

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: P294034

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294034  
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-LD5-85-A19/156-UNV-L82765-W2A1-U-2700K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7403.0 lumens  
Efficiency: N/A  
Efficacy: 118.6 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

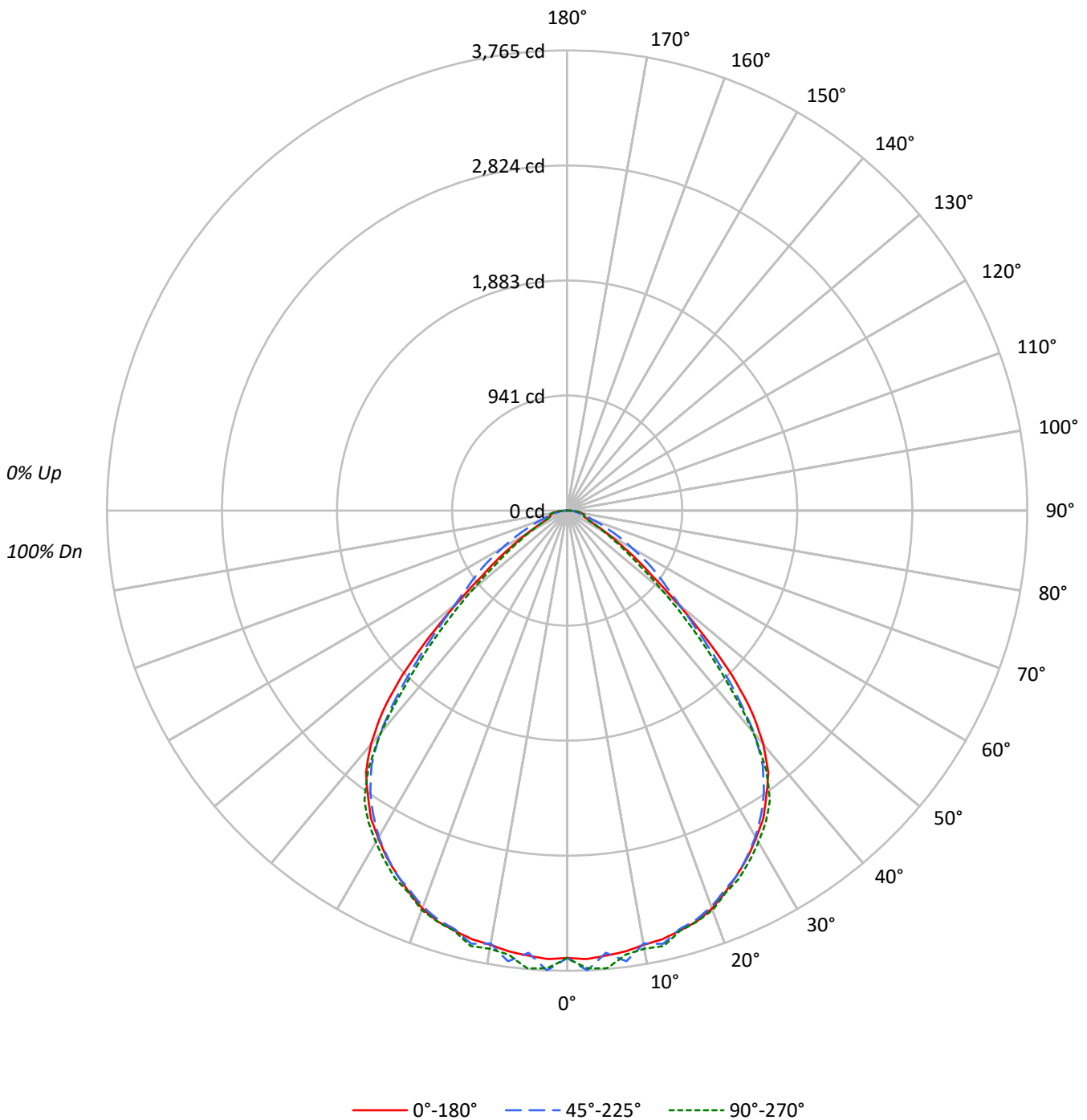
Input Watts (W): 62.403  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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					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°	4925	4925	4925
5°	4936	4904	5077
10°	4928	4914	4974
15°	4957	4940	4960
20°	4960	4940	4981
25°	4884	4887	4935
30°	4802	4788	4865
35°	4667	4611	4749
40°	4383	4187	4164
45°	3633	3287	3117
50°	2444	2494	2130
55°	1612	2092	1397
60°	1033	1651	957
65°	666	1260	647
70°	589	903	589
75°	760	717	766
80°	931	618	976
85°	1082	917	1138



