

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: P476258

Luminaire Tested: **14GR-LD5-60-A19/156-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476258
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14GR-LD5-60-A19/156-UNV-L835-CD1-U
Description: GR 1'X4' LED TROFFER w/ A19/156 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5839.9 lumens
Efficiency: N/A
Efficacy: 112.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.2
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

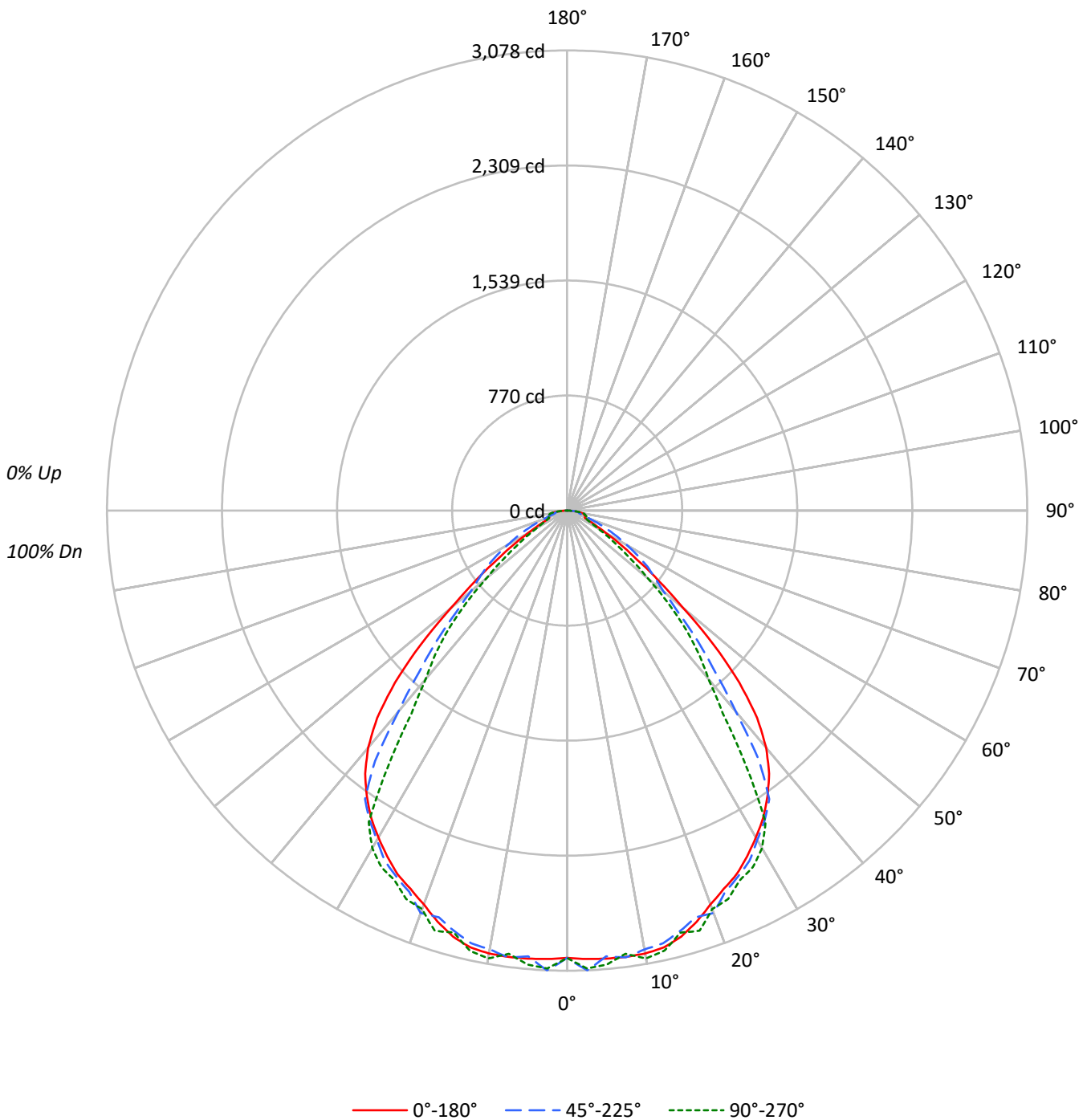
Input Watts (W): 52.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	101	94	89	85	91	87	83	88	84	81	85	82	79	78					78			
3	96	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	83	71	64	58	81	70	63	58	68	62	57	67	61	57	65	60	56	54					54			
6	77	65	58	52	75	64	57	52	63	56	51	61	55	51	60	55	51	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	51	43	39	49	43	38	48	43	38	48	42	38	36					36			
10	60	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°	8053	8053	8053
5°	8125	8084	8233
10°	8219	8144	8311
15°	8218	8116	8142
20°	8027	8202	8124
25°	7969	8024	8105
30°	7846	7903	8102
35°	7672	7743	6869
40°	7270	6164	5165
45°	6200	4700	4281
50°	4236	3520	2956
55°	2668	3083	1965
60°	1612	2468	1267
65°	1012	1908	973
70°	1010	1275	1034
75°	1272	1017	1335
80°	1658	1232	1753
85°	1606	1698	1698



