

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: P476203

Luminaire Tested: **14GR-LD5-50-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476203
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-50-F1-UNV-L850-CD1-U
Description: GR 1'X4' LED TROFFER w/ F1 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5167.1 lumens
Efficiency: N/A
Efficacy: 126.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.24 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

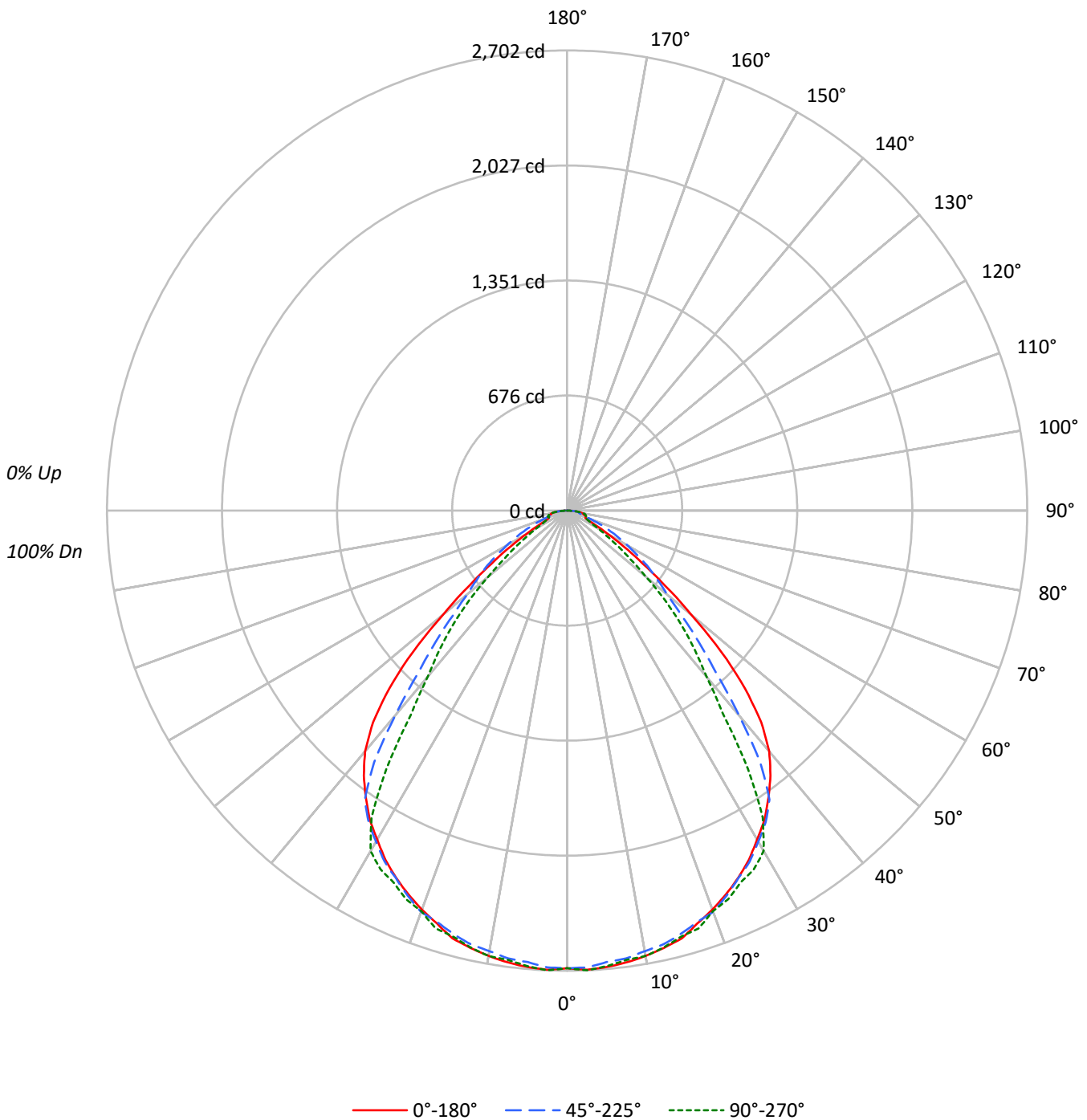
Input Watts (W): 41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88					88			
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77					77			
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68					68			
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61					61			
5	82	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49					49			
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44					44			
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40					40			
9	63	51	44	39	62	50	43	39	49	43	38	48	42	38	47	42	38	36					36			
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33					33			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7231	7231	7231
5°	7267	7189	7251
10°	7256	7177	7256
15°	7245	7172	7212
20°	7141	7182	7165
25°	7060	7069	7155
30°	6930	6975	7173
35°	6766	6804	6082
40°	6483	5518	4471
45°	5625	4161	3611
50°	3996	3197	2531
55°	2538	2741	1696
60°	1495	2195	1121
65°	884	1713	866
70°	910	1161	887
75°	1112	902	1173
80°	1435	1120	1568
85°	1519	1519	1519