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	350.5	4.7
10°-20°	1006.4	13.6
20°-30°	1515.1	20.5
30°-40°	1756.1	23.7
40°-50°	1371.8	18.5
50°-60°	732.5	9.9
60°-70°	376.7	5.1
70°-80°	213.1	2.9
80°-90°	80.9	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°	2872.0	38.8
0°-40°	4628.0	62.5
0°-60°	6732.3	90.9
0°-90°	7403.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7403.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3661	3661	3661	3661	3661	
5°	3655	3757	3631	3731	3759	348
15°	3558	3581	3546	3569	3561	1005
25°	3290	3279	3292	3287	3324	1516
35°	2841	2828	2807	2863	2891	1771
45°	1909	1910	1727	1712	1638	1439
55°	687	869	892	804	596	634
65°	209	436	396	435	203	230
75°	146	275	138	257	147	148
85°	70	92	59	92	74	72
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3660.6	3660.6	3660.6	3660.6	3660.6
2.5°	3672.5	3739.0	3765.2	3733.1	3747.4
5°	3654.6	3756.9	3630.8	3730.7	3759.2
7.5°	3638.0	3627.3	3718.8	3623.7	3664.1
10°	3607.1	3614.2	3596.4	3664.1	3640.4
12.5°	3592.8	3634.4	3630.8	3596.4	3648.7
15°	3558.3	3580.9	3546.4	3569.0	3560.7
17.5°	3523.8	3513.1	3509.6	3519.1	3527.4
20°	3464.4	3428.7	3450.1	3452.5	3478.7
22.5°	3378.8	3357.4	3362.2	3383.6	3385.9
25°	3289.6	3278.9	3292.0	3287.3	3324.1
27.5°	3196.9	3182.6	3191.0	3208.8	3231.4
30°	3091.1	3087.5	3081.6	3097.0	3131.5
32.5°	2986.5	2957.9	2953.2	2985.3	3024.5
35°	2841.4	2828.4	2807.0	2862.8	2891.4
37.5°	2703.5	2663.1	2628.6	2661.9	2673.8
40°	2495.5	2464.6	2383.7	2387.3	2370.6
42.5°	2239.9	2217.3	2062.7	2035.4	1989.0
45°	1909.3	1910.5	1727.4	1712.0	1638.3
47.5°	1525.3	1593.1	1433.8	1416.0	1306.6
50°	1167.5	1289.9	1191.3	1162.7	1017.7
52.5°	876.2	1055.7	1024.8	963.0	763.3
55°	687.2	869.1	891.7	803.7	595.6
57.5°	517.2	715.7	752.6	680.0	460.1
60°	384.0	602.8	613.5	584.9	355.5
62.5°	285.3	512.4	498.1	501.7	263.9
65°	209.2	436.3	395.9	435.1	203.3
67.5°	171.2	378.1	307.9	376.9	165.3
70°	149.8	335.3	229.5	331.7	149.8
72.5°	145.0	307.9	181.9	294.8	146.2
75°	146.2	274.6	137.9	256.8	147.4
77.5°	134.3	225.9	104.6	218.8	140.3
80°	120.1	171.2	79.7	173.6	126.0
82.5°	102.2	124.8	64.2	128.4	105.8
85°	70.1	91.5	59.4	91.5	73.7
87.5°	33.3	54.7	36.9	52.3	38.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)