

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: P476194

Luminaire Tested: **14GR-LD5-50-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476194
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-L840-CD1-U
Description: GR 1'X4' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5162.1 lumens
Efficiency: N/A
Efficacy: 125.9 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

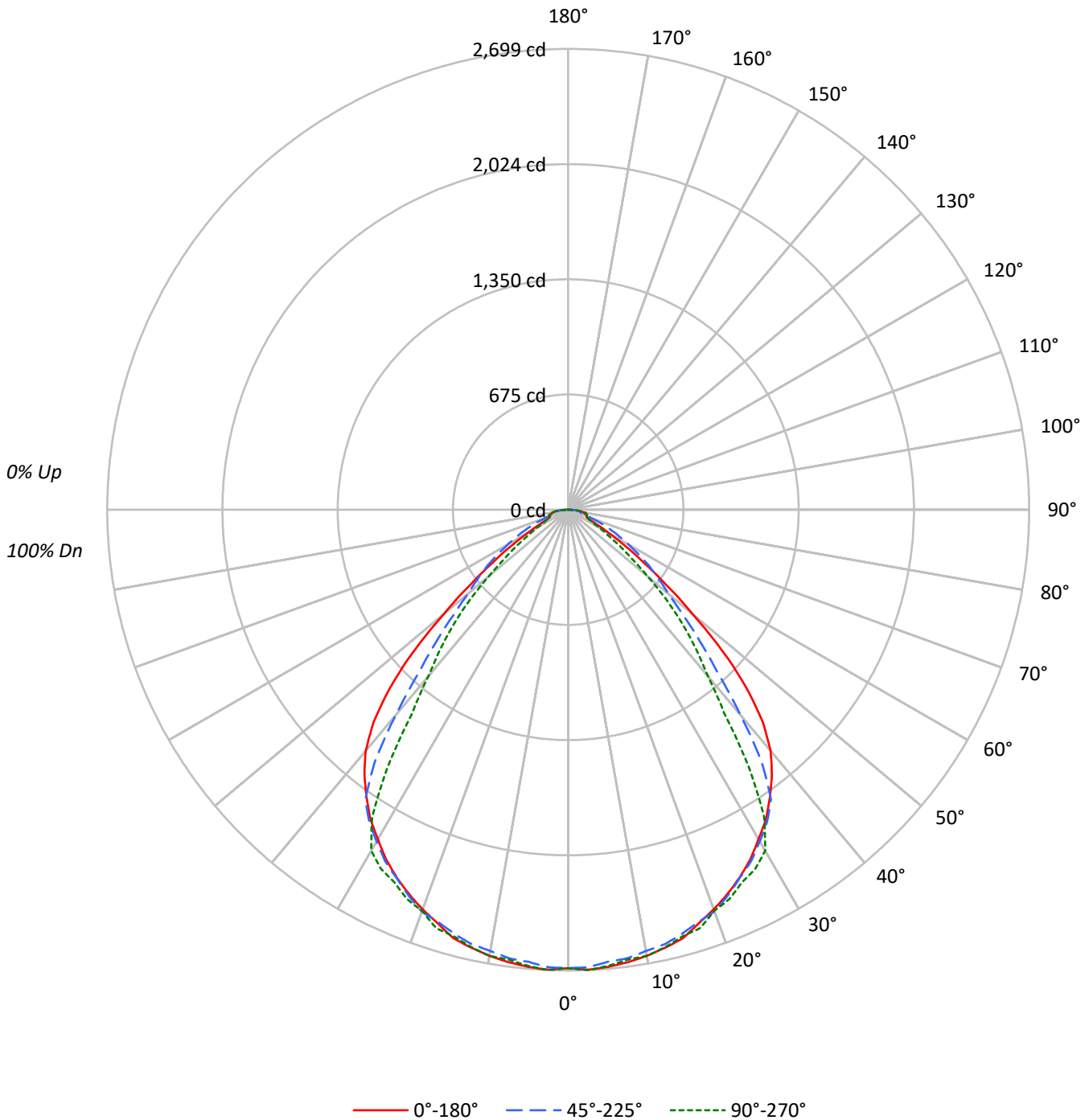
Input Watts (W): 41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	111	107	104	101	108	105	102	99	101	98	96	97	95	93	93	92	90	88
2	103	96	91	86	100	94	89	85	91	87	83	88	84	81	85	82	79	77
3	95	87	80	75	93	85	79	74	82	77	73	80	75	71	77	74	70	68
4	89	79	71	65	87	77	70	65	75	69	64	73	68	63	71	66	63	61
5	82	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54
6	77	65	57	52	75	64	57	52	63	56	51	61	55	51	60	54	50	49
7	72	60	52	47	70	59	52	47	58	51	46	56	50	46	55	50	46	44
8	67	55	48	42	66	55	47	42	53	47	42	52	46	42	51	46	42	40
9	63	51	44	39	62	50	43	39	49	43	38	48	42	38	47	42	38	36
10	59	47	40	35	58	47	40	35	46	40	35	45	39	35	44	39	35	33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7224	7224	7224
5°	7260	7182	7244
10°	7249	7170	7249
15°	7238	7165	7205
20°	7133	7175	7158
25°	7053	7062	7147
30°	6923	6968	7166
35°	6759	6797	6076
40°	6477	5512	4467
45°	5620	4157	3607
50°	3992	3194	2529
55°	2535	2738	1695
60°	1493	2193	1120
65°	883	1712	865
70°	910	1160	887
75°	1111	901	1172
80°	1433	1119	1567
85°	1516	1516	1516



