

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: P475709

Luminaire Tested: **24GR-LD5-85-A-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475709
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-85-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: 7993.0 lumens
Efficiency: N/A
Efficacy: 135.0 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

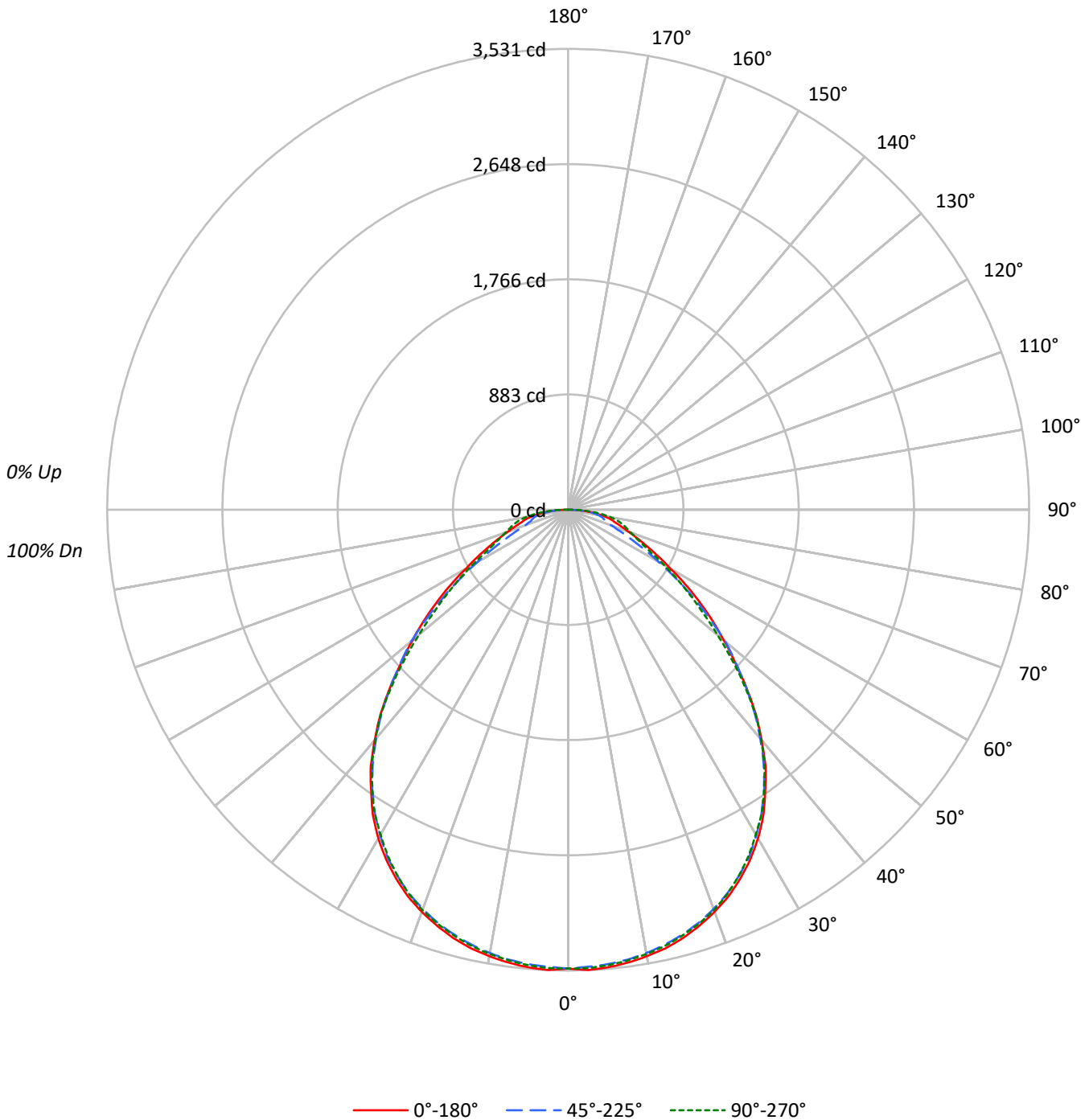
Input Watts (W): 59.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4730	4730	4730
5°	4754	4722	4732
10°	4746	4714	4724
15°	4733	4695	4706
20°	4696	4662	4674
25°	4630	4596	4593
30°	4518	4476	4465
35°	4324	4297	4297
40°	4046	4023	4039
45°	3673	3667	3638
50°	3258	3283	3122
55°	2864	2738	2673
60°	2438	2162	2275
65°	2130	1681	2007
70°	1926	1384	2003
75°	1927	1477	2238
80°	2122	1817	2561
85°	2188	2041	2794



