

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: P294146

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L92765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294146
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-L92765-W2A1-U-4500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5643.0 lumens
Efficiency: N/A
Efficacy: 120.6 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

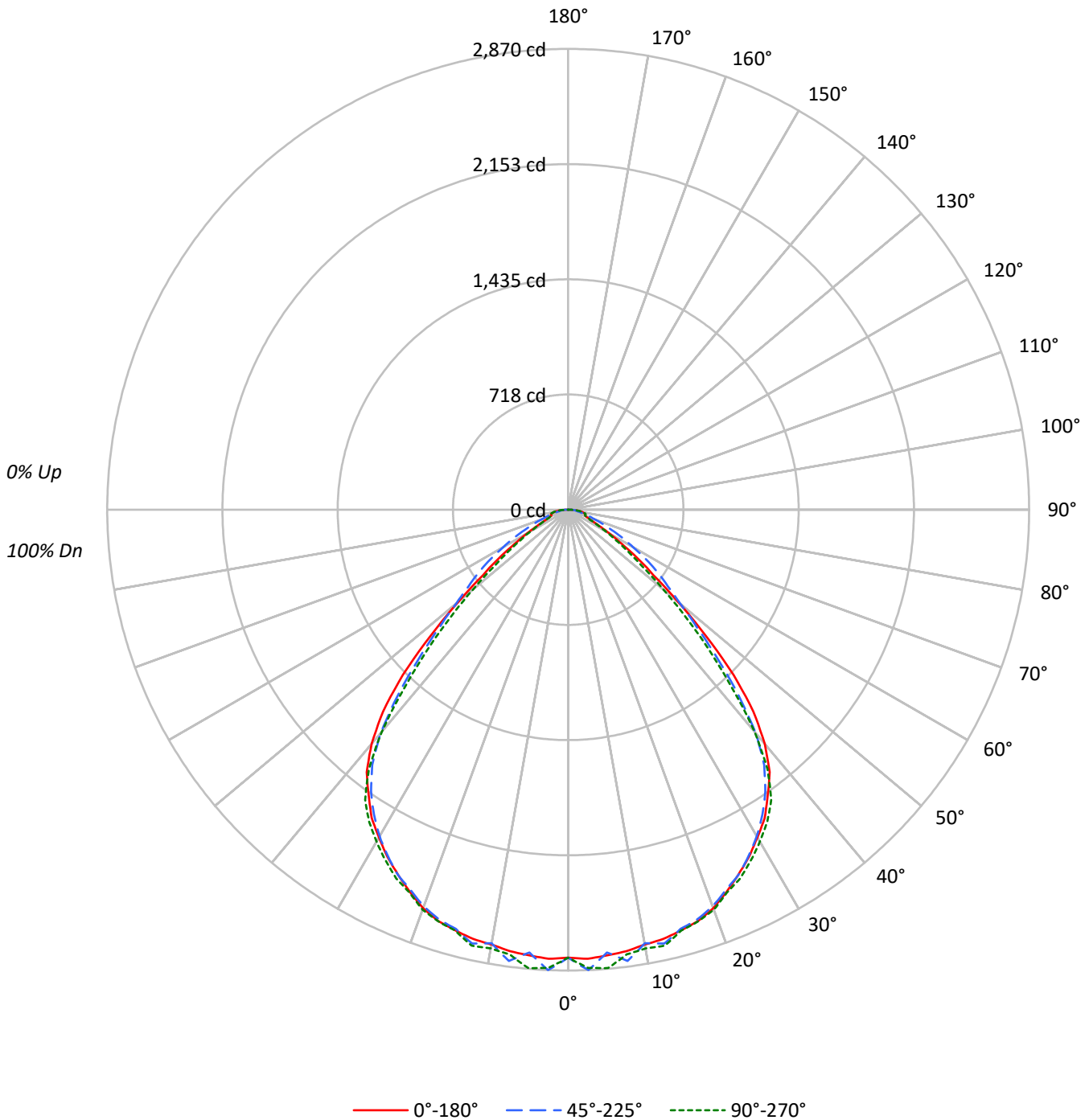
Input Watts (W): 46.779
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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				88
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79	77				77
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70	68				68
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62	60				60
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55	53				53
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50	48				48
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45	43				43
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41	39				39
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37	36				36
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34	33				33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3754	3754	3754
5°	3763	3738	3870
10°	3756	3745	3791
15°	3778	3766	3781
20°	3781	3766	3797
25°	3723	3725	3762
30°	3661	3649	3709
35°	3558	3514	3620
40°	3341	3191	3174
45°	2769	2506	2376
50°	1863	1901	1624
55°	1229	1594	1065
60°	788	1258	729
65°	508	961	493
70°	449	688	449
75°	580	546	584
80°	709	470	745
85°	826	699	868



