

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: P475710

Luminaire Tested: **24GR-LD5-90-A-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475710
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-90-A-UNV-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ A LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8433.9 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.28
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

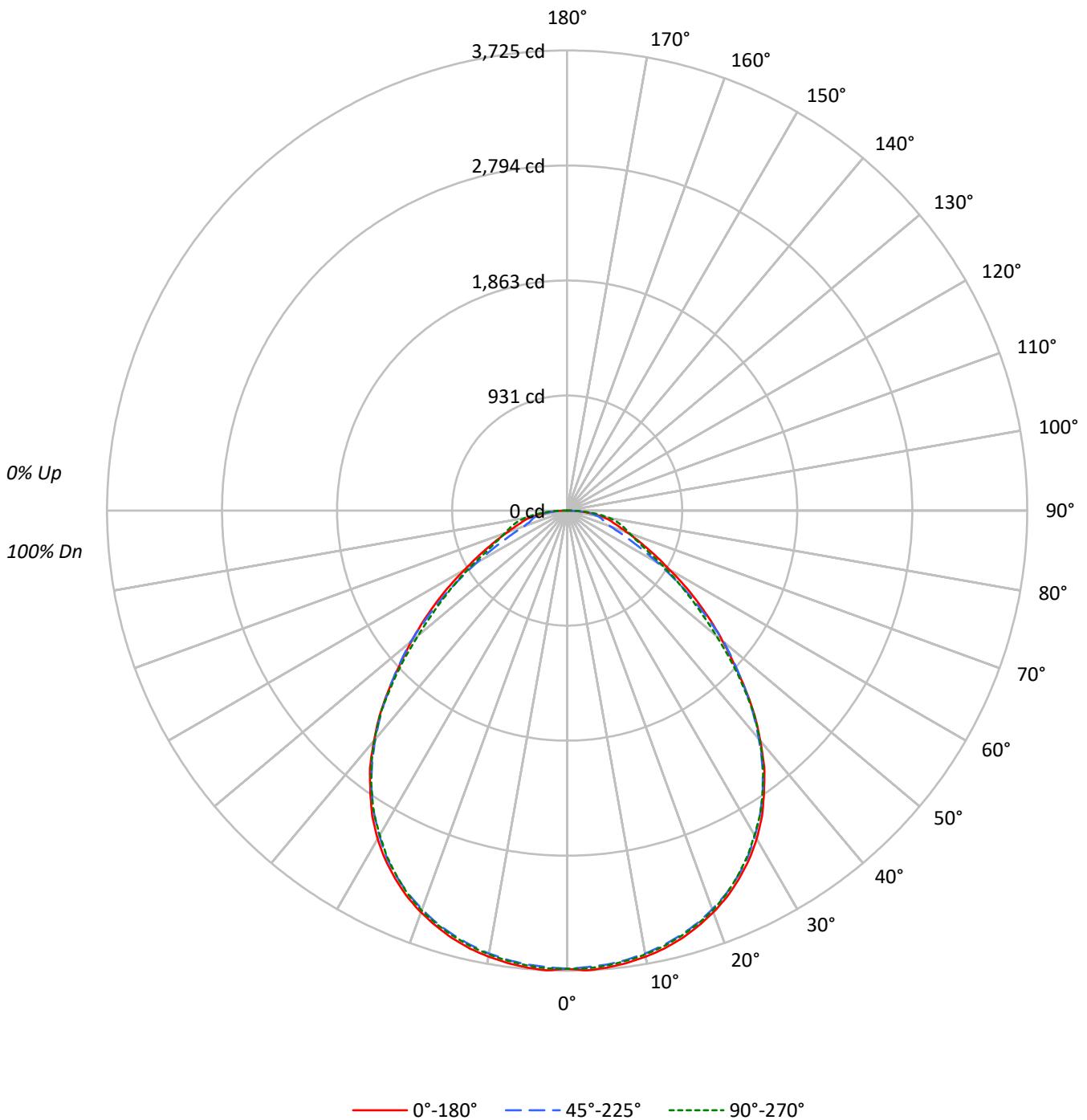
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86				86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74				74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64				64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	58	56				56
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43				43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39				39
8	64	51	43	38	62	50	43	37	49	42	37	48	42	37	47	41	37	35				35
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32				32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29				29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4991	4991	4991
5°	5016	4982	4993
10°	5008	4974	4984
15°	4994	4954	4966
20°	4955	4919	4932
25°	4886	4850	4846
30°	4767	4723	4712
35°	4563	4534	4534
40°	4269	4244	4262
45°	3876	3870	3838
50°	3438	3464	3294
55°	3021	2889	2821
60°	2572	2282	2400
65°	2247	1774	2118
70°	2032	1460	2114
75°	2033	1559	2361
80°	2239	1918	2703
85°	2308	2154	2949