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	332.9	4.2
10°-20°	953.0	11.9
20°-30°	1425.7	17.8
30°-40°	1631.5	20.4
40°-50°	1478.2	18.5
50°-60°	1046.5	13.1
60°-70°	604.5	7.6
70°-80°	366.5	4.6
80°-90°	154.3	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°	2711.6	33.9
0°-40°	4343.1	54.3
0°-60°	6867.7	85.9
0°-90°	7993.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7993.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3516	3516	3516	3516	3516	
5°	3520	3507	3496	3495	3504	334
15°	3398	3384	3371	3371	3379	958
25°	3119	3106	3096	3094	3094	1435
35°	2633	2621	2616	2612	2616	1642
45°	1930	1927	1927	1913	1912	1487
55°	1221	1180	1167	1132	1140	1094
65°	669	600	528	604	630	672
75°	371	332	284	365	430	397
85°	142	128	132	169	181	152
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3515.6	3515.6	3515.6	3515.6	3515.6
2.5°	3530.6	3517.2	3505.4	3506.9	3515.6
5°	3519.5	3506.9	3495.9	3495.1	3503.8
7.5°	3500.6	3489.6	3477.0	3477.0	3484.1
10°	3473.9	3462.9	3450.3	3449.5	3457.4
12.5°	3442.4	3428.2	3414.9	3414.9	3423.5
15°	3397.5	3384.2	3370.8	3370.8	3378.7
17.5°	3342.5	3330.7	3319.6	3320.4	3326.7
20°	3279.5	3267.7	3255.9	3257.5	3264.5
22.5°	3207.1	3192.9	3183.5	3182.7	3187.4
25°	3118.9	3106.4	3096.1	3093.8	3093.8
27.5°	3020.6	3007.2	3000.1	2989.1	2992.2
30°	2908.0	2893.9	2881.3	2875.0	2874.2
32.5°	2781.3	2767.1	2756.1	2755.3	2758.5
35°	2632.6	2620.8	2616.0	2612.1	2616.0
37.5°	2485.4	2463.4	2459.4	2458.6	2468.9
40°	2303.6	2295.7	2290.2	2286.3	2299.7
42.5°	2128.9	2113.1	2114.7	2099.8	2123.4
45°	1930.5	1926.6	1927.4	1913.2	1911.7
47.5°	1733.8	1733.0	1744.8	1705.5	1703.1
50°	1556.7	1548.8	1568.5	1507.9	1491.4
52.5°	1387.5	1365.5	1359.2	1304.1	1304.1
55°	1220.7	1179.7	1167.1	1132.5	1139.6
57.5°	1062.5	1004.2	978.3	977.5	989.3
60°	905.9	839.7	803.5	831.9	845.3
62.5°	781.5	709.1	654.0	707.5	720.1
65°	669.0	599.7	528.1	604.4	630.4
67.5°	572.2	514.7	425.0	524.9	559.6
70°	489.5	438.4	351.8	462.8	509.2
72.5°	424.2	381.7	306.1	413.2	469.1
75°	370.7	332.1	284.1	365.2	430.5
77.5°	328.2	282.5	266.0	319.5	386.4
80°	273.9	232.2	234.5	274.7	330.5
82.5°	210.9	179.4	188.9	227.4	259.7
85°	141.7	127.5	132.2	169.2	181.0
87.5°	70.0	67.7	72.4	99.2	99.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)