

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: P294085

Luminaire Tested: **24GR-LD5-85-A19/156-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P294085
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-L93050-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: 7406.0 lumens
Efficiency: N/A
Efficacy: 115.7 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

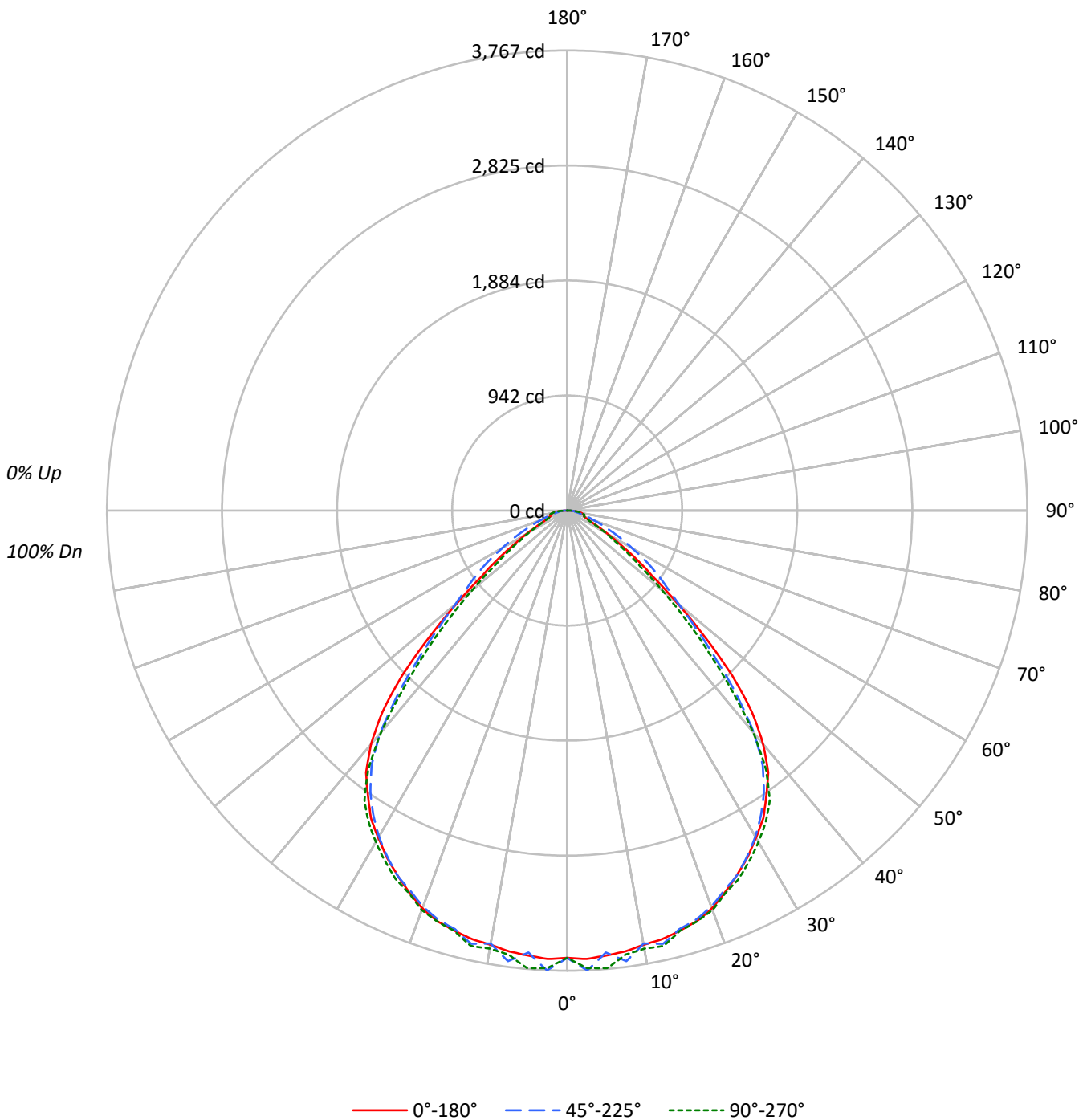
Input Watts (W): 64.025478
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4927	4927	4927
5°	4938	4906	5079
10°	4930	4915	4976
15°	4959	4942	4962
20°	4962	4942	4983
25°	4886	4889	4937
30°	4804	4790	4867
35°	4669	4612	4751
40°	4385	4189	4166
45°	3635	3288	3119
50°	2445	2494	2131
55°	1613	2092	1398
60°	1034	1651	957
65°	666	1261	648
70°	590	903	590
75°	761	717	767
80°	931	618	977
85°	1084	919	1138



