

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: P475533

Luminaire Tested: **24GR-LD5-130-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475533
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-130-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: 12535.9 lumens
Efficiency: N/A
Efficacy: 141.3 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

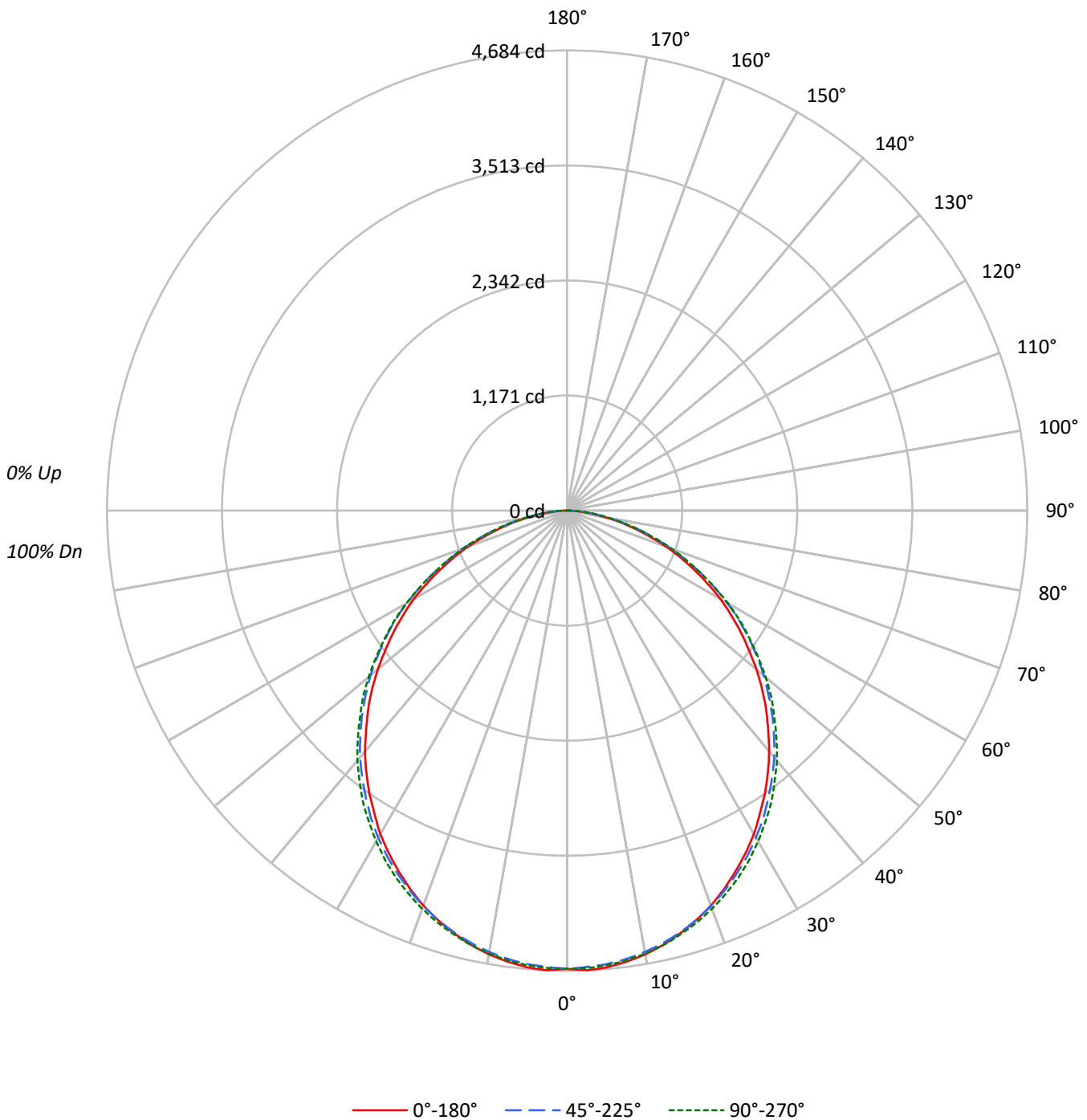
Input Watts (W): 88.7
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6276	6276	6276
5°	6303	6258	6275
10°	6267	6233	6255
15°	6204	6193	6220
20°	6126	6133	6175
25°	6018	6058	6120
30°	5908	5973	6040
35°	5767	5864	5953
40°	5621	5761	5835
45°	5453	5619	5678
50°	5268	5471	5520
55°	5061	5286	5315
60°	4853	5068	5088
65°	4548	4763	4752
70°	4212	4406	4450
75°	3733	3950	3975
80°	3106	3334	3410
85°	2353	2581	2904



