

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: P475760

Luminaire Tested: **24GR-LD5-180-A-UNV-L850-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475760  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-180-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: 17874.8 lumens  
Efficiency: N/A  
Efficacy: 141.5 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

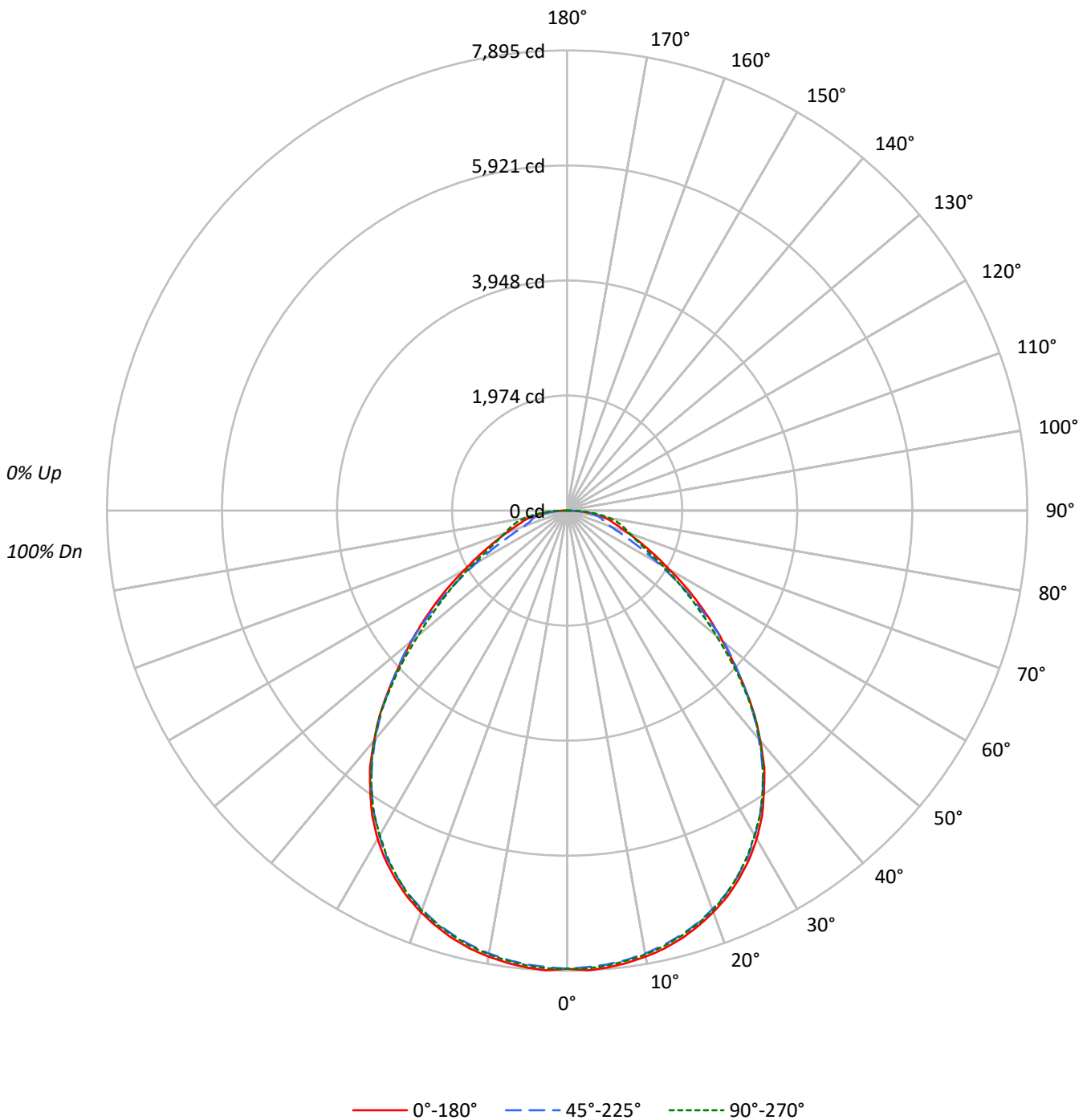
Input Watts (W): 126.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	10578	10578	10578
5°	10630	10559	10583
10°	10614	10542	10563
15°	10584	10500	10525
20°	10501	10425	10453
25°	10355	10279	10271
30°	10104	10011	9986
35°	9670	9609	9609
40°	9048	8996	9033
45°	8215	8201	8135
50°	7287	7342	6981
55°	6404	6123	5978
60°	5451	4836	5086
65°	4763	3760	4488
70°	4306	3095	4480
75°	4310	3303	5005
80°	4746	4064	5728
85°	4891	4565	6249



