

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: P476021

Luminaire Tested: **22GR-LD5-60-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P476021
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22GR-LD5-60-A19/156-UNV-L850-CD1-U
Description: GR 2'X2' LED TROFFER w/ A19/156 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5785.7 lumens
Efficiency: N/A
Efficacy: 130.3 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.22 / 1.23
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

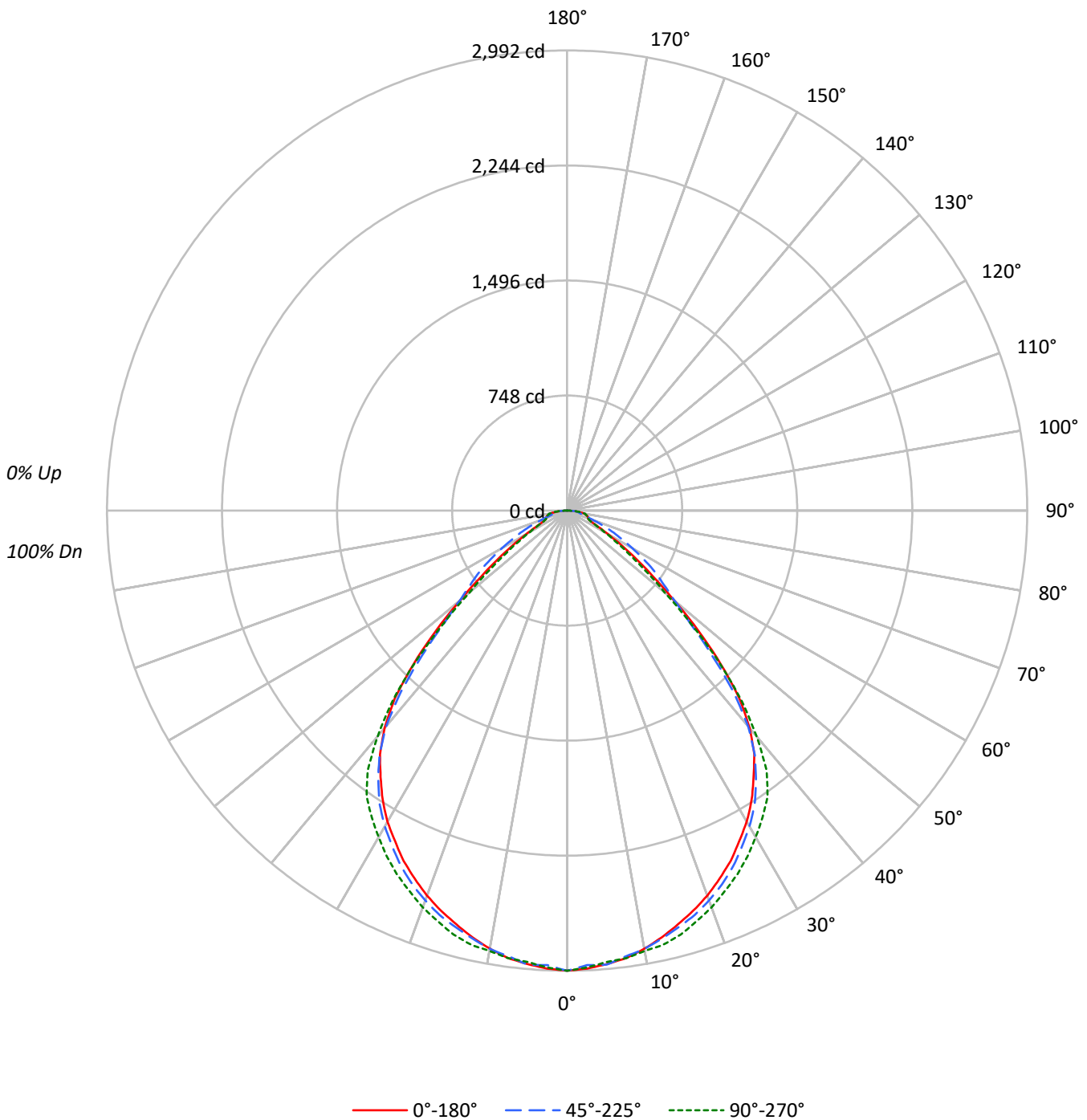
Input Watts (W): 44.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20																		
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	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	103	100	108	105	101	99	100	98	95	97	95	93	93	91	90	88																												
2	103	96	90	85	100	94	89	84	91	86	82	87	84	81	84	82	79	77																												
3	95	86	79	74	93	85	78	73	82	76	72	79	75	71	77	73	70	68																												
4	88	78	70	65	86	77	70	64	74	68	63	72	67	63	70	65	62	60																												
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53																												
6	76	65	57	51	75	64	56	51	62	55	50	60	54	50	59	54	50	48																												
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43																												
8	67	54	47	41	65	54	46	41	53	46	41	51	45	41	50	45	41	39																												
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36																												
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8051	8051	8051
5°	7995	8004	7959
10°	7905	7908	7944
15°	7759	7812	7951
20°	7629	7725	7861
25°	7465	7581	7759
30°	7257	7367	7619
35°	6946	7034	7464
40°	6484	6433	6733
45°	5384	5080	5338
50°	3794	3812	3478
55°	2548	3277	2292
60°	1644	2630	1524
65°	1138	2036	1096
70°	1145	1389	1136
75°	1409	1085	1397
80°	1722	1257	1824
85°	1680	1714	1853



