

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: P294153

Luminaire Tested: **24GR-LD5-72-A19/156-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294153
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-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6021.0 lumens
Efficiency: N/A
Efficacy: 114.4 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

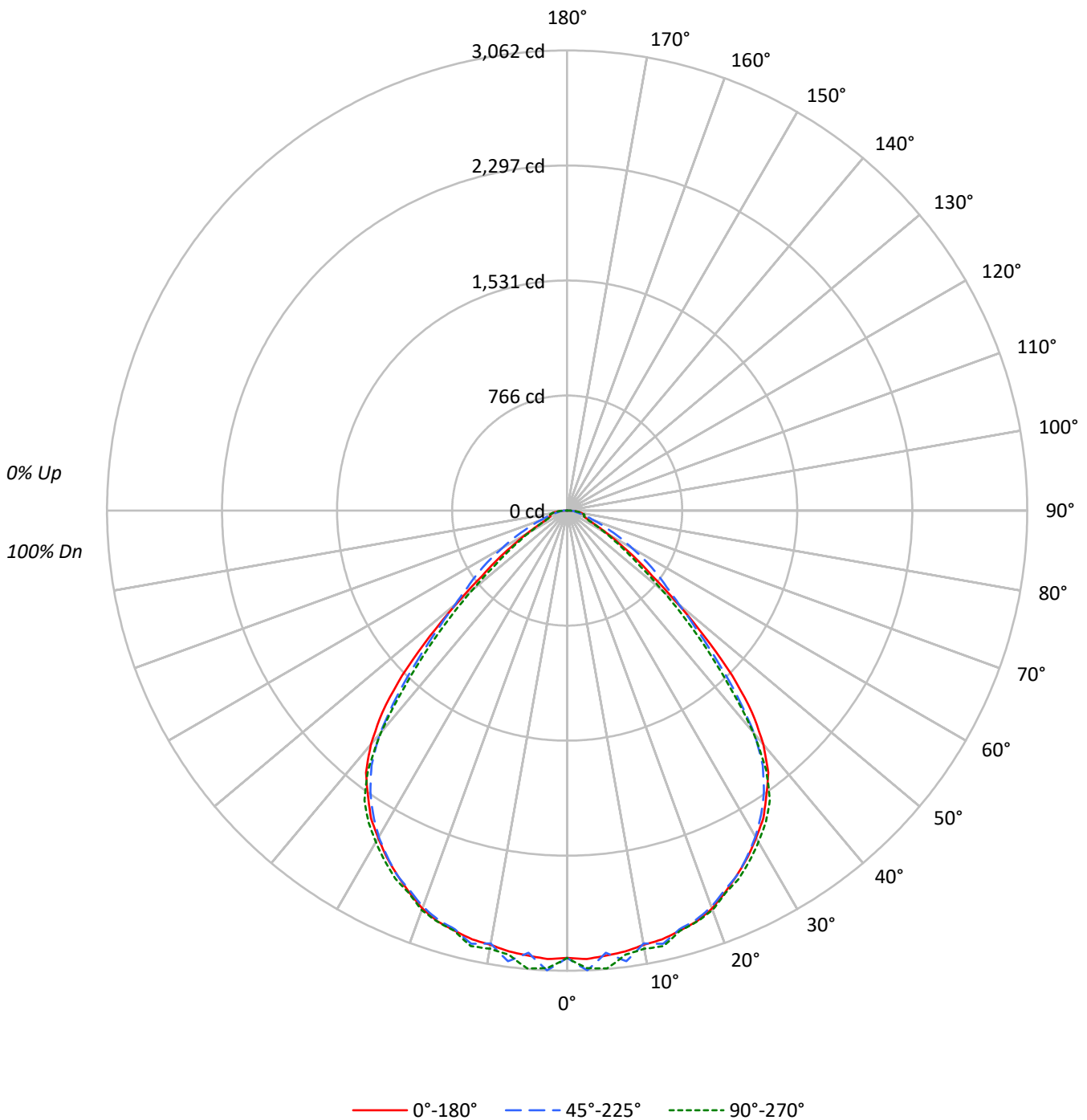
Input Watts (W): 52.638
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4006	4006	4006
5°	4015	3988	4130
10°	4008	3996	4045
15°	4031	4018	4034
20°	4034	4018	4051
25°	3972	3975	4014
30°	3906	3894	3957
35°	3796	3750	3863
40°	3565	3405	3387
45°	2955	2673	2535
50°	1988	2028	1733
55°	1311	1701	1136
60°	840	1343	778
65°	542	1025	526
70°	479	734	479
75°	618	583	623
80°	757	502	794
85°	880	746	926



