

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: P475692

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475692
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-64-A19/156-UNV-L850-CD1-U
Description: GR 2'X4' 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: 6141.3 lumens
Efficiency: N/A
Efficacy: 141.5 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.25 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

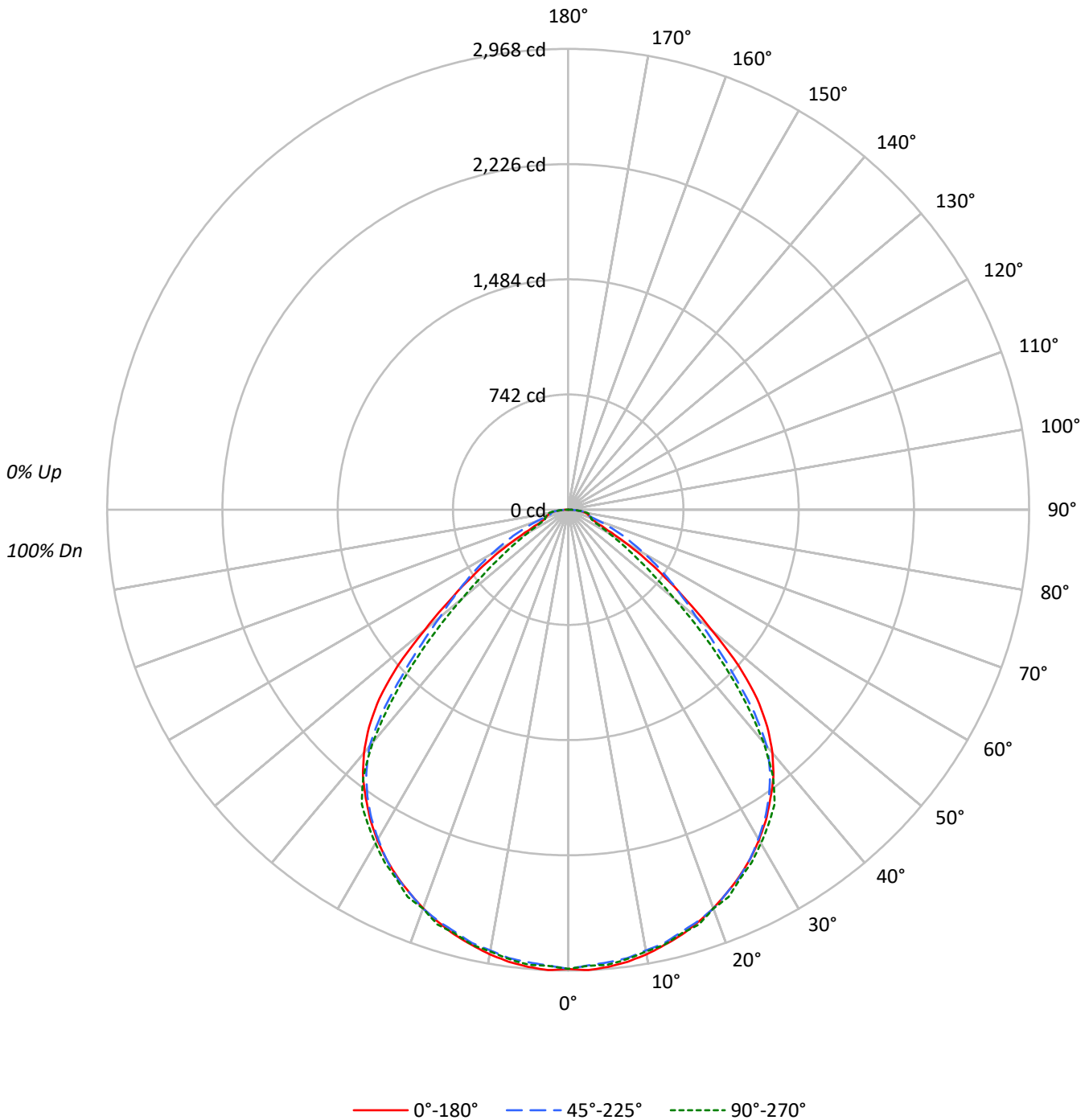
Input Watts (W): 43.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					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	103	100	108	104	101	98	100	98	95	96	94	92	93	91	90					88				
2	102	95	90	85	100	94	88	84	90	86	82	87	83	80	84	81	78					76				
3	95	86	79	73	92	84	78	73	81	76	71	79	74	70	76	72	69					67				
4	88	77	70	64	86	76	69	63	74	67	63	71	66	62	69	65	61					59				
5	81	70	62	56	79	69	62	56	67	60	55	65	59	55	63	58	54					52				
6	76	64	56	50	74	63	55	50	61	54	49	60	54	49	58	53	49					47				
7	71	58	50	45	69	58	50	45	56	49	44	55	49	44	53	48	44					42				
8	66	54	46	40	65	53	46	40	52	45	40	50	44	40	49	44	40					38				
9	62	49	42	37	61	49	42	37	48	41	37	47	41	36	46	40	36					34				
10	58	46	38	34	57	45	38	34	44	38	33	43	37	33	43	37	33					31				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3979	3979	3979
5°	3992	3953	3973
10°	3972	3938	3947
15°	3946	3921	3934
20°	3912	3915	3913
25°	3871	3877	3890
30°	3817	3805	3855
35°	3730	3702	3805
40°	3594	3500	3437
45°	3272	2879	2716
50°	2524	2258	1866
55°	1794	1883	1235
60°	1136	1521	806
65°	659	1196	589
70°	610	824	625
75°	702	627	744
80°	877	867	983
85°	956	1013	1051



