

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: P294074

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294074
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-64-A19/156-UNV-L93050-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5294.0 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

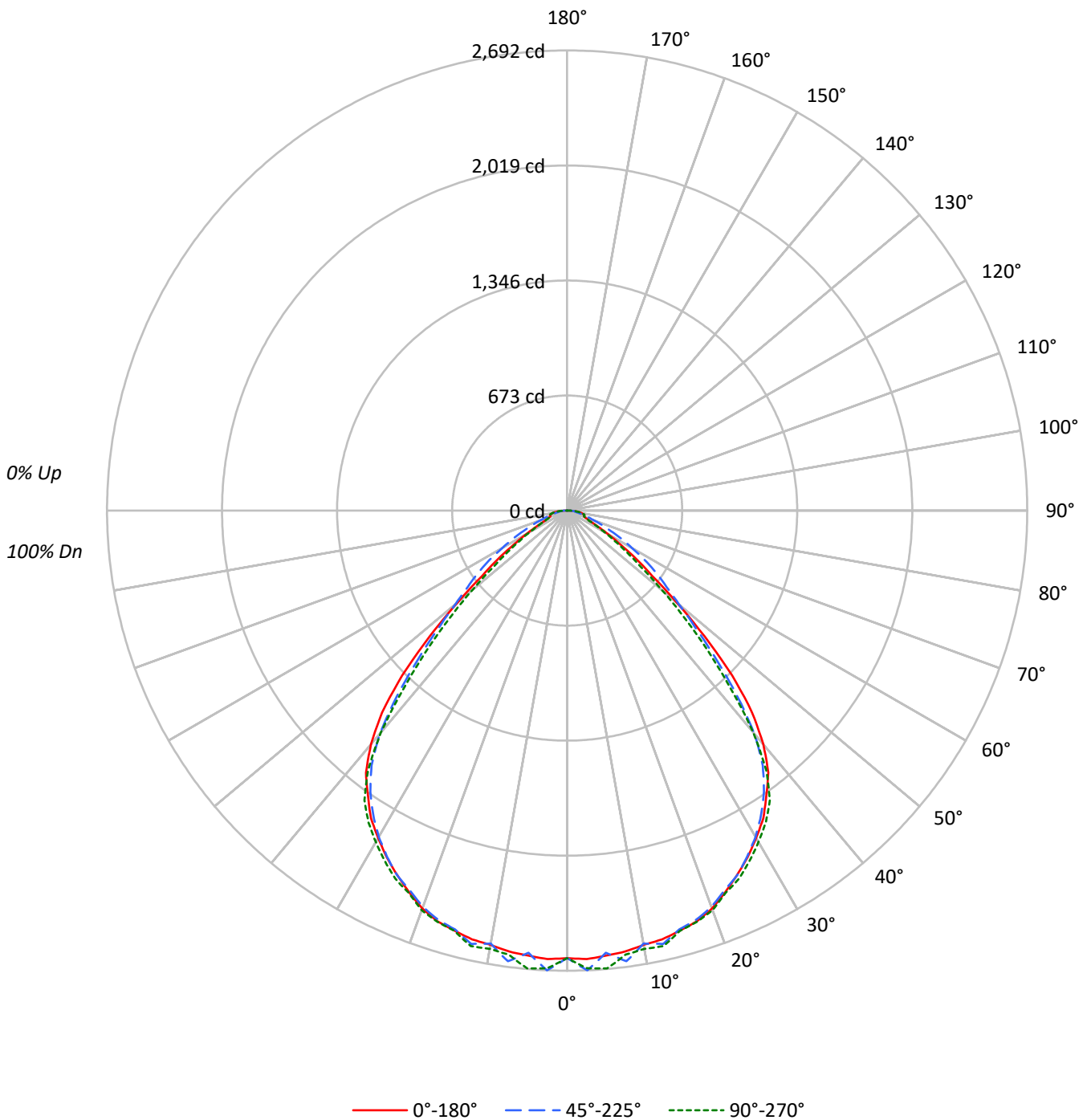
Input Watts (W): 46.814898
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	102	99	101	98	96	97	95	93	93	92	90					88				
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79					77				
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70					68				
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	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	55	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	55	47	42	65	54	47	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°	3522	3522	3522
5°	3530	3507	3631
10°	3524	3514	3557
15°	3545	3533	3547
20°	3547	3533	3562
25°	3492	3495	3529
30°	3434	3424	3479
35°	3338	3297	3396
40°	3134	2994	2978
45°	2598	2351	2229
50°	1748	1783	1523
55°	1153	1496	999
60°	739	1181	684
65°	476	901	463
70°	421	646	421
75°	544	513	548
80°	666	442	698
85°	775	656	814



