

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: P294148

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294148  
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-5500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5846.0 lumens  
Efficiency: N/A  
Efficacy: 123.7 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

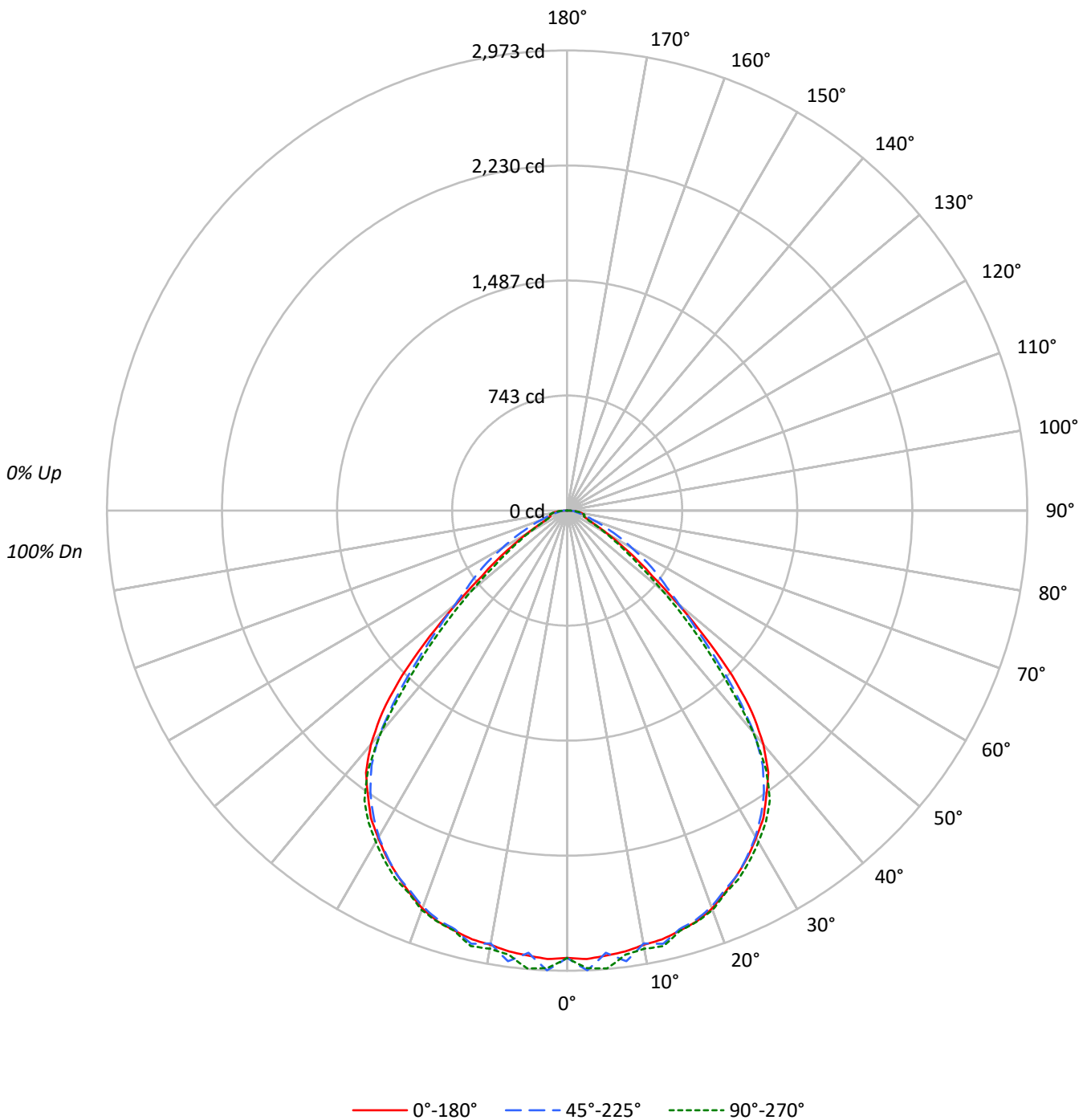
Input Watts (W): 47.244  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3889	3889	3889
5°	3898	3873	4009
10°	3892	3880	3928
15°	3914	3901	3917
20°	3917	3901	3933
25°	3857	3859	3897
30°	3792	3781	3842
35°	3686	3641	3750
40°	3461	3306	3288
45°	2869	2596	2462
50°	1930	1969	1682
55°	1273	1652	1103
60°	816	1304	755
65°	526	995	511
70°	465	713	465
75°	600	566	605
80°	735	487	771
85°	855	724	898