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	280.1	4.8
10°-20°	792.9	13.7
20°-30°	1175.9	20.3
30°-40°	1345.1	23.2
40°-50°	1064.8	18.4
50°-60°	581.0	10.0
60°-70°	304.0	5.3
70°-80°	175.5	3.0
80°-90°	66.4	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°	2248.9	38.9
0°-40°	3594.0	62.1
0°-60°	5239.8	90.6
0°-90°	5785.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5785.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2992	2992	2992	2992	2992	
5°	2960	2938	2963	2953	2946	281
15°	2785	2800	2804	2826	2854	786
25°	2514	2518	2553	2585	2613	1156
35°	2114	2114	2141	2219	2272	1319
45°	1415	1407	1335	1400	1403	1076
55°	543	678	698	651	489	504
65°	179	360	320	342	172	193
75°	136	217	104	213	134	141
85°	54	71	56	72	60	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2991.8	2991.8	2991.8	2991.8	2991.8
2.5°	2980.7	2962.9	2958.5	2967.4	2972.9
5°	2959.6	2938.5	2962.9	2952.9	2946.3
7.5°	2935.1	2927.4	2922.9	2938.5	2935.1
10°	2892.9	2881.8	2894.1	2902.9	2907.4
12.5°	2841.9	2847.4	2849.6	2877.4	2890.7
15°	2785.2	2799.7	2804.1	2826.3	2854.1
17.5°	2727.5	2730.8	2757.5	2786.3	2799.7
20°	2664.2	2669.7	2697.5	2724.1	2745.2
22.5°	2589.8	2596.4	2630.9	2660.8	2678.6
25°	2514.3	2517.6	2553.1	2585.3	2613.1
27.5°	2423.2	2441.0	2462.1	2506.5	2536.5
30°	2335.5	2346.6	2371.0	2419.9	2452.1
32.5°	2232.2	2236.6	2267.7	2321.0	2364.3
35°	2114.5	2114.5	2141.1	2218.9	2272.2
37.5°	1997.9	1982.3	2003.4	2092.3	2130.0
40°	1845.7	1834.6	1831.3	1892.4	1916.8
42.5°	1659.1	1638.0	1600.3	1662.5	1682.5
45°	1414.8	1407.1	1334.9	1400.4	1402.6
47.5°	1159.4	1165.0	1083.9	1149.4	1100.5
50°	906.2	963.9	910.6	938.4	830.7
52.5°	705.2	812.9	792.9	781.8	635.2
55°	543.1	678.5	698.5	650.8	488.6
57.5°	414.2	578.6	590.8	557.5	372.0
60°	305.4	488.6	488.6	473.1	283.2
62.5°	227.7	419.8	397.6	402.0	216.6
65°	178.8	359.8	319.8	342.0	172.1
67.5°	149.9	299.8	242.1	295.4	149.9
70°	145.5	261.0	176.6	266.5	144.4
72.5°	144.4	239.9	132.2	242.1	145.5
75°	135.5	216.6	104.4	213.2	134.4
77.5°	124.4	179.9	86.6	179.9	125.5
80°	111.1	136.6	81.1	139.9	117.7
82.5°	85.5	97.7	72.2	98.8	91.1
85°	54.4	71.1	55.5	72.2	60.0
87.5°	24.4	37.8	24.4	38.9	26.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)