

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: P475547

Luminaire Tested: **24GR-LD5-120-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475547
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-L835-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12020.6 lumens
Efficiency: N/A
Efficacy: 147.7 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

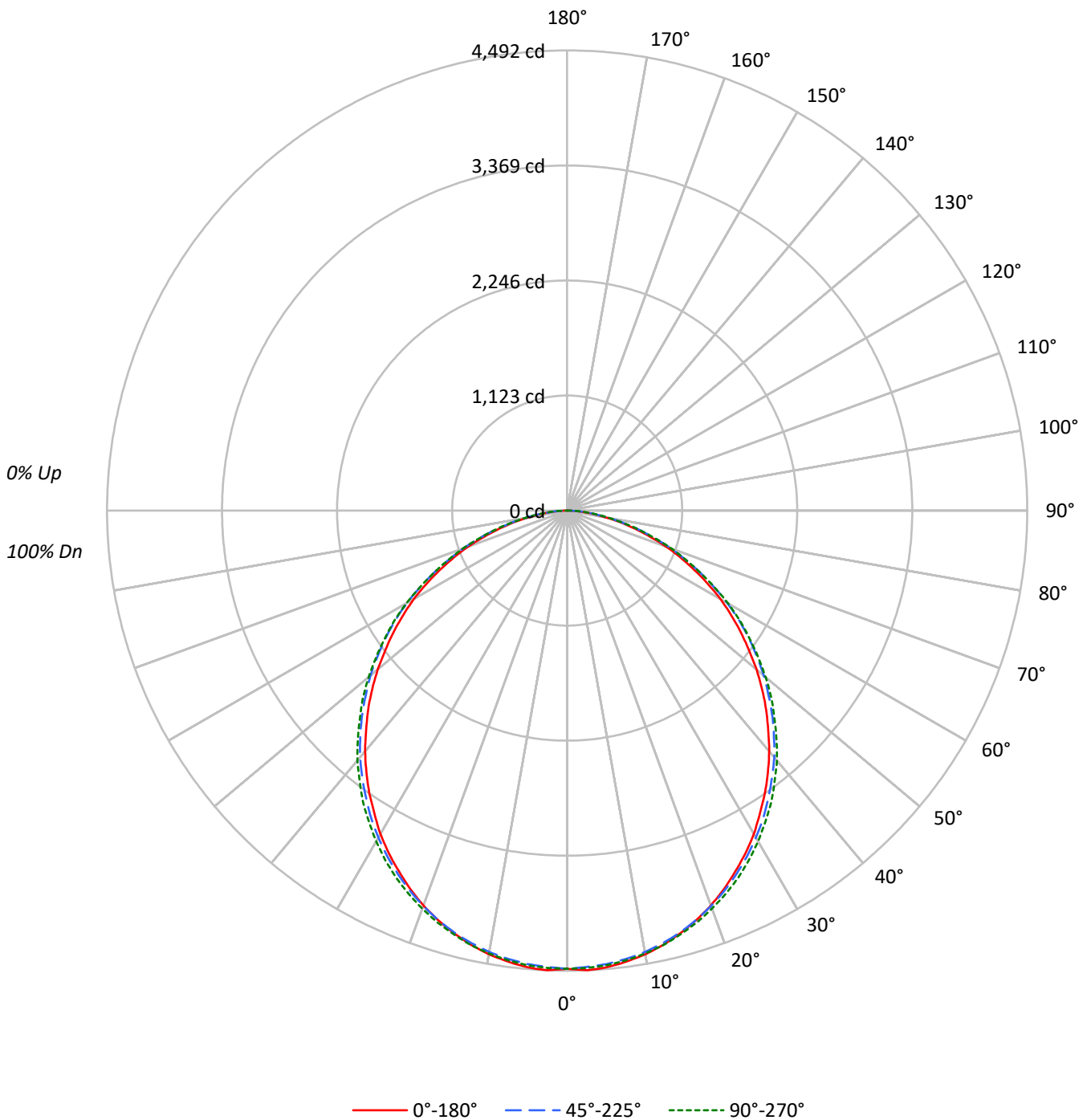
Input Watts (W): 81.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6018	6018	6018
5°	6044	6001	6017
10°	6009	5977	5998
15°	5949	5938	5964
20°	5874	5881	5921
25°	5770	5809	5868
30°	5665	5727	5791
35°	5530	5623	5708
40°	5390	5524	5595
45°	5229	5388	5444
50°	5051	5246	5293
55°	4853	5069	5097
60°	4654	4860	4879
65°	4361	4568	4557
70°	4039	4225	4267
75°	3579	3787	3812
80°	2978	3197	3270
85°	2257	2475	2785



