

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: P293454

Luminaire Tested: **24GR-LD5-85-A-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P293454
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-A-UNV-L83050-W2A1-U-3500K
Description: GRLED 2x4 TUNABLE WHITE TROFFER
WITH A LENS
Light Source: (336) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8386.0 lumens
Efficiency: N/A
Efficacy: 134.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

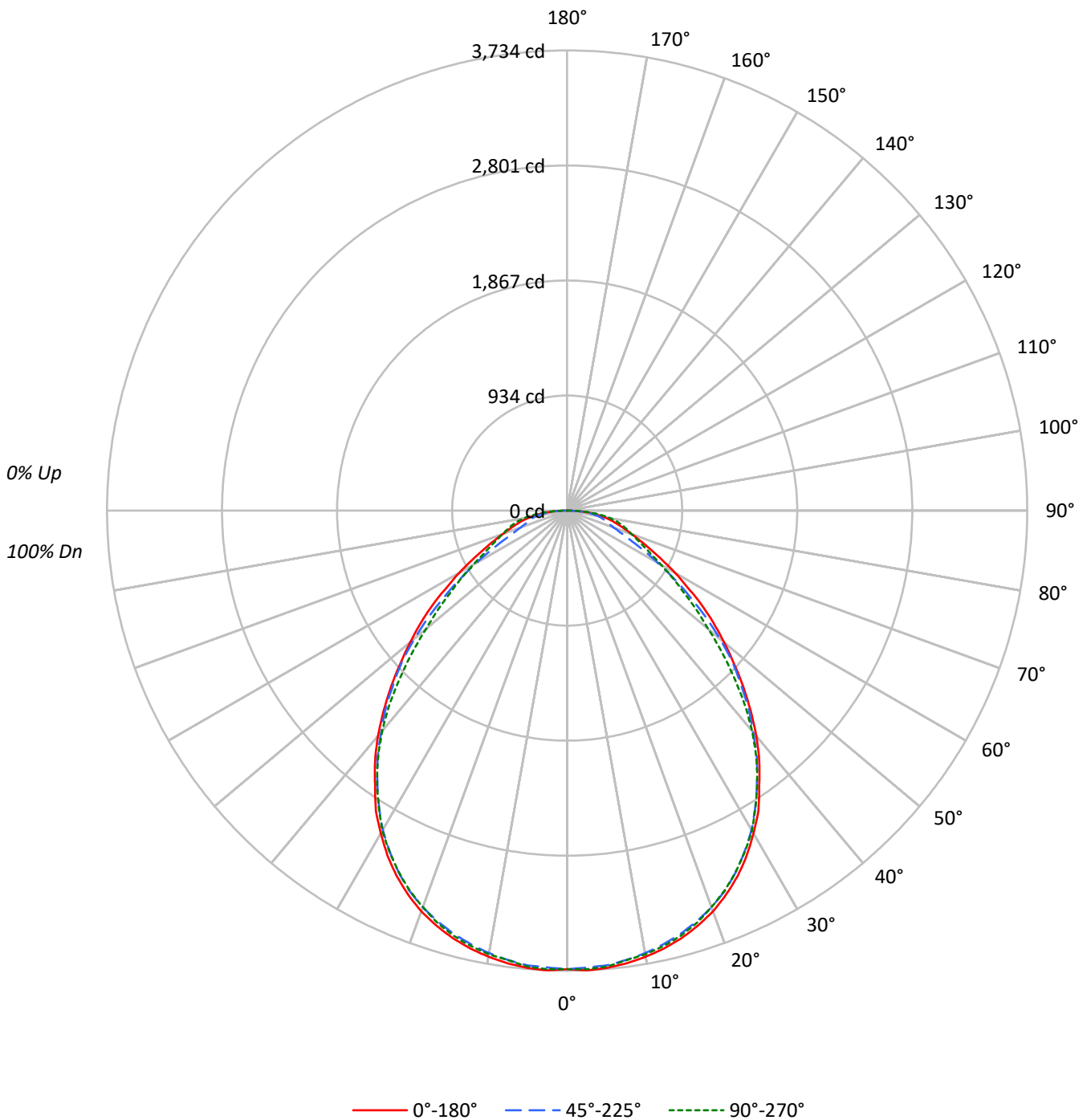
Input Watts (W): 62.403
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P293454

CATALOG NUMBER: 24GR-LD5-85-A-UNV-L83050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P293454

