

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: P475546

Luminaire Tested: **24GR-LD5-100-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475546
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-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: 10043.7 lumens
Efficiency: N/A
Efficacy: 149.7 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

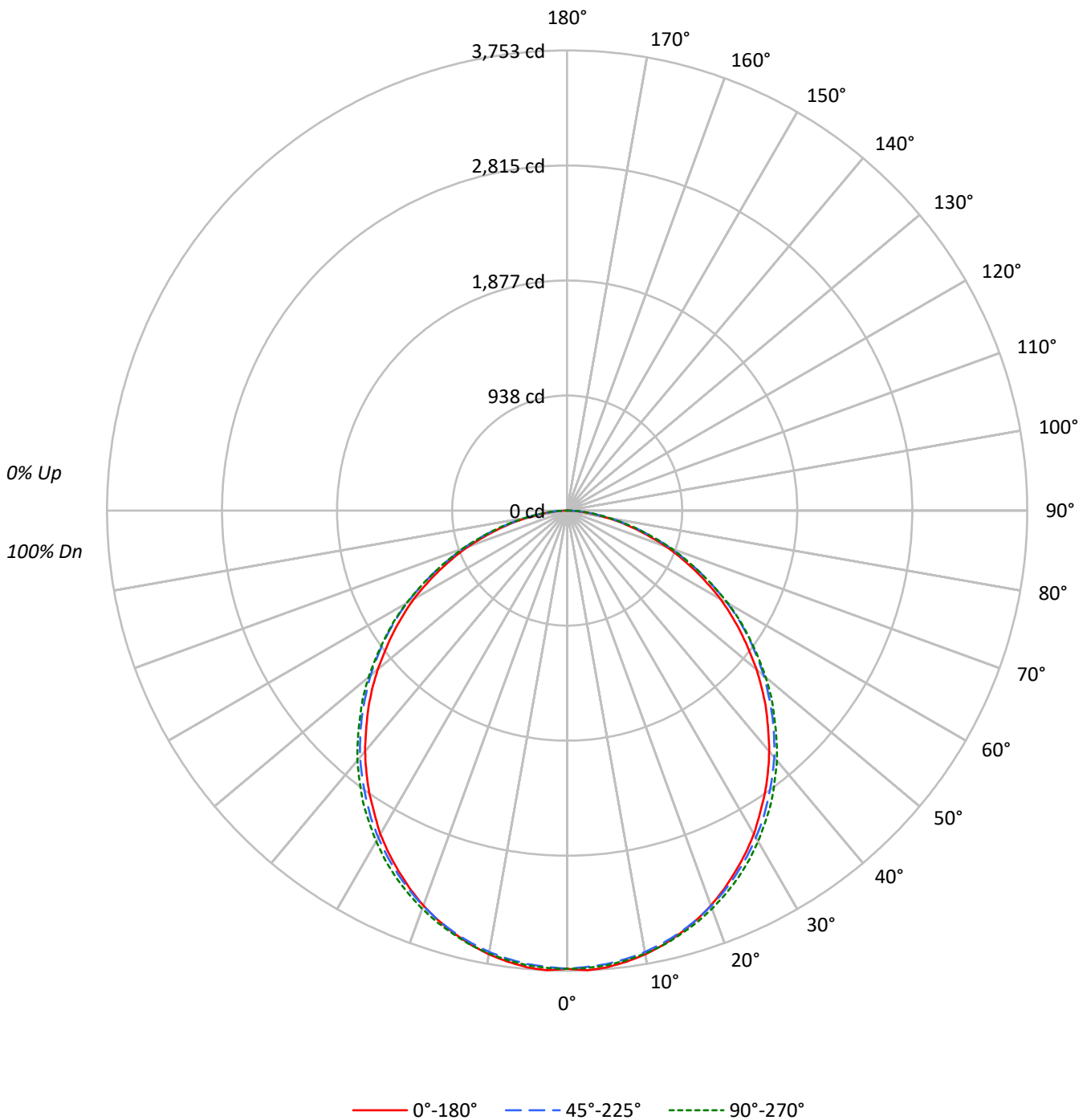
Input Watts (W): 67.1
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5028	5028	5028
5°	5050	5014	5027
10°	5021	4994	5012
15°	4971	4961	4983
20°	4908	4914	4948
25°	4821	4853	4903
30°	4733	4785	4839
35°	4621	4698	4770
40°	4503	4616	4675
45°	4369	4502	4549
50°	4221	4383	4423
55°	4055	4235	4258
60°	3888	4061	4077
65°	3644	3816	3807
70°	3375	3530	3565
75°	2990	3164	3185
80°	2488	2671	2732
85°	1885	2069	2326