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	278.7	4.5
10°-20°	797.1	13.0
20°-30°	1202.8	19.6
30°-40°	1411.8	23.0
40°-50°	1188.5	19.4
50°-60°	675.1	11.0
60°-70°	337.0	5.5
70°-80°	176.7	2.9
80°-90°	73.7	1.2
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°	2278.6	37.1
0°-40°	3690.3	60.1
0°-60°	5554.0	90.4
0°-90°	6141.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6141.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2957	2957	2957	2957	2957	
5°	2955	2934	2927	2932	2942	281
15°	2833	2826	2815	2822	2824	799
25°	2607	2608	2612	2618	2620	1201
35°	2271	2258	2254	2292	2316	1418
45°	1719	1651	1513	1487	1427	1295
55°	765	818	803	692	526	696
65°	207	429	376	319	185	235
75°	135	208	121	181	143	143
85°	62	74	66	83	68	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2957.3	2957.3	2957.3	2957.3	2957.3
2.5°	2967.9	2953.5	2937.3	2932.9	2940.4
5°	2955.4	2934.2	2926.6	2931.6	2941.7
7.5°	2936.0	2914.1	2912.9	2904.1	2919.1
10°	2907.3	2892.9	2882.3	2887.3	2889.1
12.5°	2871.0	2866.6	2858.5	2851.6	2868.5
15°	2832.9	2826.0	2814.7	2822.2	2824.1
17.5°	2784.1	2780.3	2778.5	2784.1	2800.4
20°	2732.2	2732.2	2734.1	2735.3	2732.8
22.5°	2670.3	2668.4	2670.9	2675.9	2699.7
25°	2607.2	2608.4	2611.5	2618.4	2620.3
27.5°	2537.1	2537.8	2536.5	2543.4	2559.6
30°	2456.5	2454.0	2449.0	2464.0	2481.5
32.5°	2369.0	2364.0	2358.3	2381.5	2400.2
35°	2270.8	2258.3	2253.9	2292.1	2316.4
37.5°	2170.1	2144.5	2135.1	2163.3	2166.4
40°	2046.3	2008.2	1992.6	1965.1	1956.9
42.5°	1897.5	1858.1	1773.7	1731.2	1701.2
45°	1719.4	1650.6	1513.0	1486.8	1427.4
47.5°	1489.3	1416.1	1278.6	1222.3	1154.8
50°	1206.0	1163.5	1078.5	1008.5	891.6
52.5°	964.1	972.8	932.8	835.9	690.9
55°	764.6	817.8	802.8	692.1	526.4
57.5°	588.3	702.7	684.6	569.6	402.0
60°	422.0	602.1	565.2	468.9	299.5
62.5°	289.5	513.9	463.3	387.0	229.5
65°	206.9	428.9	375.8	318.9	185.1
67.5°	170.1	350.7	288.2	270.7	161.3
70°	155.1	282.6	209.4	236.3	158.8
72.5°	147.6	237.0	153.8	206.9	151.3
75°	135.0	208.2	120.7	181.3	143.2
77.5°	125.0	180.1	112.5	158.8	139.4
80°	113.2	142.5	111.9	134.4	126.9
82.5°	91.3	103.8	94.4	110.0	102.5
85°	61.9	73.8	65.6	83.2	68.1
87.5°	30.6	36.3	29.4	39.4	30.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)