

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: P475919

Luminaire Tested: **22GR-LD5-28-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475919
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-28-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: 2895.9 lumens
Efficiency: N/A
Efficacy: 137.9 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

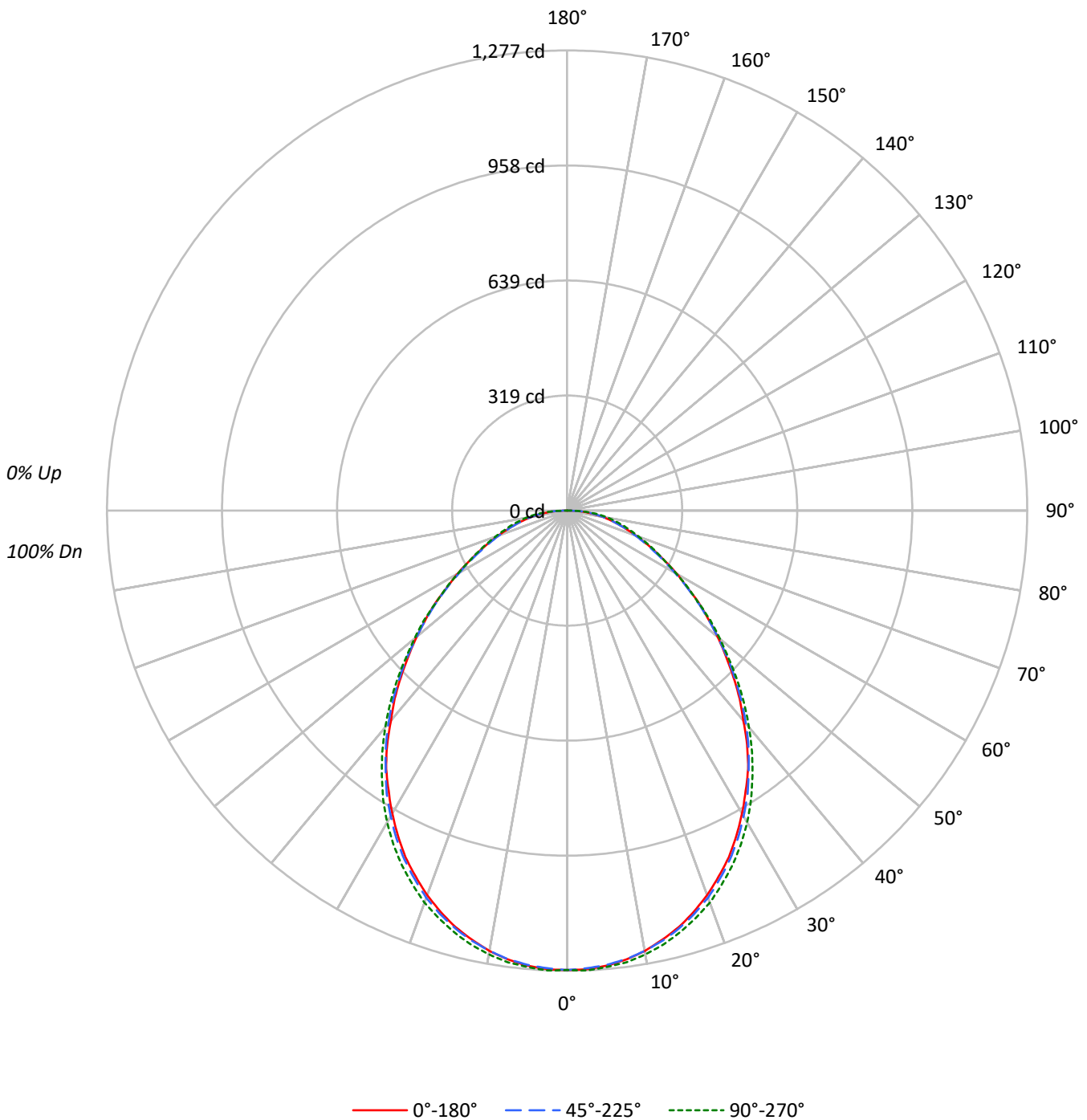
Input Watts (W): 21
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3431	3431	3431
5°	3424	3418	3434
10°	3390	3390	3417
15°	3334	3344	3375
20°	3253	3273	3315
25°	3151	3173	3224
30°	3017	3043	3104
35°	2876	2885	2945
40°	2673	2711	2759
45°	2482	2505	2542
50°	2280	2280	2316
55°	2092	2069	2080
60°	1893	1860	1886
65°	1726	1687	1742
70°	1595	1585	1662
75°	1537	1523	1676
80°	1551	1551	1779
85°	1621	1698	2035



