

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: P476177

Luminaire Tested: **14GR-LD5-60-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476177
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-60-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: 5931.9 lumens
Efficiency: N/A
Efficacy: 113.9 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

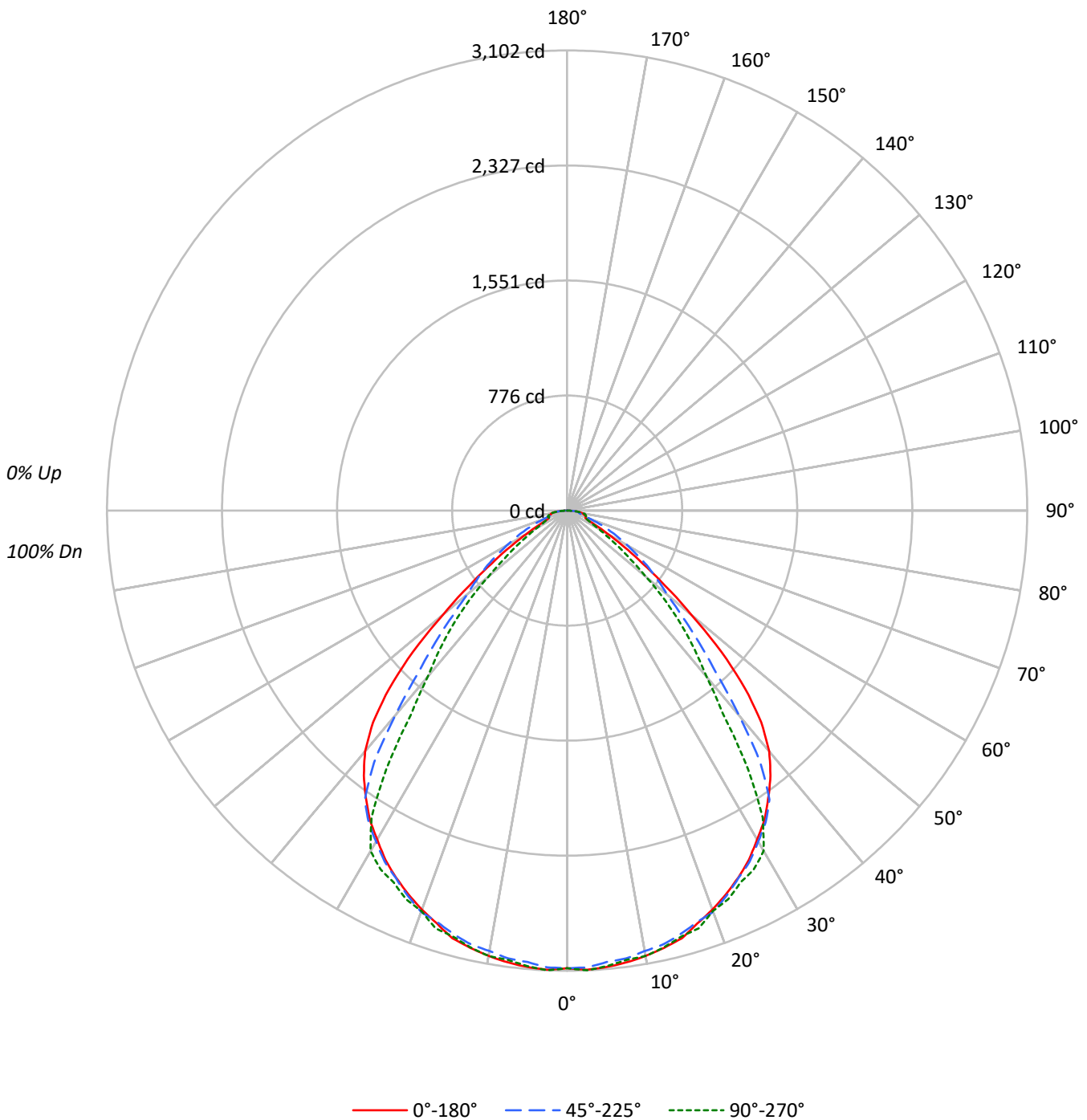
Input Watts (W): 52.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	8302	8302	8302
5°	8342	8253	8324
10°	8330	8239	8330
15°	8317	8234	8280
20°	8197	8245	8226
25°	8105	8115	8213
30°	7956	8007	8234
35°	7767	7811	6982
40°	7442	6334	5133
45°	6458	4777	4145
50°	4588	3670	2905
55°	2913	3147	1947
60°	1716	2520	1287
65°	1015	1966	994
70°	1045	1333	1019
75°	1278	1036	1346
80°	1647	1286	1801
85°	1744	1744	1744



