

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: P475885

Luminaire Tested: **22GR-LD5-36-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475885
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-36-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: 3553.0 lumens
Efficiency: N/A
Efficacy: 124.7 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

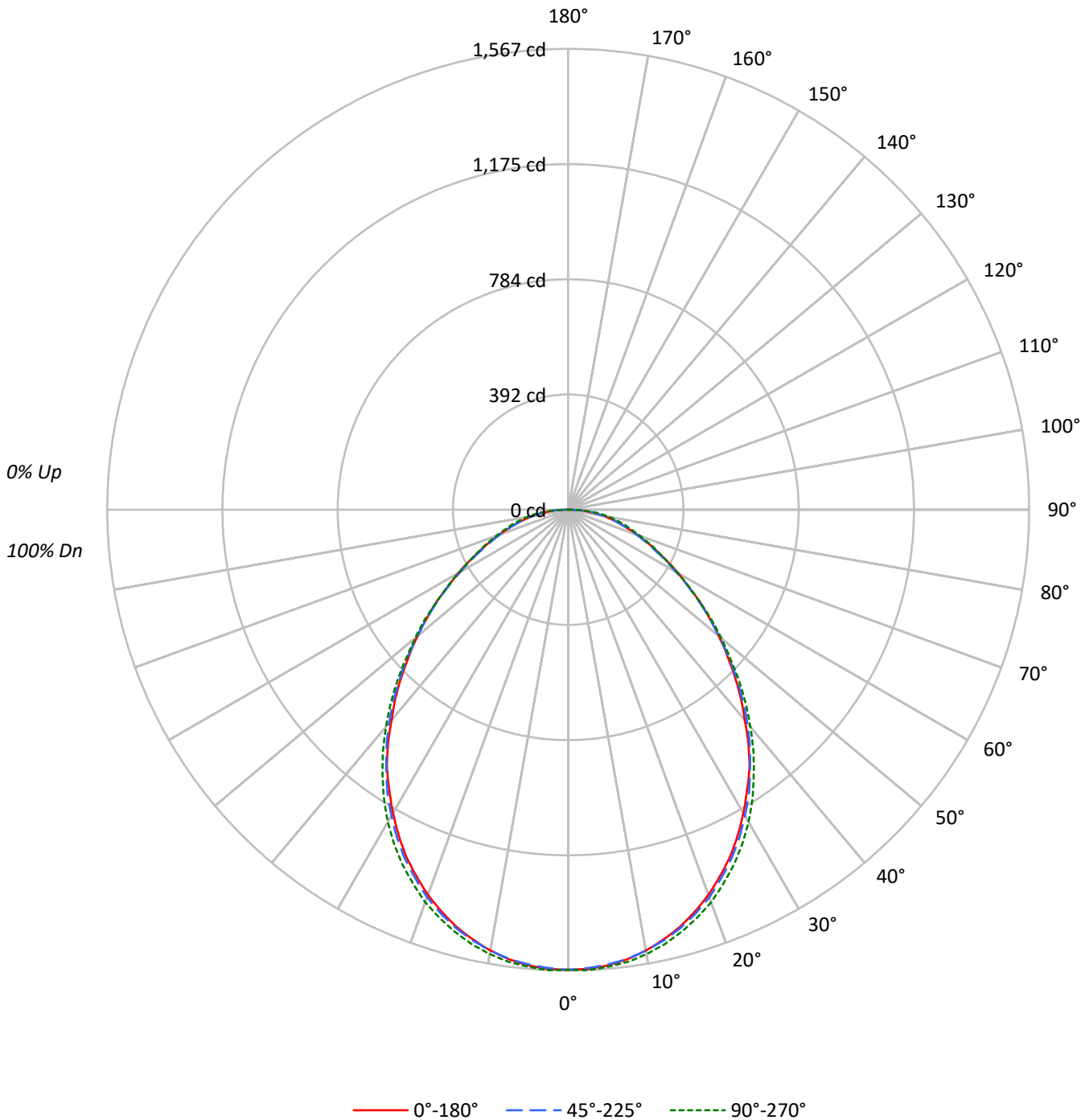
Input Watts (W): 28.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4209	4209	4209
5°	4201	4193	4213
10°	4160	4160	4192
15°	4091	4103	4141
20°	3991	4016	4068
25°	3866	3893	3955
30°	3701	3734	3809
35°	3529	3539	3613
40°	3279	3327	3384
45°	3045	3073	3119
50°	2798	2798	2842
55°	2566	2538	2552
60°	2322	2282	2314
65°	2118	2070	2137
70°	1957	1945	2039
75°	1885	1869	2057
80°	1905	1905	2182
85°	1988	2081	2498