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	254.6	4.9
10°-20°	729.0	14.1
20°-30°	1102.4	21.4
30°-40°	1227.6	23.8
40°-50°	898.5	17.4
50°-60°	495.3	9.6
60°-70°	253.2	4.9
70°-80°	144.1	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°	2085.9	40.4
0°-40°	3313.6	64.2
0°-60°	4707.4	91.2
0°-90°	5162.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5162.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2685	2685	2685	2685	2685	
5°	2688	2688	2659	2676	2682	255
15°	2598	2569	2572	2604	2586	730
25°	2375	2370	2378	2419	2407	1093
35°	2058	2060	2069	1928	1850	1284
45°	1477	1361	1092	994	948	1111
55°	540	636	584	500	361	505
65°	139	329	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°	2684.7	2684.7	2684.7	2684.7	2684.7
2.5°	2696.2	2696.2	2681.8	2699.1	2699.1
5°	2687.5	2687.5	2658.6	2676.0	2681.8
7.5°	2673.1	2673.1	2650.0	2664.4	2658.6
10°	2652.9	2638.4	2624.0	2664.4	2652.9
12.5°	2626.9	2598.0	2606.6	2603.7	2624.0
15°	2598.0	2569.1	2571.9	2603.7	2586.4
17.5°	2540.2	2543.0	2531.5	2554.6	2569.1
20°	2491.0	2499.7	2505.5	2519.9	2499.7
22.5°	2436.1	2439.0	2444.8	2465.0	2467.9
25°	2375.4	2369.7	2378.3	2418.8	2407.2
27.5°	2309.0	2306.1	2320.5	2355.2	2372.5
30°	2228.1	2239.6	2242.5	2306.1	2306.1
32.5°	2152.9	2152.9	2167.4	2199.2	2135.6
35°	2057.6	2060.4	2069.1	1927.5	1849.5
37.5°	1959.3	1950.6	1861.1	1603.9	1499.8
40°	1843.7	1823.5	1569.2	1338.0	1271.5
42.5°	1684.8	1624.1	1294.6	1155.9	1106.8
45°	1476.7	1361.1	1092.4	994.1	947.9
47.5°	1228.2	1121.3	907.4	840.9	777.4
50°	953.6	930.5	762.9	705.1	604.0
52.5°	725.3	771.6	670.4	595.3	465.3
55°	540.4	635.8	583.7	499.9	361.2
57.5°	395.9	528.8	491.3	424.8	271.6
60°	277.4	447.9	407.5	358.3	208.1
62.5°	196.5	387.2	335.2	306.3	158.9
65°	138.7	329.4	268.8	257.2	135.8
67.5°	115.6	277.4	205.2	228.3	115.6
70°	115.6	231.2	147.4	202.3	112.7
72.5°	115.6	202.3	109.8	184.9	118.5
75°	106.9	184.9	86.7	164.7	112.7
77.5°	98.3	156.1	75.1	141.6	109.8
80°	92.5	112.7	72.2	115.6	101.1
82.5°	75.1	80.9	66.5	89.6	78.0
85°	49.1	60.7	49.1	66.5	49.1
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)