

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: P475753

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

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475753  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-72-A-UNV-L850-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7039.7 lumens  
Efficiency: N/A  
Efficacy: 144.6 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.28  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

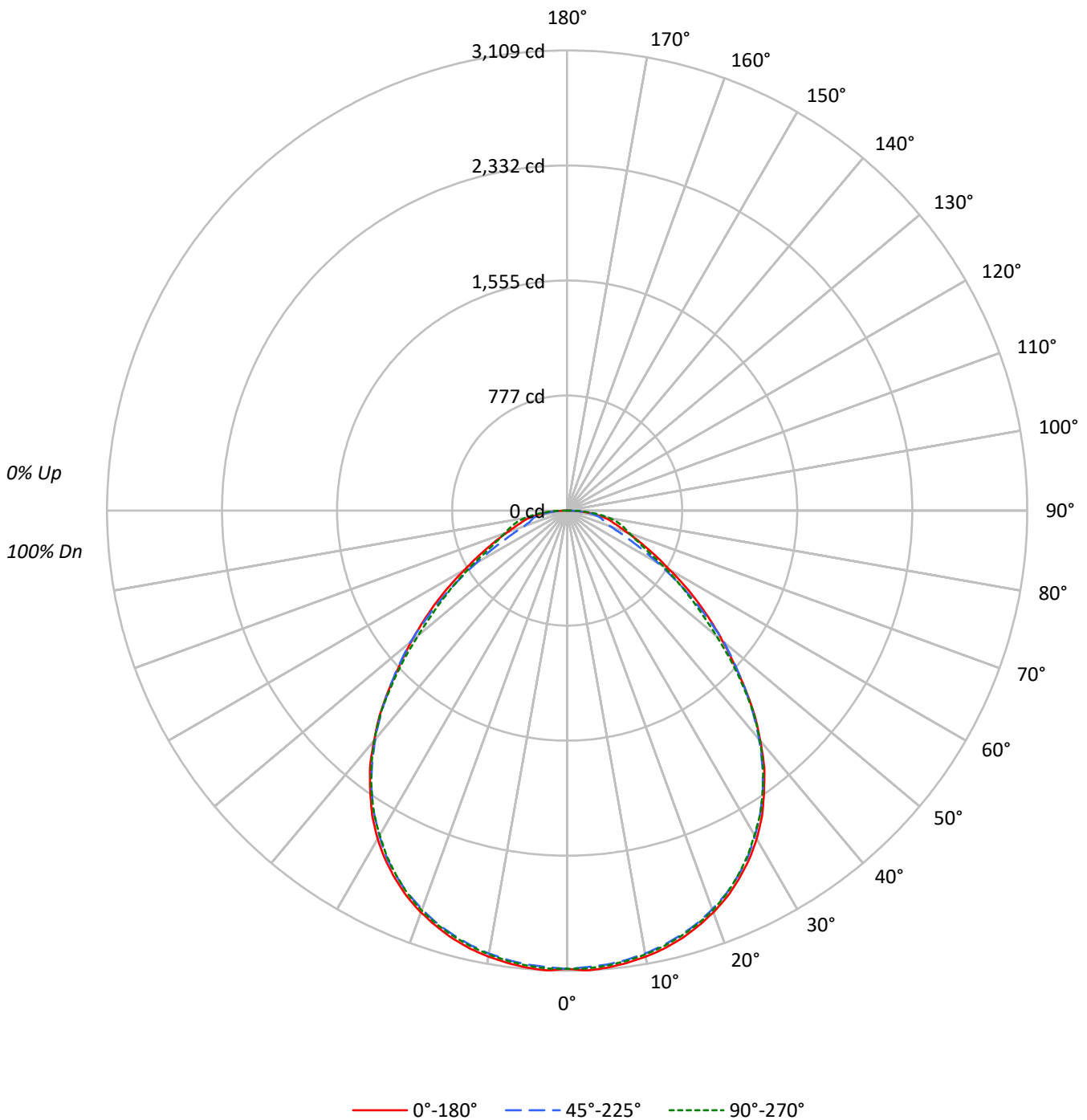
Input Watts (W): 48.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	105	102	98	107	103	100	96	99	96	93		95	93	91		92	90	88	86
2	101	93	87	82	98	92	86	81	88	83	79		85	81	77		82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66	62	58	56
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46		57	50	46		55	50	45	43
7	68	56	47	42	67	55	47	42	53	46	41		52	46	41		51	45	41	39
8	64	51	43	38	62	50	43	37	49	42	37		48	42	37		47	41	37	35
9	60	47	39	34	59	47	39	34	45	39	34		44	38	34		43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31		41	35	31		40	35	31	29

