

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: P475570

Luminaire Tested: **24GR-LD5-48-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475570  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-48-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**

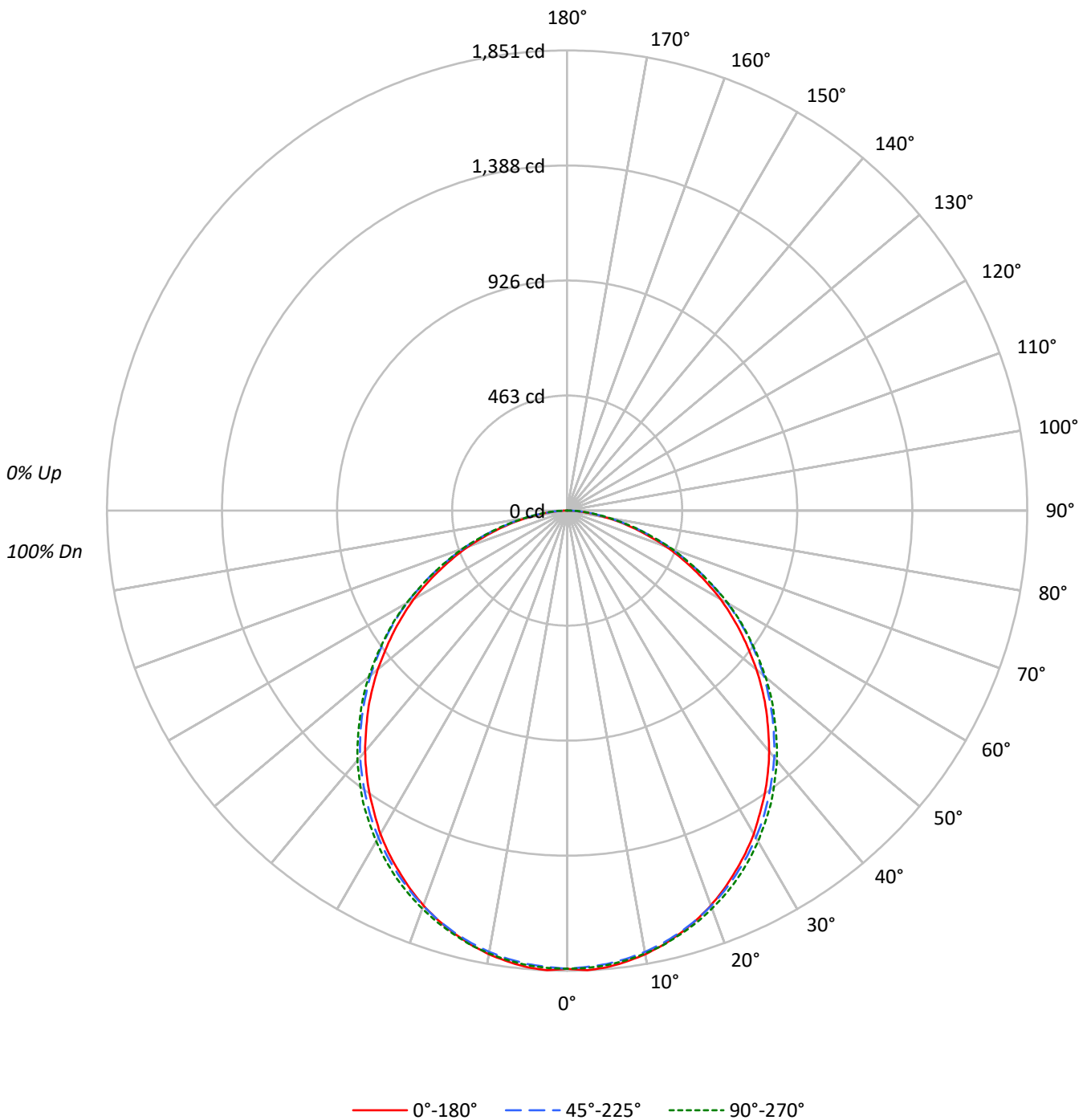
Lumens per Lamp: N/A  
Luminaire Lumens: 4953.0 lumens  
Efficiency: N/A  
Efficacy: 150.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 33  
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°	2480	2480	2480
5°	2490	2473	2479
10°	2476	2463	2471
15°	2451	2447	2457
20°	2420	2423	2440
25°	2378	2393	2418
30°	2334	2360	2386
35°	2279	2317	2352
40°	2221	2276	2305
45°	2155	2220	2243
50°	2081	2162	2181
55°	2000	2089	2100
60°	1918	2003	2010
65°	1797	1882	1877
70°	1664	1741	1758
75°	1475	1561	1570
80°	1227	1317	1347
85°	929	1020	1147



