

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: P294021

Luminaire Tested: **24GR-LD5-64-A19/156-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294021  
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-5000K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6413.0 lumens  
Efficiency: N/A  
Efficacy: 136.3 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

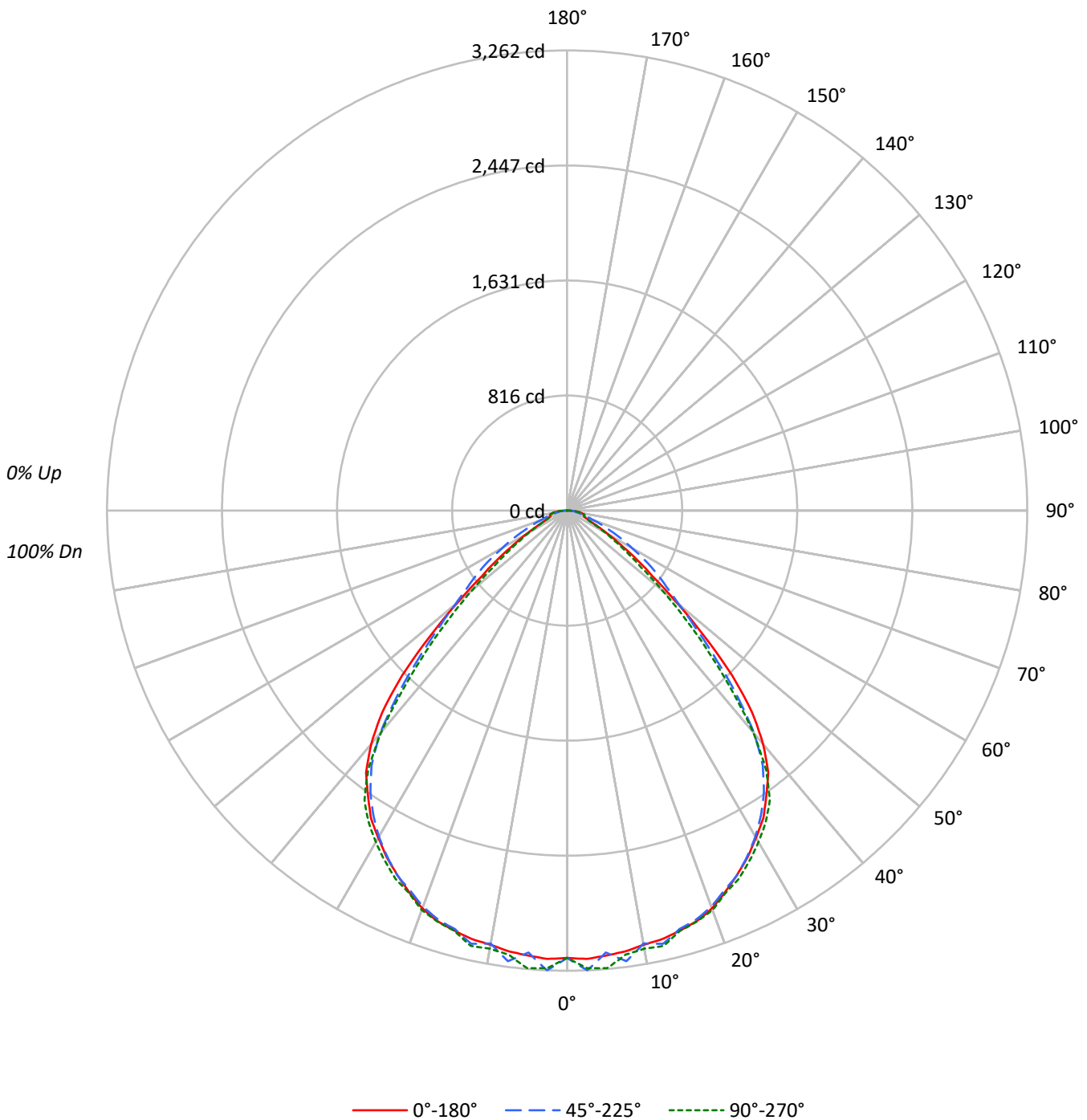
Input Watts (W): 47.058  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4267	4267	4267
5°	4276	4248	4398
10°	4269	4256	4308
15°	4294	4279	4297
20°	4297	4279	4315
25°	4231	4234	4275
30°	4160	4147	4215
35°	4043	3994	4114
40°	3797	3627	3607
45°	3147	2847	2700
50°	2117	2160	1845
55°	1396	1812	1210
60°	895	1430	829
65°	577	1092	561
70°	511	782	511
75°	659	621	664
80°	806	535	846
85°	939	795	986