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	744.4	4.2
10°-20°	2131.3	11.9
20°-30°	3188.2	17.8
30°-40°	3648.4	20.4
40°-50°	3305.6	18.5
50°-60°	2340.3	13.1
60°-70°	1351.9	7.6
70°-80°	819.6	4.6
80°-90°	345.0	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°	6064.0	33.9
0°-40°	9712.4	54.3
0°-60°	15358.3	85.9
0°-90°	17874.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17874.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7862	7862	7862	7862	7862	
5°	7871	7842	7818	7816	7836	748
15°	7598	7568	7538	7538	7556	2142
25°	6975	6947	6924	6918	6918	3208
35°	5887	5861	5850	5841	5850	3673
45°	4317	4308	4310	4278	4275	3326
55°	2730	2638	2610	2533	2548	2446
65°	1496	1341	1181	1352	1410	1504
75°	829	743	635	817	963	888
85°	317	285	296	378	405	341
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7861.9	7861.9	7861.9	7861.9	7861.9
2.5°	7895.3	7865.4	7839.0	7842.5	7861.9
5°	7870.7	7842.5	7817.9	7816.1	7835.5
7.5°	7828.5	7803.8	7775.7	7775.7	7791.5
10°	7768.6	7744.0	7715.8	7714.1	7731.7
12.5°	7698.2	7666.5	7636.6	7636.6	7656.0
15°	7597.9	7568.0	7538.1	7538.1	7555.7
17.5°	7474.7	7448.3	7423.7	7425.4	7439.5
20°	7333.9	7307.5	7281.1	7284.6	7300.5
22.5°	7172.0	7140.3	7119.2	7117.4	7128.0
25°	6974.9	6946.7	6923.8	6918.5	6918.5
27.5°	6754.9	6724.9	6709.1	6684.5	6691.5
30°	6503.2	6471.5	6443.3	6429.3	6427.5
32.5°	6219.8	6188.1	6163.5	6161.7	6168.8
35°	5887.2	5860.8	5850.2	5841.4	5850.2
37.5°	5558.1	5508.8	5500.0	5498.2	5521.1
40°	5151.5	5133.9	5121.6	5112.8	5142.7
42.5°	4760.8	4725.6	4729.1	4695.7	4748.5
45°	4317.3	4308.5	4310.2	4278.5	4275.0
47.5°	3877.3	3875.5	3901.9	3813.9	3808.6
50°	3481.3	3463.7	3507.7	3372.1	3335.2
52.5°	3102.9	3053.6	3039.5	2916.3	2916.3
55°	2729.8	2638.2	2610.1	2532.6	2548.5
57.5°	2376.0	2245.8	2187.7	2185.9	2212.3
60°	2025.8	1877.9	1797.0	1860.3	1890.2
62.5°	1747.7	1585.8	1462.6	1582.2	1610.4
65°	1496.0	1341.1	1181.0	1351.7	1409.8
67.5°	1279.5	1151.0	950.4	1173.9	1251.4
70°	1094.7	980.3	786.7	1034.9	1138.7
72.5°	948.6	853.6	684.6	924.0	1049.0
75°	829.0	742.7	635.4	816.6	962.7
77.5°	733.9	631.8	594.9	714.6	864.2
80°	612.5	519.2	524.5	614.2	739.2
82.5°	471.7	401.3	422.4	508.6	580.8
85°	316.8	285.1	295.7	378.4	404.8
87.5°	156.6	151.4	161.9	221.8	221.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)