

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: P475884

Luminaire Tested: **22GR-LD5-32-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475884  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22GR-LD5-32-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: 3157.4 lumens  
Efficiency: N/A  
Efficacy: 126.3 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

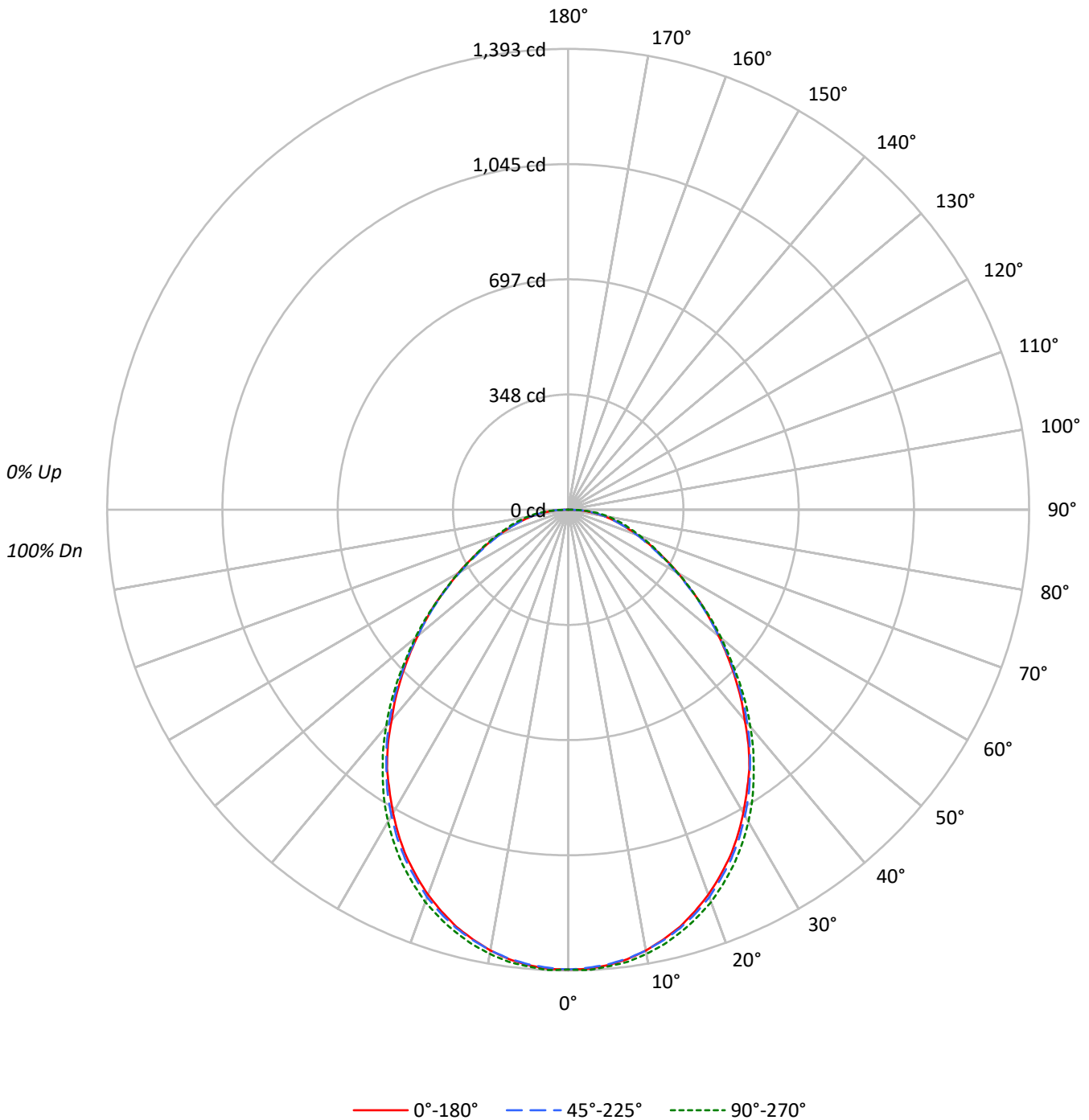
Input Watts (W): 25  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3741	3741	3741
5°	3734	3726	3744
10°	3697	3697	3726
15°	3635	3646	3680
20°	3546	3569	3615
25°	3436	3459	3515
30°	3289	3318	3384
35°	3136	3145	3211
40°	2914	2956	3008
45°	2706	2731	2772
50°	2486	2486	2525
55°	2280	2255	2268
60°	2064	2028	2057
65°	1882	1840	1899
70°	1739	1729	1813
75°	1675	1661	1828
80°	1692	1692	1940
85°	1769	1849	2220



