

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: P475531

Luminaire Tested: **24GR-LD5-100-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475531
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-100-F1-UNV-L830-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9692.1 lumens
Efficiency: N/A
Efficacy: 144.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.24 / 1.34
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

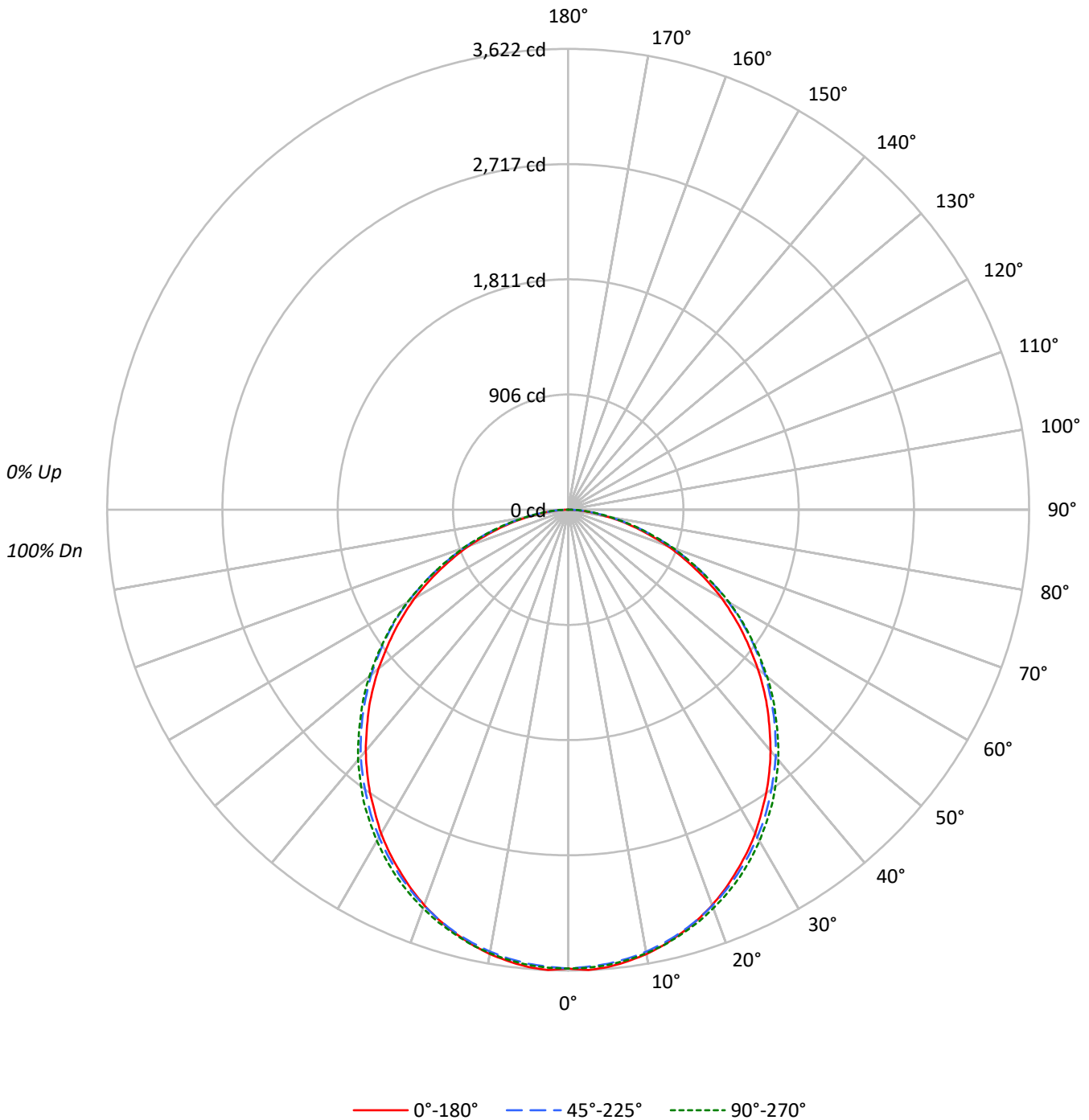
Input Watts (W): 67.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	109	104	100	96	106	102	98	95	98	95	92		94	91	89		90	88	86	84
2	99	91	84	79	97	89	83	78	86	81	76		82	78	74		79	76	73	70
3	91	80	72	66	88	79	71	65	76	69	64		73	67	63		70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47		58	52	47		57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42		53	46	41		51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37		48	42	37		47	41	36	34
8	61	48	39	33	59	47	39	33	46	38	33		44	38	33		43	37	33	31
9	57	44	35	30	56	43	35	30	42	35	30		41	34	30		40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4852	4852	4852
5°	4873	4839	4851
10°	4845	4819	4836
15°	4797	4788	4809
20°	4736	4742	4774
25°	4653	4684	4732
30°	4568	4618	4669
35°	4459	4534	4603
40°	4346	4454	4511
45°	4216	4344	4390
50°	4073	4230	4268
55°	3913	4087	4109
60°	3752	3919	3934
65°	3516	3683	3674
70°	3257	3406	3440
75°	2886	3054	3073
80°	2401	2578	2637
85°	1820	1996	2245