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	250.6	4.7
10°-20°	719.7	13.6
20°-30°	1083.5	20.5
30°-40°	1255.8	23.7
40°-50°	981.0	18.5
50°-60°	523.8	9.9
60°-70°	269.4	5.1
70°-80°	152.4	2.9
80°-90°	57.9	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°	2053.8	38.8
0°-40°	3309.6	62.5
0°-60°	4814.4	90.9
0°-90°	5294.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5294.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2618	2618	2618	2618	2618	
5°	2614	2687	2596	2668	2688	249
15°	2545	2561	2536	2552	2546	719
25°	2352	2345	2354	2351	2377	1084
35°	2032	2023	2007	2047	2068	1267
45°	1365	1366	1235	1224	1172	1029
55°	491	622	638	575	426	453
65°	150	312	283	311	145	164
75°	105	196	99	184	105	106
85°	50	66	42	66	53	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2617.7	2617.7	2617.7	2617.7	2617.7
2.5°	2626.2	2673.8	2692.5	2669.6	2679.8
5°	2613.5	2686.6	2596.5	2667.9	2688.3
7.5°	2601.6	2593.9	2659.4	2591.4	2620.3
10°	2579.5	2584.6	2571.8	2620.3	2603.3
12.5°	2569.3	2599.0	2596.5	2571.8	2609.2
15°	2544.6	2560.8	2536.1	2552.3	2546.3
17.5°	2520.0	2512.3	2509.8	2516.6	2522.5
20°	2477.5	2451.9	2467.2	2468.9	2487.7
22.5°	2416.2	2400.9	2404.3	2419.6	2421.3
25°	2352.5	2344.8	2354.2	2350.8	2377.1
27.5°	2286.2	2276.0	2281.9	2294.7	2310.8
30°	2210.5	2207.9	2203.7	2214.7	2239.4
32.5°	2135.7	2115.3	2111.9	2134.8	2162.9
35°	2032.0	2022.6	2007.3	2047.3	2067.7
37.5°	1933.3	1904.4	1879.8	1903.6	1912.1
40°	1784.5	1762.4	1704.6	1707.2	1695.3
42.5°	1601.8	1585.6	1475.1	1455.5	1422.4
45°	1365.4	1366.3	1235.3	1224.3	1171.6
47.5°	1090.8	1139.3	1025.3	1012.6	934.4
50°	834.9	922.5	851.9	831.5	727.8
52.5°	626.6	755.0	732.9	688.7	545.8
55°	491.4	621.5	637.6	574.7	425.9
57.5°	369.8	511.8	538.2	486.3	329.0
60°	274.6	431.0	438.7	418.3	254.2
62.5°	204.0	366.4	356.2	358.8	188.7
65°	149.6	312.0	283.1	311.2	145.4
67.5°	122.4	270.4	220.2	269.5	118.2
70°	107.1	239.8	164.1	237.2	107.1
72.5°	103.7	220.2	130.1	210.8	104.6
75°	104.6	196.4	98.6	183.6	105.4
77.5°	96.1	161.5	74.8	156.4	100.3
80°	85.9	122.4	57.0	124.1	90.1
82.5°	73.1	89.3	45.9	91.8	75.7
85°	50.2	65.5	42.5	65.5	52.7
87.5°	23.8	39.1	26.4	37.4	27.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)