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	353.2	3.5
10°-20°	1005.6	10.0
20°-30°	1506.7	15.0
30°-40°	1787.6	17.8
40°-50°	1815.4	18.1
50°-60°	1598.8	15.9
60°-70°	1174.8	11.7
70°-80°	638.9	6.4
80°-90°	162.8	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°	2865.4	28.5
0°-40°	4653.0	46.3
0°-60°	8067.2	80.3
0°-90°	10043.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10043.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3737	3737	3737	3737	3737	
5°	3739	3723	3712	3712	3722	355
15°	3569	3562	3562	3567	3578	1006
25°	3248	3252	3269	3288	3303	1496
35°	2813	2829	2860	2889	2904	1759
45°	2296	2315	2366	2394	2391	1770
55°	1729	1753	1806	1822	1815	1546
65°	1145	1163	1199	1208	1196	1134
75°	575	587	609	611	613	612
85°	122	125	134	146	151	148
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3737.1	3737.1	3737.1	3737.1	3737.1
2.5°	3752.8	3738.1	3725.3	3725.3	3734.1
5°	3739.0	3723.3	3712.4	3712.4	3722.3
7.5°	3710.5	3697.7	3688.8	3688.8	3699.6
10°	3675.0	3662.2	3655.3	3656.3	3668.1
12.5°	3627.7	3615.9	3613.0	3614.9	3629.7
15°	3568.6	3561.7	3561.7	3566.7	3577.5
17.5°	3502.6	3495.7	3500.7	3507.6	3521.4
20°	3427.8	3422.9	3431.7	3442.6	3455.4
22.5°	3342.1	3340.1	3354.9	3369.7	3382.5
25°	3247.5	3251.5	3269.2	3287.9	3302.7
27.5°	3150.0	3154.0	3178.6	3198.3	3213.1
30°	3046.6	3048.6	3080.1	3103.7	3114.6
32.5°	2926.4	2942.2	2975.7	2998.3	3008.2
35°	2813.1	2828.9	2860.4	2889.0	2903.8
37.5°	2690.0	2703.8	2745.2	2775.7	2780.6
40°	2563.9	2576.7	2628.0	2653.6	2661.5
42.5°	2426.0	2450.7	2497.0	2522.6	2527.5
45°	2296.0	2314.7	2366.0	2393.5	2390.6
47.5°	2157.1	2177.8	2228.1	2254.7	2259.6
50°	2016.3	2039.9	2094.1	2111.8	2112.8
52.5°	1868.5	1899.1	1948.3	1972.0	1964.1
55°	1728.7	1753.3	1805.5	1822.2	1815.3
57.5°	1584.9	1612.4	1660.7	1669.6	1670.6
60°	1445.0	1467.6	1509.0	1517.9	1514.9
62.5°	1291.3	1314.0	1351.4	1360.3	1353.4
65°	1144.6	1163.3	1198.7	1207.6	1195.8
67.5°	998.8	1017.5	1045.1	1058.9	1046.1
70°	857.9	872.7	897.3	905.2	906.2
72.5°	708.2	734.8	752.5	751.6	748.6
75°	575.2	587.1	608.7	610.7	612.7
77.5°	448.2	451.1	473.8	479.7	475.8
80°	321.1	331.9	344.7	351.6	352.6
82.5°	211.8	219.7	230.5	242.3	242.3
85°	122.1	125.1	134.0	145.8	150.7
87.5°	49.2	54.2	63.0	71.9	72.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)