

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: P475534

Luminaire Tested: **24GR-LD5-150-F1-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475534  
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-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: 14553.6 lumens  
Efficiency: N/A  
Efficacy: 140.8 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

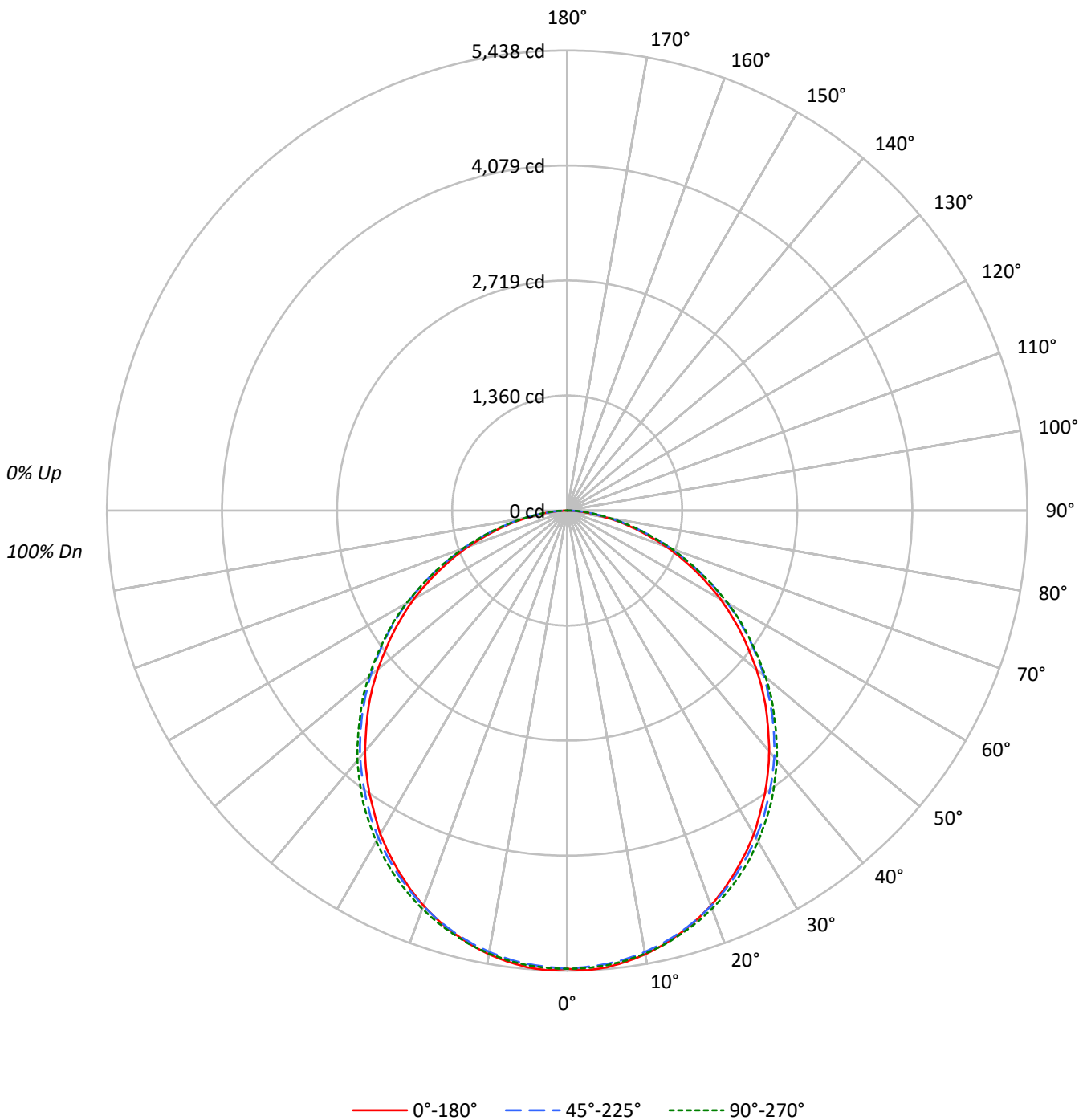
Input Watts (W): 103.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	7286	7286	7286
5°	7318	7266	7285
10°	7276	7237	7262
15°	7203	7189	7221
20°	7112	7120	7169
25°	6986	7033	7105
30°	6859	6934	7012
35°	6696	6808	6911
40°	6525	6688	6774
45°	6331	6524	6591
50°	6116	6352	6408
55°	5876	6137	6171
60°	5634	5884	5907
65°	5280	5530	5516
70°	4891	5115	5166
75°	4333	4586	4615
80°	3605	3871	3959
85°	2732	2996	3372