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	340.8	3.5
10°-20°	970.4	10.0
20°-30°	1453.9	15.0
30°-40°	1725.0	17.8
40°-50°	1751.9	18.1
50°-60°	1542.8	15.9
60°-70°	1133.7	11.7
70°-80°	616.6	6.4
80°-90°	157.1	1.6
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°	2765.1	28.5
0°-40°	4490.2	46.3
0°-60°	7784.8	80.3
0°-90°	9692.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9692.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3606	3606	3606	3606	3606	
5°	3608	3593	3582	3582	3592	342
15°	3444	3437	3437	3442	3452	971
25°	3134	3138	3155	3173	3187	1444
35°	2715	2730	2760	2788	2802	1697
45°	2216	2234	2283	2310	2307	1708
55°	1668	1692	1742	1758	1752	1491
65°	1104	1123	1157	1165	1154	1095
75°	555	566	587	589	591	590
85°	118	121	129	141	145	143
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3606.3	3606.3	3606.3	3606.3	3606.3
2.5°	3621.5	3607.2	3594.9	3594.9	3603.4
5°	3608.2	3593.0	3582.5	3582.5	3592.0
7.5°	3580.6	3568.3	3559.7	3559.7	3570.2
10°	3546.4	3534.0	3527.4	3528.3	3539.7
12.5°	3500.8	3489.4	3486.5	3488.4	3502.7
15°	3443.7	3437.1	3437.1	3441.8	3452.3
17.5°	3380.1	3373.4	3378.2	3384.8	3398.1
20°	3307.8	3303.1	3311.6	3322.1	3334.4
22.5°	3225.1	3223.2	3237.5	3251.7	3264.1
25°	3133.9	3137.7	3154.8	3172.8	3187.1
27.5°	3039.8	3043.6	3067.3	3086.3	3100.6
30°	2940.0	2941.9	2972.3	2995.1	3005.5
32.5°	2824.0	2839.2	2871.5	2893.4	2902.9
35°	2714.7	2729.9	2760.3	2787.9	2802.1
37.5°	2595.9	2609.2	2649.1	2678.6	2683.3
40°	2474.2	2486.6	2536.0	2560.7	2568.3
42.5°	2341.1	2364.9	2409.6	2434.3	2439.0
45°	2215.7	2233.7	2283.2	2309.8	2306.9
47.5°	2081.6	2101.6	2150.1	2175.7	2180.5
50°	1945.7	1968.5	2020.8	2037.9	2038.9
52.5°	1803.1	1832.6	1880.1	1902.9	1895.3
55°	1668.2	1691.9	1742.3	1758.5	1751.8
57.5°	1529.4	1556.0	1602.6	1611.1	1612.1
60°	1394.4	1416.3	1456.2	1464.8	1461.9
62.5°	1246.1	1268.0	1304.1	1312.7	1306.0
65°	1104.5	1122.6	1156.8	1165.3	1153.9
67.5°	963.8	981.9	1008.5	1021.8	1009.5
70°	827.9	842.2	865.9	873.5	874.5
72.5°	683.4	709.1	726.2	725.2	722.4
75°	555.1	566.5	587.4	589.3	591.2
77.5°	432.5	435.3	457.2	462.9	459.1
80°	309.9	320.3	332.7	339.3	340.3
82.5°	204.4	212.0	222.4	233.8	233.8
85°	117.9	120.7	129.3	140.7	145.4
87.5°	47.5	52.3	60.8	69.4	70.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)