

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: P475890

Luminaire Tested: **22GR-LD5-70-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475890  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-70-F1-UNV-L830-CD1-U  
Description: GR 2'X2' LED TROFFER w/ F1 LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6808.8 lumens  
Efficiency: N/A  
Efficacy: 130.2 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

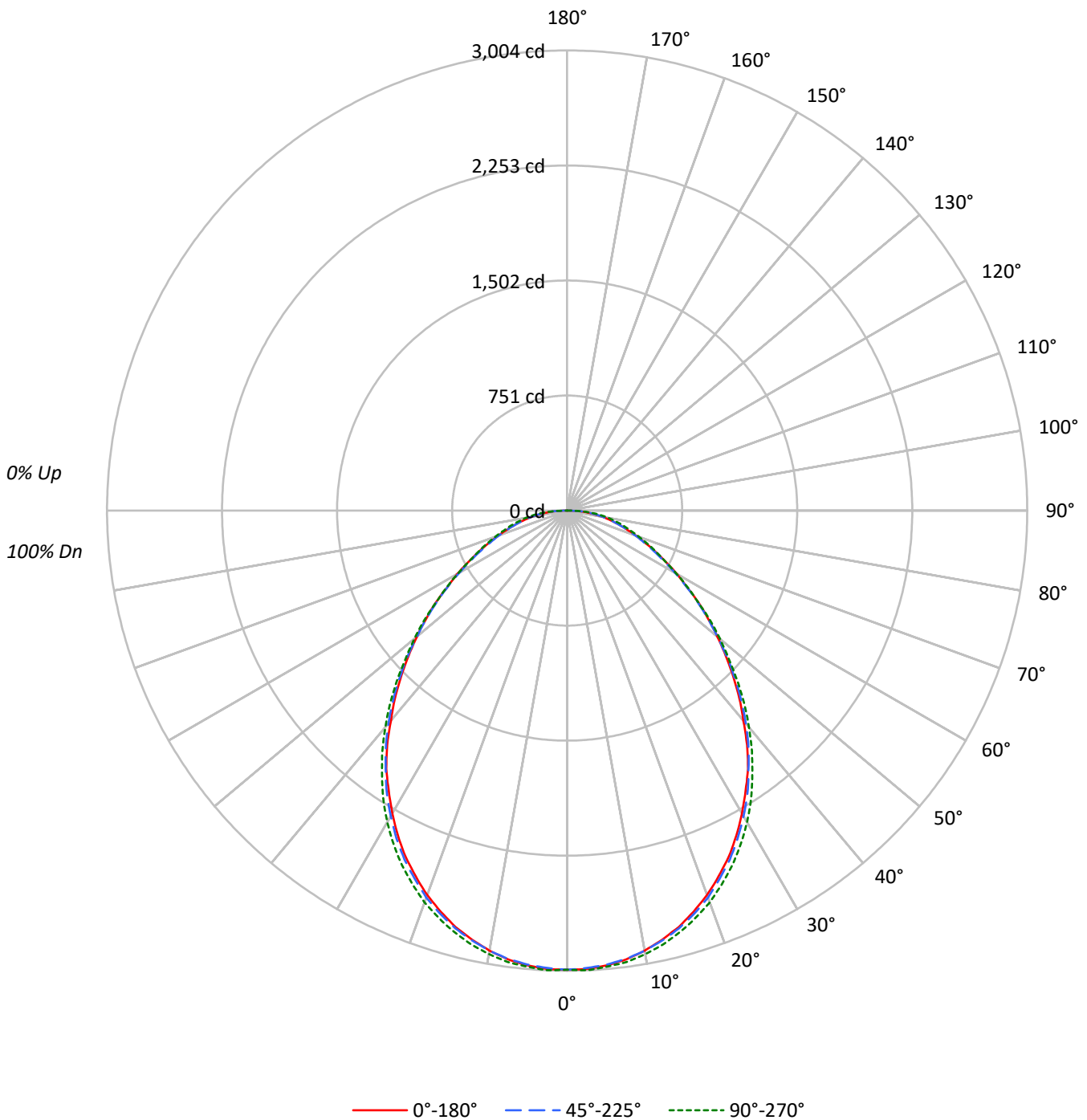
Input Watts (W): 52.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	8067	8067	8067
5°	8051	8036	8074
10°	7971	7971	8034
15°	7840	7863	7935
20°	7647	7696	7795
25°	7409	7460	7579
30°	7093	7156	7298
35°	6763	6782	6924
40°	6284	6375	6486
45°	5835	5890	5977
50°	5361	5361	5445
55°	4917	4863	4890
60°	4451	4373	4435
65°	4059	3968	4096
70°	3751	3728	3909
75°	3612	3583	3941
80°	3649	3649	4183
85°	3813	3989	4789