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.2	4.7
10°-20°	767.1	13.6
20°-30°	1154.9	20.5
30°-40°	1338.6	23.7
40°-50°	1045.7	18.5
50°-60°	558.4	9.9
60°-70°	287.1	5.1
70°-80°	162.4	2.9
80°-90°	61.7	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°	2189.2	38.8
0°-40°	3527.8	62.5
0°-60°	5131.8	90.9
0°-90°	5643.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5643.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2790	2790	2790	2790	2790	
5°	2786	2864	2768	2844	2866	265
15°	2712	2730	2703	2720	2714	766
25°	2508	2499	2509	2506	2534	1155
35°	2166	2156	2140	2182	2204	1350
45°	1455	1456	1317	1305	1249	1097
55°	524	662	680	613	454	483
65°	160	333	302	332	155	175
75°	112	209	105	196	112	113
85°	54	70	45	70	56	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2790.3	2790.3	2790.3	2790.3	2790.3
2.5°	2799.4	2850.1	2870.1	2845.6	2856.5
5°	2785.8	2863.7	2767.6	2843.8	2865.5
7.5°	2773.1	2764.9	2834.7	2762.2	2793.0
10°	2749.5	2755.0	2741.4	2793.0	2774.9
12.5°	2738.6	2770.4	2767.6	2741.4	2781.2
15°	2712.4	2729.6	2703.3	2720.5	2714.2
17.5°	2686.1	2677.9	2675.2	2682.5	2688.8
20°	2640.8	2613.6	2629.9	2631.7	2651.6
22.5°	2575.5	2559.2	2562.8	2579.1	2581.0
25°	2507.6	2499.4	2509.4	2505.7	2533.8
27.5°	2436.9	2426.0	2432.3	2445.9	2463.2
30°	2356.2	2353.5	2349.0	2360.7	2387.0
32.5°	2276.5	2254.7	2251.1	2275.6	2305.5
35°	2165.9	2155.9	2139.6	2182.2	2204.0
37.5°	2060.8	2030.0	2003.7	2029.1	2038.1
40°	1902.2	1878.6	1817.0	1819.7	1807.0
42.5°	1707.3	1690.1	1572.3	1551.5	1516.1
45°	1455.4	1456.3	1316.8	1305.0	1248.8
47.5°	1162.7	1214.4	1092.9	1079.3	996.0
50°	889.9	983.3	908.0	886.3	775.7
52.5°	667.9	804.7	781.2	734.1	581.8
55°	523.8	662.5	679.7	612.6	454.0
57.5°	394.2	545.6	573.6	518.4	350.7
60°	292.7	459.5	467.6	445.9	271.0
62.5°	217.5	390.6	379.7	382.4	201.2
65°	159.5	332.6	301.8	331.7	155.0
67.5°	130.5	288.2	234.7	287.3	126.0
70°	114.2	255.6	174.9	252.8	114.2
72.5°	110.6	234.7	138.7	224.7	111.5
75°	111.5	209.3	105.1	195.7	112.4
77.5°	102.4	172.2	79.7	166.7	106.9
80°	91.5	130.5	60.7	132.3	96.1
82.5°	77.9	95.2	48.9	97.9	80.7
85°	53.5	69.8	45.3	69.8	56.2
87.5°	25.4	41.7	28.1	39.9	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)