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.2	3.5
10°-20°	495.9	10.0
20°-30°	743.0	15.0
30°-40°	881.5	17.8
40°-50°	895.3	18.1
50°-60°	788.4	15.9
60°-70°	579.3	11.7
70°-80°	315.1	6.4
80°-90°	80.3	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°	1413.1	28.5
0°-40°	2294.6	46.3
0°-60°	3978.3	80.3
0°-90°	4953.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4953.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1843	1843	1843	1843	1843	
5°	1844	1836	1831	1831	1836	175
15°	1760	1756	1756	1759	1764	496
25°	1602	1603	1612	1621	1629	738
35°	1387	1395	1411	1425	1432	867
45°	1132	1142	1167	1180	1179	873
55°	852	865	890	899	895	762
65°	564	574	591	596	590	559
75°	284	290	300	301	302	302
85°	60	62	66	72	74	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1842.9	1842.9	1842.9	1842.9	1842.9
2.5°	1850.7	1843.4	1837.1	1837.1	1841.5
5°	1843.9	1836.1	1830.8	1830.8	1835.6
7.5°	1829.8	1823.5	1819.1	1819.1	1824.5
10°	1812.3	1806.0	1802.6	1803.1	1808.9
12.5°	1789.0	1783.2	1781.7	1782.7	1790.0
15°	1759.8	1756.4	1756.4	1758.9	1764.2
17.5°	1727.3	1723.9	1726.3	1729.7	1736.5
20°	1690.4	1688.0	1692.3	1697.7	1704.0
22.5°	1648.1	1647.2	1654.4	1661.7	1668.0
25°	1601.5	1603.4	1612.2	1621.4	1628.7
27.5°	1553.4	1555.3	1567.5	1577.2	1584.5
30°	1502.4	1503.4	1518.9	1530.6	1535.9
32.5°	1443.1	1450.9	1467.4	1478.6	1483.5
35°	1387.3	1395.1	1410.6	1424.7	1432.0
37.5°	1326.6	1333.4	1353.8	1368.8	1371.3
40°	1264.4	1270.7	1296.0	1308.6	1312.5
42.5°	1196.4	1208.5	1231.4	1244.0	1246.4
45°	1132.3	1141.5	1166.8	1180.4	1178.9
47.5°	1063.8	1074.0	1098.8	1111.9	1114.3
50°	994.3	1006.0	1032.7	1041.4	1041.9
52.5°	921.5	936.5	960.8	972.5	968.6
55°	852.5	864.6	890.4	898.6	895.2
57.5°	781.6	795.2	819.0	823.3	823.8
60°	712.6	723.8	744.2	748.5	747.1
62.5°	636.8	648.0	666.4	670.8	667.4
65°	564.4	573.7	591.1	595.5	589.7
67.5°	492.5	501.8	515.4	522.2	515.9
70°	423.1	430.4	442.5	446.4	446.9
72.5°	349.2	362.4	371.1	370.6	369.2
75°	283.7	289.5	300.2	301.2	302.1
77.5°	221.0	222.5	233.6	236.6	234.6
80°	158.4	163.7	170.0	173.4	173.9
82.5°	104.4	108.3	113.7	119.5	119.5
85°	60.2	61.7	66.1	71.9	74.3
87.5°	24.3	26.7	31.1	35.5	35.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)