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	288.7	4.9
10°-20°	827.6	14.2
20°-30°	1249.1	21.4
30°-40°	1393.1	23.9
40°-50°	1013.1	17.3
50°-60°	555.6	9.5
60°-70°	282.5	4.8
70°-80°	166.1	2.8
80°-90°	64.2	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°	2365.4	40.5
0°-40°	3758.5	64.4
0°-60°	5327.2	91.2
0°-90°	5839.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5839.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2993	2993	2993	2993	2993	
5°	3008	3072	2993	3048	3048	287
15°	2950	2938	2913	2974	2922	828
25°	2684	2684	2702	2754	2730	1234
35°	2336	2332	2357	2198	2091	1454
45°	1629	1504	1235	1146	1125	1224
55°	569	703	657	587	419	537
65°	159	339	300	309	153	177
75°	122	217	98	196	128	127
85°	52	67	55	70	55	58
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2992.7	2992.7	2992.7	2992.7	2992.7
2.5°	3001.9	3063.0	3078.3	3078.3	3066.1
5°	3008.0	3072.2	2992.7	3047.7	3047.7
7.5°	3011.1	3020.2	3014.1	3026.3	2989.7
10°	3008.0	2986.6	2980.5	3056.9	3041.6
12.5°	2992.7	2910.2	2965.2	2940.7	3014.1
15°	2949.9	2937.7	2913.2	2974.4	2922.4
17.5°	2882.7	2888.8	2852.1	2882.7	2946.9
20°	2803.2	2830.7	2864.3	2873.5	2836.8
22.5°	2739.0	2748.2	2760.4	2791.0	2812.4
25°	2684.0	2684.0	2702.3	2754.3	2729.8
27.5°	2607.5	2613.7	2641.2	2656.5	2690.1
30°	2525.0	2531.1	2543.3	2613.7	2607.5
32.5°	2439.4	2445.5	2457.8	2503.6	2470.0
35°	2335.5	2332.4	2356.9	2197.9	2090.9
37.5°	2219.3	2216.3	2109.3	1809.7	1708.8
40°	2069.5	2057.3	1754.7	1519.3	1470.4
42.5°	1880.0	1828.0	1467.3	1329.8	1305.3
45°	1629.3	1504.0	1235.0	1146.3	1124.9
47.5°	1332.8	1238.0	1005.7	966.0	914.0
50°	1011.8	1018.0	840.7	813.1	706.1
52.5°	773.4	846.8	739.8	687.8	547.2
55°	568.6	703.1	657.2	586.9	418.8
57.5°	421.9	583.9	556.4	504.4	321.0
60°	299.6	486.0	458.5	434.1	235.4
62.5°	217.0	406.6	376.0	366.8	180.4
65°	159.0	339.3	299.6	308.7	152.8
67.5°	128.4	284.3	226.2	269.0	131.4
70°	128.4	253.7	162.0	238.4	131.4
72.5°	128.4	238.4	128.4	217.0	137.6
75°	122.3	217.0	97.8	195.6	128.4
77.5°	113.1	177.3	82.5	168.1	122.3
80°	107.0	131.4	79.5	131.4	113.1
82.5°	82.5	91.7	73.4	97.8	88.7
85°	52.0	67.3	55.0	70.3	55.0
87.5°	24.5	36.7	24.5	36.7	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)