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	282.7	4.2
10°-20°	795.8	11.7
20°-30°	1157.0	17.0
30°-40°	1295.1	19.0
40°-50°	1195.3	17.6
50°-60°	932.8	13.7
60°-70°	631.4	9.3
70°-80°	377.1	5.5
80°-90°	141.6	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°	2235.4	32.8
0°-40°	3530.5	51.9
0°-60°	5658.7	83.1
0°-90°	6808.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6808.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2998	2998	2998	2998	2998	
5°	2980	2975	2975	2986	2989	282
15°	2814	2814	2823	2840	2848	792
25°	2495	2495	2512	2538	2553	1146
35°	2059	2056	2064	2096	2108	1281
45°	1533	1542	1548	1559	1571	1183
55°	1048	1039	1037	1042	1042	935
65°	638	632	623	635	643	635
75°	347	345	345	365	379	369
85°	124	121	129	149	155	131
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2997.7	2997.7	2997.7	2997.7	2997.7
2.5°	2994.9	2989.1	2989.1	2997.7	3003.5
5°	2980.5	2974.8	2974.8	2986.3	2989.1
7.5°	2954.7	2951.8	2951.8	2963.3	2971.9
10°	2917.3	2914.5	2917.3	2928.8	2940.3
12.5°	2868.5	2868.5	2874.3	2888.6	2900.1
15°	2814.0	2814.0	2822.6	2839.8	2848.4
17.5°	2745.1	2747.9	2759.4	2779.5	2788.1
20°	2670.4	2676.1	2687.6	2704.9	2722.1
22.5°	2584.3	2590.0	2601.5	2627.3	2638.8
25°	2495.2	2495.2	2512.5	2538.3	2552.7
27.5°	2391.9	2394.8	2412.0	2440.7	2455.1
30°	2282.8	2291.4	2302.9	2328.7	2348.8
32.5°	2167.9	2176.5	2190.9	2219.6	2234.0
35°	2058.8	2055.9	2064.5	2096.1	2107.6
37.5°	1929.6	1932.5	1943.9	1966.9	1981.3
40°	1788.9	1803.2	1814.7	1832.0	1846.3
42.5°	1665.4	1674.0	1682.6	1699.9	1711.4
45°	1533.3	1541.9	1547.7	1559.2	1570.7
47.5°	1404.1	1407.0	1415.6	1421.3	1430.0
50°	1280.6	1283.5	1280.6	1289.3	1300.7
52.5°	1160.0	1157.2	1157.2	1160.0	1177.3
55°	1048.1	1039.4	1036.6	1042.3	1042.3
57.5°	924.6	921.7	921.7	918.8	933.2
60°	827.0	818.4	812.6	818.4	824.1
62.5°	726.5	717.9	712.1	723.6	723.6
65°	637.5	631.7	623.1	634.6	643.2
67.5°	551.3	545.6	542.7	557.1	568.5
70°	476.7	473.8	473.8	488.1	496.8
72.5°	407.7	404.9	404.9	425.0	433.6
75°	347.4	344.6	344.6	364.7	379.0
77.5°	287.1	284.3	292.9	310.1	324.5
80°	235.5	232.6	235.5	258.4	269.9
82.5°	178.0	178.0	183.8	206.7	218.2
85°	123.5	120.6	129.2	149.3	155.1
87.5°	63.2	66.0	68.9	80.4	80.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)