

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: P293958

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293958
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-LD5-85-A19/156-UNV-L83050-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A19/156 LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8067.0 lumens
Efficiency: N/A
Efficacy: 129.3 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

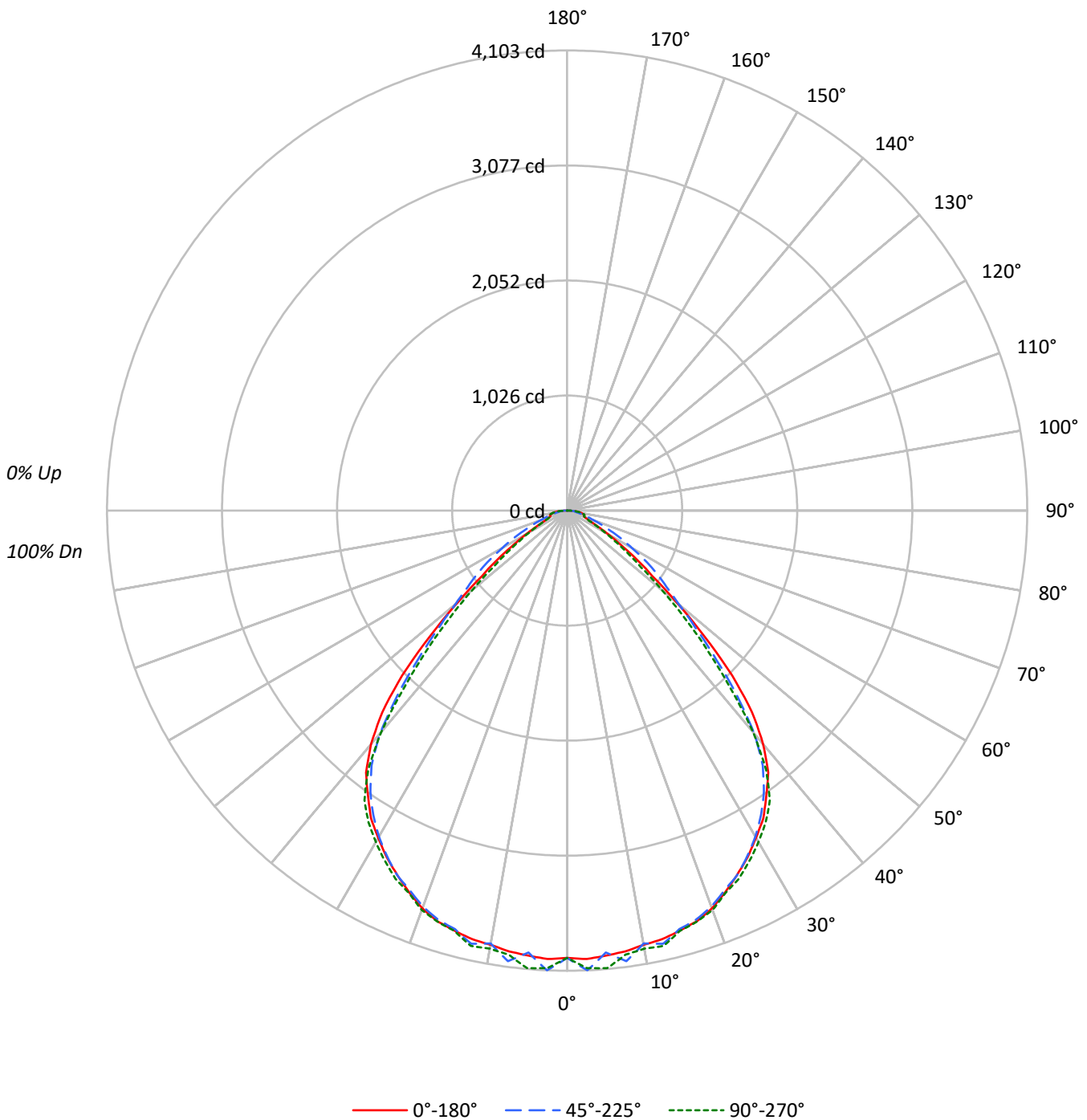
Input Watts (W): 62.403
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5367	5367	5367
5°	5379	5344	5533
10°	5370	5354	5420
15°	5401	5383	5405
20°	5405	5383	5428
25°	5322	5326	5378
30°	5233	5217	5302
35°	5086	5024	5175
40°	4776	4562	4537
45°	3959	3582	3397
50°	2663	2717	2321
55°	1757	2279	1523
60°	1126	1799	1042
65°	726	1373	705
70°	642	983	642
75°	828	781	835
80°	1013	673	1064
85°	1179	1000	1240