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	303.6	4.7
10°-20°	871.8	13.6
20°-30°	1312.5	20.5
30°-40°	1521.2	23.7
40°-50°	1188.3	18.5
50°-60°	634.5	9.9
60°-70°	326.3	5.1
70°-80°	184.6	2.9
80°-90°	70.1	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°	2487.9	38.8
0°-40°	4009.1	62.5
0°-60°	5832.0	90.9
0°-90°	6413.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6413.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3171	3171	3171	3171	3171	
5°	3166	3254	3145	3232	3256	301
15°	3082	3102	3072	3092	3084	871
25°	2850	2840	2852	2848	2880	1313
35°	2461	2450	2432	2480	2505	1535
45°	1654	1655	1496	1483	1419	1246
55°	595	753	772	696	516	549
65°	181	378	343	377	176	199
75°	127	238	120	222	128	128
85°	61	79	52	79	64	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3171.0	3171.0	3171.0	3171.0	3171.0
2.5°	3181.3	3239.0	3261.7	3233.9	3246.2
5°	3165.9	3254.5	3145.3	3231.8	3256.5
7.5°	3151.5	3142.2	3221.5	3139.1	3174.1
10°	3124.7	3130.9	3115.4	3174.1	3153.5
12.5°	3112.3	3148.4	3145.3	3115.4	3160.7
15°	3082.5	3102.0	3072.2	3091.7	3084.5
17.5°	3052.6	3043.3	3040.2	3048.5	3055.7
20°	3001.1	2970.2	2988.8	2990.8	3013.5
22.5°	2927.0	2908.4	2912.5	2931.1	2933.1
25°	2849.7	2840.4	2851.8	2847.7	2879.6
27.5°	2769.4	2757.0	2764.2	2779.7	2799.3
30°	2677.7	2674.6	2669.5	2682.9	2712.7
32.5°	2587.1	2562.4	2558.3	2586.1	2620.1
35°	2461.4	2450.1	2431.6	2480.0	2504.7
37.5°	2342.0	2307.0	2277.1	2305.9	2316.2
40°	2161.7	2135.0	2064.9	2068.0	2053.6
42.5°	1940.3	1920.8	1786.9	1763.2	1723.0
45°	1654.0	1655.0	1496.4	1483.0	1419.2
47.5°	1321.4	1380.1	1242.1	1226.6	1131.9
50°	1011.4	1117.4	1032.0	1007.2	881.6
52.5°	759.0	914.5	887.8	834.2	661.2
55°	595.3	752.9	772.4	696.2	516.0
57.5°	448.0	620.0	651.9	589.1	398.6
60°	332.7	522.2	531.4	506.7	307.9
62.5°	247.2	443.9	431.5	434.6	228.6
65°	181.3	378.0	343.0	376.9	176.1
67.5°	148.3	327.5	266.7	326.5	143.2
70°	129.8	290.4	198.8	287.3	129.8
72.5°	125.6	266.7	157.6	255.4	126.7
75°	126.7	237.9	119.5	222.5	127.7
77.5°	116.4	195.7	90.6	189.5	121.5
80°	104.0	148.3	69.0	150.4	109.2
82.5°	88.6	108.1	55.6	111.2	91.7
85°	60.8	79.3	51.5	79.3	63.9
87.5°	28.8	47.4	31.9	45.3	33.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)