

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: P475532

Luminaire Tested: **24GR-LD5-120-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475532
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-120-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: 11599.9 lumens
Efficiency: N/A
Efficacy: 142.5 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

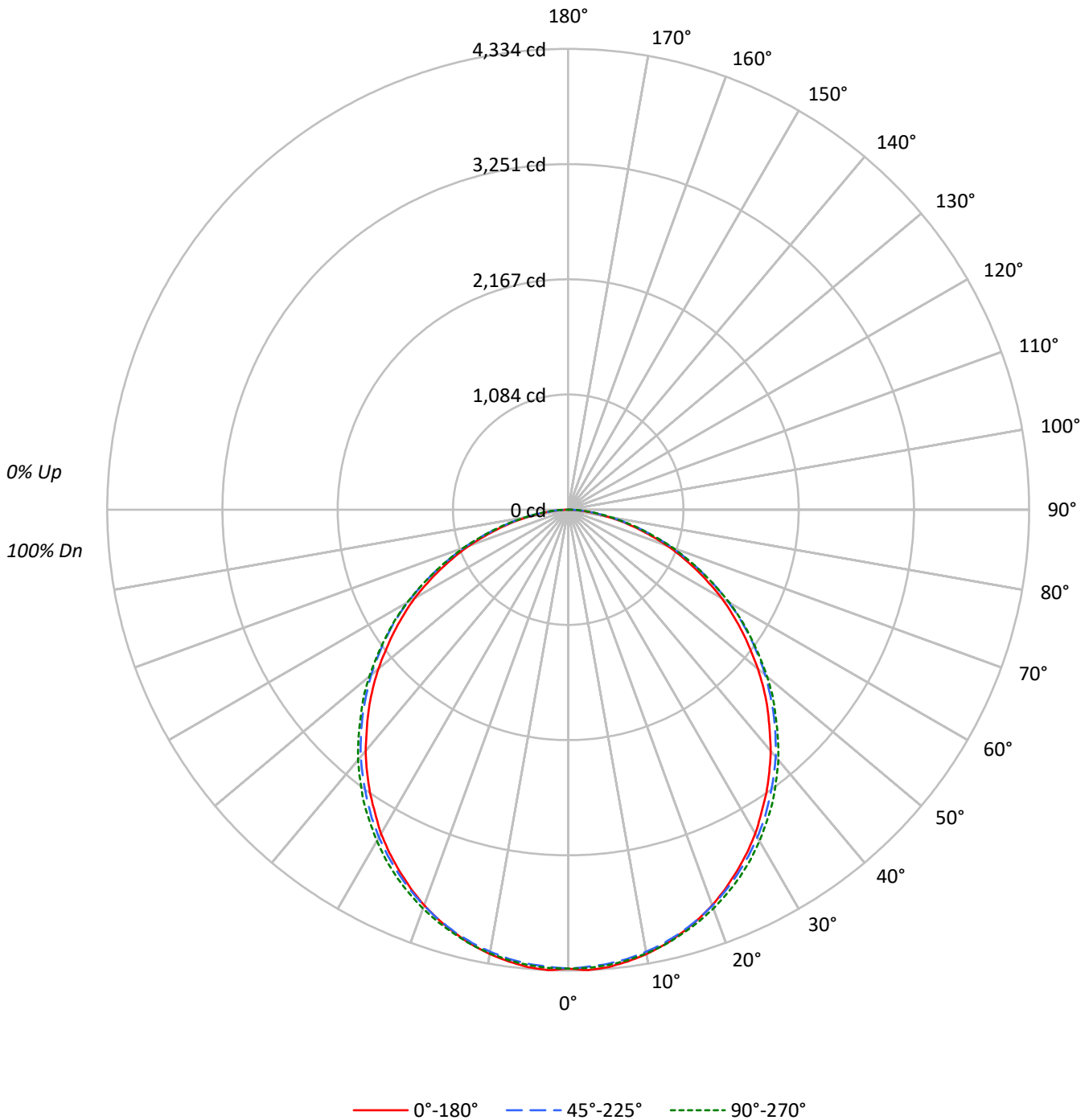
Input Watts (W): 81.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5807	5807	5807
5°	5833	5791	5806
10°	5799	5768	5788
15°	5741	5730	5755
20°	5669	5675	5714
25°	5568	5605	5663
30°	5467	5527	5589
35°	5337	5426	5509
40°	5201	5331	5399
45°	5046	5200	5254
50°	4874	5063	5108
55°	4683	4891	4918
60°	4491	4690	4708
65°	4209	4408	4397
70°	3898	4077	4117
75°	3454	3655	3679
80°	2874	3085	3156
85°	2178	2388	2688



