

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: P475913

Luminaire Tested: **22GR-LD5-60-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475913  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-60-F1-UNV-L840-CD1-U  
Description: GR 2'X2' LED TROFFER w/ F1 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6082.5 lumens  
Efficiency: N/A  
Efficacy: 137.0 lumens/watt  
Spacing Criteria (0/90/45): 1.14 / 1.17 / 1.24  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

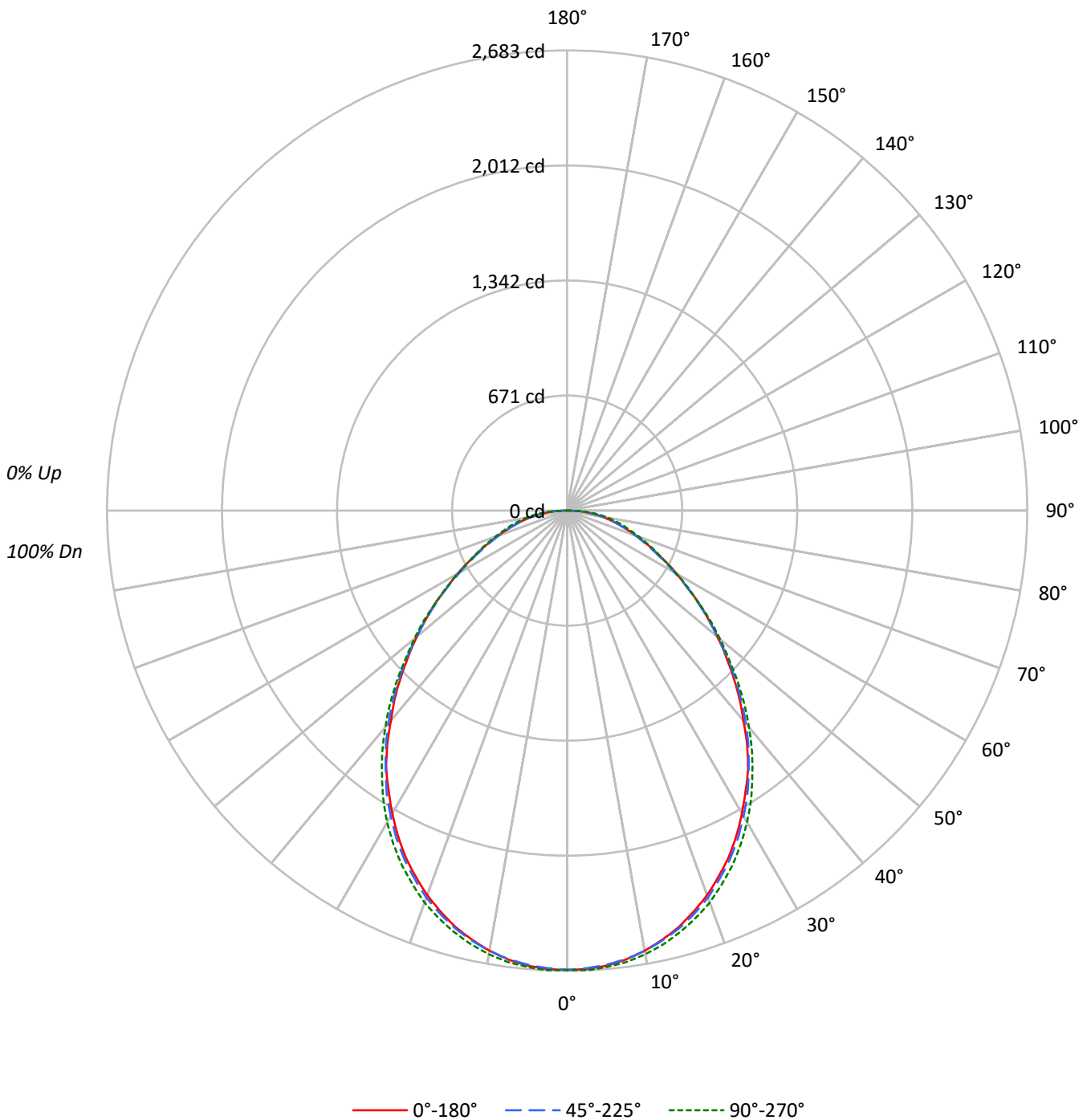
Input Watts (W): 44.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	90	80	73	68	78	71	66	75	70	65	72	68	64	62
4	85	73	65	59	82	72	64	58	70	63	57	67	61	57	65	60	56	54
5	78	66	57	51	76	65	57	51	63	56	50	61	55	50	59	54	49	47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	50	44	39	37
8	63	50	42	36	62	49	42	36	48	41	36	47	40	36	46	40	36	34
9	59	46	38	33	58	46	38	33	44	37	33	43	37	32	42	37	32	31
10	55	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