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	422.7	3.5
10°-20°	1203.5	10.0
20°-30°	1803.2	15.0
30°-40°	2139.4	17.8
40°-50°	2172.7	18.1
50°-60°	1913.5	15.9
60°-70°	1406.0	11.7
70°-80°	764.7	6.4
80°-90°	194.8	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°	3429.5	28.5
0°-40°	5568.9	46.3
0°-60°	9655.1	80.3
0°-90°	12020.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12020.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4473	4473	4473	4473	4473	
5°	4475	4456	4443	4443	4455	425
15°	4271	4263	4263	4269	4282	1204
25°	3887	3892	3913	3935	3953	1791
35°	3367	3386	3424	3458	3475	2105
45°	2748	2770	2832	2865	2861	2118
55°	2069	2098	2161	2181	2173	1850
65°	1370	1392	1435	1445	1431	1358
75°	688	703	728	731	733	732
85°	146	150	160	174	180	177
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4472.7	4472.7	4472.7	4472.7	4472.7
2.5°	4491.5	4473.8	4458.5	4458.5	4469.1
5°	4475.0	4456.2	4443.2	4443.2	4455.0
7.5°	4440.8	4425.5	4414.9	4414.9	4427.9
10°	4398.4	4383.1	4374.8	4376.0	4390.1
12.5°	4341.8	4327.7	4324.1	4326.5	4344.2
15°	4271.1	4262.8	4262.8	4268.7	4281.7
17.5°	4192.1	4183.8	4189.7	4198.0	4214.5
20°	4102.5	4096.6	4107.2	4120.2	4135.5
22.5°	3999.9	3997.6	4015.3	4032.9	4048.3
25°	3886.8	3891.5	3912.7	3935.1	3952.8
27.5°	3770.0	3774.8	3804.2	3827.8	3845.5
30°	3646.3	3648.6	3686.3	3714.6	3727.6
32.5°	3502.4	3521.3	3561.4	3588.5	3600.3
35°	3366.9	3385.7	3423.5	3457.6	3475.3
37.5°	3219.5	3236.0	3285.5	3322.1	3328.0
40°	3068.6	3083.9	3145.2	3175.9	3185.3
42.5°	2903.6	2933.0	2988.5	3019.1	3025.0
45°	2748.0	2770.4	2831.7	2864.7	2861.1
47.5°	2581.7	2606.5	2666.6	2698.4	2704.3
50°	2413.2	2441.5	2506.3	2527.5	2528.7
52.5°	2236.3	2272.9	2331.8	2360.1	2350.7
55°	2068.9	2098.4	2160.9	2180.9	2172.7
57.5°	1896.8	1929.8	1987.6	1998.2	1999.4
60°	1729.4	1756.5	1806.0	1816.6	1813.1
62.5°	1545.5	1572.6	1617.4	1628.0	1619.8
65°	1369.9	1392.3	1434.7	1445.3	1431.2
67.5°	1195.4	1217.8	1250.8	1267.3	1252.0
70°	1026.8	1044.5	1074.0	1083.4	1084.6
72.5°	847.6	879.4	900.7	899.5	895.9
75°	688.5	702.6	728.5	730.9	733.3
77.5°	536.4	539.9	567.0	574.1	569.4
80°	384.3	397.3	412.6	420.9	422.0
82.5°	253.5	262.9	275.9	290.0	290.0
85°	146.2	149.7	160.3	174.5	180.4
87.5°	58.9	64.8	75.4	86.1	87.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)