

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: P231809

Luminaire Tested: **24GR-LD5-150-A-UNV-L935-CD2-U**

Issue Date: 3/12/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P231809  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33306)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/12/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-150-A-UNV-L935-CD2-U  
Description: METALUX 2X4 GRLED TROFFER  
WITH A LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

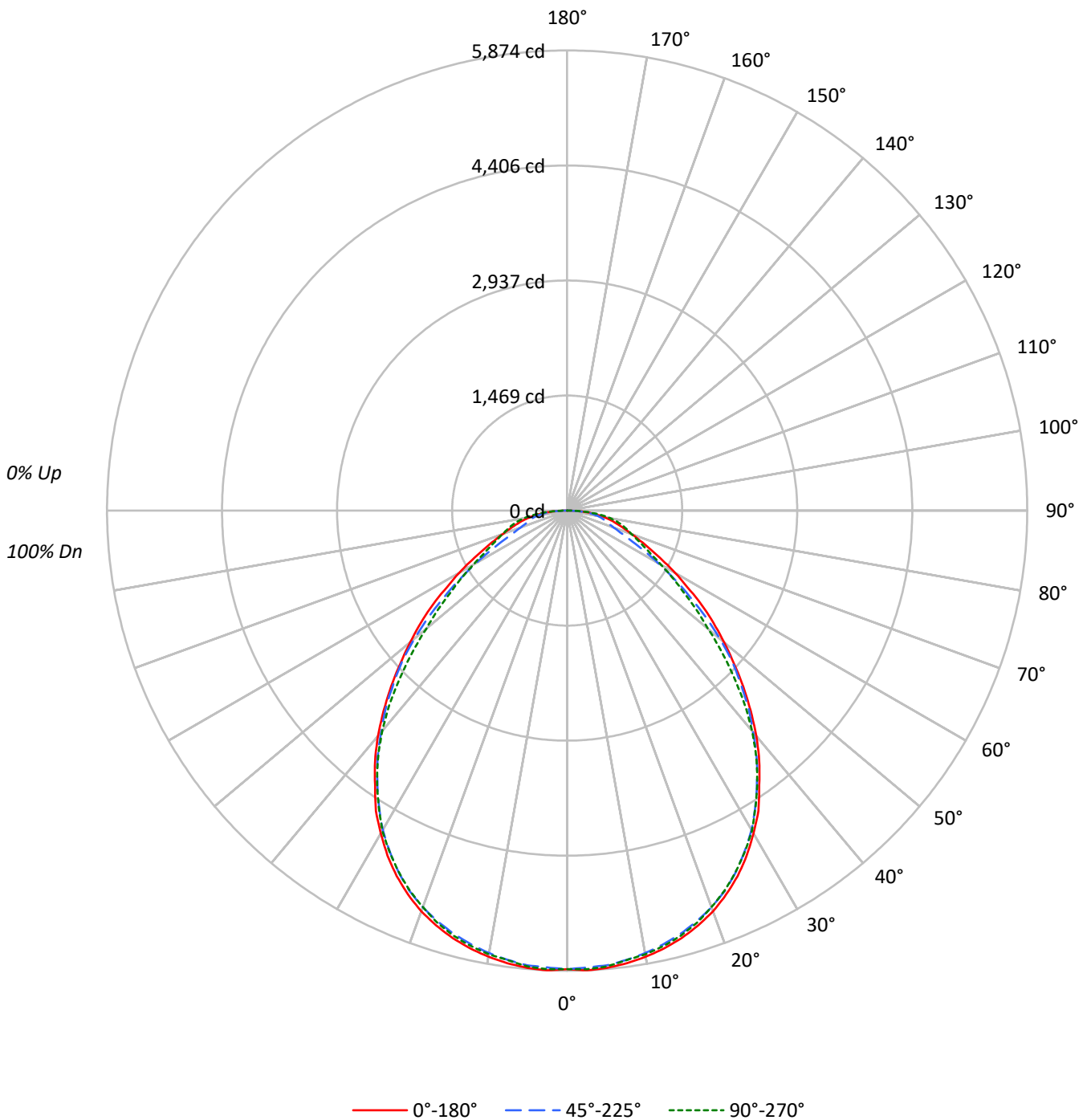
Lumens per Lamp: N/A  
Luminaire Lumens: 13192.0 lumens  
Efficiency: N/A  
Efficacy: 109.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.26  
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')  
CIE Type: Direct