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

	0°	45°	90°
0°	7206	7206	7206
5°	7192	7179	7213
10°	7121	7121	7177
15°	7003	7025	7089
20°	6832	6875	6964
25°	6619	6664	6771
30°	6337	6392	6520
35°	6042	6059	6185
40°	5614	5695	5794
45°	5213	5262	5340
50°	4789	4789	4865
55°	4393	4344	4368
60°	3976	3907	3962
65°	3626	3544	3659
70°	3350	3330	3492
75°	3227	3200	3520
80°	3259	3259	3736
85°	3406	3563	4276



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	252.5	4.2
10°-20°	710.9	11.7
20°-30°	1033.6	17.0
30°-40°	1157.0	19.0
40°-50°	1067.8	17.6
50°-60°	833.3	13.7
60°-70°	564.1	9.3
70°-80°	336.8	5.5
80°-90°	126.5	2.1
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°	1997.0	32.8
0°-40°	3153.9	51.9
0°-60°	5055.1	83.1
0°-90°	6082.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6082.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2678	2678	2678	2678	2678	
5°	2663	2658	2658	2668	2670	252
15°	2514	2514	2522	2537	2545	707
25°	2229	2229	2244	2268	2280	1024
35°	1839	1837	1844	1872	1883	1144
45°	1370	1378	1383	1393	1403	1057
55°	936	929	926	931	931	835
65°	570	564	557	567	575	567
75°	310	308	308	326	339	330
85°	110	108	115	133	138	117
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2678.0	2678.0	2678.0	2678.0	2678.0
2.5°	2675.4	2670.3	2670.3	2678.0	2683.1
5°	2662.6	2657.5	2657.5	2667.7	2670.3
7.5°	2639.5	2636.9	2636.9	2647.2	2654.9
10°	2606.2	2603.6	2606.2	2616.4	2626.7
12.5°	2562.5	2562.5	2567.7	2580.5	2590.8
15°	2513.8	2513.8	2521.5	2536.9	2544.6
17.5°	2452.2	2454.8	2465.1	2483.0	2490.7
20°	2385.6	2390.7	2400.9	2416.3	2431.7
22.5°	2308.6	2313.7	2324.0	2347.1	2357.3
25°	2229.1	2229.1	2244.5	2267.6	2280.4
27.5°	2136.7	2139.3	2154.7	2180.3	2193.2
30°	2039.3	2047.0	2057.2	2080.3	2098.3
32.5°	1936.7	1944.4	1957.2	1982.8	1995.7
35°	1839.2	1836.6	1844.3	1872.5	1882.8
37.5°	1723.8	1726.3	1736.6	1757.1	1769.9
40°	1598.1	1610.9	1621.2	1636.5	1649.4
42.5°	1487.8	1495.5	1503.2	1518.5	1528.8
45°	1369.8	1377.5	1382.6	1392.9	1403.1
47.5°	1254.3	1256.9	1264.6	1269.7	1277.4
50°	1144.0	1146.6	1144.0	1151.7	1162.0
52.5°	1036.3	1033.7	1033.7	1036.3	1051.7
55°	936.3	928.6	926.0	931.1	931.1
57.5°	826.0	823.4	823.4	820.8	833.7
60°	738.8	731.1	725.9	731.1	736.2
62.5°	649.0	641.3	636.1	646.4	646.4
65°	569.5	564.3	556.6	566.9	574.6
67.5°	492.5	487.4	484.8	497.6	507.9
70°	425.8	423.2	423.2	436.1	443.8
72.5°	364.2	361.7	361.7	379.6	387.3
75°	310.4	307.8	307.8	325.8	338.6
77.5°	256.5	253.9	261.6	277.0	289.9
80°	210.3	207.8	210.3	230.9	241.1
82.5°	159.0	159.0	164.2	184.7	194.9
85°	110.3	107.7	115.4	133.4	138.5
87.5°	56.4	59.0	61.6	71.8	71.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)