

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: P475647

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475647
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-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ A19/156 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5810.2 lumens
Efficiency: N/A
Efficacy: 133.9 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

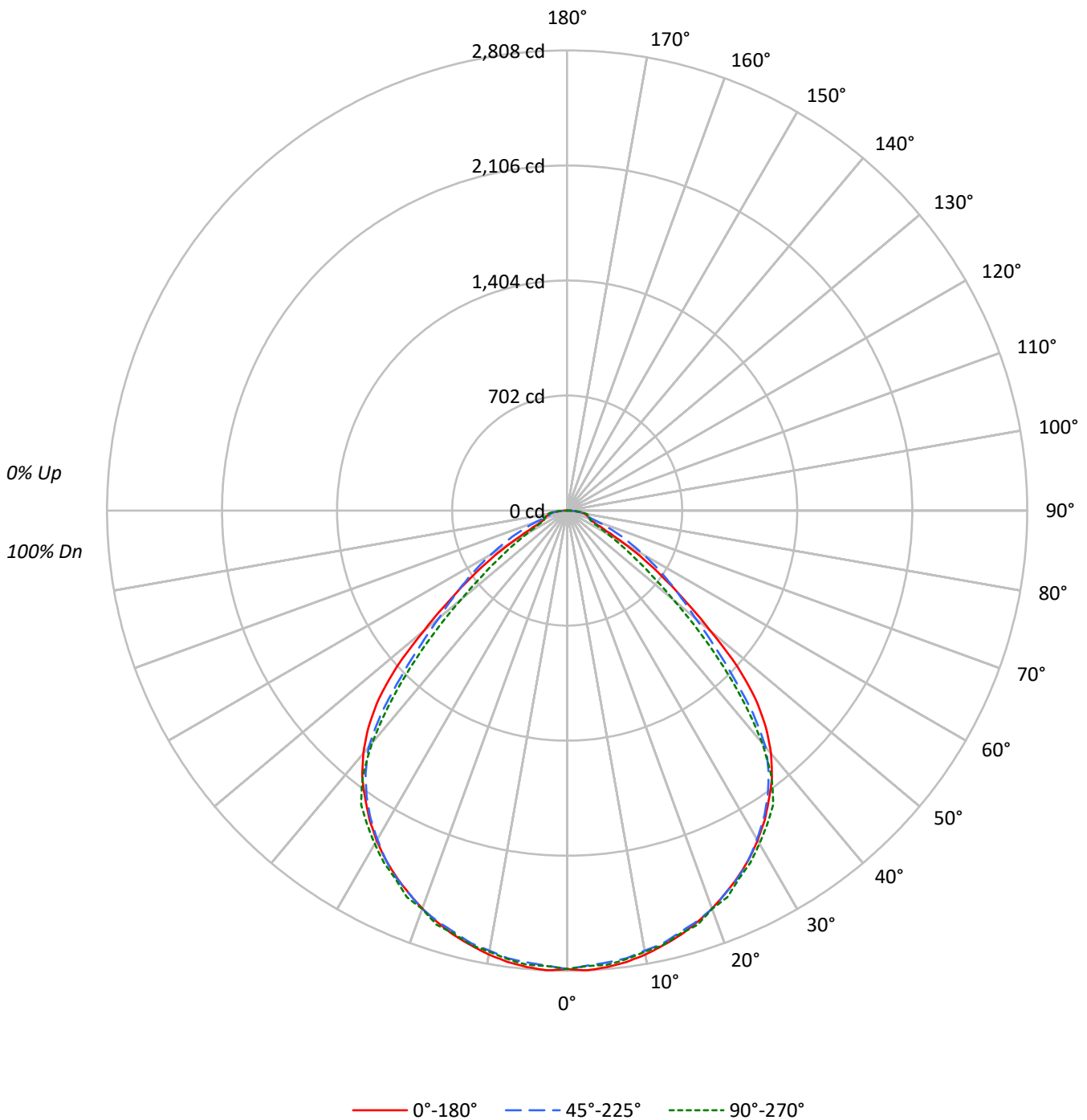
Input Watts (W): 43.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3764	3764	3764
5°	3776	3740	3759
10°	3758	3725	3734
15°	3733	3709	3722
20°	3701	3704	3702
25°	3662	3668	3680
30°	3611	3600	3647
35°	3529	3503	3600
40°	3400	3311	3252
45°	3095	2724	2570
50°	2388	2136	1766
55°	1697	1782	1168
60°	1075	1439	762
65°	623	1132	557
70°	577	780	591
75°	664	594	704
80°	830	821	931
85°	905	959	996



