

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: P475573

Luminaire Tested: **24GR-LD5-72-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475573  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-72-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: 7257.0 lumens  
Efficiency: N/A  
Efficacy: 149.0 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

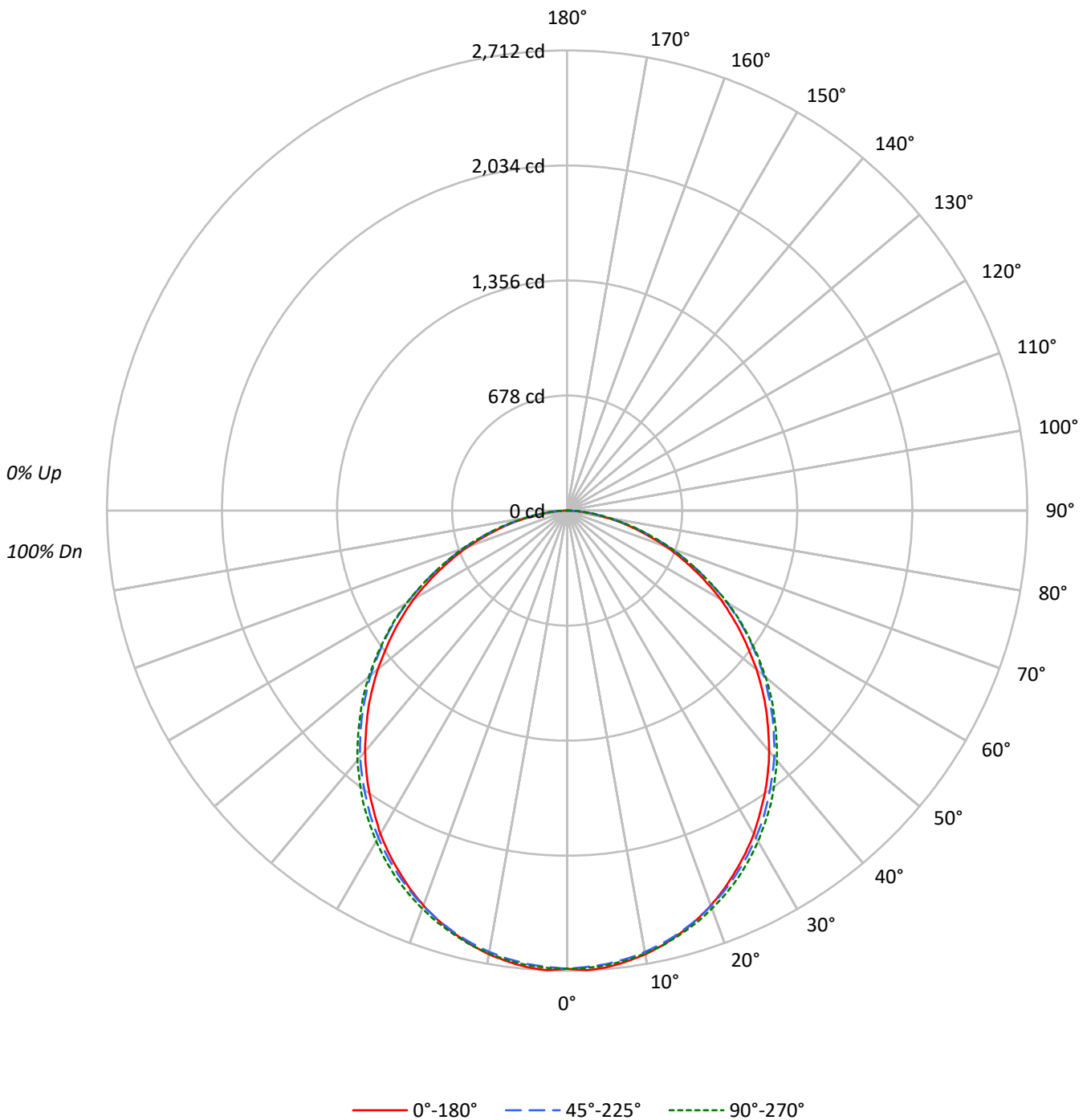
Input Watts (W): 48.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	70					70			
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60					60			
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51			
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44					44			
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39					39			
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34					34			
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3633	3633	3633
5°	3649	3623	3633
10°	3628	3609	3621
15°	3592	3585	3601
20°	3546	3550	3575
25°	3484	3507	3543
30°	3420	3458	3496
35°	3339	3395	3446
40°	3254	3335	3378
45°	3157	3253	3287
50°	3050	3167	3195
55°	2930	3060	3077
60°	2810	2934	2946
65°	2633	2758	2751
70°	2439	2551	2576
75°	2161	2286	2301
80°	1798	1930	1974
85°	1363	1494	1681