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	147.5	4.2
10°-20°	415.2	11.7
20°-30°	603.8	17.0
30°-40°	675.8	19.0
40°-50°	623.7	17.6
50°-60°	486.7	13.7
60°-70°	329.5	9.3
70°-80°	196.8	5.5
80°-90°	73.9	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°	1166.5	32.8
0°-40°	1842.3	51.9
0°-60°	2952.8	83.1
0°-90°	3553.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3553.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1564	1564	1564	1564	1564	
5°	1555	1552	1552	1558	1560	147
15°	1468	1468	1473	1482	1486	413
25°	1302	1302	1311	1324	1332	598
35°	1074	1073	1077	1094	1100	668
45°	800	805	808	814	820	617
55°	547	542	541	544	544	488
65°	333	330	325	331	336	331
75°	181	180	180	190	198	193
85°	64	63	67	78	81	69
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1564.3	1564.3	1564.3	1564.3	1564.3
2.5°	1562.8	1559.8	1559.8	1564.3	1567.3
5°	1555.3	1552.3	1552.3	1558.3	1559.8
7.5°	1541.8	1540.3	1540.3	1546.3	1550.8
10°	1522.3	1520.8	1522.3	1528.3	1534.3
12.5°	1496.9	1496.9	1499.9	1507.3	1513.3
15°	1468.4	1468.4	1472.9	1481.9	1486.4
17.5°	1432.4	1433.9	1439.9	1450.4	1454.9
20°	1393.5	1396.5	1402.5	1411.4	1420.4
22.5°	1348.5	1351.5	1357.5	1371.0	1377.0
25°	1302.1	1302.1	1311.1	1324.5	1332.0
27.5°	1248.1	1249.6	1258.6	1273.6	1281.1
30°	1191.2	1195.7	1201.7	1215.2	1225.7
32.5°	1131.3	1135.8	1143.2	1158.2	1165.7
35°	1074.3	1072.8	1077.3	1093.8	1099.8
37.5°	1006.9	1008.4	1014.4	1026.4	1033.9
40°	933.5	941.0	947.0	955.9	963.4
42.5°	869.0	873.5	878.0	887.0	893.0
45°	800.1	804.6	807.6	813.6	819.6
47.5°	732.7	734.2	738.7	741.7	746.2
50°	668.3	669.8	668.3	672.8	678.8
52.5°	605.3	603.8	603.8	605.3	614.3
55°	546.9	542.4	540.9	543.9	543.9
57.5°	482.5	481.0	481.0	479.5	487.0
60°	431.5	427.0	424.0	427.0	430.0
62.5°	379.1	374.6	371.6	377.6	377.6
65°	332.6	329.6	325.1	331.1	335.6
67.5°	287.7	284.7	283.2	290.7	296.7
70°	248.7	247.2	247.2	254.7	259.2
72.5°	212.8	211.3	211.3	221.8	226.3
75°	181.3	179.8	179.8	190.3	197.8
77.5°	149.8	148.3	152.8	161.8	169.3
80°	122.9	121.4	122.9	134.9	140.8
82.5°	92.9	92.9	95.9	107.9	113.9
85°	64.4	62.9	67.4	77.9	80.9
87.5°	33.0	34.5	36.0	42.0	42.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)