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.7	4.5
10°-20°	754.2	13.0
20°-30°	1137.9	19.6
30°-40°	1335.6	23.0
40°-50°	1124.4	19.4
50°-60°	638.7	11.0
60°-70°	318.8	5.5
70°-80°	167.2	2.9
80°-90°	69.7	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°	2155.7	37.1
0°-40°	3491.4	60.1
0°-60°	5254.5	90.4
0°-90°	5810.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5810.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2798	2798	2798	2798	2798	
5°	2796	2776	2769	2774	2783	265
15°	2680	2674	2663	2670	2672	756
25°	2467	2468	2471	2477	2479	1136
35°	2148	2136	2132	2168	2192	1342
45°	1627	1562	1431	1407	1350	1225
55°	723	774	760	655	498	658
65°	196	406	356	302	175	223
75°	128	197	114	172	136	135
85°	59	70	62	79	64	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2797.8	2797.8	2797.8	2797.8	2797.8
2.5°	2807.9	2794.3	2778.9	2774.8	2781.9
5°	2796.0	2775.9	2768.8	2773.6	2783.0
7.5°	2777.7	2757.0	2755.8	2747.5	2761.7
10°	2750.5	2736.9	2726.8	2731.6	2733.3
12.5°	2716.2	2712.1	2704.4	2697.9	2713.8
15°	2680.1	2673.6	2663.0	2670.1	2671.8
17.5°	2634.0	2630.4	2628.7	2634.0	2649.4
20°	2584.9	2584.9	2586.7	2587.8	2585.5
22.5°	2526.3	2524.5	2526.9	2531.6	2554.1
25°	2466.6	2467.8	2470.7	2477.2	2479.0
27.5°	2400.3	2400.9	2399.7	2406.2	2421.6
30°	2324.0	2321.7	2316.9	2331.1	2347.7
32.5°	2241.2	2236.5	2231.2	2253.0	2270.8
35°	2148.3	2136.5	2132.4	2168.5	2191.5
37.5°	2053.1	2028.9	2020.0	2046.6	2049.6
40°	1936.0	1899.9	1885.1	1859.1	1851.4
42.5°	1795.2	1758.0	1678.1	1637.9	1609.5
45°	1626.6	1561.6	1431.4	1406.6	1350.4
47.5°	1409.0	1339.8	1209.6	1156.4	1092.5
50°	1141.0	1100.8	1020.3	954.1	843.5
52.5°	912.1	920.4	882.5	790.8	653.6
55°	723.4	773.7	759.5	654.8	498.0
57.5°	556.6	664.9	647.7	538.9	380.3
60°	399.3	569.6	534.7	443.6	283.3
62.5°	273.9	486.2	438.3	366.1	217.1
65°	195.8	405.8	355.5	301.7	175.1
67.5°	160.9	331.8	272.7	256.1	152.6
70°	146.7	267.4	198.2	223.6	150.2
72.5°	139.6	224.2	145.5	195.8	143.1
75°	127.8	197.0	114.2	171.5	135.5
77.5°	118.3	170.4	106.5	150.2	131.9
80°	107.1	134.9	105.9	127.2	120.1
82.5°	86.4	98.2	89.3	104.1	97.0
85°	58.6	69.8	62.1	78.7	64.5
87.5°	29.0	34.3	27.8	37.3	28.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)