

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: P294027

Luminaire Tested: **24GR-LD5-72-A19/156-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294027
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-LD5-72-A19/156-UNV-L82765-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6873.0 lumens
Efficiency: N/A
Efficacy: 130.1 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

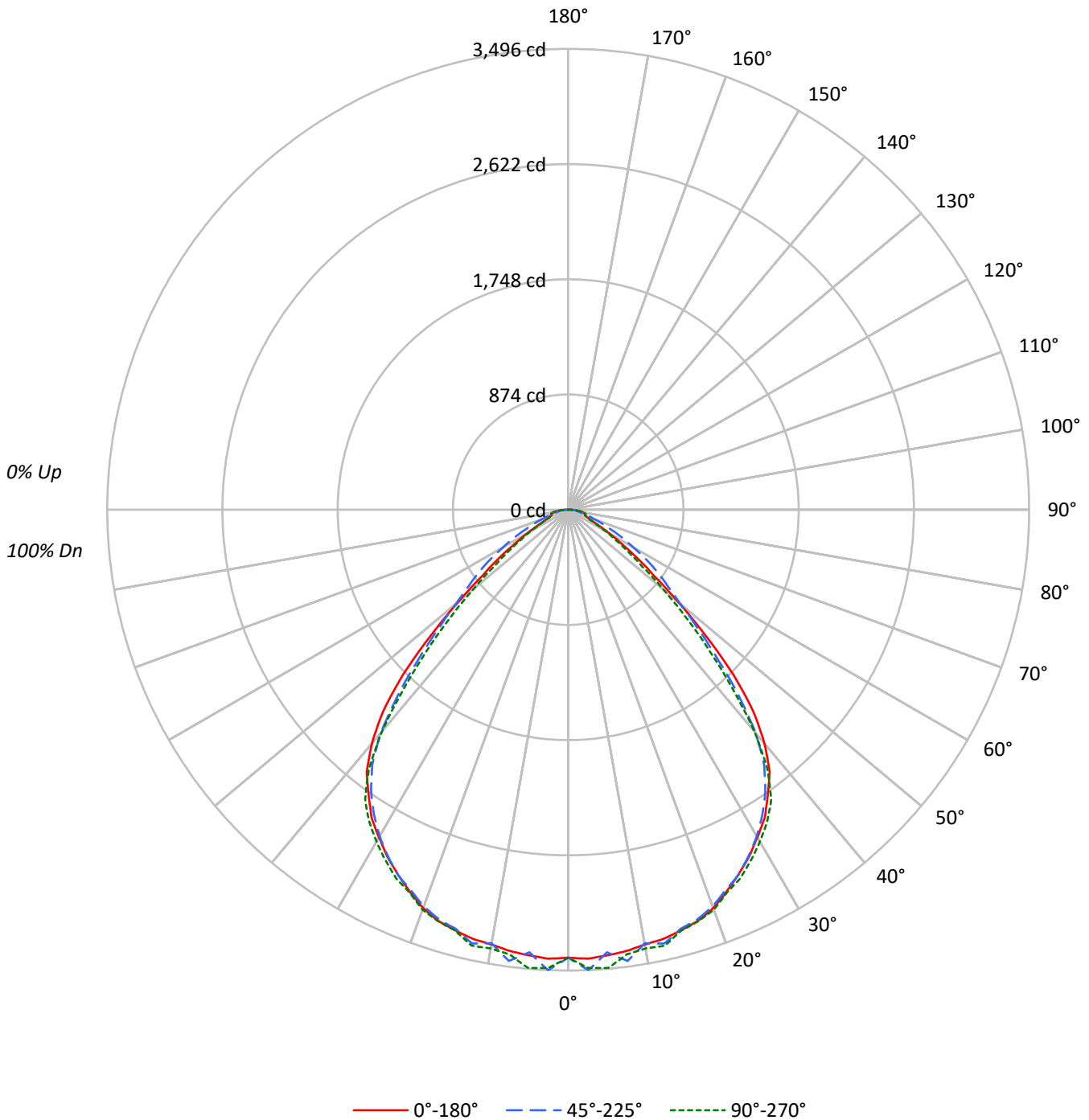
Input Watts (W): 52.824
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P294027

