

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: P475918

Luminaire Tested: **22GR-LD5-24-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475918  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-24-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: 2480.9 lumens  
Efficiency: N/A  
Efficacy: 138.6 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

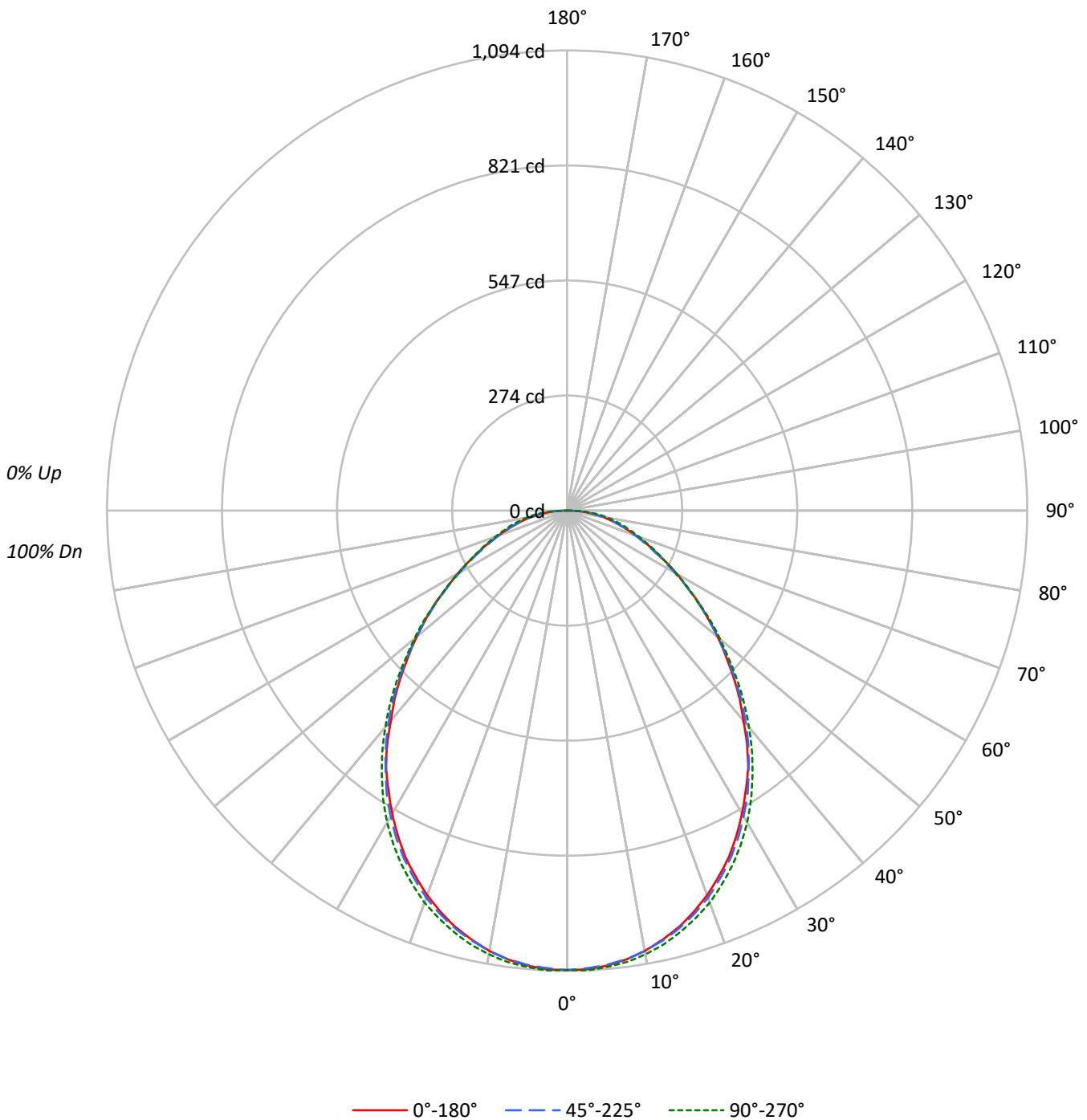
Input Watts (W): 17.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2939	2939	2939
5°	2934	2928	2942
10°	2905	2905	2927
15°	2856	2865	2891
20°	2786	2804	2840
25°	2700	2718	2762
30°	2585	2607	2659
35°	2464	2471	2523
40°	2290	2323	2363
45°	2126	2146	2178
50°	1953	1953	1984
55°	1792	1772	1782
60°	1622	1594	1616
65°	1479	1445	1493
70°	1367	1358	1424
75°	1316	1305	1436
80°	1330	1330	1523
85°	1389	1454	1744



