

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: P475902

Luminaire Tested: **22GR-LD5-70-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475902  
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-L835-CD1-U  
Description: GR 2'X2' LED TROFFER w/ F1 LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7055.7 lumens  
Efficiency: N/A  
Efficacy: 134.9 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

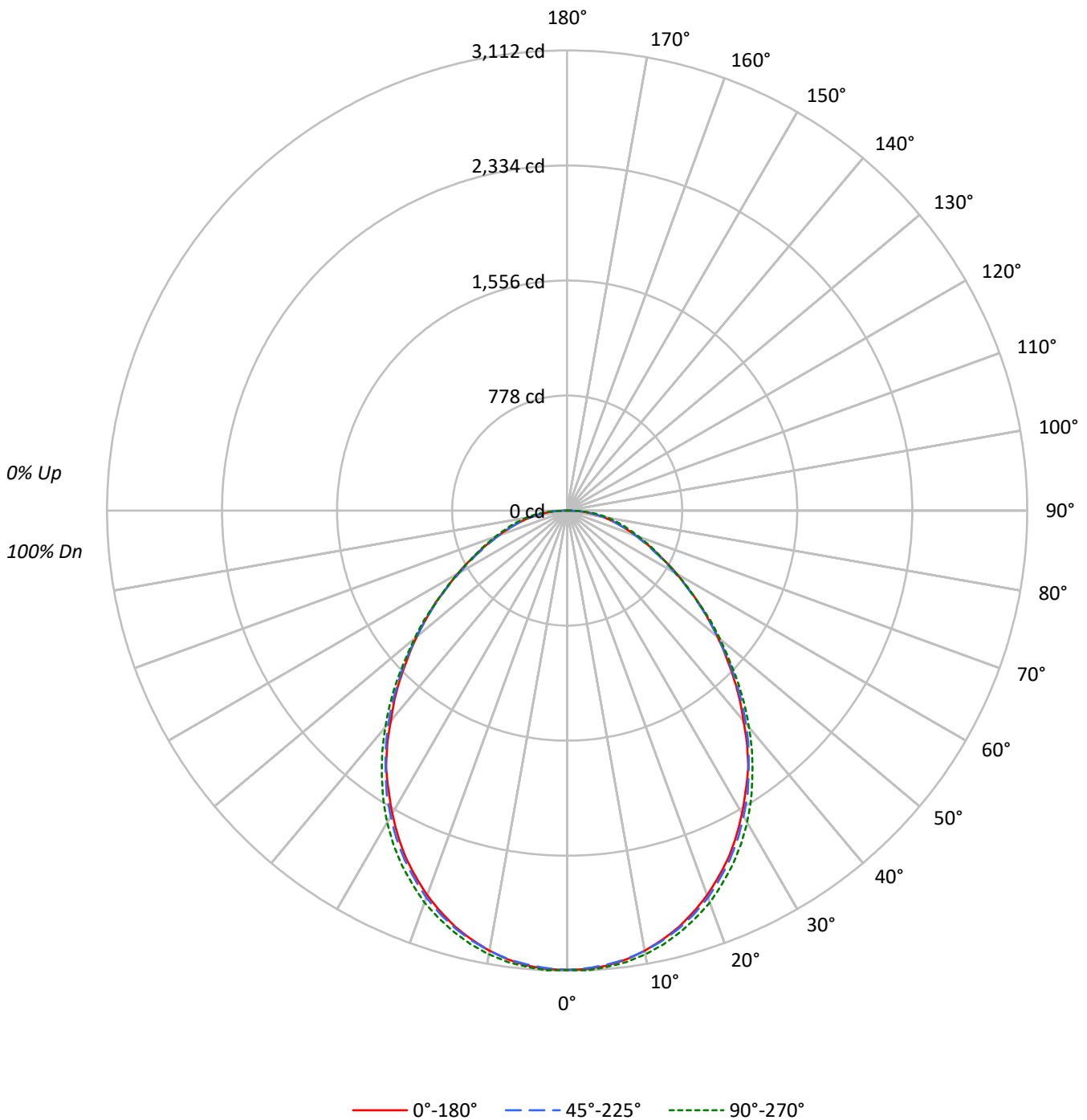
Input Watts (W): 52.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	8360	8360	8360
5°	8343	8327	8367
10°	8261	8261	8326
15°	8124	8149	8223
20°	7925	7976	8078
25°	7678	7731	7854
30°	7351	7415	7563
35°	7009	7028	7175
40°	6512	6606	6721
45°	6047	6103	6194
50°	5556	5556	5643
55°	5096	5040	5067
60°	4612	4532	4596
65°	4206	4111	4244
70°	3886	3863	4050
75°	3743	3713	4084
80°	3781	3781	4334
85°	3949	4134	4962



