

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: P294144

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294144
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-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: 5329.0 lumens
Efficiency: N/A
Efficacy: 115.8 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

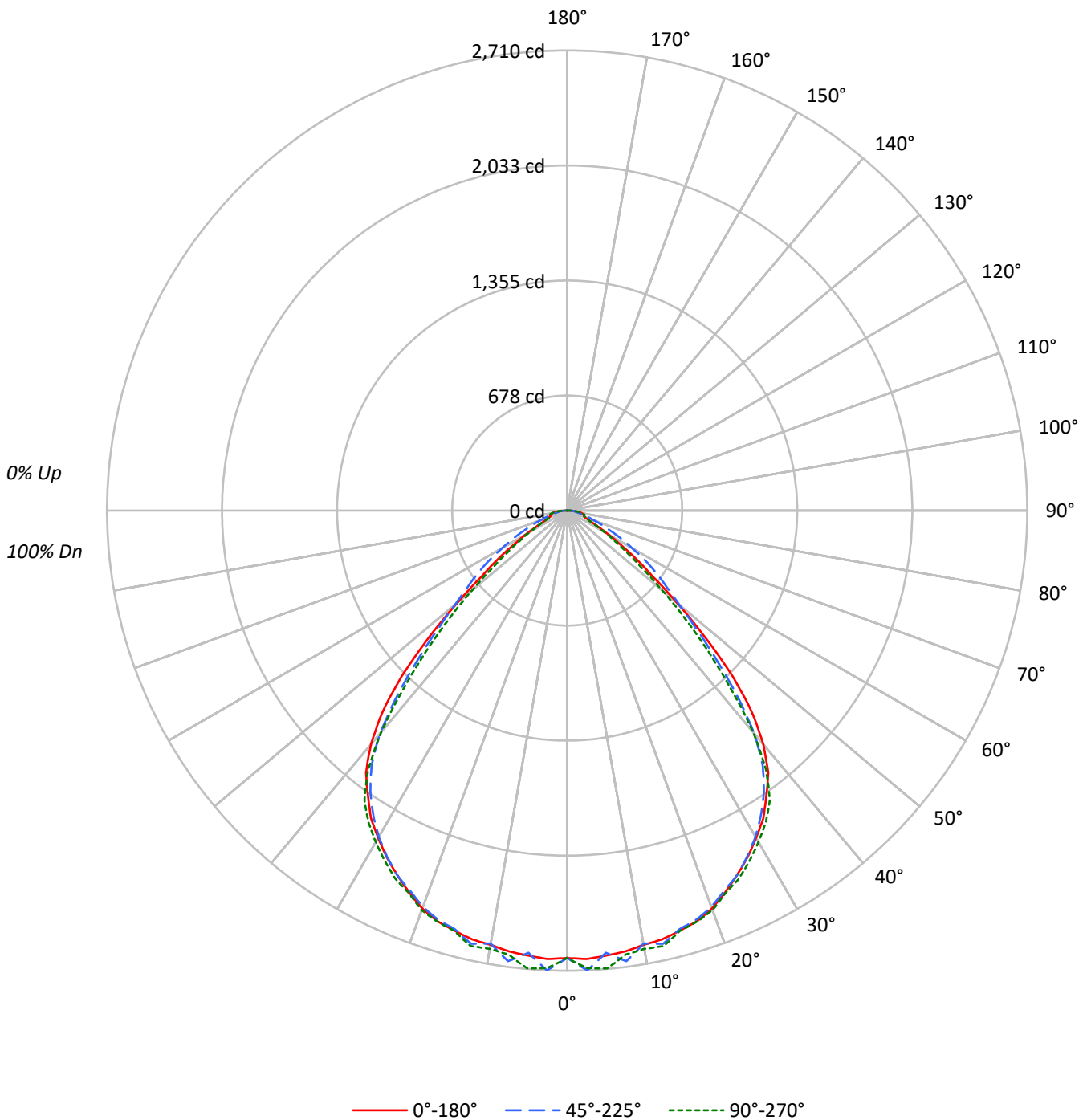
Input Watts (W): 46.035
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P294144

CATALOG NUMBER: 24GR-LD5-64-A19/156-UNV-L92765-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P294144