Input Watts (W): 120.3  
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	110	105	101	98	107	103	99	96	99	96	93	95	93	90	91	89	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	69	90	81	74	69	79	73	68	76	71	67	73	69	65	63
4	86	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	53	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	53	46	72	60	52	46	58	51	46	57	50	45	55	49	45	43
7	68	56	47	42	67	55	47	41	53	46	41	52	46	41	51	45	41	39
8	64	51	43	37	62	50	43	37	49	42	37	48	41	37	47	41	37	35
9	60	47	39	34	58	46	39	34	45	38	34	44	38	33	43	38	33	32
10	56	44	36	31	55	43	36	31	42	35	31	41	35	31	40	35	30	29

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

	0°	45°	90°
0°	8965	8965	8965
5°	9008	8958	8980
10°	8992	8919	8945
15°	8958	8867	8906
20°	8872	8783	8779
25°	8700	8607	8600
30°	8413	8326	8344
35°	7991	7899	7911
40°	7514	7383	7339
45°	6887	6794	6524
50°	6226	6056	5599
55°	5589	5088	4827
60°	4894	4096	4245
65°	4269	3220	3907
70°	3906	2811	3906
75°	3907	2991	4306
80°	4242	3523	4908
85°	4655	3975	5265



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	554.3	4.2
10°-20°	1581.8	12.0
20°-30°	2345.5	17.8
30°-40°	2646.0	20.1
40°-50°	2396.5	18.2
50°-60°	1728.9	13.1
60°-70°	1032.3	7.8
70°-80°	638.0	4.8
80°-90°	268.8	2.0
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°	4481.5	34.0
0°-40°	7127.5	54.0
0°-60°	11252.9	85.3
0°-90°	13192.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13192.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5853	5853	5853	5853	5853	
5°	5859	5851	5827	5820	5841	557
15°	5649	5615	5592	5594	5617	1592
25°	5148	5120	5093	5075	5089	2365
35°	4274	4268	4225	4227	4231	2674
45°	3179	3159	3136	3059	3012	2450
55°	2093	2028	1906	1812	1808	1868
65°	1178	1037	889	1009	1078	1185
75°	660	573	505	630	728	705
85°	265	232	226	296	300	277
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5853.1	5853.1	5853.1	5853.1	5853.1
2.5°	5873.5	5857.2	5836.9	5849.0	5859.2
5°	5859.2	5851.1	5826.7	5820.5	5840.9
7.5°	5828.7	5808.3	5785.9	5796.1	5787.9
10°	5781.8	5763.4	5735.0	5737.0	5751.3
12.5°	5724.8	5702.3	5671.8	5679.9	5692.1
15°	5649.4	5614.7	5592.2	5594.3	5616.7
17.5°	5553.6	5527.0	5498.6	5504.6	5514.8
20°	5443.5	5429.2	5388.5	5376.2	5386.4
22.5°	5304.9	5278.4	5256.0	5249.9	5251.9
25°	5148.0	5119.5	5092.9	5074.6	5088.9
27.5°	4964.6	4940.1	4905.4	4899.3	4911.6
30°	4756.7	4738.3	4707.8	4699.6	4718.0
32.5°	4544.8	4514.2	4471.3	4471.3	4475.4
35°	4273.7	4267.6	4224.8	4226.8	4230.9
37.5°	4029.1	4000.6	3976.1	3951.6	3963.9
40°	3758.1	3725.5	3692.8	3676.6	3670.5
42.5°	3466.6	3442.2	3427.9	3368.8	3354.5
45°	3179.3	3158.9	3136.5	3059.1	3012.1
47.5°	2885.8	2881.8	2863.4	2726.9	2680.0
50°	2612.7	2606.6	2541.4	2396.7	2349.8
52.5°	2353.9	2313.1	2227.5	2084.9	2076.7
55°	2093.0	2027.8	1905.5	1811.8	1807.7
57.5°	1817.9	1740.5	1616.1	1565.2	1591.7
60°	1597.8	1479.6	1337.0	1343.0	1385.8
62.5°	1369.5	1237.1	1096.4	1157.6	1208.5
65°	1177.9	1037.3	888.6	1008.8	1078.1
67.5°	1010.8	880.4	737.7	898.8	966.0
70°	872.3	766.3	627.7	796.9	872.3
72.5°	762.2	664.4	556.4	715.4	803.0
75°	660.3	572.6	505.4	629.8	727.6
77.5°	572.6	487.0	456.5	556.4	652.1
80°	480.9	403.5	399.4	485.0	556.4
82.5°	375.0	322.0	322.0	405.5	448.4
85°	264.9	232.3	226.2	295.5	299.6
87.5°	136.5	130.4	118.2	154.9	154.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)