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	440.8	3.5
10°-20°	1255.1	10.0
20°-30°	1880.5	15.0
30°-40°	2231.1	17.8
40°-50°	2265.9	18.1
50°-60°	1995.5	15.9
60°-70°	1466.3	11.7
70°-80°	797.5	6.4
80°-90°	203.2	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°	3576.5	28.5
0°-40°	5807.6	46.3
0°-60°	10069.0	80.3
0°-90°	12535.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12535.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4664	4664	4664	4664	4664	
5°	4667	4647	4634	4634	4646	443
15°	4454	4446	4446	4452	4465	1256
25°	4053	4058	4080	4104	4122	1868
35°	3511	3531	3570	3606	3624	2195
45°	2866	2889	2953	2988	2984	2209
55°	2158	2188	2254	2274	2266	1929
65°	1429	1452	1496	1507	1492	1416
75°	718	733	760	762	765	764
85°	152	156	167	182	188	185
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4664.4	4664.4	4664.4	4664.4	4664.4
2.5°	4684.1	4665.6	4649.6	4649.6	4660.7
5°	4666.8	4647.2	4633.7	4633.7	4645.9
7.5°	4631.2	4615.2	4604.1	4604.1	4617.7
10°	4586.9	4571.0	4562.3	4563.6	4578.3
12.5°	4527.9	4513.2	4509.5	4511.9	4530.4
15°	4454.2	4445.6	4445.6	4451.7	4465.2
17.5°	4371.8	4363.2	4369.3	4377.9	4395.1
20°	4278.4	4272.2	4283.3	4296.8	4312.8
22.5°	4171.4	4168.9	4187.4	4205.8	4221.8
25°	4053.4	4058.3	4080.4	4103.8	4122.2
27.5°	3931.7	3936.6	3967.3	3991.9	4010.3
30°	3802.6	3805.0	3844.4	3873.9	3887.4
32.5°	3652.6	3672.3	3714.1	3742.3	3754.6
35°	3511.2	3530.9	3570.2	3605.9	3624.3
37.5°	3357.5	3374.7	3426.4	3464.5	3470.6
40°	3200.2	3216.1	3280.1	3312.0	3321.9
42.5°	3028.0	3058.8	3116.6	3148.5	3154.7
45°	2865.8	2889.1	2953.0	2987.5	2983.8
47.5°	2692.4	2718.2	2780.9	2814.1	2820.3
50°	2516.6	2546.1	2613.7	2635.9	2637.1
52.5°	2332.2	2370.3	2431.8	2461.3	2451.4
55°	2157.6	2188.4	2253.5	2274.4	2265.8
57.5°	1978.1	2012.5	2072.8	2083.9	2085.1
60°	1803.5	1831.8	1883.5	1894.5	1890.8
62.5°	1611.8	1640.0	1686.8	1697.8	1689.2
65°	1428.6	1451.9	1496.2	1507.3	1492.5
67.5°	1246.6	1270.0	1304.4	1321.6	1305.6
70°	1070.8	1089.3	1120.0	1129.8	1131.1
72.5°	883.9	917.1	939.3	938.0	934.4
75°	718.0	732.7	759.8	762.2	764.7
77.5°	559.4	563.1	591.3	598.7	593.8
80°	400.8	414.3	430.3	438.9	440.1
82.5°	264.3	274.2	287.7	302.4	302.4
85°	152.4	156.1	167.2	182.0	188.1
87.5°	61.5	67.6	78.7	89.7	91.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)