

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: P294140

Luminaire Tested: **24GR-LD5-56-A19/156-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294140
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-LD5-56-A19/156-UNV-L92765-W2A1-U-5700K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 90 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5170.0 lumens
Efficiency: N/A
Efficacy: 128.7 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

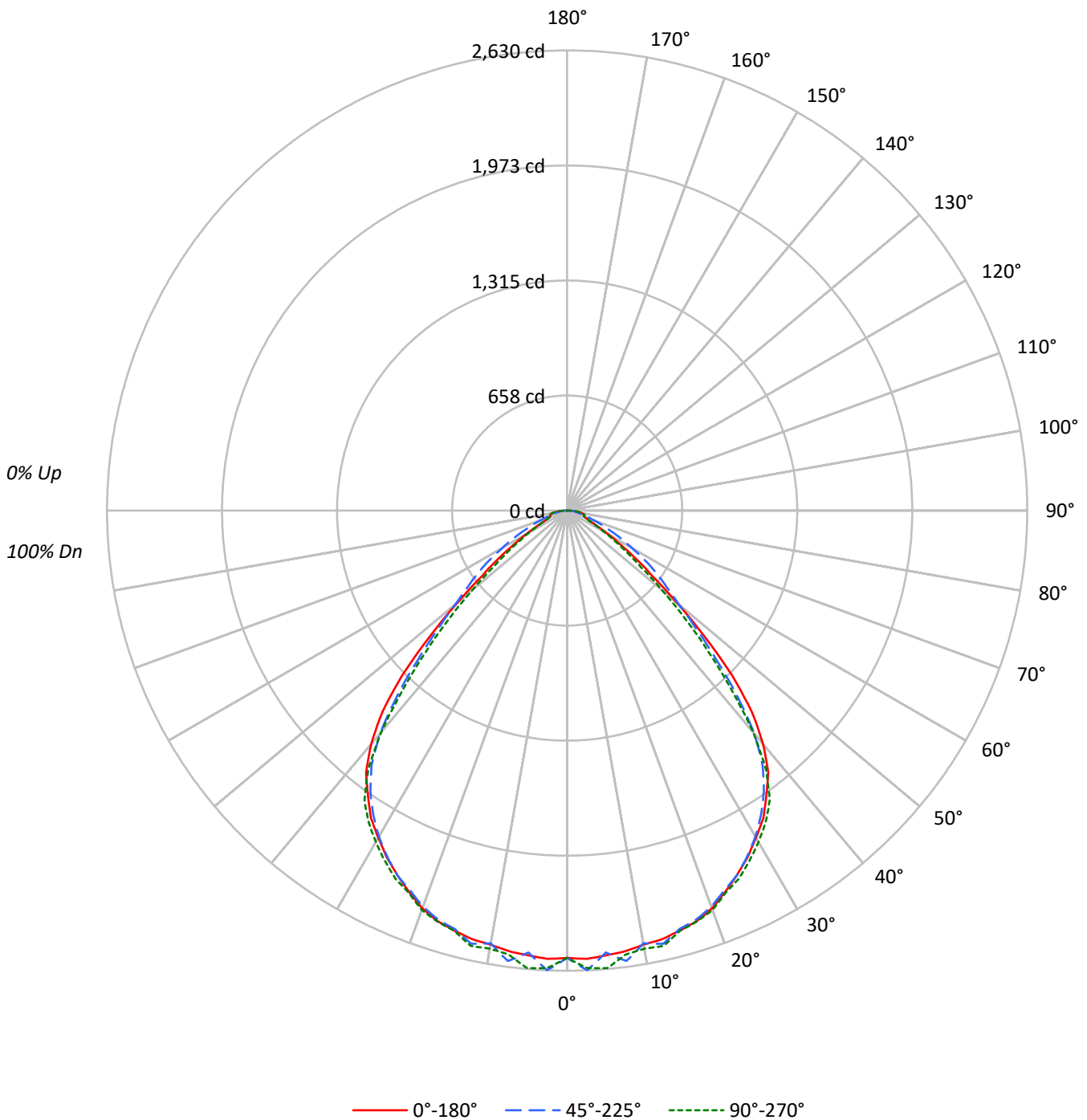
Input Watts (W): 40.176
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3440	3440	3440
5°	3447	3425	3546
10°	3442	3431	3473
15°	3461	3450	3464
20°	3464	3450	3479
25°	3411	3413	3446
30°	3354	3344	3398
35°	3259	3220	3317
40°	3061	2924	2908
45°	2537	2296	2177
50°	1707	1741	1488
55°	1126	1461	976
60°	722	1153	668
65°	465	880	452
70°	411	630	411
75°	531	501	535
80°	650	431	682
85°	756	641	795



