

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: P294016

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294016  
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-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: 5715.0 lumens  
Efficiency: N/A  
Efficacy: 124.4 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

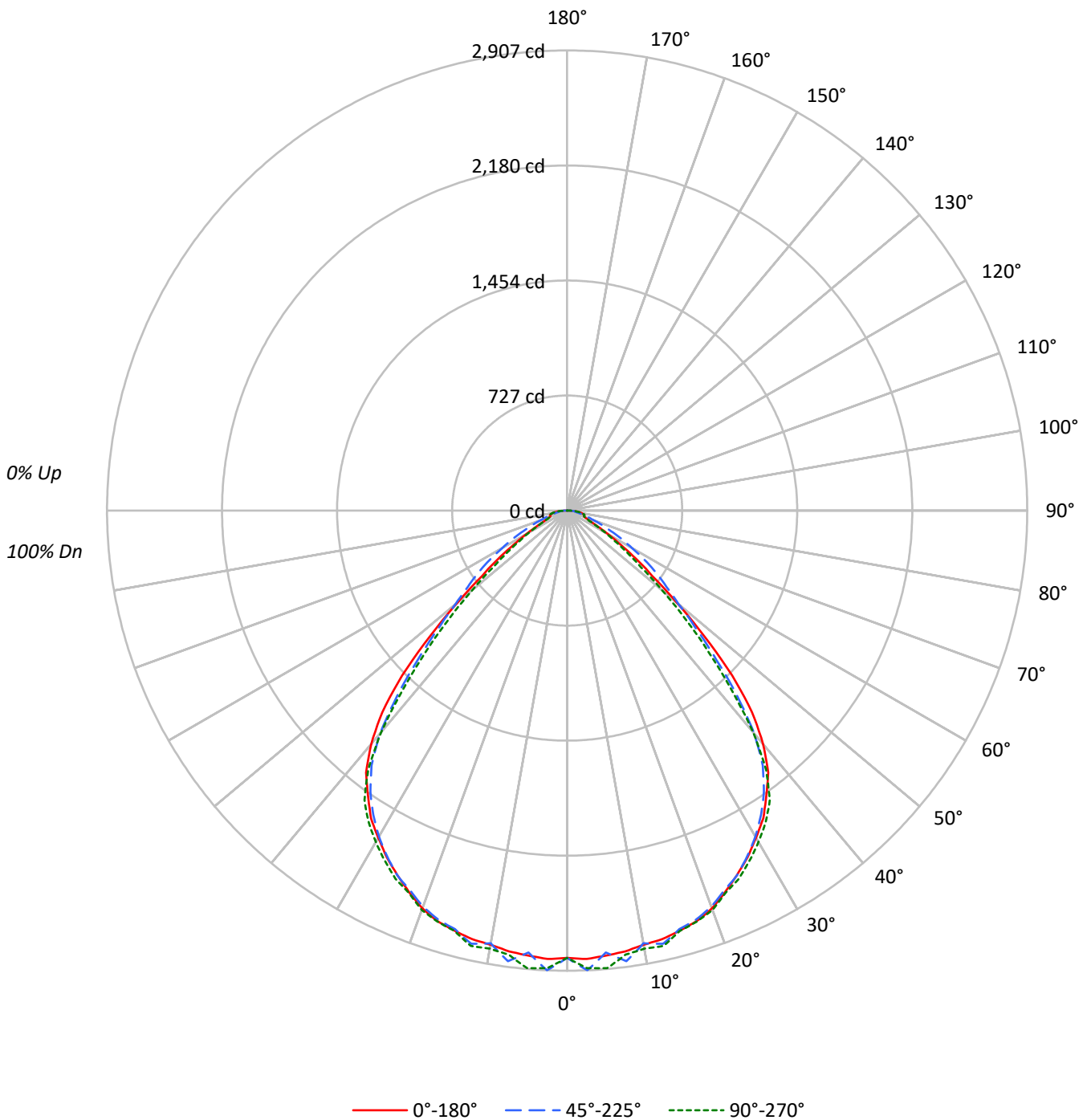
Input Watts (W): 45.942  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3802	3802	3802
5°	3811	3786	3920
10°	3804	3793	3840
15°	3826	3814	3829
20°	3829	3814	3845
25°	3770	3773	3810
30°	3707	3696	3756
35°	3603	3559	3666
40°	3384	3232	3214
45°	2805	2538	2406
50°	1887	1925	1644
55°	1244	1615	1079
60°	798	1274	738
65°	514	973	500
70°	455	697	455
75°	587	554	592
80°	718	477	754
85°	837	709	878



