

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: P475757

Luminaire Tested: **24GR-LD5-120-A-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475757  
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-L850-CD1-U  
Description: GR 2'X4' LED TROFFER w/ A LENS  
Light Source: 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11893.8 lumens  
Efficiency: N/A  
Efficacy: 146.1 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

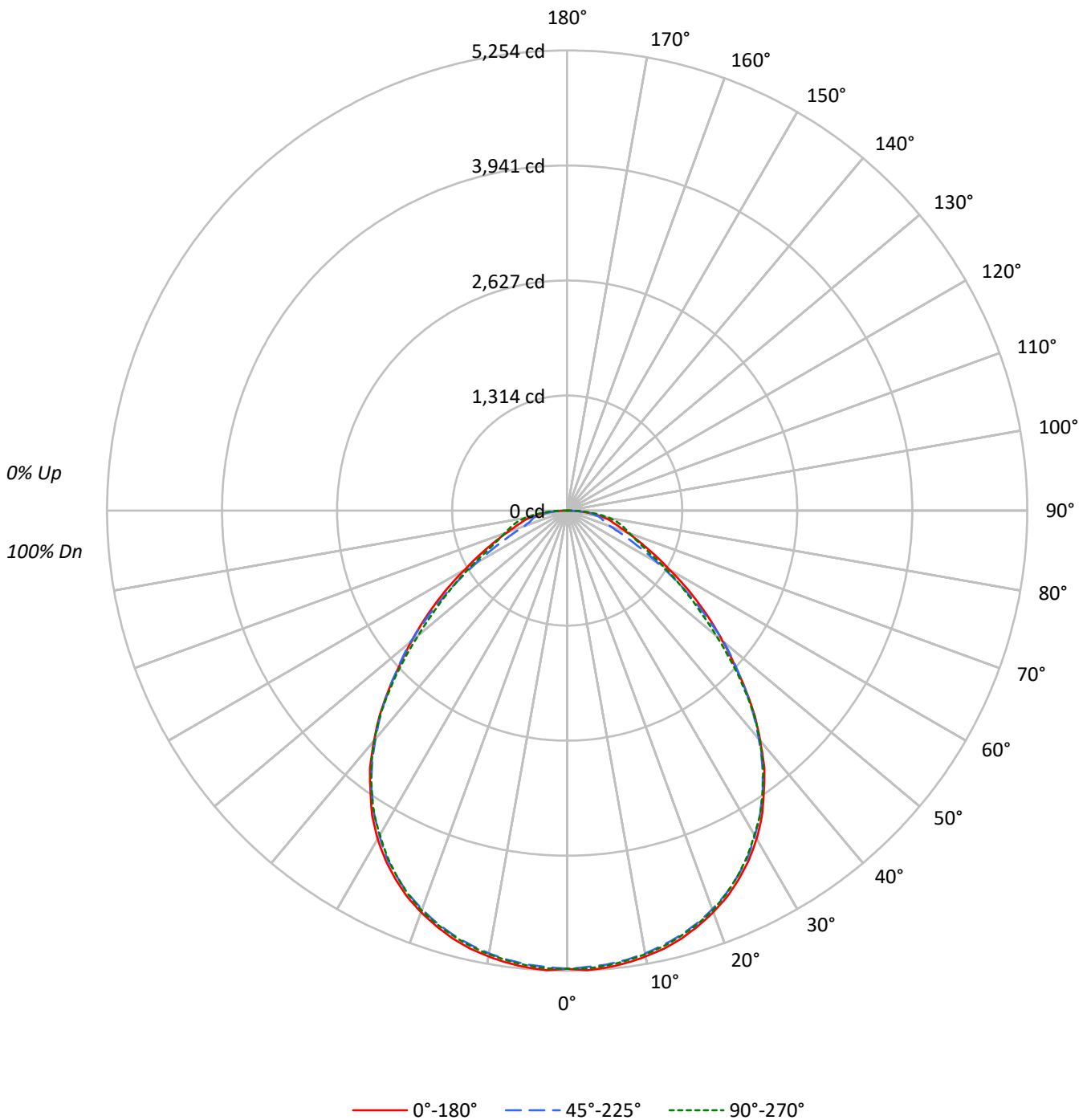
Input Watts (W): 81.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	7039	7039	7039
5°	7073	7026	7042
10°	7062	7014	7029
15°	7042	6987	7003
20°	6987	6937	6955
25°	6890	6840	6834
30°	6723	6661	6645
35°	6434	6394	6394
40°	6021	5986	6010
45°	5466	5457	5413
50°	4849	4886	4645
55°	4261	4074	3978
60°	3627	3218	3384
65°	3169	2502	2986
70°	2865	2059	2981
75°	2868	2198	3330
80°	3157	2704	3811
85°	3254	3037	4159