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	244.8	4.7
10°-20°	702.8	13.6
20°-30°	1058.1	20.5
30°-40°	1226.4	23.7
40°-50°	958.0	18.5
50°-60°	511.5	9.9
60°-70°	263.0	5.1
70°-80°	148.8	2.9
80°-90°	56.5	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°	2005.7	38.8
0°-40°	3232.1	62.5
0°-60°	4701.6	90.9
0°-90°	5170.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5170.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2556	2556	2556	2556	2556	
5°	2552	2624	2536	2605	2625	243
15°	2485	2501	2477	2492	2487	702
25°	2297	2290	2299	2296	2321	1059
35°	1984	1975	1960	1999	2019	1237
45°	1333	1334	1206	1196	1144	1005
55°	480	607	623	561	416	443
65°	146	305	276	304	142	161
75°	102	192	96	179	103	103
85°	49	64	42	64	52	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2556.4	2556.4	2556.4	2556.4	2556.4
2.5°	2564.7	2611.2	2629.5	2607.1	2617.0
5°	2552.3	2623.7	2535.7	2605.4	2625.3
7.5°	2540.6	2533.2	2597.1	2530.7	2558.9
10°	2519.1	2524.0	2511.6	2558.9	2542.3
12.5°	2509.1	2538.2	2535.7	2511.6	2548.1
15°	2485.0	2500.8	2476.7	2492.5	2486.7
17.5°	2460.9	2453.5	2451.0	2457.6	2463.4
20°	2419.4	2394.5	2409.5	2411.1	2429.4
22.5°	2359.6	2344.7	2348.0	2363.0	2364.6
25°	2297.4	2289.9	2299.0	2295.7	2321.4
27.5°	2232.6	2222.6	2228.5	2240.9	2256.7
30°	2158.7	2156.2	2152.1	2162.9	2186.9
32.5°	2085.7	2065.7	2062.4	2084.8	2112.2
35°	1984.4	1975.2	1960.3	1999.3	2019.2
37.5°	1888.0	1859.8	1835.7	1859.0	1867.3
40°	1742.7	1721.2	1664.7	1667.2	1655.6
42.5°	1564.2	1548.5	1440.5	1421.4	1389.1
45°	1333.4	1334.3	1206.4	1195.6	1144.1
47.5°	1065.2	1112.6	1001.3	988.9	912.5
50°	815.3	900.8	831.9	812.0	710.7
52.5°	611.9	737.3	715.7	672.5	533.0
55°	479.9	606.9	622.7	561.3	416.0
57.5°	361.2	499.8	525.6	474.9	321.3
60°	268.2	420.9	428.4	408.5	248.3
62.5°	199.3	357.8	347.9	350.4	184.3
65°	146.1	304.7	276.5	303.9	142.0
67.5°	119.6	264.0	215.0	263.2	115.4
70°	104.6	234.1	160.2	231.6	104.6
72.5°	101.3	215.0	127.0	205.9	102.1
75°	102.1	191.8	96.3	179.3	103.0
77.5°	93.8	157.8	73.1	152.8	98.0
80°	83.9	119.6	55.6	121.2	88.0
82.5°	71.4	87.2	44.8	89.7	73.9
85°	49.0	63.9	41.5	63.9	51.5
87.5°	23.2	38.2	25.7	36.5	26.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)