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	381.9	4.7
10°-20°	1096.6	13.6
20°-30°	1651.0	20.5
30°-40°	1913.6	23.7
40°-50°	1494.8	18.5
50°-60°	798.2	9.9
60°-70°	410.5	5.1
70°-80°	232.2	2.9
80°-90°	88.2	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°	3129.5	38.8
0°-40°	5043.1	62.5
0°-60°	7336.2	90.9
0°-90°	8067.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8067.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3989	3989	3989	3989	3989	
5°	3982	4094	3956	4065	4096	379
15°	3878	3902	3864	3889	3880	1095
25°	3585	3573	3587	3582	3622	1652
35°	3096	3082	3059	3120	3151	1930
45°	2081	2082	1882	1866	1785	1568
55°	749	947	972	876	649	691
65°	228	476	431	474	222	251
75°	159	299	150	280	161	161
85°	76	100	65	100	80	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3988.9	3988.9	3988.9	3988.9	3988.9
2.5°	4001.9	4074.4	4102.9	4067.9	4083.5
5°	3982.4	4093.8	3956.5	4065.3	4096.4
7.5°	3964.3	3952.6	4052.4	3948.7	3992.8
10°	3930.6	3938.4	3918.9	3992.8	3966.9
12.5°	3915.1	3960.4	3956.5	3918.9	3975.9
15°	3877.5	3902.1	3864.5	3889.1	3880.1
17.5°	3839.9	3828.3	3824.4	3834.7	3843.8
20°	3775.1	3736.3	3759.6	3762.2	3790.7
22.5°	3681.9	3658.5	3663.7	3687.0	3689.6
25°	3584.7	3573.0	3587.3	3582.1	3622.3
27.5°	3483.6	3468.1	3477.2	3496.6	3521.2
30°	3368.3	3364.5	3358.0	3374.8	3412.4
32.5°	3254.3	3223.2	3218.1	3253.0	3295.8
35°	3096.3	3082.0	3058.7	3119.6	3150.7
37.5°	2946.0	2902.0	2864.4	2900.7	2913.6
40°	2719.3	2685.6	2597.5	2601.4	2583.3
42.5°	2440.8	2416.1	2247.7	2217.9	2167.4
45°	2080.6	2081.9	1882.4	1865.5	1785.2
47.5°	1662.1	1736.0	1562.4	1543.0	1423.8
50°	1272.2	1405.6	1298.1	1267.0	1109.0
52.5°	954.8	1150.4	1116.7	1049.4	831.7
55°	748.8	947.0	971.6	875.8	649.1
57.5°	563.6	779.9	820.1	741.0	501.4
60°	418.5	656.8	668.5	637.4	387.4
62.5°	310.9	558.4	542.8	546.7	287.6
65°	228.0	475.5	431.4	474.2	221.5
67.5°	186.6	412.0	335.5	410.7	180.1
70°	163.2	365.3	250.0	361.4	163.2
72.5°	158.1	335.5	198.2	321.3	159.3
75°	159.3	299.3	150.3	279.8	160.6
77.5°	146.4	246.1	114.0	238.4	152.9
80°	130.8	186.6	86.8	189.1	137.3
82.5°	111.4	136.0	70.0	139.9	115.3
85°	76.4	99.8	64.8	99.8	80.3
87.5°	36.3	59.6	40.2	57.0	41.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)