

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: P475549

Luminaire Tested: **24GR-LD5-150-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475549
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-150-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: 15081.5 lumens
Efficiency: N/A
Efficacy: 145.9 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

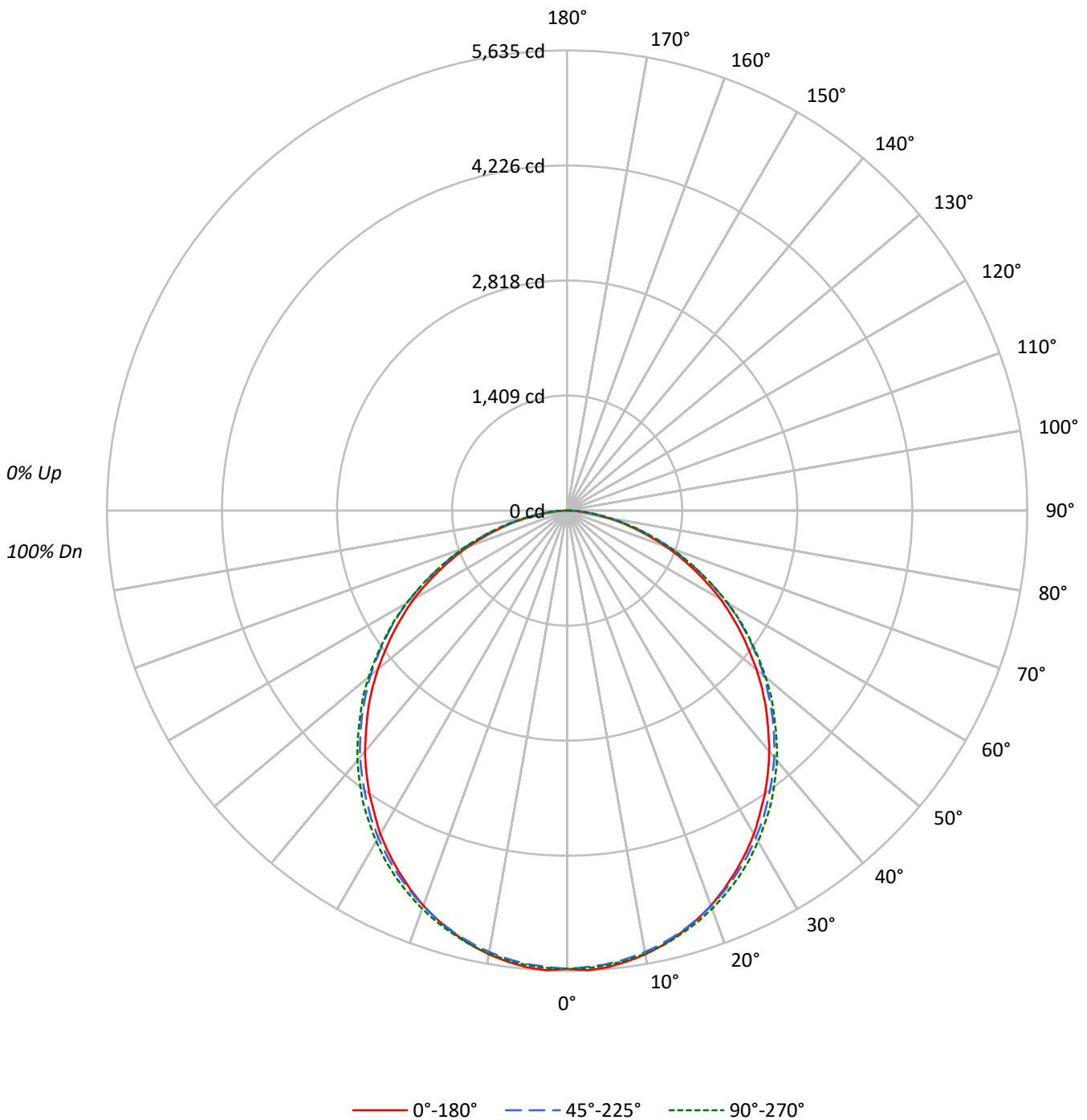
Input Watts (W): 103.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P475549

CATALOG NUMBER: 24GR-LD5-150-F1-UNV-L835-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P475549