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

	0°	45°	90°
0°	4166	4166	4166
5°	4187	4159	4168
10°	4180	4152	4160
15°	4168	4135	4145
20°	4136	4106	4117
25°	4078	4048	4045
30°	3979	3943	3933
35°	3808	3784	3784
40°	3563	3543	3557
45°	3235	3230	3204
50°	2870	2892	2749
55°	2522	2411	2354
60°	2147	1904	2003
65°	1876	1481	1768
70°	1696	1219	1764
75°	1697	1301	1971
80°	1869	1601	2256
85°	1927	1797	2461



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	293.2	4.2
10°-20°	839.4	11.9
20°-30°	1255.6	17.8
30°-40°	1436.9	20.4
40°-50°	1301.8	18.5
50°-60°	921.7	13.1
60°-70°	532.4	7.6
70°-80°	322.8	4.6
80°-90°	135.9	1.9
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°	2388.2	33.9
0°-40°	3825.1	54.3
0°-60°	6048.6	85.9
0°-90°	7039.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7039.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3096	3096	3096	3096	3096	
5°	3100	3089	3079	3078	3086	295
15°	2992	2980	2969	2969	2976	844
25°	2747	2736	2727	2725	2725	1263
35°	2319	2308	2304	2300	2304	1447
45°	1700	1697	1698	1685	1684	1310
55°	1075	1039	1028	997	1004	963
65°	589	528	465	532	555	592
75°	326	292	250	322	379	350
85°	125	112	116	149	159	134
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3096.3	3096.3	3096.3	3096.3	3096.3
2.5°	3109.4	3097.7	3087.3	3088.7	3096.3
5°	3099.7	3088.7	3079.0	3078.3	3085.9
7.5°	3083.1	3073.4	3062.3	3062.3	3068.6
10°	3059.5	3049.8	3038.7	3038.1	3045.0
12.5°	3031.8	3019.3	3007.6	3007.6	3015.2
15°	2992.3	2980.5	2968.7	2968.7	2975.7
17.5°	2943.8	2933.4	2923.7	2924.4	2929.9
20°	2888.3	2877.9	2867.5	2868.9	2875.2
22.5°	2824.6	2812.1	2803.8	2803.1	2807.2
25°	2746.9	2735.8	2726.8	2724.8	2724.8
27.5°	2660.3	2648.5	2642.3	2632.6	2635.3
30°	2561.2	2548.7	2537.6	2532.1	2531.4
32.5°	2449.6	2437.1	2427.4	2426.7	2429.5
35°	2318.6	2308.2	2304.0	2300.5	2304.0
37.5°	2189.0	2169.5	2166.1	2165.4	2174.4
40°	2028.8	2021.9	2017.1	2013.6	2025.4
42.5°	1875.0	1861.1	1862.5	1849.3	1870.1
45°	1700.3	1696.8	1697.5	1685.0	1683.6
47.5°	1527.0	1526.3	1536.7	1502.0	1500.0
50°	1371.0	1364.1	1381.4	1328.1	1313.5
52.5°	1222.0	1202.6	1197.1	1148.5	1148.5
55°	1075.1	1039.0	1027.9	997.4	1003.7
57.5°	935.7	884.5	861.6	860.9	871.3
60°	797.8	739.6	707.7	732.7	744.4
62.5°	688.3	624.5	576.0	623.1	634.2
65°	589.2	528.2	465.1	532.3	555.2
67.5°	503.9	453.3	374.3	462.3	492.8
70°	431.1	386.1	309.8	407.6	448.5
72.5°	373.6	336.2	269.6	363.9	413.1
75°	326.5	292.5	250.2	321.6	379.2
77.5°	289.0	248.8	234.3	281.4	340.3
80°	241.2	204.5	206.6	241.9	291.1
82.5°	185.8	158.0	166.4	200.3	228.7
85°	124.8	112.3	116.4	149.0	159.4
87.5°	61.7	59.6	63.8	87.3	87.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)