

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: P476176

Luminaire Tested: **14GR-LD5-50-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476176
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-L830-CD1-U
Description: GR 1'X4' LED TROFFER w/ F1 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4888.5 lumens
Efficiency: N/A
Efficacy: 119.2 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

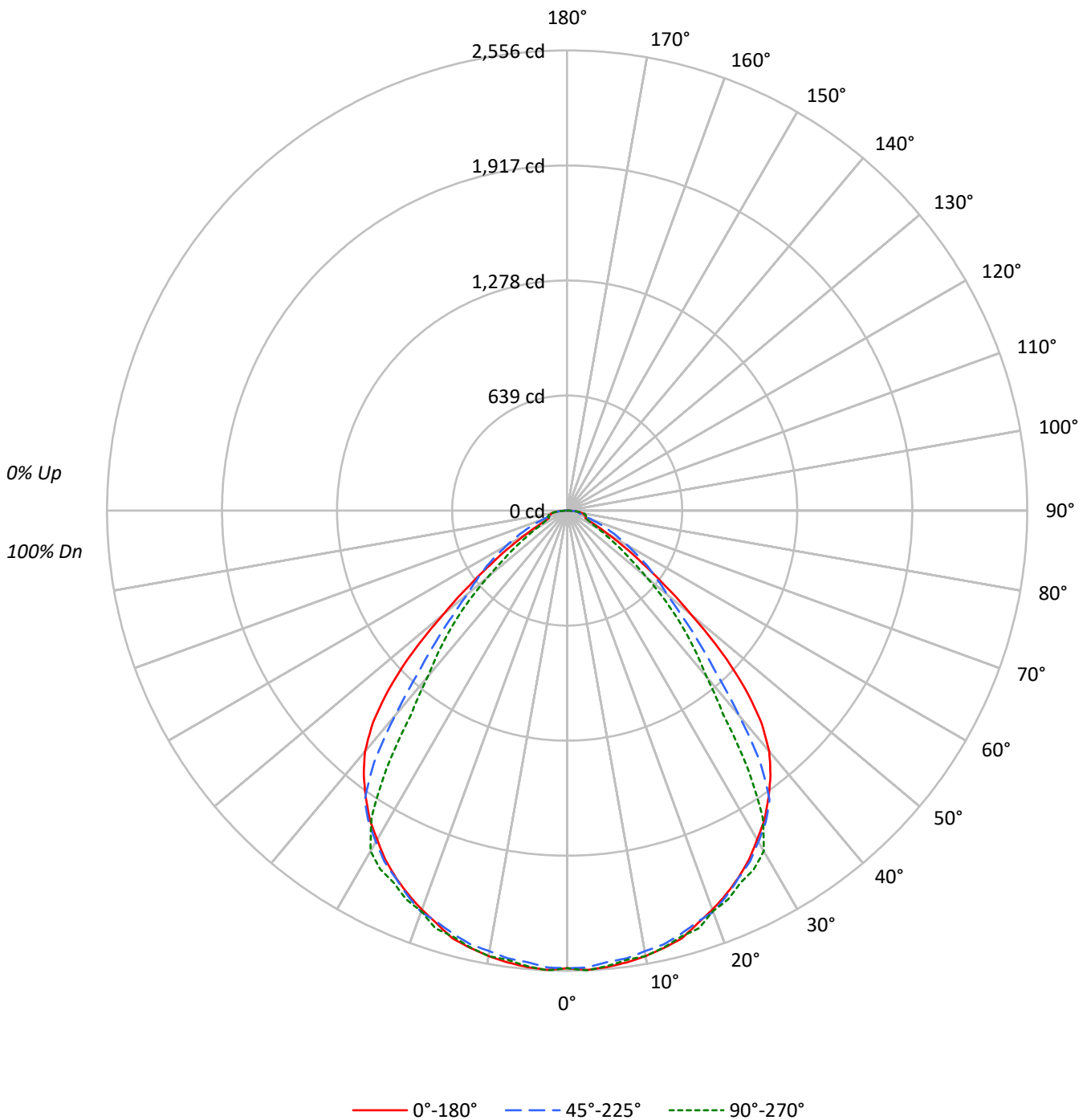
Input Watts (W): 41
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6842	6842	6842
5°	6875	6801	6860
10°	6865	6790	6865
15°	6854	6786	6824
20°	6755	6795	6779
25°	6679	6687	6769
30°	6556	6599	6786
35°	6401	6437	5754
40°	6133	5220	4230
45°	5322	3937	3416
50°	3781	3025	2395
55°	2401	2594	1605
60°	1414	2077	1060
65°	837	1621	819
70°	862	1098	840
75°	1053	854	1109
80°	1358	1060	1485
85°	1436	1436	1436



