

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: P475714

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

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475714  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-150-A-UNV-L830-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 14117.7 lumens  
Efficiency: N/A  
Efficacy: 136.5 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.21 / 1.28  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

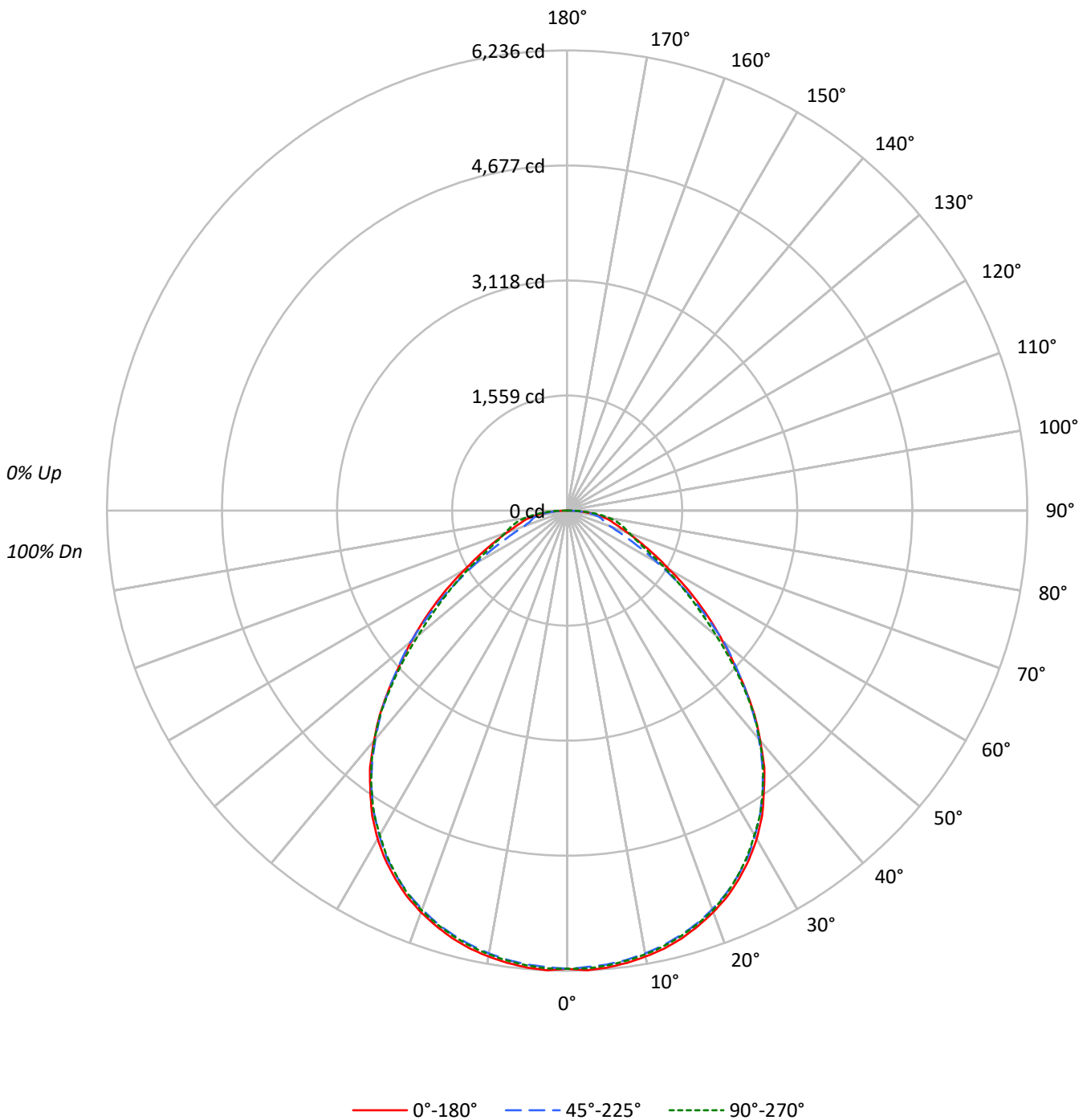
Input Watts (W): 103.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86				86
2	101	93	87	82	98	92	86	81	88	83	79	85	81	77	82	79	76	74				74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64				64
4	86	75	66	60	83	73	66	60	71	64	59	69	63	58	66	62	58	56				56
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49				49
6	74	61	53	47	72	60	52	46	58	51	46	57	50	46	55	50	45	43				43
7	68	56	47	42	67	55	47	42	53	46	41	52	46	41	51	45	41	39				39
8	64	51	43	38	62	50	43	37	49	42	37	48	42	37	47	41	37	35				35
9	60	47	39	34	59	47	39	34	45	39	34	44	38	34	43	38	33	32				32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	31	29				29