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.2	4.2
10°-20°	338.4	11.7
20°-30°	492.1	17.0
30°-40°	550.8	19.0
40°-50°	508.4	17.6
50°-60°	396.7	13.7
60°-70°	268.6	9.3
70°-80°	160.4	5.5
80°-90°	60.2	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°	950.8	32.8
0°-40°	1501.6	51.9
0°-60°	2406.7	83.1
0°-90°	2895.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2895.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1275	1275	1275	1275	1275	
5°	1268	1265	1265	1270	1271	120
15°	1197	1197	1200	1208	1212	337
25°	1061	1061	1069	1080	1086	487
35°	876	874	878	892	896	545
45°	652	656	658	663	668	503
55°	446	442	441	443	443	398
65°	271	269	265	270	274	270
75°	148	146	146	155	161	157
85°	52	51	55	64	66	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1275.0	1275.0	1275.0	1275.0	1275.0
2.5°	1273.8	1271.3	1271.3	1275.0	1277.4
5°	1267.7	1265.2	1265.2	1270.1	1271.3
7.5°	1256.7	1255.4	1255.4	1260.3	1264.0
10°	1240.8	1239.6	1240.8	1245.7	1250.6
12.5°	1220.0	1220.0	1222.5	1228.6	1233.5
15°	1196.8	1196.8	1200.5	1207.8	1211.5
17.5°	1167.5	1168.7	1173.6	1182.2	1185.8
20°	1135.8	1138.2	1143.1	1150.4	1157.7
22.5°	1099.1	1101.6	1106.5	1117.4	1122.3
25°	1061.3	1061.3	1068.6	1079.6	1085.7
27.5°	1017.3	1018.5	1025.8	1038.1	1044.2
30°	970.9	974.6	979.4	990.4	999.0
32.5°	922.0	925.7	931.8	944.0	950.1
35°	875.6	874.4	878.1	891.5	896.4
37.5°	820.7	821.9	826.8	836.6	842.7
40°	760.8	766.9	771.8	779.2	785.3
42.5°	708.3	712.0	715.7	723.0	727.9
45°	652.1	655.8	658.3	663.1	668.0
47.5°	597.2	598.4	602.1	604.5	608.2
50°	544.7	545.9	544.7	548.3	553.2
52.5°	493.4	492.2	492.2	493.4	500.7
55°	445.8	442.1	440.9	443.3	443.3
57.5°	393.2	392.0	392.0	390.8	396.9
60°	351.7	348.1	345.6	348.1	350.5
62.5°	309.0	305.3	302.9	307.8	307.8
65°	271.1	268.7	265.0	269.9	273.6
67.5°	234.5	232.0	230.8	236.9	241.8
70°	202.7	201.5	201.5	207.6	211.3
72.5°	173.4	172.2	172.2	180.7	184.4
75°	147.8	146.5	146.5	155.1	161.2
77.5°	122.1	120.9	124.6	131.9	138.0
80°	100.1	98.9	100.1	109.9	114.8
82.5°	75.7	75.7	78.2	87.9	92.8
85°	52.5	51.3	55.0	63.5	65.9
87.5°	26.9	28.1	29.3	34.2	34.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)