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	292.6	4.9
10°-20°	837.7	14.1
20°-30°	1266.8	21.4
30°-40°	1410.7	23.8
40°-50°	1032.5	17.4
50°-60°	569.1	9.6
60°-70°	291.0	4.9
70°-80°	165.6	2.8
80°-90°	65.9	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°	2397.0	40.4
0°-40°	3807.7	64.2
0°-60°	5409.4	91.2
0°-90°	5931.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5931.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3085	3085	3085	3085	3085	
5°	3088	3088	3055	3075	3082	293
15°	2985	2952	2956	2992	2972	839
25°	2730	2723	2733	2780	2766	1257
35°	2364	2368	2378	2215	2125	1475
45°	1697	1564	1255	1142	1089	1277
55°	621	731	671	574	415	580
65°	159	379	309	296	156	183
75°	123	212	100	189	130	129
85°	56	70	56	76	56	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3085.0	3085.0	3085.0	3085.0	3085.0
2.5°	3098.3	3098.3	3081.7	3101.6	3101.6
5°	3088.3	3088.3	3055.1	3075.0	3081.7
7.5°	3071.7	3071.7	3045.1	3061.7	3055.1
10°	3048.5	3031.9	3015.3	3061.7	3048.5
12.5°	3018.6	2985.4	2995.3	2992.0	3015.3
15°	2985.4	2952.2	2955.5	2992.0	2972.1
17.5°	2919.0	2922.3	2909.0	2935.6	2952.2
20°	2862.5	2872.5	2879.1	2895.7	2872.5
22.5°	2799.4	2802.7	2809.4	2832.6	2835.9
25°	2729.7	2723.0	2733.0	2779.5	2766.2
27.5°	2653.3	2650.0	2666.6	2706.4	2726.3
30°	2560.3	2573.6	2576.9	2650.0	2650.0
32.5°	2474.0	2474.0	2490.6	2527.1	2454.0
35°	2364.4	2367.7	2377.7	2215.0	2125.3
37.5°	2251.5	2241.5	2138.6	1843.0	1723.5
40°	2118.6	2095.4	1803.2	1537.5	1461.1
42.5°	1936.0	1866.3	1487.7	1328.3	1271.9
45°	1696.9	1564.1	1255.2	1142.3	1089.2
47.5°	1411.3	1288.5	1042.7	966.3	893.3
50°	1095.9	1069.3	876.7	810.3	694.0
52.5°	833.5	886.6	770.4	684.1	534.6
55°	621.0	730.6	670.8	574.5	415.1
57.5°	454.9	607.7	564.5	488.2	312.2
60°	318.8	514.7	468.2	411.8	239.1
62.5°	225.8	445.0	385.2	352.0	182.6
65°	159.4	378.6	308.8	295.5	156.1
67.5°	132.8	318.8	235.8	262.3	132.8
70°	132.8	265.7	169.4	232.5	129.5
72.5°	132.8	232.5	126.2	212.5	136.2
75°	122.9	212.5	99.6	189.3	129.5
77.5°	112.9	179.3	86.3	162.7	126.2
80°	106.3	129.5	83.0	132.8	116.2
82.5°	86.3	93.0	76.4	102.9	89.7
85°	56.5	69.7	56.5	76.4	56.5
87.5°	26.6	36.5	26.6	33.2	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)