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	8355	8355	8355
5°	8396	8340	8359
10°	8383	8326	8343
15°	8359	8293	8313
20°	8294	8234	8256
25°	8178	8118	8112
30°	7980	7906	7887
35°	7637	7590	7590
40°	7146	7105	7134
45°	6488	6478	6425
50°	5755	5799	5514
55°	5058	4836	4722
60°	4306	3819	4017
65°	3762	2969	3545
70°	3401	2445	3538
75°	3404	2609	3953
80°	3748	3209	4523
85°	3863	3605	4935



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	588.0	4.2
10°-20°	1683.3	11.9
20°-30°	2518.1	17.8
30°-40°	2881.6	20.4
40°-50°	2610.8	18.5
50°-60°	1848.4	13.1
60°-70°	1067.8	7.6
70°-80°	647.3	4.6
80°-90°	272.4	1.9
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°	4789.4	33.9
0°-40°	7671.0	54.3
0°-60°	12130.1	85.9
0°-90°	14117.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14117.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6209	6209	6209	6209	6209	
5°	6216	6194	6175	6173	6189	591
15°	6001	5977	5954	5954	5968	1692
25°	5509	5487	5468	5464	5464	2534
35°	4650	4629	4621	4614	4621	2901
45°	3410	3403	3404	3379	3376	2627
55°	2156	2084	2062	2000	2013	1932
65°	1182	1059	933	1068	1113	1188
75°	655	587	502	645	760	702
85°	250	225	234	299	320	269
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6209.4	6209.4	6209.4	6209.4	6209.4
2.5°	6235.8	6212.2	6191.4	6194.1	6209.4
5°	6216.4	6194.1	6174.7	6173.3	6188.6
7.5°	6183.0	6163.6	6141.3	6141.3	6153.8
10°	6135.7	6116.3	6094.0	6092.7	6106.6
12.5°	6080.1	6055.1	6031.5	6031.5	6046.8
15°	6000.9	5977.3	5953.7	5953.7	5967.6
17.5°	5903.6	5882.8	5863.3	5864.7	5875.8
20°	5792.4	5771.6	5750.7	5753.5	5766.0
22.5°	5664.5	5639.5	5622.8	5621.4	5629.8
25°	5508.8	5486.6	5468.5	5464.3	5464.3
27.5°	5335.1	5311.4	5298.9	5279.5	5285.0
30°	5136.3	5111.3	5089.0	5077.9	5076.5
32.5°	4912.5	4887.5	4868.0	4866.6	4872.2
35°	4649.8	4628.9	4620.6	4613.6	4620.6
37.5°	4389.8	4350.9	4344.0	4342.6	4360.6
40°	4068.7	4054.8	4045.1	4038.1	4061.8
42.5°	3760.1	3732.3	3735.1	3708.7	3750.4
45°	3409.8	3402.9	3404.3	3379.2	3376.5
47.5°	3062.3	3060.9	3081.8	3012.3	3008.1
50°	2749.5	2735.6	2770.4	2663.4	2634.2
52.5°	2450.7	2411.8	2400.6	2303.3	2303.3
55°	2156.0	2083.7	2061.5	2000.3	2012.8
57.5°	1876.6	1773.7	1727.9	1726.5	1747.3
60°	1600.0	1483.2	1419.3	1469.3	1492.9
62.5°	1380.3	1252.4	1155.1	1249.7	1271.9
65°	1181.6	1059.2	932.7	1067.6	1113.4
67.5°	1010.6	909.1	750.6	927.2	988.3
70°	864.6	774.3	621.4	817.4	899.4
72.5°	749.2	674.2	540.7	729.8	828.5
75°	654.7	586.6	501.8	645.0	760.4
77.5°	579.7	499.0	469.8	564.4	682.5
80°	483.7	410.1	414.2	485.1	583.8
82.5°	372.5	316.9	333.6	401.7	458.7
85°	250.2	225.2	233.5	298.9	319.7
87.5°	123.7	119.5	127.9	175.1	175.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)