

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: P475564

Luminaire Tested: **24GR-LD5-150-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475564
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-L840-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15368.0 lumens
Efficiency: N/A
Efficacy: 148.6 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

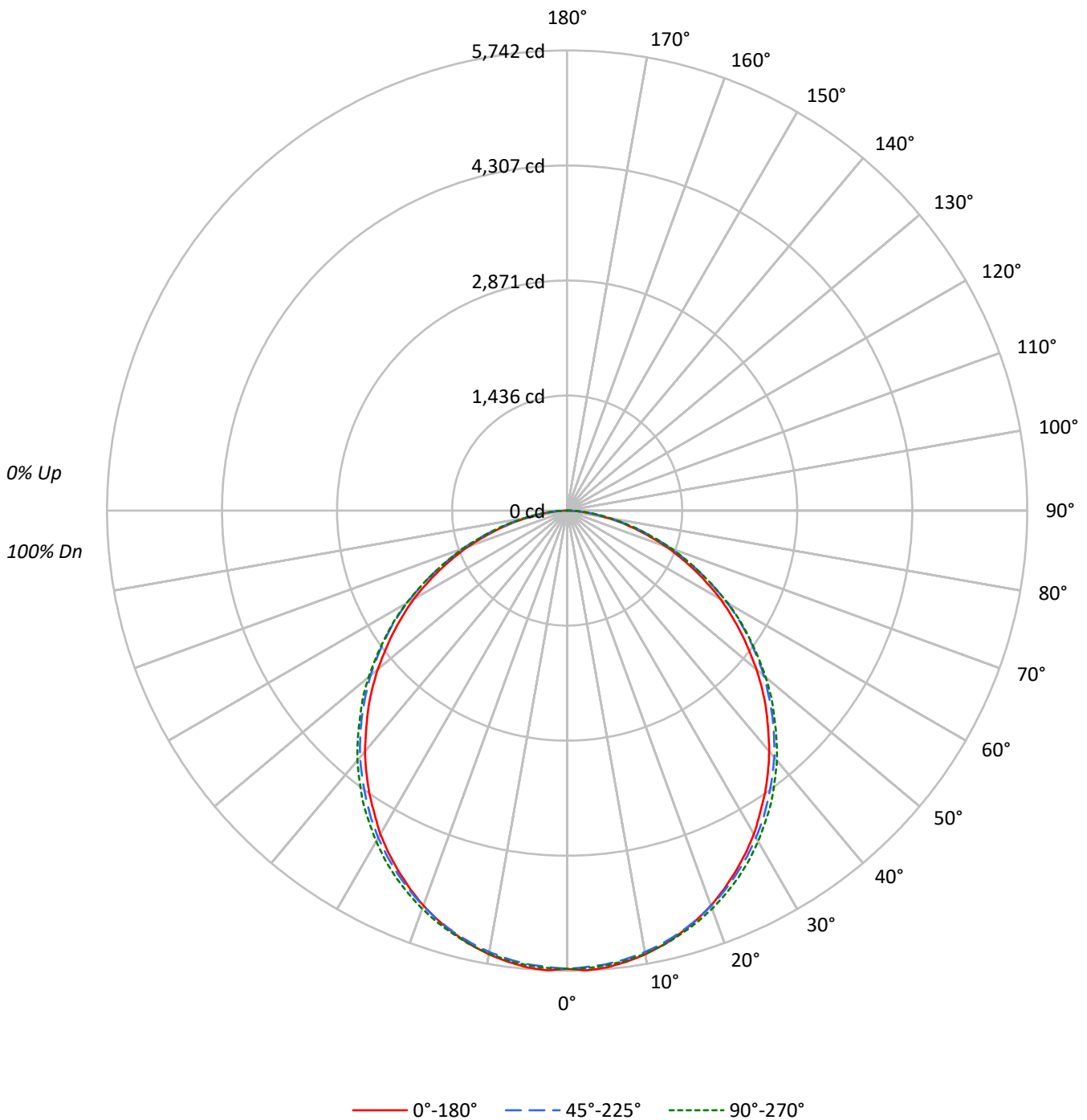
Input Watts (W): 103.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7694	7694	7694
5°	7727	7672	7693
10°	7683	7642	7668
15°	7606	7591	7625
20°	7510	7519	7570
25°	7377	7426	7502
30°	7243	7322	7404
35°	7070	7189	7298
40°	6891	7063	7153
45°	6685	6889	6960
50°	6458	6707	6767
55°	6205	6480	6516
60°	5950	6213	6238
65°	5576	5840	5825
70°	5164	5401	5455
75°	4576	4842	4874
80°	3807	4087	4181
85°	2885	3165	3560