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.0	4.2
10°-20°	289.9	11.7
20°-30°	421.6	17.0
30°-40°	471.9	19.0
40°-50°	435.5	17.6
50°-60°	339.9	13.7
60°-70°	230.1	9.3
70°-80°	137.4	5.5
80°-90°	51.6	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°	814.5	32.8
0°-40°	1286.4	51.9
0°-60°	2061.8	83.1
0°-90°	2480.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2480.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1092	1092	1092	1092	1092	
5°	1086	1084	1084	1088	1089	103
15°	1025	1025	1028	1035	1038	288
25°	909	909	916	925	930	418
35°	750	749	752	764	768	467
45°	559	562	564	568	572	431
55°	382	379	378	380	380	341
65°	232	230	227	231	234	231
75°	127	126	126	133	138	134
85°	45	44	47	54	56	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1092.3	1092.3	1092.3	1092.3	1092.3
2.5°	1091.2	1089.1	1089.1	1092.3	1094.4
5°	1086.0	1083.9	1083.9	1088.1	1089.1
7.5°	1076.6	1075.5	1075.5	1079.7	1082.8
10°	1063.0	1061.9	1063.0	1067.2	1071.3
12.5°	1045.2	1045.2	1047.3	1052.5	1056.7
15°	1025.3	1025.3	1028.4	1034.7	1037.9
17.5°	1000.2	1001.2	1005.4	1012.8	1015.9
20°	973.0	975.1	979.3	985.5	991.8
22.5°	941.6	943.7	947.9	957.3	961.5
25°	909.2	909.2	915.5	924.9	930.1
27.5°	871.5	872.6	878.8	889.3	894.5
30°	831.8	834.9	839.1	848.5	855.8
32.5°	789.9	793.0	798.3	808.7	814.0
35°	750.1	749.1	752.2	763.7	767.9
37.5°	703.1	704.1	708.3	716.7	721.9
40°	651.8	657.0	661.2	667.5	672.7
42.5°	606.8	610.0	613.1	619.4	623.6
45°	558.7	561.8	563.9	568.1	572.3
47.5°	511.6	512.7	515.8	517.9	521.0
50°	466.6	467.7	466.6	469.8	473.9
52.5°	422.7	421.6	421.6	422.7	429.0
55°	381.9	378.7	377.7	379.8	379.8
57.5°	336.9	335.8	335.8	334.8	340.0
60°	301.3	298.2	296.1	298.2	300.3
62.5°	264.7	261.6	259.5	263.7	263.7
65°	232.3	230.2	227.0	231.2	234.4
67.5°	200.9	198.8	197.7	203.0	207.2
70°	173.7	172.6	172.6	177.9	181.0
72.5°	148.6	147.5	147.5	154.8	158.0
75°	126.6	125.5	125.5	132.9	138.1
77.5°	104.6	103.6	106.7	113.0	118.2
80°	85.8	84.7	85.8	94.2	98.3
82.5°	64.9	64.9	67.0	75.3	79.5
85°	45.0	43.9	47.1	54.4	56.5
87.5°	23.0	24.1	25.1	29.3	29.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)