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	351.3	4.2
10°-20°	1005.6	11.9
20°-30°	1504.3	17.8
30°-40°	1721.5	20.4
40°-50°	1559.7	18.5
50°-60°	1104.2	13.1
60°-70°	637.9	7.6
70°-80°	386.7	4.6
80°-90°	162.8	1.9
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°	2861.2	33.9
0°-40°	4582.6	54.3
0°-60°	7246.6	85.9
0°-90°	8433.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8433.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3710	3710	3710	3710	3710	
5°	3714	3700	3689	3688	3697	353
15°	3585	3571	3557	3557	3565	1011
25°	3291	3278	3267	3264	3264	1514
35°	2778	2765	2760	2756	2760	1733
45°	2037	2033	2034	2019	2017	1569
55°	1288	1245	1232	1195	1202	1154
65°	706	633	557	638	665	710
75°	391	350	300	385	454	419
85°	150	134	140	178	191	161
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3709.5	3709.5	3709.5	3709.5	3709.5
2.5°	3725.3	3711.2	3698.7	3700.4	3709.5
5°	3713.7	3700.4	3688.8	3687.9	3697.1
7.5°	3693.7	3682.1	3668.8	3668.8	3676.3
10°	3665.5	3653.9	3640.6	3639.8	3648.1
12.5°	3632.3	3617.3	3603.2	3603.2	3612.4
15°	3585.0	3570.8	3556.7	3556.7	3565.0
17.5°	3526.8	3514.4	3502.7	3503.6	3510.2
20°	3460.4	3447.9	3435.5	3437.1	3444.6
22.5°	3384.0	3369.0	3359.1	3358.2	3363.2
25°	3291.0	3277.7	3266.9	3264.4	3264.4
27.5°	3187.2	3173.1	3165.6	3154.0	3157.3
30°	3068.4	3053.5	3040.2	3033.5	3032.7
32.5°	2934.7	2919.8	2908.2	2907.3	2910.6
35°	2777.8	2765.3	2760.3	2756.2	2760.3
37.5°	2622.5	2599.2	2595.1	2594.3	2605.0
40°	2430.7	2422.4	2416.5	2412.4	2426.5
42.5°	2246.3	2229.7	2231.4	2215.6	2240.5
45°	2037.0	2032.9	2033.7	2018.8	2017.1
47.5°	1829.4	1828.6	1841.1	1799.5	1797.0
50°	1642.6	1634.3	1655.0	1591.1	1573.7
52.5°	1464.0	1440.8	1434.1	1376.0	1376.0
55°	1288.0	1244.8	1231.5	1195.0	1202.5
57.5°	1121.1	1059.6	1032.2	1031.4	1043.8
60°	955.8	886.1	847.9	877.8	891.9
62.5°	824.6	748.2	690.1	746.6	759.8
65°	705.9	632.8	557.2	637.8	665.2
67.5°	603.7	543.1	448.4	553.9	590.4
70°	516.5	462.5	371.2	488.3	537.3
72.5°	447.6	402.8	323.0	436.0	494.9
75°	391.1	350.4	299.8	385.3	454.2
77.5°	346.3	298.1	280.7	337.2	407.7
80°	289.0	245.0	247.5	289.8	348.8
82.5°	222.6	189.3	199.3	240.0	274.0
85°	149.5	134.5	139.5	178.5	191.0
87.5°	73.9	71.4	76.4	104.6	104.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)