CATALOG NUMBER: 24GR-LD5-72-A19/156-UNV-L82765-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P294027

CATALOG NUMBER: 24GR-LD5-72-A19/156-UNV-L82765-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°	4573	4573	4573
5°	4583	4553	4714
10°	4575	4562	4618
15°	4602	4586	4605
20°	4605	4586	4624
25°	4534	4537	4582
30°	4459	4445	4517
35°	4333	4280	4409
40°	4069	3887	3866
45°	3373	3052	2894
50°	2269	2315	1978
55°	1497	1942	1297
60°	959	1533	888
65°	619	1170	601
70°	547	838	547
75°	706	665	712
80°	864	573	907
85°	1005	852	1056



TEST NUMBER: P294027

CATALOG NUMBER: 24GR-LD5-72-A19/156-UNV-L82765-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.4	4.7
10°-20°	934.3	13.6
20°-30°	1406.6	20.5
30°-40°	1630.4	23.7
40°-50°	1273.6	18.5
50°-60°	680.0	9.9
60°-70°	349.7	5.1
70°-80°	197.8	2.9
80°-90°	75.1	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°	2666.3	38.8
0°-40°	4296.7	62.5
0°-60°	6250.3	90.9
0°-90°	6873.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6873.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3398	3398	3398	3398	3398	
5°	3393	3488	3371	3464	3490	323
15°	3304	3324	3292	3314	3306	933
25°	3054	3044	3056	3052	3086	1407
35°	2638	2626	2606	2658	2684	1645
45°	1773	1774	1604	1589	1521	1336
55°	638	807	828	746	553	589
65°	194	405	368	404	189	214
75°	136	255	128	238	137	138
85°	65	85	55	85	68	67
90°	0	0	0	0	0	



TEST NUMBER: P294027

CATALOG NUMBER: 24GR-LD5-72-A19/156-UNV-L82765-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3398.5	3398.5	3398.5	3398.5	3398.5
2.5°	3409.5	3471.4	3495.6	3465.8	3479.1
5°	3393.0	3487.9	3370.9	3463.6	3490.1
7.5°	3377.5	3367.6	3452.6	3364.3	3401.8
10°	3348.8	3355.5	3338.9	3401.8	3379.7
12.5°	3335.6	3374.2	3370.9	3338.9	3387.5
15°	3303.6	3324.5	3292.5	3313.5	3305.8
17.5°	3271.6	3261.6	3258.3	3267.2	3274.9
20°	3216.4	3183.3	3203.1	3205.3	3229.6
22.5°	3136.9	3117.0	3121.5	3141.3	3143.5
25°	3054.1	3044.2	3056.3	3051.9	3086.1
27.5°	2968.0	2954.8	2962.5	2979.1	3000.0
30°	2869.8	2866.5	2861.0	2875.3	2907.3
32.5°	2772.7	2746.2	2741.8	2771.6	2808.0
35°	2638.0	2625.9	2606.0	2657.9	2684.4
37.5°	2510.0	2472.4	2440.4	2471.3	2482.4
40°	2316.8	2288.1	2213.1	2216.4	2200.9
42.5°	2079.5	2058.5	1915.0	1889.7	1846.6
45°	1772.7	1773.8	1603.8	1589.4	1521.0
47.5°	1416.1	1479.0	1331.1	1314.6	1213.0
50°	1083.9	1197.6	1106.0	1079.5	944.8
52.5°	813.5	980.1	951.4	894.1	708.6
55°	638.0	806.9	827.8	746.1	553.0
57.5°	480.1	664.5	698.7	631.4	427.2
60°	356.5	559.6	569.5	543.1	330.0
62.5°	264.9	475.7	462.5	465.8	245.0
65°	194.3	405.1	367.6	404.0	188.7
67.5°	158.9	351.0	285.9	349.9	153.4
70°	139.1	311.3	213.0	308.0	139.1
72.5°	134.7	285.9	168.9	273.7	135.8
75°	135.8	255.0	128.0	238.4	136.9
77.5°	124.7	209.7	97.1	203.1	130.2
80°	111.5	158.9	74.0	161.2	117.0
82.5°	94.9	115.9	59.6	119.2	98.2
85°	65.1	85.0	55.2	85.0	68.4
87.5°	30.9	50.8	34.2	48.6	35.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)