

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: P293944

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293944
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-LD5-56-A19/156-UNV-L83050-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5759.0 lumens
Efficiency: N/A
Efficacy: 144.3 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

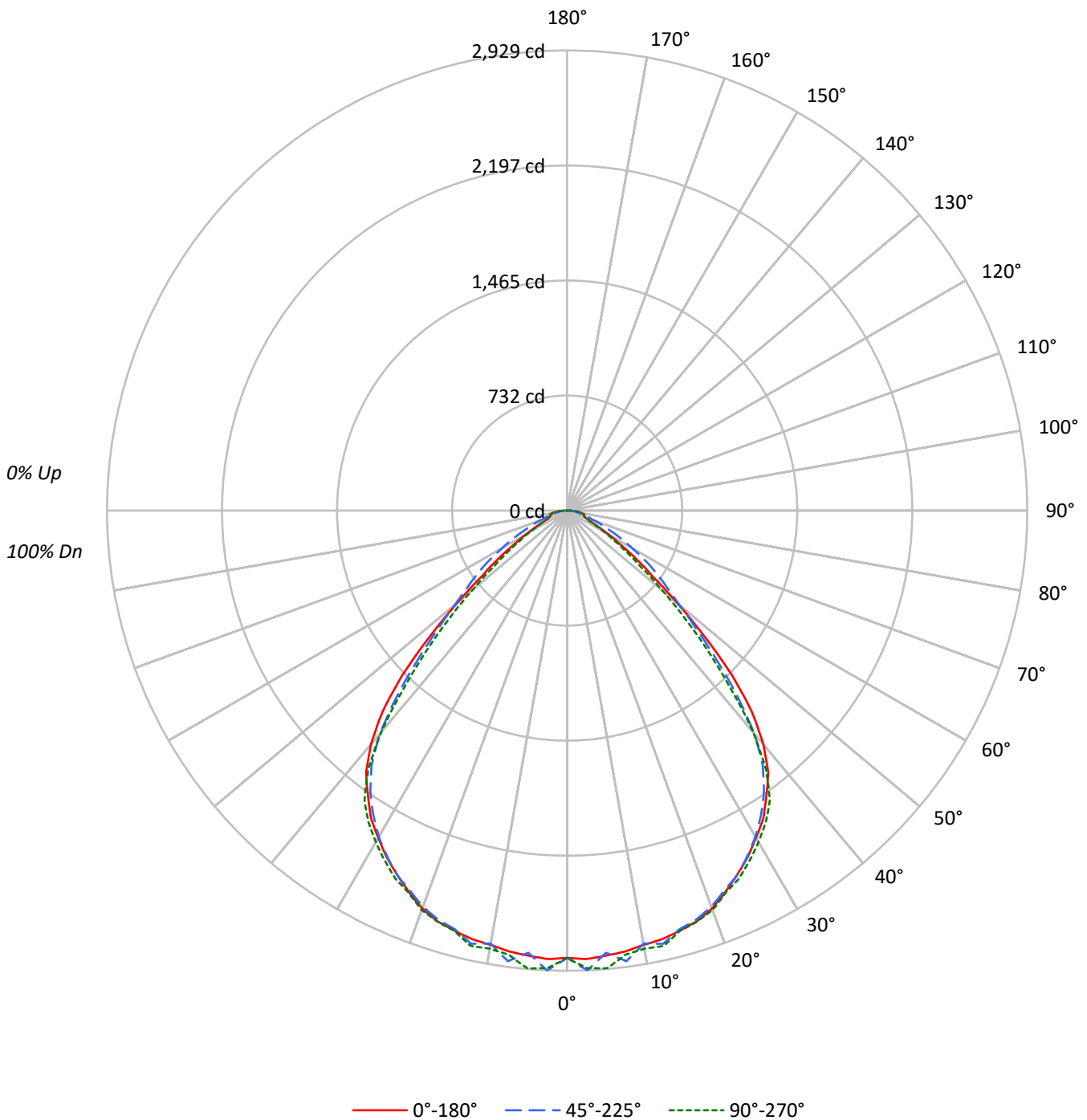
Input Watts (W): 39.897
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	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°	3832	3832	3832
5°	3840	3815	3950
10°	3834	3822	3869
15°	3856	3843	3858
20°	3859	3843	3875
25°	3799	3802	3839
30°	3736	3725	3785
35°	3631	3587	3695
40°	3410	3257	3239
45°	2826	2557	2425
50°	1901	1940	1657
55°	1254	1627	1087
60°	804	1284	744
65°	518	981	504
70°	458	702	458
75°	592	558	596
80°	724	480	759
85°	843	713	885



