

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: P475924

Luminaire Tested: **22GR-LD5-50-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475924  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-50-F1-UNV-L850-CD1-U  
Description: GR 2'X2' LED TROFFER w/ F1 LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5158.5 lumens  
Efficiency: N/A  
Efficacy: 139.8 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

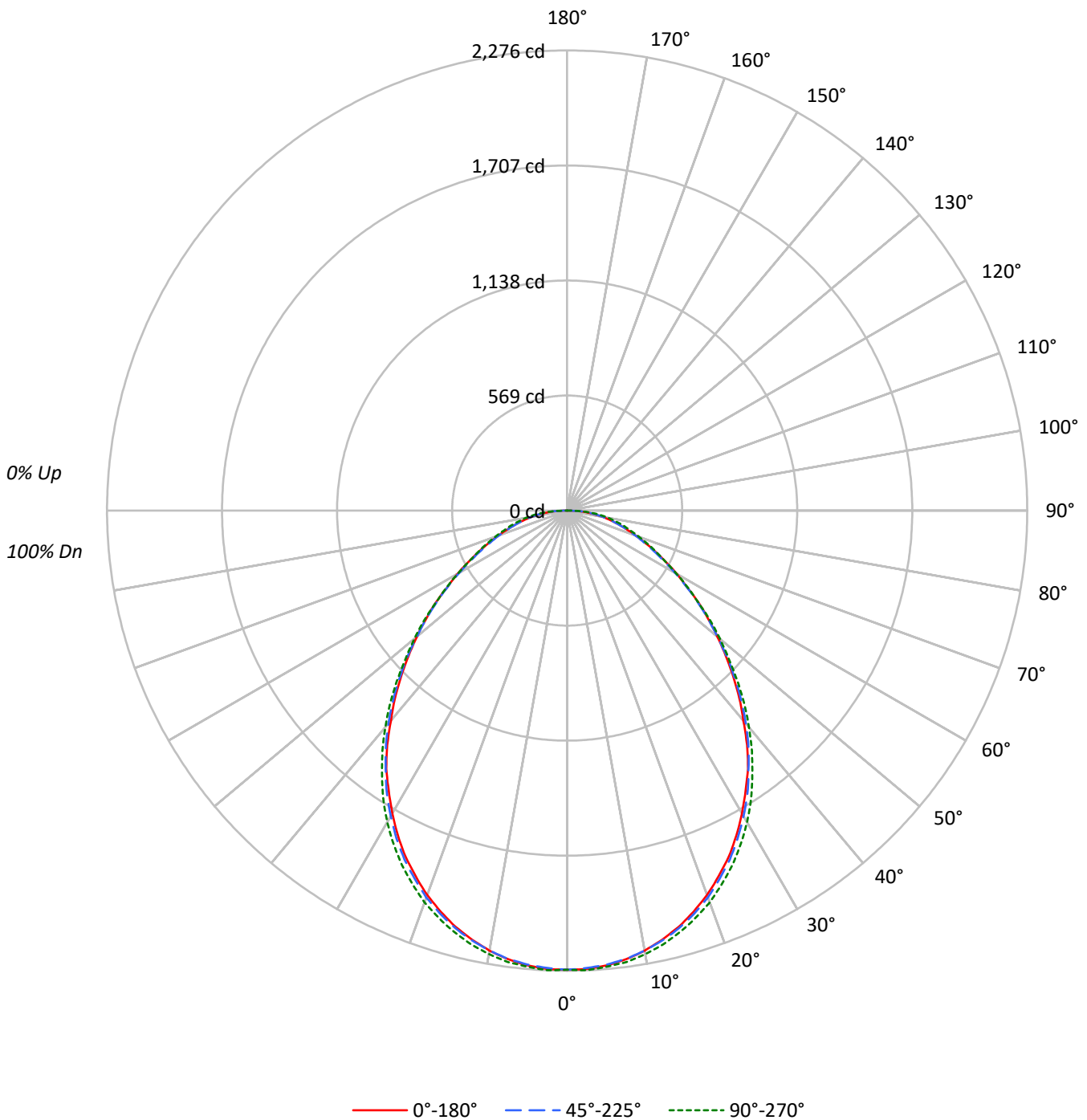
Input Watts (W): 36.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	6112	6112	6112
5°	6100	6088	6117
10°	6040	6040	6087
15°	5939	5958	6012
20°	5794	5831	5906
25°	5613	5652	5742
30°	5374	5421	5529
35°	5124	5139	5246
40°	4761	4830	4914
45°	4421	4462	4529
50°	4062	4062	4126
55°	3725	3684	3705
60°	3372	3314	3360
65°	3075	3006	3103
70°	2841	2825	2961
75°	2737	2715	2986
80°	2765	2765	3169
85°	2887	3023	3628