CATALOG NUMBER: 24GR-LD5-64-A19/156-UNV-L92765-W2A1-U-3500K

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					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°	3545	3545	3545
5°	3553	3530	3655
10°	3547	3537	3580
15°	3568	3556	3570
20°	3571	3556	3585
25°	3515	3518	3552
30°	3457	3446	3502
35°	3360	3319	3419
40°	3155	3014	2997
45°	2615	2366	2244
50°	1759	1795	1533
55°	1160	1506	1006
60°	744	1188	689
65°	479	907	466
70°	424	650	424
75°	547	516	552
80°	669	444	703
85°	780	661	820



TEST NUMBER: P294144

CATALOG NUMBER: 24GR-LD5-64-A19/156-UNV-L92765-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.3	4.7
10°-20°	724.4	13.6
20°-30°	1090.6	20.5
30°-40°	1264.1	23.7
40°-50°	987.5	18.5
50°-60°	527.3	9.9
60°-70°	271.2	5.1
70°-80°	153.4	2.9
80°-90°	58.3	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°	2067.4	38.8
0°-40°	3331.5	62.5
0°-60°	4846.2	90.9
0°-90°	5329.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5329.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2635	2635	2635	2635	2635	
5°	2631	2704	2614	2686	2706	250
15°	2561	2578	2553	2569	2563	723
25°	2368	2360	2370	2366	2393	1091
35°	2045	2036	2021	2061	2081	1275
45°	1374	1375	1244	1232	1179	1036
55°	495	626	642	578	429	456
65°	151	314	285	313	146	166
75°	105	198	99	185	106	107
85°	50	66	43	66	53	52
90°	0	0	0	0	0	



TEST NUMBER: P294144

CATALOG NUMBER: 24GR-LD5-64-A19/156-UNV-L92765-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2635.0	2635.0	2635.0	2635.0	2635.0
2.5°	2643.6	2691.5	2710.3	2687.2	2697.5
5°	2630.8	2704.4	2613.6	2685.5	2706.1
7.5°	2618.8	2611.1	2677.0	2608.5	2637.6
10°	2596.5	2601.7	2588.8	2637.6	2620.5
12.5°	2586.3	2616.2	2613.6	2588.8	2626.5
15°	2561.4	2577.7	2552.9	2569.1	2563.1
17.5°	2536.6	2528.9	2526.3	2533.2	2539.2
20°	2493.8	2468.2	2483.6	2485.3	2504.1
22.5°	2432.2	2416.8	2420.2	2435.6	2437.3
25°	2368.0	2360.3	2369.7	2366.3	2392.8
27.5°	2301.3	2291.0	2297.0	2309.8	2326.1
30°	2225.1	2222.5	2218.3	2229.4	2254.2
32.5°	2149.8	2129.3	2125.8	2148.9	2177.2
35°	2045.4	2036.0	2020.6	2060.8	2081.3
37.5°	1946.1	1917.0	1892.2	1916.2	1924.7
40°	1796.3	1774.1	1715.9	1718.5	1706.5
42.5°	1612.3	1596.1	1484.8	1465.1	1431.8
45°	1374.4	1375.3	1243.5	1232.4	1179.3
47.5°	1098.0	1146.8	1032.1	1019.3	940.5
50°	840.4	928.6	857.5	837.0	732.6
52.5°	630.7	760.0	737.7	693.2	549.4
55°	494.7	625.6	641.9	578.5	428.8
57.5°	372.3	515.2	541.7	489.5	331.2
60°	276.4	433.9	441.6	421.1	255.9
62.5°	205.4	368.9	358.6	361.2	190.0
65°	150.6	314.1	285.0	313.2	146.3
67.5°	123.2	272.1	221.7	271.3	119.0
70°	107.8	241.3	165.2	238.8	107.8
72.5°	104.4	221.7	130.9	212.2	105.3
75°	105.3	197.7	99.3	184.9	106.1
77.5°	96.7	162.6	75.3	157.5	101.0
80°	86.4	123.2	57.3	124.9	90.7
82.5°	73.6	89.9	46.2	92.4	76.2
85°	50.5	65.9	42.8	65.9	53.1
87.5°	24.0	39.4	26.5	37.7	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)