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	540.4	3.5
10°-20°	1538.7	10.0
20°-30°	2305.4	15.0
30°-40°	2735.2	17.8
40°-50°	2777.8	18.1
50°-60°	2446.3	15.9
60°-70°	1797.5	11.7
70°-80°	977.7	6.4
80°-90°	249.1	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°	4384.5	28.5
0°-40°	7119.7	46.3
0°-60°	12343.8	80.3
0°-90°	15368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15368.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5718	5718	5718	5718	5718	
5°	5721	5697	5680	5680	5696	543
15°	5460	5450	5450	5457	5474	1540
25°	4969	4975	5002	5031	5054	2290
35°	4304	4329	4377	4420	4443	2691
45°	3513	3542	3620	3662	3658	2708
55°	2645	2683	2763	2788	2778	2365
65°	1751	1780	1834	1848	1830	1736
75°	880	898	931	934	938	936
85°	187	191	205	223	231	226
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5718.2	5718.2	5718.2	5718.2	5718.2
2.5°	5742.3	5719.7	5700.1	5700.1	5713.7
5°	5721.2	5697.1	5680.5	5680.5	5695.6
7.5°	5677.5	5657.9	5644.3	5644.3	5660.9
10°	5623.2	5603.6	5593.1	5594.6	5612.7
12.5°	5550.9	5532.8	5528.3	5531.3	5553.9
15°	5460.5	5449.9	5449.9	5457.4	5474.0
17.5°	5359.5	5348.9	5356.5	5367.0	5388.1
20°	5244.9	5237.4	5251.0	5267.5	5287.1
22.5°	5113.8	5110.8	5133.4	5156.0	5175.6
25°	4969.1	4975.2	5002.3	5030.9	5053.5
27.5°	4819.9	4825.9	4863.6	4893.8	4916.4
30°	4661.7	4664.7	4712.9	4749.1	4765.7
32.5°	4477.8	4501.9	4553.1	4587.8	4602.9
35°	4304.5	4328.6	4376.8	4420.5	4443.1
37.5°	4116.1	4137.2	4200.5	4247.2	4254.7
40°	3923.1	3942.7	4021.1	4060.3	4072.4
42.5°	3712.1	3749.8	3820.7	3859.8	3867.4
45°	3513.2	3541.8	3620.2	3662.4	3657.9
47.5°	3300.7	3332.3	3409.2	3449.9	3457.4
50°	3085.2	3121.3	3204.2	3231.4	3232.9
52.5°	2859.1	2905.8	2981.2	3017.3	3005.3
55°	2645.1	2682.8	2762.6	2788.3	2777.7
57.5°	2425.0	2467.2	2541.1	2554.6	2556.2
60°	2211.0	2245.7	2309.0	2322.5	2318.0
62.5°	1975.9	2010.6	2067.8	2081.4	2070.8
65°	1751.3	1780.0	1834.2	1847.8	1829.7
67.5°	1528.3	1556.9	1599.1	1620.2	1600.6
70°	1312.7	1335.3	1373.0	1385.1	1386.6
72.5°	1083.7	1124.3	1151.5	1150.0	1145.4
75°	880.2	898.3	931.4	934.4	937.5
77.5°	685.8	690.3	724.9	734.0	728.0
80°	491.3	507.9	527.5	538.1	539.6
82.5°	324.0	336.1	352.7	370.8	370.8
85°	186.9	191.4	205.0	223.1	230.6
87.5°	75.4	82.9	96.5	110.0	111.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)