

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: P475562

Luminaire Tested: **24GR-LD5-120-F1-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475562  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-120-F1-UNV-L840-CD1-U  
Description: GR 2'X4' LED TROFFER w/ F1 LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12249.0 lumens  
Efficiency: N/A  
Efficacy: 150.5 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

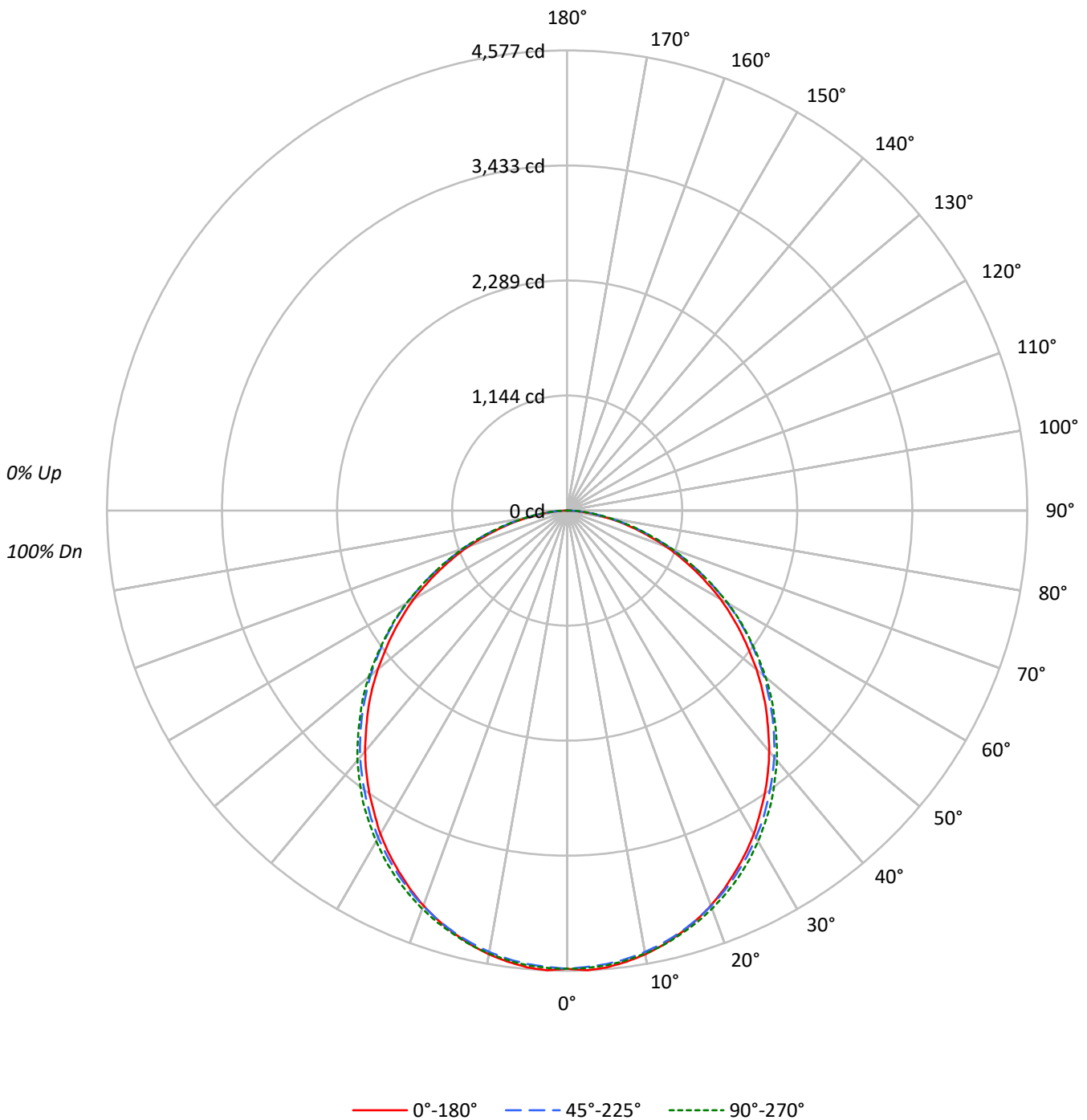
Input Watts (W): 81.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	6132	6132	6132
5°	6159	6115	6131
10°	6124	6091	6112
15°	6062	6051	6077
20°	5986	5993	6034
25°	5880	5919	5980
30°	5773	5836	5901
35°	5635	5730	5817
40°	5492	5629	5701
45°	5328	5491	5548
50°	5147	5346	5394
55°	4945	5165	5193
60°	4742	4952	4972
65°	4444	4655	4643
70°	4116	4305	4348
75°	3647	3859	3884
80°	3034	3257	3333
85°	2300	2523	2837



