

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: P294154

Luminaire Tested: **24GR-LD5-72-A19/156-UNV-L92765-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294154
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-L92765-W2A1-U-4000K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6215.0 lumens
Efficiency: N/A
Efficacy: 116.8 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

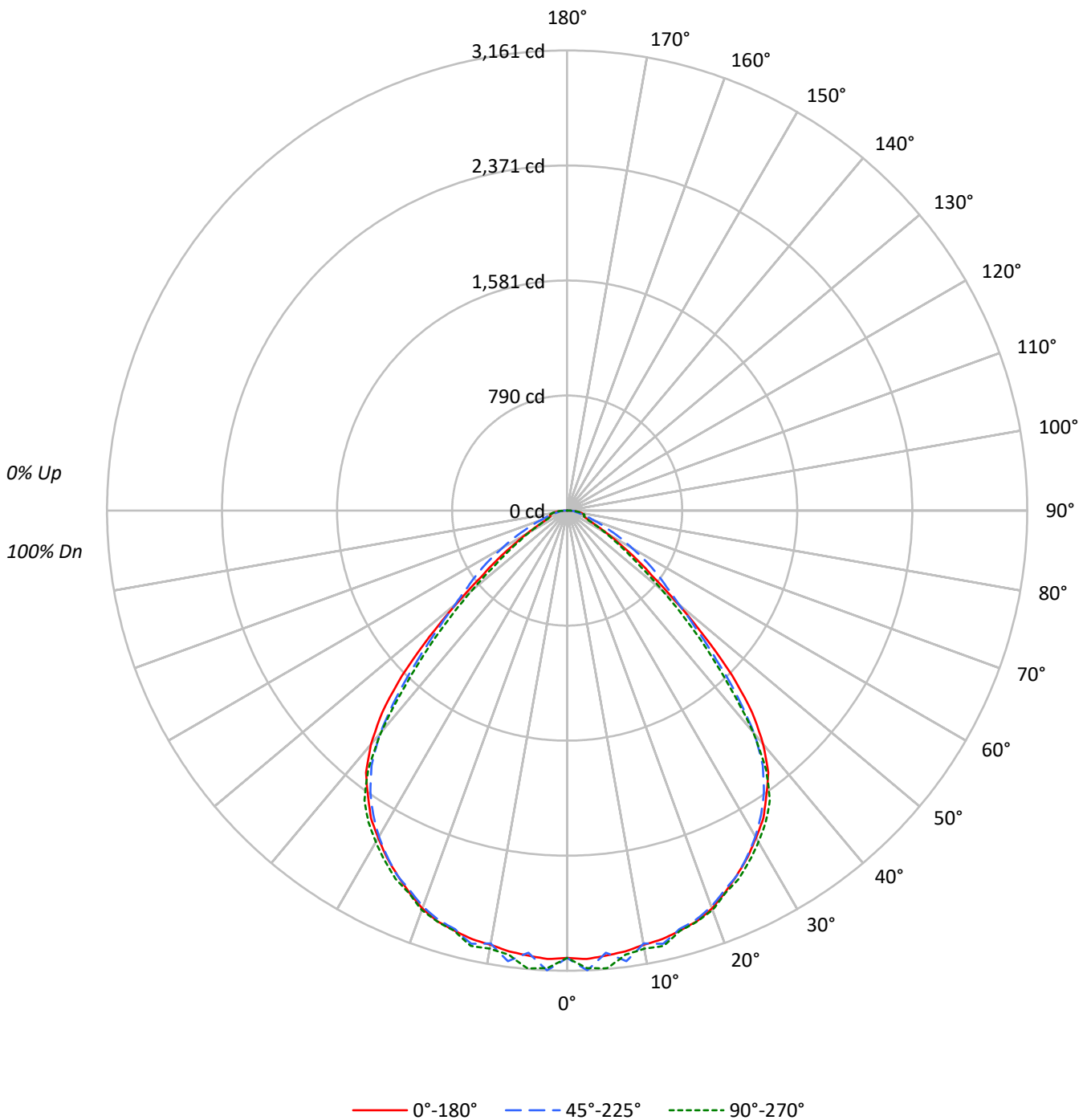
Input Watts (W): 53.196
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4135	4135	4135
5°	4144	4117	4263
10°	4137	4125	4176
15°	4161	4147	4164
20°	4165	4147	4182
25°	4100	4103	4143
30°	4032	4019	4085
35°	3918	3871	3987
40°	3680	3515	3496
45°	3050	2759	2617
50°	2052	2093	1788
55°	1353	1756	1173
60°	868	1386	803
65°	559	1058	543
70°	495	758	495
75°	638	602	644
80°	781	518	820
85°	909	770	956