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.6	4.7
10°-20°	1006.8	13.6
20°-30°	1515.7	20.5
30°-40°	1756.8	23.7
40°-50°	1372.3	18.5
50°-60°	732.8	9.9
60°-70°	376.8	5.1
70°-80°	213.2	2.9
80°-90°	81.0	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
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0°-30°	2873.1	38.8
0°-40°	4629.9	62.5
0°-60°	6735.1	90.9
0°-90°	7406.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7406.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3662	3662	3662	3662	3662	
5°	3656	3758	3632	3732	3761	348
15°	3560	3582	3548	3570	3562	1005
25°	3291	3280	3293	3289	3326	1516
35°	2843	2830	2808	2864	2892	1772
45°	1910	1911	1728	1713	1639	1439
55°	688	869	892	804	596	634
65°	209	436	396	435	203	230
75°	146	275	138	257	148	148
85°	70	92	60	92	74	72
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3662.1	3662.1	3662.1	3662.1	3662.1
2.5°	3673.9	3740.6	3766.7	3734.6	3748.9
5°	3656.1	3758.4	3632.3	3732.2	3760.8
7.5°	3639.5	3628.8	3720.3	3625.2	3665.6
10°	3608.5	3615.7	3597.8	3665.6	3641.8
12.5°	3594.3	3635.9	3632.3	3597.8	3650.2
15°	3559.8	3582.4	3547.9	3570.5	3562.1
17.5°	3525.3	3514.6	3511.0	3520.5	3528.8
20°	3465.8	3430.1	3451.5	3453.9	3480.1
22.5°	3380.2	3358.8	3363.5	3384.9	3387.3
25°	3291.0	3280.3	3293.4	3288.6	3325.5
27.5°	3198.2	3183.9	3192.3	3210.1	3232.7
30°	3092.3	3088.8	3082.8	3098.3	3132.8
32.5°	2987.7	2959.1	2954.4	2986.5	3025.7
35°	2842.6	2829.5	2808.1	2864.0	2892.5
37.5°	2704.6	2664.2	2629.7	2663.0	2674.9
40°	2496.5	2465.6	2384.7	2388.2	2371.6
42.5°	2240.8	2218.2	2063.5	2036.2	1989.8
45°	1910.1	1911.3	1728.1	1712.7	1638.9
47.5°	1526.0	1593.7	1434.4	1416.5	1307.1
50°	1168.0	1290.5	1191.7	1163.2	1018.1
52.5°	876.6	1056.2	1025.2	963.4	763.6
55°	687.5	869.4	892.0	804.0	595.9
57.5°	517.4	716.0	752.9	680.3	460.3
60°	384.2	603.0	613.7	585.2	355.6
62.5°	285.4	512.6	498.3	501.9	264.0
65°	209.3	436.5	396.1	435.3	203.4
67.5°	171.3	378.2	308.0	377.0	165.3
70°	149.9	335.4	229.5	331.8	149.9
72.5°	145.1	308.0	182.0	295.0	146.3
75°	146.3	274.7	138.0	256.9	147.5
77.5°	134.4	226.0	104.7	218.8	140.3
80°	120.1	171.3	79.7	173.6	126.1
82.5°	102.3	124.9	64.2	128.5	105.9
85°	70.2	91.6	59.5	91.6	73.7
87.5°	33.3	54.7	36.9	52.3	38.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)