CATALOG NUMBER: 24GR-LD5-150-F1-UNV-L835-CD1-U

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°	7550	7550	7550
5°	7583	7529	7549
10°	7539	7499	7525
15°	7464	7450	7483
20°	7370	7378	7429
25°	7240	7288	7362
30°	7107	7186	7266
35°	6938	7055	7162
40°	6762	6931	7019
45°	6560	6760	6831
50°	6337	6582	6641
55°	6089	6360	6394
60°	5839	6097	6121
65°	5472	5731	5717
70°	5068	5301	5353
75°	4491	4752	4783
80°	3736	4011	4103
85°	2831	3106	3494



TEST NUMBER: P475549

CATALOG NUMBER: 24GR-LD5-150-F1-UNV-L835-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	530.3	3.5
10°-20°	1510.0	10.0
20°-30°	2262.4	15.0
30°-40°	2684.2	17.8
40°-50°	2726.0	18.1
50°-60°	2400.7	15.9
60°-70°	1764.0	11.7
70°-80°	959.4	6.4
80°-90°	244.4	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°	4302.7	28.5
0°-40°	6986.9	46.3
0°-60°	12113.6	80.3
0°-90°	15081.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15081.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5612	5612	5612	5612	5612	
5°	5614	5591	5575	5575	5589	533
15°	5359	5348	5348	5356	5372	1511
25°	4876	4882	4909	4937	4959	2247
35°	4224	4248	4295	4338	4360	2641
45°	3448	3476	3553	3594	3590	2657
55°	2596	2633	2711	2736	2726	2321
65°	1719	1747	1800	1813	1796	1703
75°	864	882	914	917	920	919
85°	183	188	201	219	226	222
90°	0	0	0	0	0	



TEST NUMBER: P475549

CATALOG NUMBER: 24GR-LD5-150-F1-UNV-L835-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5611.6	5611.6	5611.6	5611.6	5611.6
2.5°	5635.2	5613.0	5593.8	5593.8	5607.1
5°	5614.5	5590.9	5574.6	5574.6	5589.4
7.5°	5571.6	5552.4	5539.1	5539.1	5555.4
10°	5518.4	5499.2	5488.8	5490.3	5508.0
12.5°	5447.4	5429.6	5425.2	5428.2	5450.3
15°	5358.6	5348.3	5348.3	5355.7	5372.0
17.5°	5259.5	5249.2	5256.6	5266.9	5287.6
20°	5147.1	5139.7	5153.1	5169.3	5188.6
22.5°	5018.5	5015.5	5037.7	5059.9	5079.1
25°	4876.5	4882.4	4909.0	4937.1	4959.3
27.5°	4730.0	4736.0	4772.9	4802.5	4824.7
30°	4574.7	4577.7	4625.0	4660.5	4676.8
32.5°	4394.3	4418.0	4468.2	4502.3	4517.1
35°	4224.2	4247.9	4295.2	4338.1	4360.3
37.5°	4039.3	4060.0	4122.1	4168.0	4175.4
40°	3850.0	3869.2	3946.1	3984.6	3996.4
42.5°	3642.9	3679.9	3749.4	3787.9	3795.3
45°	3447.7	3475.8	3552.7	3594.1	3589.7
47.5°	3239.1	3270.2	3345.6	3385.6	3393.0
50°	3027.6	3063.1	3144.5	3171.1	3172.6
52.5°	2805.8	2851.6	2925.6	2961.1	2949.3
55°	2595.8	2632.7	2711.1	2736.3	2725.9
57.5°	2379.8	2421.2	2493.7	2507.0	2508.5
60°	2169.8	2203.8	2265.9	2279.2	2274.8
62.5°	1939.1	1973.1	2029.3	2042.6	2032.2
65°	1718.7	1746.8	1800.0	1813.3	1795.6
67.5°	1499.8	1527.9	1569.3	1590.0	1570.8
70°	1288.3	1310.4	1347.4	1359.3	1360.7
72.5°	1063.4	1103.4	1130.0	1128.5	1124.1
75°	863.8	881.5	914.1	917.0	920.0
77.5°	673.0	677.4	711.4	720.3	714.4
80°	482.2	498.4	517.7	528.0	529.5
82.5°	318.0	329.8	346.1	363.8	363.8
85°	183.4	187.8	201.2	218.9	226.3
87.5°	74.0	81.3	94.7	108.0	109.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)