

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: P475922

Luminaire Tested: **22GR-LD5-40-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475922  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-40-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: 4192.9 lumens  
Efficiency: N/A  
Efficacy: 129.4 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

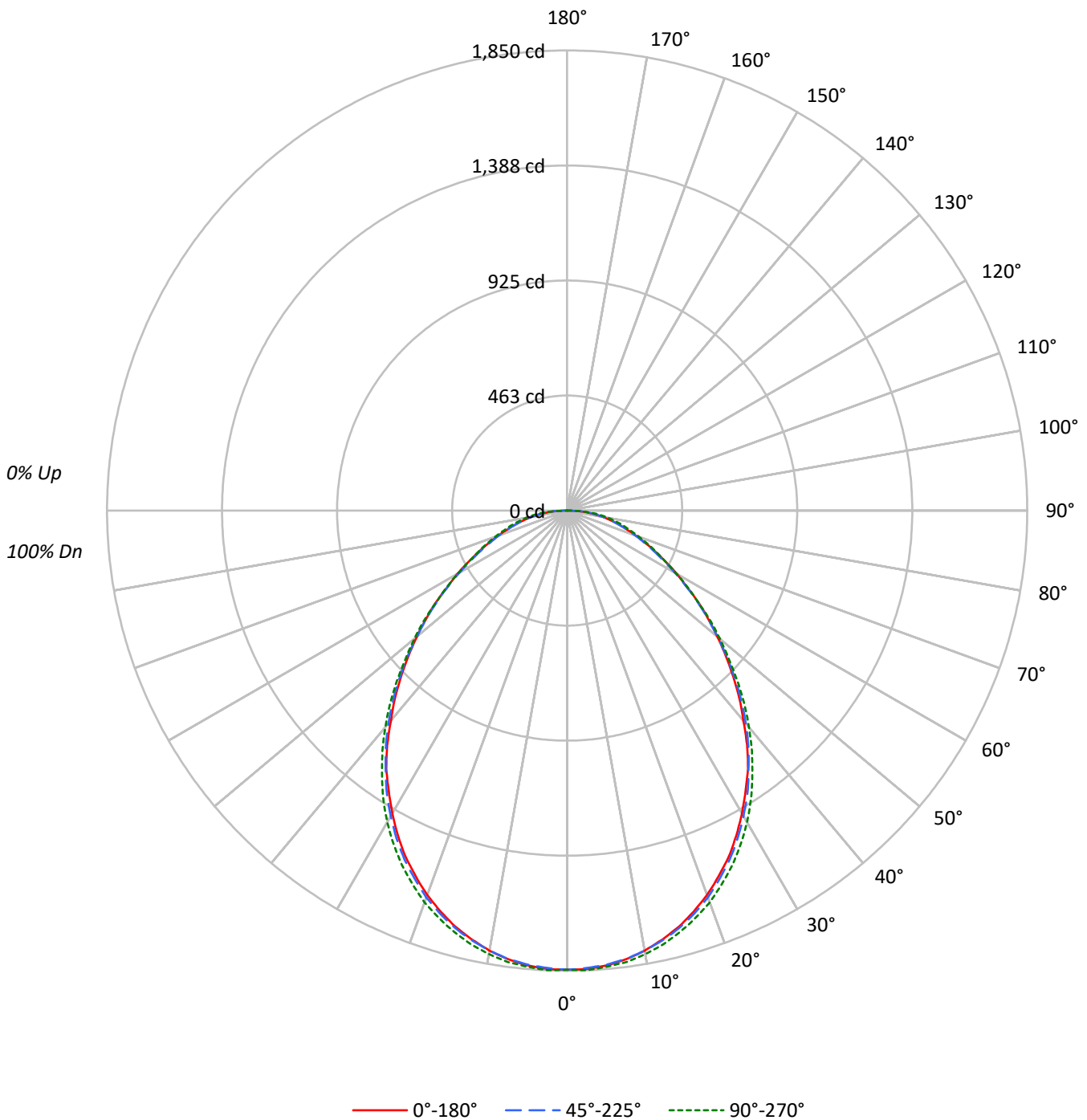
Input Watts (W): 32.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4968	4968	4968
5°	4958	4948	4972
10°	4909	4909	4948
15°	4828	4842	4887
20°	4709	4740	4800
25°	4562	4594	4668
30°	4368	4406	4494
35°	4165	4177	4264
40°	3870	3926	3994
45°	3593	3627	3681
50°	3301	3301	3353
55°	3028	2995	3012
60°	2741	2693	2731
65°	2499	2443	2522
70°	2309	2296	2407
75°	2225	2206	2427
80°	2247	2247	2576
85°	2347	2458	2949