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	270.6	4.7
10°-20°	776.9	13.6
20°-30°	1169.6	20.5
30°-40°	1355.7	23.7
40°-50°	1059.0	18.5
50°-60°	565.5	9.9
60°-70°	290.8	5.1
70°-80°	164.5	2.9
80°-90°	62.5	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°	2217.1	38.8
0°-40°	3572.8	62.5
0°-60°	5197.2	90.9
0°-90°	5715.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5715.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2826	2826	2826	2826	2826	
5°	2821	2900	2803	2880	2902	268
15°	2747	2764	2738	2755	2749	776
25°	2540	2531	2541	2538	2566	1170
35°	2194	2183	2167	2210	2232	1367
45°	1474	1475	1334	1322	1265	1111
55°	530	671	688	620	460	490
65°	162	337	306	336	157	178
75°	113	212	106	198	114	114
85°	54	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°	2825.9	2825.9	2825.9	2825.9	2825.9
2.5°	2835.1	2886.5	2906.7	2881.9	2892.9
5°	2821.3	2900.2	2803.0	2880.1	2902.1
7.5°	2808.5	2800.2	2870.9	2797.5	2828.7
10°	2784.6	2790.1	2776.3	2828.7	2810.3
12.5°	2773.6	2805.7	2803.0	2776.3	2816.7
15°	2747.0	2764.4	2737.8	2755.2	2748.8
17.5°	2720.4	2712.1	2709.3	2716.7	2723.1
20°	2674.5	2646.9	2663.5	2665.3	2685.5
22.5°	2608.4	2591.9	2595.5	2612.1	2613.9
25°	2539.6	2531.3	2541.4	2537.7	2566.2
27.5°	2468.0	2456.9	2463.4	2477.1	2494.6
30°	2386.3	2383.5	2378.9	2390.9	2417.5
32.5°	2305.5	2283.5	2279.8	2304.6	2334.9
35°	2193.5	2183.4	2166.9	2210.1	2232.1
37.5°	2087.1	2055.9	2029.3	2055.0	2064.1
40°	1926.5	1902.6	1840.2	1842.9	1830.1
42.5°	1729.1	1711.7	1592.4	1571.3	1535.5
45°	1474.0	1474.9	1333.6	1321.6	1264.7
47.5°	1177.5	1229.9	1106.9	1093.1	1008.7
50°	901.3	995.8	919.6	897.6	785.6
52.5°	676.4	815.0	791.1	743.4	589.2
55°	530.5	670.9	688.3	620.4	459.8
57.5°	399.2	552.5	581.0	525.0	355.2
60°	296.4	465.3	473.6	451.6	274.4
62.5°	220.3	395.6	384.6	387.3	203.8
65°	161.5	336.8	305.6	335.9	156.9
67.5°	132.2	291.9	237.7	290.9	127.6
70°	115.6	258.8	177.1	256.1	115.6
72.5°	112.0	237.7	140.4	227.6	112.9
75°	112.9	212.0	106.5	198.2	113.8
77.5°	103.7	174.4	80.8	168.9	108.3
80°	92.7	132.2	61.5	134.0	97.3
82.5°	78.9	96.4	49.6	99.1	81.7
85°	54.2	70.7	45.9	70.7	56.9
87.5°	25.7	42.2	28.5	40.4	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)