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.8	4.9
10°-20°	729.7	14.1
20°-30°	1103.5	21.4
30°-40°	1228.8	23.8
40°-50°	899.4	17.4
50°-60°	495.8	9.6
60°-70°	253.5	4.9
70°-80°	144.2	2.8
80°-90°	57.4	1.1
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°	2088.0	40.4
0°-40°	3316.8	64.2
0°-60°	4712.0	91.2
0°-90°	5167.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5167.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2687	2687	2687	2687	2687	
5°	2690	2690	2661	2679	2684	256
15°	2600	2572	2574	2606	2589	731
25°	2378	2372	2381	2421	2410	1095
35°	2060	2062	2071	1929	1851	1285
45°	1478	1362	1093	995	949	1112
55°	541	636	584	500	362	506
65°	139	330	269	257	136	160
75°	107	185	87	165	113	112
85°	49	61	49	66	49	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2687.3	2687.3	2687.3	2687.3	2687.3
2.5°	2698.9	2698.9	2684.4	2701.7	2701.7
5°	2690.2	2690.2	2661.3	2678.6	2684.4
7.5°	2675.7	2675.7	2652.6	2667.0	2661.3
10°	2655.5	2641.0	2626.5	2667.0	2655.5
12.5°	2629.4	2600.5	2609.2	2606.3	2626.5
15°	2600.5	2571.6	2574.5	2606.3	2588.9
17.5°	2542.7	2545.5	2534.0	2557.1	2571.6
20°	2493.5	2502.2	2507.9	2522.4	2502.2
22.5°	2438.5	2441.4	2447.2	2467.4	2470.3
25°	2377.8	2372.0	2380.7	2421.2	2409.6
27.5°	2311.2	2308.3	2322.8	2357.5	2374.9
30°	2230.2	2241.8	2244.7	2308.3	2308.3
32.5°	2155.0	2155.0	2169.5	2201.3	2137.7
35°	2059.6	2062.5	2071.1	1929.4	1851.3
37.5°	1961.2	1952.5	1862.9	1605.4	1501.3
40°	1845.5	1825.3	1570.7	1339.3	1272.8
42.5°	1686.4	1625.7	1295.9	1157.1	1107.9
45°	1478.2	1362.4	1093.4	995.1	948.8
47.5°	1229.4	1122.4	908.3	841.8	778.1
50°	954.6	931.4	763.7	705.8	604.6
52.5°	726.1	772.3	671.1	595.9	465.7
55°	540.9	636.4	584.3	500.4	361.6
57.5°	396.3	529.4	491.8	425.2	271.9
60°	277.7	448.4	407.9	358.7	208.3
62.5°	196.7	387.6	335.5	306.6	159.1
65°	138.8	329.8	269.0	257.4	136.0
67.5°	115.7	277.7	205.4	228.5	115.7
70°	115.7	231.4	147.5	202.5	112.8
72.5°	115.7	202.5	109.9	185.1	118.6
75°	107.0	185.1	86.8	164.9	112.8
77.5°	98.4	156.2	75.2	141.7	109.9
80°	92.6	112.8	72.3	115.7	101.2
82.5°	75.2	81.0	66.5	89.7	78.1
85°	49.2	60.7	49.2	66.5	49.2
87.5°	23.1	31.8	23.1	28.9	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)