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	292.9	4.2
10°-20°	824.6	11.7
20°-30°	1199.0	17.0
30°-40°	1342.1	19.0
40°-50°	1238.7	17.6
50°-60°	966.6	13.7
60°-70°	654.3	9.3
70°-80°	390.7	5.5
80°-90°	146.8	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°	2316.5	32.8
0°-40°	3658.6	51.9
0°-60°	5863.9	83.1
0°-90°	7055.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7055.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3106	3106	3106	3106	3106	
5°	3089	3083	3083	3095	3098	293
15°	2916	2916	2925	2943	2952	820
25°	2586	2586	2604	2630	2645	1187
35°	2134	2130	2139	2172	2184	1327
45°	1589	1598	1604	1616	1628	1226
55°	1086	1077	1074	1080	1080	969
65°	661	655	646	658	666	658
75°	360	357	357	378	393	382
85°	128	125	134	155	161	136
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3106.5	3106.5	3106.5	3106.5	3106.5
2.5°	3103.5	3097.5	3097.5	3106.5	3112.4
5°	3088.6	3082.7	3082.7	3094.6	3097.5
7.5°	3061.8	3058.9	3058.9	3070.8	3079.7
10°	3023.2	3020.2	3023.2	3035.1	3047.0
12.5°	2972.6	2972.6	2978.5	2993.4	3005.3
15°	2916.0	2916.0	2925.0	2942.8	2951.7
17.5°	2844.6	2847.6	2859.5	2880.3	2889.3
20°	2767.3	2773.2	2785.1	2803.0	2820.8
22.5°	2678.0	2683.9	2695.8	2722.6	2734.5
25°	2585.8	2585.8	2603.6	2630.4	2645.3
27.5°	2478.6	2481.6	2499.5	2529.2	2544.1
30°	2365.6	2374.5	2386.4	2413.2	2434.0
32.5°	2246.5	2255.5	2270.3	2300.1	2315.0
35°	2133.5	2130.5	2139.4	2172.2	2184.1
37.5°	1999.6	2002.5	2014.4	2038.3	2053.1
40°	1853.8	1868.6	1880.5	1898.4	1913.3
42.5°	1725.8	1734.7	1743.7	1761.5	1773.4
45°	1588.9	1597.9	1603.8	1615.7	1627.6
47.5°	1455.0	1458.0	1466.9	1472.9	1481.8
50°	1327.1	1330.1	1327.1	1336.0	1347.9
52.5°	1202.1	1199.1	1199.1	1202.1	1220.0
55°	1086.1	1077.1	1074.2	1080.1	1080.1
57.5°	958.1	955.2	955.2	952.2	967.1
60°	857.0	848.0	842.1	848.0	854.0
62.5°	752.8	743.9	737.9	749.8	749.8
65°	660.6	654.6	645.7	657.6	666.5
67.5°	571.3	565.4	562.4	577.3	589.2
70°	493.9	491.0	491.0	505.8	514.8
72.5°	422.5	419.6	419.6	440.4	449.3
75°	360.0	357.1	357.1	377.9	392.8
77.5°	297.6	294.6	303.5	321.4	336.2
80°	244.0	241.0	244.0	267.8	279.7
82.5°	184.5	184.5	190.4	214.2	226.1
85°	127.9	125.0	133.9	154.7	160.7
87.5°	65.5	68.4	71.4	83.3	83.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)