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	407.9	3.5
10°-20°	1161.4	10.0
20°-30°	1740.1	15.0
30°-40°	2064.5	17.8
40°-50°	2096.7	18.1
50°-60°	1846.5	15.9
60°-70°	1356.8	11.7
70°-80°	737.9	6.4
80°-90°	188.0	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°	3309.4	28.5
0°-40°	5374.0	46.3
0°-60°	9317.1	80.3
0°-90°	11599.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11599.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4316	4316	4316	4316	4316	
5°	4318	4300	4288	4288	4299	410
15°	4122	4114	4114	4119	4132	1162
25°	3751	3755	3776	3797	3814	1728
35°	3249	3267	3304	3337	3354	2031
45°	2652	2673	2733	2764	2761	2044
55°	1996	2025	2085	2105	2097	1785
65°	1322	1344	1384	1395	1381	1310
75°	664	678	703	705	708	707
85°	141	144	155	168	174	171
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4316.1	4316.1	4316.1	4316.1	4316.1
2.5°	4334.3	4317.3	4302.5	4302.5	4312.7
5°	4318.4	4300.2	4287.7	4287.7	4299.0
7.5°	4285.4	4270.6	4260.4	4260.4	4272.9
10°	4244.4	4229.7	4221.7	4222.8	4236.5
12.5°	4189.8	4176.2	4172.8	4175.0	4192.1
15°	4121.6	4113.6	4113.6	4119.3	4131.8
17.5°	4045.4	4037.4	4043.1	4051.0	4067.0
20°	3958.9	3953.2	3963.5	3976.0	3990.8
22.5°	3859.9	3857.7	3874.7	3891.8	3906.6
25°	3750.7	3755.3	3775.7	3797.4	3814.4
27.5°	3638.1	3642.6	3671.1	3693.8	3710.9
30°	3518.6	3520.9	3557.3	3584.6	3597.1
32.5°	3379.9	3398.1	3436.7	3462.9	3474.3
35°	3249.0	3267.2	3303.6	3336.6	3353.7
37.5°	3106.8	3122.8	3170.5	3205.8	3211.5
40°	2961.2	2976.0	3035.2	3064.7	3073.8
42.5°	2801.9	2830.4	2883.9	2913.4	2919.1
45°	2651.8	2673.4	2732.6	2764.4	2761.0
47.5°	2491.4	2515.3	2573.3	2604.0	2609.7
50°	2328.7	2356.0	2418.6	2439.0	2440.2
52.5°	2158.1	2193.3	2250.2	2277.5	2268.4
55°	1996.5	2025.0	2085.2	2104.6	2096.6
57.5°	1830.4	1862.3	1918.0	1928.3	1929.4
60°	1668.9	1695.0	1742.8	1753.1	1749.7
62.5°	1491.4	1517.6	1560.8	1571.0	1563.1
65°	1321.9	1343.5	1384.5	1394.7	1381.1
67.5°	1153.5	1175.2	1207.0	1222.9	1208.1
70°	990.9	1007.9	1036.4	1045.5	1046.6
72.5°	817.9	848.7	869.1	868.0	864.6
75°	664.4	678.0	703.0	705.3	707.6
77.5°	517.6	521.0	547.2	554.0	549.5
80°	370.9	383.4	398.2	406.1	407.3
82.5°	244.6	253.7	266.2	279.9	279.9
85°	141.1	144.5	154.7	168.4	174.1
87.5°	56.9	62.6	72.8	83.0	84.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)