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.7	4.7
10°-20°	782.9	13.6
20°-30°	1178.6	20.5
30°-40°	1366.1	23.7
40°-50°	1067.2	18.5
50°-60°	569.8	9.9
60°-70°	293.0	5.1
70°-80°	165.8	2.9
80°-90°	62.9	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°	2234.2	38.8
0°-40°	3600.3	62.5
0°-60°	5237.3	90.9
0°-90°	5759.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5759.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2848	2848	2848	2848	2848	
5°	2843	2923	2824	2902	2924	270
15°	2768	2786	2759	2776	2770	782
25°	2559	2551	2561	2557	2586	1179
35°	2210	2200	2184	2227	2249	1378
45°	1485	1486	1344	1332	1274	1119
55°	535	676	694	625	463	493
65°	163	339	308	338	158	179
75°	114	214	107	200	115	115
85°	55	71	46	71	57	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2847.7	2847.7	2847.7	2847.7	2847.7
2.5°	2856.9	2908.7	2929.0	2904.1	2915.2
5°	2843.0	2922.6	2824.5	2902.2	2924.4
7.5°	2830.1	2821.8	2893.0	2819.0	2850.4
10°	2806.0	2811.6	2797.7	2850.4	2831.9
12.5°	2794.9	2827.3	2824.5	2797.7	2838.4
15°	2768.1	2785.7	2758.9	2776.4	2770.0
17.5°	2741.3	2733.0	2730.2	2737.6	2744.1
20°	2695.1	2667.3	2684.0	2685.8	2706.2
22.5°	2628.5	2611.8	2615.5	2632.2	2634.0
25°	2559.1	2550.8	2561.0	2557.3	2585.9
27.5°	2487.0	2475.9	2482.3	2496.2	2513.8
30°	2404.6	2401.9	2397.3	2409.3	2436.1
32.5°	2323.3	2301.1	2297.4	2322.3	2352.9
35°	2210.4	2200.3	2183.6	2227.1	2249.3
37.5°	2103.1	2071.7	2044.9	2070.8	2080.0
40°	1941.3	1917.2	1854.4	1857.1	1844.2
42.5°	1742.4	1724.9	1604.6	1583.4	1547.3
45°	1485.3	1486.3	1343.8	1331.8	1274.5
47.5°	1186.6	1239.3	1115.4	1101.5	1016.4
50°	908.2	1003.5	926.7	904.5	791.7
52.5°	681.6	821.3	797.2	749.1	593.8
55°	534.6	676.1	693.6	625.2	463.4
57.5°	402.3	556.8	585.4	529.0	357.9
60°	298.7	468.9	477.2	455.0	276.5
62.5°	222.0	398.6	387.5	390.3	205.3
65°	162.8	339.4	308.0	338.5	158.2
67.5°	133.2	294.1	239.5	293.2	128.6
70°	116.5	260.8	178.5	258.0	116.5
72.5°	112.8	239.5	141.5	229.4	113.8
75°	113.8	213.6	107.3	199.8	114.7
77.5°	104.5	175.7	81.4	170.2	109.1
80°	93.4	133.2	62.0	135.0	98.0
82.5°	79.5	97.1	49.9	99.9	82.3
85°	54.6	71.2	46.2	71.2	57.3
87.5°	25.9	42.5	28.7	40.7	29.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)