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	255.2	3.5
10°-20°	726.6	10.0
20°-30°	1088.7	15.0
30°-40°	1291.6	17.8
40°-50°	1311.7	18.1
50°-60°	1155.2	15.9
60°-70°	848.8	11.7
70°-80°	461.7	6.4
80°-90°	117.6	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°	2070.4	28.5
0°-40°	3362.0	46.3
0°-60°	5828.9	80.3
0°-90°	7257.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7257.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2700	2700	2700	2700	2700	
5°	2702	2690	2682	2682	2690	256
15°	2578	2574	2574	2577	2585	727
25°	2346	2349	2362	2376	2386	1081
35°	2033	2044	2067	2087	2098	1271
45°	1659	1672	1710	1730	1727	1279
55°	1249	1267	1305	1317	1312	1117
65°	827	840	866	873	864	820
75°	416	424	440	441	443	442
85°	88	90	97	105	109	107
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2700.2	2700.2	2700.2	2700.2	2700.2
2.5°	2711.6	2700.9	2691.7	2691.7	2698.1
5°	2701.6	2690.3	2682.4	2682.4	2689.5
7.5°	2681.0	2671.8	2665.4	2665.4	2673.2
10°	2655.4	2646.1	2641.2	2641.9	2650.4
12.5°	2621.2	2612.7	2610.5	2612.0	2622.6
15°	2578.5	2573.5	2573.5	2577.1	2584.9
17.5°	2530.8	2525.9	2529.4	2534.4	2544.4
20°	2476.7	2473.2	2479.6	2487.4	2496.7
22.5°	2414.8	2413.4	2424.1	2434.8	2444.0
25°	2346.5	2349.4	2362.2	2375.7	2386.4
27.5°	2276.0	2278.9	2296.7	2310.9	2321.6
30°	2201.3	2202.7	2225.5	2242.6	2250.4
32.5°	2114.5	2125.9	2150.1	2166.4	2173.6
35°	2032.6	2044.0	2066.8	2087.4	2098.1
37.5°	1943.7	1953.6	1983.5	2005.6	2009.2
40°	1852.6	1861.8	1898.8	1917.3	1923.0
42.5°	1752.9	1770.7	1804.2	1822.7	1826.2
45°	1659.0	1672.5	1709.5	1729.5	1727.3
47.5°	1558.6	1573.6	1609.9	1629.1	1632.7
50°	1456.9	1474.0	1513.1	1525.9	1526.6
52.5°	1350.1	1372.2	1407.8	1424.8	1419.1
55°	1249.0	1266.8	1304.6	1316.7	1311.7
57.5°	1145.1	1165.1	1199.9	1206.3	1207.1
60°	1044.1	1060.4	1090.3	1096.7	1094.6
62.5°	933.1	949.4	976.5	982.9	977.9
65°	827.0	840.5	866.2	872.6	864.0
67.5°	721.7	735.2	755.1	765.1	755.8
70°	619.9	630.6	648.4	654.1	654.8
72.5°	511.7	530.9	543.7	543.0	540.9
75°	415.6	424.2	439.8	441.3	442.7
77.5°	323.8	326.0	342.3	346.6	343.8
80°	232.0	239.8	249.1	254.1	254.8
82.5°	153.0	158.7	166.5	175.1	175.1
85°	88.3	90.4	96.8	105.3	108.9
87.5°	35.6	39.1	45.5	52.0	52.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)