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	174.1	4.2
10°-20°	490.0	11.7
20°-30°	712.5	17.0
30°-40°	797.5	19.0
40°-50°	736.1	17.6
50°-60°	574.4	13.7
60°-70°	388.8	9.3
70°-80°	232.2	5.5
80°-90°	87.2	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°	1376.6	32.8
0°-40°	2174.1	51.9
0°-60°	3484.6	83.1
0°-90°	4192.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4192.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1846	1846	1846	1846	1846	
5°	1835	1832	1832	1839	1841	174
15°	1733	1733	1738	1749	1754	488
25°	1537	1537	1547	1563	1572	706
35°	1268	1266	1271	1291	1298	789
45°	944	950	953	960	967	728
55°	645	640	638	642	642	576
65°	392	389	384	391	396	391
75°	214	212	212	225	233	227
85°	76	74	80	92	96	81
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1846.0	1846.0	1846.0	1846.0	1846.0
2.5°	1844.3	1840.7	1840.7	1846.0	1849.6
5°	1835.4	1831.9	1831.9	1839.0	1840.7
7.5°	1819.5	1817.7	1817.7	1824.8	1830.1
10°	1796.5	1794.8	1796.5	1803.6	1810.7
12.5°	1766.5	1766.5	1770.0	1778.8	1785.9
15°	1732.9	1732.9	1738.2	1748.8	1754.1
17.5°	1690.4	1692.2	1699.3	1711.6	1717.0
20°	1644.5	1648.0	1655.1	1665.7	1676.3
22.5°	1591.4	1594.9	1602.0	1617.9	1625.0
25°	1536.6	1536.6	1547.2	1563.1	1572.0
27.5°	1472.9	1474.7	1485.3	1503.0	1511.8
30°	1405.7	1411.0	1418.1	1434.0	1446.4
32.5°	1335.0	1340.3	1349.2	1366.8	1375.7
35°	1267.8	1266.1	1271.4	1290.8	1297.9
37.5°	1188.3	1190.0	1197.1	1211.2	1220.1
40°	1101.6	1110.4	1117.5	1128.1	1137.0
42.5°	1025.6	1030.9	1036.2	1046.8	1053.9
45°	944.2	949.5	953.1	960.1	967.2
47.5°	864.7	866.4	871.7	875.3	880.6
50°	788.6	790.4	788.6	793.9	801.0
52.5°	714.4	712.6	712.6	714.4	725.0
55°	645.4	640.1	638.3	641.9	641.9
57.5°	569.4	567.6	567.6	565.8	574.7
60°	509.3	503.9	500.4	503.9	507.5
62.5°	447.4	442.1	438.5	445.6	445.6
65°	392.5	389.0	383.7	390.8	396.1
67.5°	339.5	336.0	334.2	343.0	350.1
70°	293.5	291.8	291.8	300.6	305.9
72.5°	251.1	249.3	249.3	261.7	267.0
75°	214.0	212.2	212.2	224.6	233.4
77.5°	176.8	175.1	180.4	191.0	199.8
80°	145.0	143.2	145.0	159.1	166.2
82.5°	109.6	109.6	113.2	127.3	134.4
85°	76.0	74.3	79.6	91.9	95.5
87.5°	38.9	40.7	42.4	49.5	49.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)