.0
2.5°	1735.1	1729.0	1724.5	1724.5	1728.4
5°	1729.0	1722.3	1718.4	1718.4	1722.3
7.5°	1718.9	1711.7	1708.3	1708.3	1711.7
10°	1702.7	1697.1	1694.4	1694.4	1697.7
12.5°	1683.7	1678.7	1675.4	1675.9	1679.3
15°	1660.8	1655.8	1653.0	1654.1	1657.5
17.5°	1634.0	1629.0	1626.8	1628.4	1632.3
20°	1603.9	1597.7	1596.6	1598.3	1602.7
22.5°	1567.5	1563.6	1563.1	1565.9	1569.8
25°	1530.1	1526.8	1525.6	1529.0	1531.2
27.5°	1491.6	1485.4	1487.7	1488.2	1491.6
30°	1448.0	1442.4	1442.4	1444.6	1448.0
32.5°	1397.7	1394.4	1397.2	1400.0	1405.0
35°	1350.2	1345.2	1348.0	1350.2	1353.0
37.5°	1296.6	1295.5	1296.0	1299.4	1303.9
40°	1244.6	1241.3	1241.3	1245.8	1248.0
42.5°	1187.7	1184.9	1187.1	1189.3	1190.5
45°	1130.1	1127.9	1130.1	1131.8	1135.2
47.5°	1068.7	1069.2	1069.8	1070.9	1074.3
50°	1007.8	1010.0	1010.6	1012.8	1010.6
52.5°	944.7	945.2	947.5	948.0	948.6
55°	886.6	881.5	883.2	884.3	886.0
57.5°	818.4	816.7	816.7	818.4	819.5
60°	755.3	751.9	754.7	751.4	749.7
62.5°	684.9	686.0	687.1	686.6	683.8
65°	620.1	616.7	619.5	617.9	615.6
67.5°	551.9	549.1	550.3	549.7	549.1
70°	484.3	484.3	483.2	480.4	480.4
72.5°	420.7	417.3	418.4	415.1	415.1
75°	352.5	352.5	351.4	348.0	351.9
77.5°	288.8	287.1	286.0	283.8	283.8
80°	225.7	221.8	221.2	221.2	222.3
82.5°	163.7	160.9	159.8	159.8	160.3
85°	100.6	102.2	100.6	98.9	101.7
87.5°	47.5	45.2	45.2	46.9	48.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)