

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: P475742

Luminaire Tested: **24GR-LD5-120-A-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475742  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-120-A-UNV-L840-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11882.0 lumens  
Efficiency: N/A  
Efficacy: 146.0 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

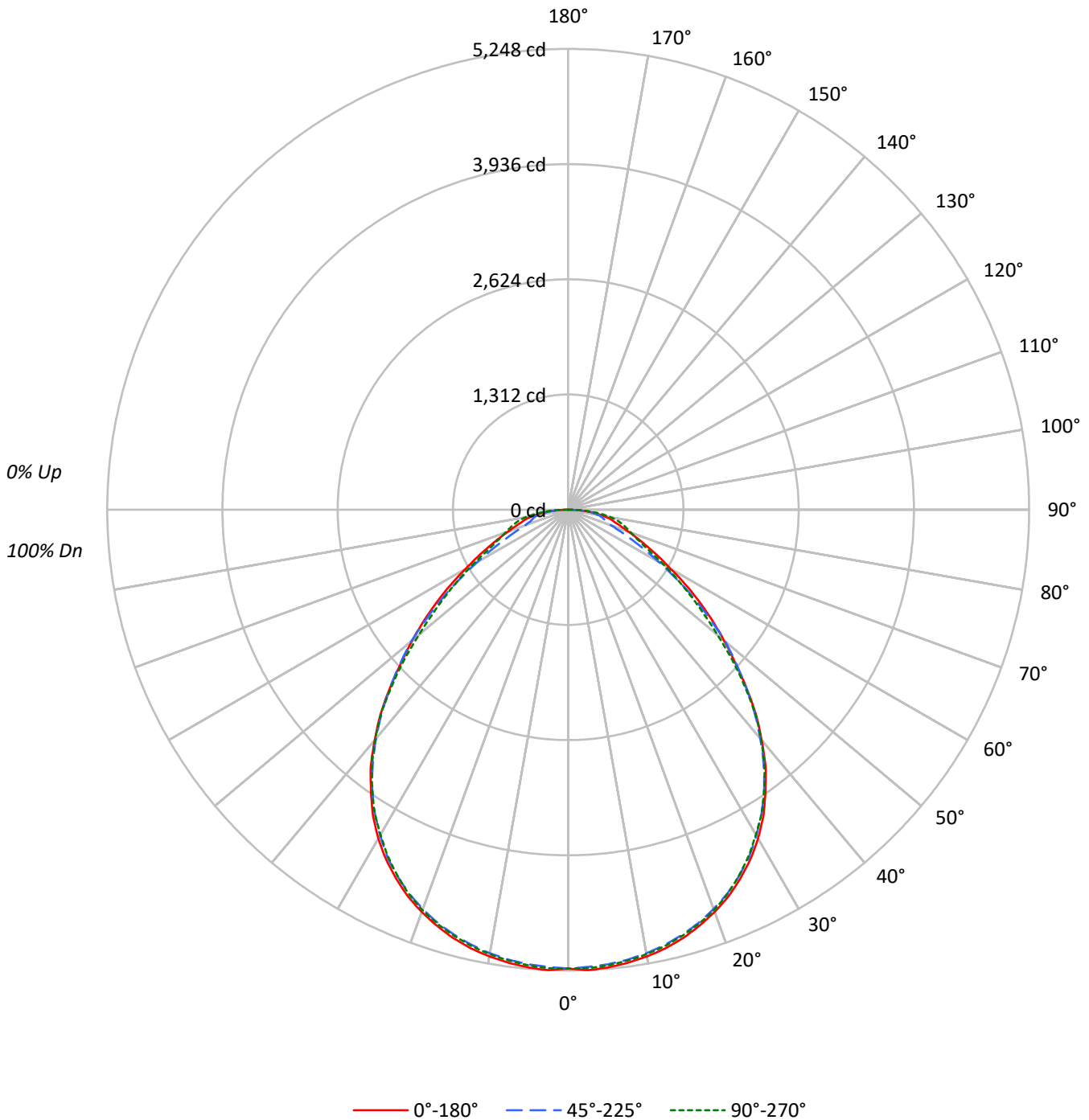
Input Watts (W): 81.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	7032	7032	7032
5°	7066	7019	7035
10°	7055	7007	7022
15°	7035	6980	6996
20°	6980	6930	6949
25°	6883	6833	6828
30°	6716	6655	6638
35°	6428	6388	6388
40°	6015	5980	6004
45°	5461	5452	5407
50°	4844	4881	4641
55°	4257	4070	3974
60°	3624	3214	3381
65°	3166	2499	2983
70°	2863	2057	2978
75°	2864	2195	3327
80°	3154	2701	3808
85°	3251	3035	4154