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	495.3	4.2
10°-20°	1418.1	11.9
20°-30°	2121.4	17.8
30°-40°	2427.7	20.4
40°-50°	2199.5	18.5
50°-60°	1557.2	13.1
60°-70°	899.6	7.6
70°-80°	545.4	4.6
80°-90°	229.5	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°	4034.9	33.9
0°-40°	6462.6	54.3
0°-60°	10219.3	85.9
0°-90°	11893.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11893.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5231	5231	5231	5231	5231	
5°	5237	5218	5202	5201	5214	498
15°	5056	5036	5016	5016	5028	1426
25°	4641	4622	4607	4604	4604	2135
35°	3917	3900	3893	3887	3893	2444
45°	2873	2867	2868	2847	2845	2213
55°	1816	1756	1737	1685	1696	1628
65°	995	892	786	899	938	1001
75°	552	494	423	543	641	591
85°	211	190	197	252	269	227
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5231.3	5231.3	5231.3	5231.3	5231.3
2.5°	5253.5	5233.6	5216.0	5218.4	5231.3
5°	5237.1	5218.4	5202.0	5200.8	5213.7
7.5°	5209.0	5192.6	5173.9	5173.9	5184.4
10°	5169.2	5152.8	5134.1	5132.9	5144.6
12.5°	5122.3	5101.3	5081.4	5081.4	5094.2
15°	5055.6	5035.7	5015.8	5015.8	5027.5
17.5°	4973.6	4956.0	4939.7	4940.8	4950.2
20°	4879.9	4862.4	4844.8	4847.1	4857.7
22.5°	4772.2	4751.1	4737.1	4735.9	4742.9
25°	4641.0	4622.3	4607.1	4603.5	4603.5
27.5°	4494.6	4474.7	4464.2	4447.8	4452.5
30°	4327.2	4306.1	4287.4	4278.0	4276.8
32.5°	4138.6	4117.5	4101.2	4100.0	4104.7
35°	3917.3	3899.7	3892.7	3886.8	3892.7
37.5°	3698.3	3665.5	3659.7	3658.5	3673.7
40°	3427.8	3416.1	3407.9	3402.0	3421.9
42.5°	3167.8	3144.4	3146.7	3124.5	3159.6
45°	2872.7	2866.8	2868.0	2846.9	2844.6
47.5°	2579.9	2578.7	2596.3	2537.7	2534.2
50°	2316.4	2304.7	2334.0	2243.8	2219.2
52.5°	2064.6	2031.8	2022.5	1940.5	1940.5
55°	1816.4	1755.5	1736.7	1685.2	1695.7
57.5°	1581.0	1494.3	1455.7	1454.5	1472.1
60°	1347.9	1249.6	1195.7	1237.8	1257.7
62.5°	1162.9	1055.2	973.2	1052.8	1071.5
65°	995.4	892.4	785.8	899.4	938.0
67.5°	851.4	765.9	632.4	781.1	832.6
70°	728.4	652.3	523.5	688.6	757.7
72.5°	631.2	568.0	455.6	614.8	698.0
75°	551.6	494.2	422.8	543.4	640.6
77.5°	488.3	420.4	395.8	475.5	575.0
80°	407.5	345.5	349.0	408.7	491.9
82.5°	313.9	267.0	281.1	338.4	386.5
85°	210.8	189.7	196.7	251.8	269.4
87.5°	104.2	100.7	107.7	147.6	147.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)