CATALOG NUMBER: 24GR-LD5-85-A-UNV-L83050-W2A1-U-3500K

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	50	30	10	0																			
RCR																																														
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																												
1	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86																												
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																												
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63																												
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55																												
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49																												
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43																												
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39																												
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35																												
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32																												
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5006	5006	5006
5°	5031	5003	5015
10°	5021	4981	4995
15°	5002	4952	4974
20°	4955	4905	4903
25°	4858	4806	4802
30°	4698	4650	4660
35°	4462	4411	4418
40°	4196	4123	4098
45°	3846	3794	3643
50°	3477	3382	3127
55°	3121	2841	2696
60°	2733	2287	2371
65°	2384	1798	2182
70°	2181	1570	2181
75°	2182	1670	2404
80°	2369	1967	2741
85°	2600	2220	2939



TEST NUMBER: P293454

CATALOG NUMBER: 24GR-LD5-85-A-UNV-L83050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.3	4.2
10°-20°	1005.5	12.0
20°-30°	1491.0	17.8
30°-40°	1682.0	20.1
40°-50°	1523.4	18.2
50°-60°	1099.0	13.1
60°-70°	656.2	7.8
70°-80°	405.6	4.8
80°-90°	170.9	2.0
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°	2848.9	34.0
0°-40°	4530.9	54.0
0°-60°	7153.3	85.3
0°-90°	8386.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8386.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3721	3721	3721	3721	3721	
5°	3725	3720	3704	3700	3713	354
15°	3591	3569	3555	3556	3570	1012
25°	3272	3254	3238	3226	3235	1503
35°	2717	2713	2686	2687	2690	1700
45°	2021	2008	1994	1945	1915	1557
55°	1330	1289	1211	1152	1149	1188
65°	749	659	565	641	685	753
75°	420	364	321	400	462	448
85°	168	148	144	188	190	176
90°	0	0	0	0	0	



TEST NUMBER: P293454

CATALOG NUMBER: 24GR-LD5-85-A-UNV-L83050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3720.8	3720.8	3720.8	3720.8	3720.8
2.5°	3733.7	3723.4	3710.4	3718.2	3724.7
5°	3724.7	3719.5	3703.9	3700.0	3713.0
7.5°	3705.2	3692.3	3678.0	3684.5	3679.3
10°	3675.4	3663.8	3645.6	3646.9	3656.0
12.5°	3639.2	3624.9	3605.5	3610.7	3618.4
15°	3591.2	3569.2	3554.9	3556.2	3570.5
17.5°	3530.3	3513.5	3495.3	3499.2	3505.7
20°	3460.4	3451.3	3425.4	3417.6	3424.1
22.5°	3372.3	3355.4	3341.2	3337.3	3338.6
25°	3272.5	3254.4	3237.5	3225.9	3234.9
27.5°	3155.9	3140.4	3118.3	3114.5	3122.2
30°	3023.8	3012.1	2992.7	2987.5	2999.2
32.5°	2889.0	2869.6	2842.4	2842.4	2845.0
35°	2716.7	2712.8	2685.6	2686.9	2689.5
37.5°	2561.3	2543.1	2527.6	2512.0	2519.8
40°	2389.0	2368.2	2347.5	2337.1	2333.3
42.5°	2203.7	2188.2	2179.1	2141.5	2132.4
45°	2021.0	2008.1	1993.8	1944.6	1914.8
47.5°	1834.5	1831.9	1820.2	1733.4	1703.6
50°	1660.9	1657.0	1615.5	1523.5	1493.7
52.5°	1496.3	1470.4	1416.0	1325.3	1320.1
55°	1330.5	1289.1	1211.3	1151.7	1149.1
57.5°	1155.6	1106.4	1027.4	995.0	1011.8
60°	1015.7	940.6	849.9	853.8	881.0
62.5°	870.6	786.4	697.0	735.9	768.3
65°	748.8	659.4	564.9	641.3	685.3
67.5°	642.6	559.7	469.0	571.3	614.1
70°	554.5	487.1	399.0	506.6	554.5
72.5°	484.5	422.3	353.7	454.7	510.4
75°	419.8	364.0	321.3	400.3	462.5
77.5°	364.0	309.6	290.2	353.7	414.6
80°	305.7	256.5	253.9	308.3	353.7
82.5°	238.4	204.7	204.7	257.8	285.0
85°	168.4	147.7	143.8	187.9	190.4
87.5°	86.8	82.9	75.1	98.5	98.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)