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	511.8	3.5
10°-20°	1457.1	10.0
20°-30°	2183.2	15.0
30°-40°	2590.3	17.8
40°-50°	2630.6	18.1
50°-60°	2316.7	15.9
60°-70°	1702.3	11.7
70°-80°	925.9	6.4
80°-90°	235.9	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°	4152.1	28.5
0°-40°	6742.4	46.3
0°-60°	11689.6	80.3
0°-90°	14553.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14553.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5415	5415	5415	5415	5415	
5°	5418	5395	5380	5380	5394	514
15°	5171	5161	5161	5168	5184	1458
25°	4706	4712	4737	4764	4786	2168
35°	4076	4099	4145	4186	4208	2548
45°	3327	3354	3428	3468	3464	2564
55°	2505	2541	2616	2640	2630	2240
65°	1658	1686	1737	1750	1733	1644
75°	834	851	882	885	888	887
85°	177	181	194	211	218	214
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5415.2	5415.2	5415.2	5415.2	5415.2
2.5°	5438.0	5416.6	5398.0	5398.0	5410.9
5°	5418.0	5395.2	5379.5	5379.5	5393.7
7.5°	5376.6	5358.1	5345.2	5345.2	5360.9
10°	5325.2	5306.7	5296.7	5298.1	5315.2
12.5°	5256.7	5239.6	5235.3	5238.2	5259.6
15°	5171.1	5161.1	5161.1	5168.2	5183.9
17.5°	5075.5	5065.5	5072.6	5082.6	5102.6
20°	4967.0	4959.9	4972.7	4988.4	5007.0
22.5°	4842.8	4840.0	4861.4	4882.8	4901.3
25°	4705.8	4711.5	4737.2	4764.3	4785.7
27.5°	4564.5	4570.2	4605.9	4634.4	4655.8
30°	4414.6	4417.5	4463.2	4497.4	4513.1
32.5°	4240.5	4263.3	4311.9	4344.7	4359.0
35°	4076.4	4099.2	4144.9	4186.3	4207.7
37.5°	3897.9	3917.9	3977.9	4022.1	4029.3
40°	3715.2	3733.8	3808.0	3845.1	3856.6
42.5°	3515.4	3551.1	3618.2	3655.3	3662.4
45°	3327.0	3354.1	3428.4	3468.3	3464.0
47.5°	3125.8	3155.7	3228.5	3267.1	3274.2
50°	2921.7	2955.9	3034.4	3060.1	3061.5
52.5°	2707.6	2751.8	2823.2	2857.4	2846.0
55°	2504.9	2540.6	2616.2	2640.5	2630.5
57.5°	2296.5	2336.5	2406.4	2419.3	2420.7
60°	2093.8	2126.7	2186.6	2199.5	2195.2
62.5°	1871.2	1904.0	1958.2	1971.1	1961.1
65°	1658.5	1685.6	1737.0	1749.9	1732.7
67.5°	1447.3	1474.4	1514.4	1534.3	1515.8
70°	1243.2	1264.6	1300.3	1311.7	1313.1
72.5°	1026.2	1064.8	1090.5	1089.0	1084.7
75°	833.5	850.7	882.1	884.9	887.8
77.5°	649.4	653.7	686.5	695.1	689.4
80°	465.3	481.0	499.6	509.5	511.0
82.5°	306.9	318.3	334.0	351.1	351.1
85°	177.0	181.3	194.1	211.2	218.4
87.5°	71.4	78.5	91.3	104.2	105.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)