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	494.9	4.2
10°-20°	1416.7	11.9
20°-30°	2119.4	17.8
30°-40°	2425.3	20.4
40°-50°	2197.4	18.5
50°-60°	1555.7	13.1
60°-70°	898.7	7.6
70°-80°	544.8	4.6
80°-90°	229.3	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°	4031.0	33.9
0°-40°	6456.2	54.3
0°-60°	10209.2	85.9
0°-90°	11882.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11882.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5226	5226	5226	5226	5226	
5°	5232	5213	5197	5196	5209	497
15°	5051	5031	5011	5011	5023	1424
25°	4636	4618	4602	4599	4599	2132
35°	3914	3896	3889	3883	3889	2442
45°	2870	2864	2865	2844	2842	2211
55°	1815	1754	1735	1684	1694	1626
65°	994	892	785	898	937	1000
75°	551	494	422	543	640	590
85°	211	190	197	252	269	226
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5226.1	5226.1	5226.1	5226.1	5226.1
2.5°	5248.4	5228.5	5210.9	5213.3	5226.1
5°	5232.0	5213.3	5196.9	5195.7	5208.6
7.5°	5203.9	5187.5	5168.8	5168.8	5179.3
10°	5164.1	5147.7	5129.0	5127.8	5139.5
12.5°	5117.3	5096.3	5076.4	5076.4	5089.2
15°	5050.6	5030.7	5010.9	5010.9	5022.6
17.5°	4968.7	4951.2	4934.8	4936.0	4945.3
20°	4875.1	4857.6	4840.0	4842.4	4852.9
22.5°	4767.5	4746.4	4732.4	4731.2	4738.3
25°	4636.5	4617.8	4602.5	4599.0	4599.0
27.5°	4490.2	4470.3	4459.8	4443.4	4448.1
30°	4322.9	4301.9	4283.2	4273.8	4272.6
32.5°	4134.6	4113.5	4097.1	4096.0	4100.6
35°	3913.5	3895.9	3888.9	3883.0	3888.9
37.5°	3694.7	3661.9	3656.1	3654.9	3670.1
40°	3424.4	3412.7	3404.5	3398.7	3418.6
42.5°	3164.7	3141.3	3143.6	3121.4	3156.5
45°	2869.9	2864.0	2865.2	2844.1	2841.8
47.5°	2577.4	2576.2	2593.8	2535.3	2531.8
50°	2314.1	2302.4	2331.7	2241.6	2217.0
52.5°	2062.6	2029.8	2020.5	1938.6	1938.6
55°	1814.6	1753.7	1735.0	1683.5	1694.1
57.5°	1579.4	1492.8	1454.2	1453.1	1470.6
60°	1346.6	1248.3	1194.5	1236.6	1256.5
62.5°	1161.8	1054.1	972.2	1051.8	1070.5
65°	994.4	891.5	785.0	898.5	937.1
67.5°	850.5	765.1	631.8	780.4	831.8
70°	727.7	651.7	523.0	687.9	757.0
72.5°	630.6	567.4	455.1	614.2	697.3
75°	551.0	493.7	422.3	542.9	640.0
77.5°	487.9	420.0	395.4	475.0	574.4
80°	407.1	345.1	348.6	408.3	491.4
82.5°	313.5	266.7	280.8	338.1	386.1
85°	210.6	189.5	196.6	251.5	269.1
87.5°	104.1	100.6	107.6	147.4	147.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)