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	241.1	4.9
10°-20°	690.3	14.1
20°-30°	1044.0	21.4
30°-40°	1162.6	23.8
40°-50°	850.9	17.4
50°-60°	469.0	9.6
60°-70°	239.8	4.9
70°-80°	136.4	2.8
80°-90°	54.3	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°	1975.4	40.4
0°-40°	3138.0	64.2
0°-60°	4457.9	91.2
0°-90°	4888.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4888.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2542	2542	2542	2542	2542	
5°	2545	2545	2518	2534	2540	242
15°	2460	2433	2436	2466	2449	691
25°	2250	2244	2252	2291	2280	1036
35°	1948	1951	1960	1825	1752	1216
45°	1398	1289	1034	941	898	1052
55°	512	602	553	473	342	478
65°	131	312	254	244	129	151
75°	101	175	82	156	107	106
85°	46	58	46	63	46	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2542.4	2542.4	2542.4	2542.4	2542.4
2.5°	2553.3	2553.3	2539.6	2556.1	2556.1
5°	2545.1	2545.1	2517.8	2534.2	2539.6
7.5°	2531.4	2531.4	2509.5	2523.2	2517.8
10°	2512.3	2498.6	2484.9	2523.2	2512.3
12.5°	2487.6	2460.3	2468.5	2465.8	2484.9
15°	2460.3	2432.9	2435.7	2465.8	2449.3
17.5°	2405.5	2408.3	2397.3	2419.2	2432.9
20°	2359.0	2367.2	2372.7	2386.4	2367.2
22.5°	2307.0	2309.8	2315.2	2334.4	2337.1
25°	2249.6	2244.1	2252.3	2290.6	2279.7
27.5°	2186.6	2183.9	2197.6	2230.4	2246.8
30°	2110.0	2120.9	2123.7	2183.9	2183.9
32.5°	2038.8	2038.8	2052.5	2082.6	2022.4
35°	1948.5	1951.3	1959.5	1825.4	1751.5
37.5°	1855.5	1847.3	1762.4	1518.9	1420.3
40°	1746.0	1726.9	1486.0	1267.1	1204.1
42.5°	1595.5	1538.0	1226.0	1094.7	1048.2
45°	1398.4	1289.0	1034.5	941.4	897.6
47.5°	1163.1	1061.8	859.3	796.4	736.2
50°	903.1	881.2	722.5	667.8	572.0
52.5°	686.9	730.7	634.9	563.8	440.6
55°	511.8	602.1	552.8	473.4	342.1
57.5°	374.9	500.8	465.2	402.3	257.2
60°	262.7	424.2	385.9	339.3	197.0
62.5°	186.1	366.7	317.5	290.1	150.5
65°	131.4	312.0	254.5	243.6	128.6
67.5°	109.5	262.7	194.3	216.2	109.5
70°	109.5	218.9	139.6	191.6	106.7
72.5°	109.5	191.6	104.0	175.1	112.2
75°	101.3	175.1	82.1	156.0	106.7
77.5°	93.0	147.8	71.2	134.1	104.0
80°	87.6	106.7	68.4	109.5	95.8
82.5°	71.2	76.6	62.9	84.8	73.9
85°	46.5	57.5	46.5	62.9	46.5
87.5°	21.9	30.1	21.9	27.4	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)