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	294.2	4.7
10°-20°	844.9	13.6
20°-30°	1272.0	20.5
30°-40°	1474.3	23.7
40°-50°	1151.6	18.5
50°-60°	614.9	9.9
60°-70°	316.2	5.1
70°-80°	178.9	2.9
80°-90°	67.9	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°	2411.1	38.8
0°-40°	3885.4	62.5
0°-60°	5652.0	90.9
0°-90°	6215.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6215.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3073	3073	3073	3073	3073	
5°	3068	3154	3048	3132	3156	292
15°	2987	3006	2977	2996	2989	844
25°	2762	2753	2764	2760	2791	1273
35°	2386	2374	2356	2403	2427	1487
45°	1603	1604	1450	1437	1375	1208
55°	577	730	749	675	500	532
65°	176	366	332	365	171	193
75°	123	231	116	216	124	124
85°	59	77	50	77	62	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3073.1	3073.1	3073.1	3073.1	3073.1
2.5°	3083.1	3139.0	3161.0	3134.0	3146.0
5°	3068.1	3154.0	3048.2	3132.0	3156.0
7.5°	3054.2	3045.2	3122.0	3042.2	3076.1
10°	3028.2	3034.2	3019.2	3076.1	3056.2
12.5°	3016.2	3051.2	3048.2	3019.2	3063.2
15°	2987.3	3006.3	2977.3	2996.3	2989.3
17.5°	2958.4	2949.4	2946.4	2954.4	2961.4
20°	2908.5	2878.5	2896.5	2898.5	2920.4
22.5°	2836.6	2818.6	2822.6	2840.6	2842.6
25°	2761.7	2752.8	2763.7	2759.7	2790.7
27.5°	2683.9	2671.9	2678.9	2693.9	2712.8
30°	2595.1	2592.1	2587.1	2600.0	2629.0
32.5°	2507.2	2483.3	2479.3	2506.2	2539.2
35°	2385.5	2374.5	2356.5	2403.4	2427.4
37.5°	2269.7	2235.7	2206.8	2234.7	2244.7
40°	2095.0	2069.1	2001.2	2004.2	1990.2
42.5°	1880.4	1861.5	1731.7	1708.7	1669.8
45°	1602.9	1603.9	1450.2	1437.3	1375.4
47.5°	1280.6	1337.4	1203.7	1188.7	1096.9
50°	980.1	1082.9	1000.1	976.1	854.4
52.5°	735.6	886.3	860.4	808.5	640.8
55°	576.9	729.6	748.6	674.7	500.0
57.5°	434.2	600.9	631.8	570.9	386.3
60°	322.4	506.0	515.0	491.1	298.4
62.5°	239.5	430.2	418.2	421.2	221.6
65°	175.7	366.3	332.4	365.3	170.7
67.5°	143.7	317.4	258.5	316.4	138.7
70°	125.8	281.5	192.6	278.5	125.8
72.5°	121.8	258.5	152.7	247.5	122.8
75°	122.8	230.6	115.8	215.6	123.8
77.5°	112.8	189.6	87.8	183.6	117.8
80°	100.8	143.7	66.9	145.7	105.8
82.5°	85.8	104.8	53.9	107.8	88.8
85°	58.9	76.9	49.9	76.9	61.9
87.5°	27.9	45.9	30.9	43.9	31.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)