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.2	4.2
10°-20°	602.9	11.7
20°-30°	876.6	17.0
30°-40°	981.2	19.0
40°-50°	905.6	17.6
50°-60°	706.7	13.7
60°-70°	478.4	9.3
70°-80°	285.7	5.5
80°-90°	107.3	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°	1693.6	32.8
0°-40°	2674.8	51.9
0°-60°	4287.2	83.1
0°-90°	5158.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5158.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2271	2271	2271	2271	2271	
5°	2258	2254	2254	2262	2265	214
15°	2132	2132	2138	2152	2158	600
25°	1890	1890	1904	1923	1934	868
35°	1560	1558	1564	1588	1597	970
45°	1162	1168	1173	1181	1190	896
55°	794	788	785	790	790	708
65°	483	479	472	481	487	481
75°	263	261	261	276	287	279
85°	94	91	98	113	118	99
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2271.2	2271.2	2271.2	2271.2	2271.2
2.5°	2269.0	2264.6	2264.6	2271.2	2275.5
5°	2258.1	2253.8	2253.8	2262.5	2264.6
7.5°	2238.5	2236.4	2236.4	2245.1	2251.6
10°	2210.3	2208.1	2210.3	2219.0	2227.7
12.5°	2173.3	2173.3	2177.6	2188.5	2197.2
15°	2131.9	2131.9	2138.5	2151.5	2158.1
17.5°	2079.7	2081.9	2090.6	2105.8	2112.4
20°	2023.2	2027.5	2036.2	2049.3	2062.3
22.5°	1957.9	1962.3	1971.0	1990.5	1999.2
25°	1890.5	1890.5	1903.5	1923.1	1934.0
27.5°	1812.2	1814.3	1827.4	1849.1	1860.0
30°	1729.5	1736.0	1744.7	1764.3	1779.5
32.5°	1642.5	1649.0	1659.9	1681.6	1692.5
35°	1559.8	1557.6	1564.2	1588.1	1596.8
37.5°	1461.9	1464.1	1472.8	1490.2	1501.1
40°	1355.3	1366.2	1374.9	1387.9	1398.8
42.5°	1261.8	1268.3	1274.8	1287.9	1296.6
45°	1161.7	1168.2	1172.6	1181.3	1190.0
47.5°	1063.8	1066.0	1072.5	1076.9	1083.4
50°	970.3	972.4	970.3	976.8	985.5
52.5°	878.9	876.7	876.7	878.9	891.9
55°	794.0	787.5	785.3	789.7	789.7
57.5°	700.5	698.3	698.3	696.1	707.0
60°	626.5	620.0	615.7	620.0	624.4
62.5°	550.4	543.9	539.5	548.2	548.2
65°	483.0	478.6	472.1	480.8	487.3
67.5°	417.7	413.3	411.2	422.0	430.7
70°	361.1	359.0	359.0	369.8	376.4
72.5°	308.9	306.7	306.7	322.0	328.5
75°	263.2	261.1	261.1	276.3	287.2
77.5°	217.5	215.4	221.9	234.9	245.8
80°	178.4	176.2	178.4	195.8	204.5
82.5°	134.9	134.9	139.2	156.6	165.3
85°	93.5	91.4	97.9	113.1	117.5
87.5°	47.9	50.0	52.2	60.9	60.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)