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.1	4.2
10°-20°	369.0	11.7
20°-30°	536.5	17.0
30°-40°	600.6	19.0
40°-50°	554.3	17.6
50°-60°	432.6	13.7
60°-70°	292.8	9.3
70°-80°	174.8	5.5
80°-90°	65.7	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°	1036.6	32.8
0°-40°	1637.2	51.9
0°-60°	2624.1	83.1
0°-90°	3157.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3157.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1390	1390	1390	1390	1390	
5°	1382	1380	1380	1385	1386	131
15°	1305	1305	1309	1317	1321	367
25°	1157	1157	1165	1177	1184	531
35°	955	953	957	972	977	594
45°	711	715	718	723	728	549
55°	486	482	481	483	483	434
65°	296	293	289	294	298	294
75°	161	160	160	169	176	171
85°	57	56	60	69	72	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1390.1	1390.1	1390.1	1390.1	1390.1
2.5°	1388.8	1386.1	1386.1	1390.1	1392.8
5°	1382.2	1379.5	1379.5	1384.8	1386.1
7.5°	1370.2	1368.8	1368.8	1374.2	1378.2
10°	1352.9	1351.5	1352.9	1358.2	1363.5
12.5°	1330.2	1330.2	1332.9	1339.5	1344.9
15°	1304.9	1304.9	1308.9	1316.9	1320.9
17.5°	1273.0	1274.3	1279.6	1288.9	1292.9
20°	1238.3	1241.0	1246.3	1254.3	1262.3
22.5°	1198.4	1201.1	1206.4	1218.4	1223.7
25°	1157.1	1157.1	1165.1	1177.1	1183.8
27.5°	1109.2	1110.5	1118.5	1131.8	1138.5
30°	1058.6	1062.6	1067.9	1079.9	1089.2
32.5°	1005.3	1009.3	1016.0	1029.3	1035.9
35°	954.7	953.4	957.4	972.0	977.4
37.5°	894.8	896.1	901.5	912.1	918.8
40°	829.6	836.2	841.5	849.5	856.2
42.5°	772.3	776.3	780.3	788.3	793.6
45°	711.0	715.0	717.7	723.0	728.4
47.5°	651.1	652.5	656.5	659.1	663.1
50°	593.9	595.2	593.9	597.9	603.2
52.5°	537.9	536.6	536.6	537.9	545.9
55°	486.0	482.0	480.7	483.4	483.4
57.5°	428.8	427.4	427.4	426.1	432.8
60°	383.5	379.5	376.8	379.5	382.2
62.5°	336.9	332.9	330.2	335.6	335.6
65°	295.6	292.9	288.9	294.3	298.3
67.5°	255.7	253.0	251.7	258.3	263.6
70°	221.0	219.7	219.7	226.4	230.4
72.5°	189.1	187.7	187.7	197.1	201.1
75°	161.1	159.8	159.8	169.1	175.8
77.5°	133.2	131.8	135.8	143.8	150.5
80°	109.2	107.9	109.2	119.8	125.2
82.5°	82.6	82.6	85.2	95.9	101.2
85°	57.3	55.9	59.9	69.2	71.9
87.5°	29.3	30.6	32.0	37.3	37.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)