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	285.1	4.7
10°-20°	818.5	13.6
20°-30°	1232.3	20.5
30°-40°	1428.3	23.7
40°-50°	1115.7	18.5
50°-60°	595.7	9.9
60°-70°	306.3	5.1
70°-80°	173.3	2.9
80°-90°	65.8	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°	2335.8	38.8
0°-40°	3764.1	62.5
0°-60°	5475.5	90.9
0°-90°	6021.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6021.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2977	2977	2977	2977	2977	
5°	2972	3056	2953	3034	3058	283
15°	2894	2912	2884	2903	2896	817
25°	2676	2667	2678	2674	2704	1233
35°	2311	2300	2283	2328	2352	1441
45°	1553	1554	1405	1392	1332	1170
55°	559	707	725	654	484	516
65°	170	355	322	354	165	187
75°	119	223	112	209	120	121
85°	57	74	48	74	60	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2977.2	2977.2	2977.2	2977.2	2977.2
2.5°	2986.9	3041.0	3062.3	3036.2	3047.8
5°	2972.4	3055.5	2953.0	3034.3	3057.5
7.5°	2958.8	2950.1	3024.6	2947.2	2980.1
10°	2933.7	2939.5	2925.0	2980.1	2960.8
12.5°	2922.1	2955.9	2953.0	2925.0	2967.5
15°	2894.1	2912.4	2884.4	2902.8	2896.0
17.5°	2866.0	2857.3	2854.4	2862.1	2868.9
20°	2817.7	2788.7	2806.1	2808.0	2829.3
22.5°	2748.0	2730.6	2734.5	2751.9	2753.8
25°	2675.5	2666.8	2677.5	2673.6	2703.6
27.5°	2600.1	2588.5	2595.3	2609.8	2628.1
30°	2514.0	2511.1	2506.3	2518.9	2546.9
32.5°	2429.0	2405.7	2401.9	2428.0	2459.9
35°	2311.0	2300.4	2282.9	2328.4	2351.6
37.5°	2198.8	2165.9	2137.9	2165.0	2174.7
40°	2029.6	2004.5	1938.7	1941.6	1928.1
42.5°	1821.7	1803.3	1677.6	1655.4	1617.7
45°	1552.9	1553.9	1405.0	1392.4	1332.4
47.5°	1240.6	1295.7	1166.1	1151.6	1062.7
50°	949.5	1049.1	968.9	945.7	827.7
52.5°	712.6	858.6	833.5	783.2	620.8
55°	558.9	706.8	725.2	653.7	484.4
57.5°	420.6	582.1	612.1	553.1	374.2
60°	312.3	490.2	498.9	475.7	289.1
62.5°	232.1	416.8	405.1	408.0	214.7
65°	170.2	354.9	322.0	353.9	165.3
67.5°	139.2	307.5	250.4	306.5	134.4
70°	121.8	272.7	186.6	269.8	121.8
72.5°	118.0	250.4	147.9	239.8	118.9
75°	118.9	223.4	112.2	208.9	119.9
77.5°	109.3	183.7	85.1	177.9	114.1
80°	97.7	139.2	64.8	141.2	102.5
82.5°	83.2	101.5	52.2	104.4	86.1
85°	57.0	74.5	48.3	74.5	60.0
87.5°	27.1	44.5	30.0	42.5	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)