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	276.8	4.7
10°-20°	794.7	13.6
20°-30°	1196.4	20.5
30°-40°	1386.8	23.7
40°-50°	1083.3	18.5
50°-60°	578.4	9.9
60°-70°	297.4	5.1
70°-80°	168.3	2.9
80°-90°	63.9	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°	2267.9	38.8
0°-40°	3654.7	62.5
0°-60°	5316.4	90.9
0°-90°	5846.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5846.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2891	2891	2891	2891	2891	
5°	2886	2967	2867	2946	2969	274
15°	2810	2828	2801	2818	2812	794
25°	2598	2589	2600	2596	2625	1197
35°	2244	2234	2217	2261	2283	1399
45°	1508	1509	1364	1352	1294	1136
55°	543	686	704	635	470	501
65°	165	345	313	344	160	182
75°	116	217	109	203	116	117
85°	55	72	47	72	58	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2890.7	2890.7	2890.7	2890.7	2890.7
2.5°	2900.1	2952.6	2973.3	2947.9	2959.2
5°	2886.0	2966.7	2867.2	2946.1	2968.6
7.5°	2872.8	2864.4	2936.7	2861.6	2893.5
10°	2848.4	2854.1	2840.0	2893.5	2874.7
12.5°	2837.2	2870.0	2867.2	2840.0	2881.3
15°	2809.9	2827.8	2800.6	2818.4	2811.8
17.5°	2782.7	2774.3	2771.4	2779.0	2785.5
20°	2735.8	2707.6	2724.5	2726.4	2747.0
22.5°	2668.2	2651.3	2655.0	2671.9	2673.8
25°	2597.8	2589.3	2599.6	2595.9	2625.0
27.5°	2524.5	2513.3	2519.8	2533.9	2551.8
30°	2441.0	2438.2	2433.5	2445.7	2472.9
32.5°	2358.4	2335.8	2332.1	2357.4	2388.4
35°	2243.8	2233.5	2216.6	2260.7	2283.3
37.5°	2134.9	2103.0	2075.8	2102.1	2111.4
40°	1970.6	1946.2	1882.4	1885.2	1872.0
42.5°	1768.8	1750.9	1628.9	1607.3	1570.7
45°	1507.8	1508.7	1364.1	1351.9	1293.7
47.5°	1204.5	1258.0	1132.2	1118.2	1031.8
50°	921.9	1018.6	940.7	918.2	803.6
52.5°	691.9	833.7	809.3	760.5	602.7
55°	542.6	686.3	704.1	634.7	470.4
57.5°	408.4	565.2	594.3	537.0	363.3
60°	303.2	476.0	484.4	461.9	280.7
62.5°	225.3	404.6	393.4	396.2	208.4
65°	165.2	344.6	312.6	343.6	160.5
67.5°	135.2	298.6	243.2	297.6	130.5
70°	118.3	264.8	181.2	261.9	118.3
72.5°	114.5	243.2	143.6	232.8	115.5
75°	115.5	216.9	108.9	202.8	116.4
77.5°	106.1	178.4	82.6	172.7	110.8
80°	94.8	135.2	62.9	137.1	99.5
82.5°	80.7	98.6	50.7	101.4	83.6
85°	55.4	72.3	46.9	72.3	58.2
87.5°	26.3	43.2	29.1	41.3	30.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)