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	430.7	3.5
10°-20°	1226.4	10.0
20°-30°	1837.5	15.0
30°-40°	2180.1	17.8
40°-50°	2214.0	18.1
50°-60°	1949.8	15.9
60°-70°	1432.7	11.7
70°-80°	779.2	6.4
80°-90°	198.5	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°	3494.6	28.5
0°-40°	5674.7	46.3
0°-60°	9838.5	80.3
0°-90°	12249.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12249.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4558	4558	4558	4558	4558	
5°	4560	4541	4528	4528	4540	433
15°	4352	4344	4344	4350	4363	1227
25°	3961	3965	3987	4010	4028	1825
35°	3431	3450	3488	3523	3541	2145
45°	2800	2823	2886	2919	2916	2158
55°	2108	2138	2202	2222	2214	1885
65°	1396	1419	1462	1473	1458	1383
75°	702	716	742	745	747	746
85°	149	153	163	178	184	180
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4557.6	4557.6	4557.6	4557.6	4557.6
2.5°	4576.9	4558.8	4543.2	4543.2	4554.0
5°	4560.0	4540.8	4527.6	4527.6	4539.6
7.5°	4525.2	4509.6	4498.8	4498.8	4512.0
10°	4482.0	4466.3	4457.9	4459.1	4473.5
12.5°	4424.3	4409.9	4406.3	4408.7	4426.7
15°	4352.2	4343.8	4343.8	4349.8	4363.0
17.5°	4271.7	4263.3	4269.3	4277.7	4294.6
20°	4180.4	4174.4	4185.2	4198.5	4214.1
22.5°	4075.9	4073.5	4091.5	4109.6	4125.2
25°	3960.6	3965.4	3987.0	4009.9	4027.9
27.5°	3841.7	3846.5	3876.5	3900.5	3918.6
30°	3715.5	3717.9	3756.4	3785.2	3798.4
32.5°	3569.0	3588.2	3629.1	3656.7	3668.7
35°	3430.8	3450.1	3488.5	3523.3	3541.4
37.5°	3280.7	3297.5	3348.0	3385.2	3391.2
40°	3126.9	3142.5	3205.0	3236.2	3245.8
42.5°	2958.7	2988.8	3045.2	3076.5	3082.5
45°	2800.2	2823.0	2885.5	2919.1	2915.5
47.5°	2630.8	2656.0	2717.3	2749.7	2755.7
50°	2459.0	2487.8	2553.9	2575.5	2576.7
52.5°	2278.8	2316.1	2376.1	2405.0	2395.3
55°	2108.2	2138.3	2201.9	2222.4	2213.9
57.5°	1932.9	1966.5	2025.3	2036.2	2037.4
60°	1762.3	1789.9	1840.4	1851.2	1847.6
62.5°	1574.9	1602.5	1648.1	1659.0	1650.6
65°	1395.9	1418.7	1462.0	1472.8	1458.3
67.5°	1218.1	1240.9	1274.6	1291.4	1275.8
70°	1046.3	1064.3	1094.4	1104.0	1105.2
72.5°	863.7	896.2	917.8	916.6	913.0
75°	701.5	716.0	742.4	744.8	747.2
77.5°	546.6	550.2	577.8	585.0	580.2
80°	391.6	404.8	420.4	428.9	430.1
82.5°	258.3	267.9	281.1	295.5	295.5
85°	149.0	152.6	163.4	177.8	183.8
87.5°	60.1	66.1	76.9	87.7	88.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)