

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: P475580

Luminaire Tested: **24GR-LD5-180-F1-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475580
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24GR-LD5-180-F1-UNV-L850-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18426.7 lumens
Efficiency: N/A
Efficacy: 145.9 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

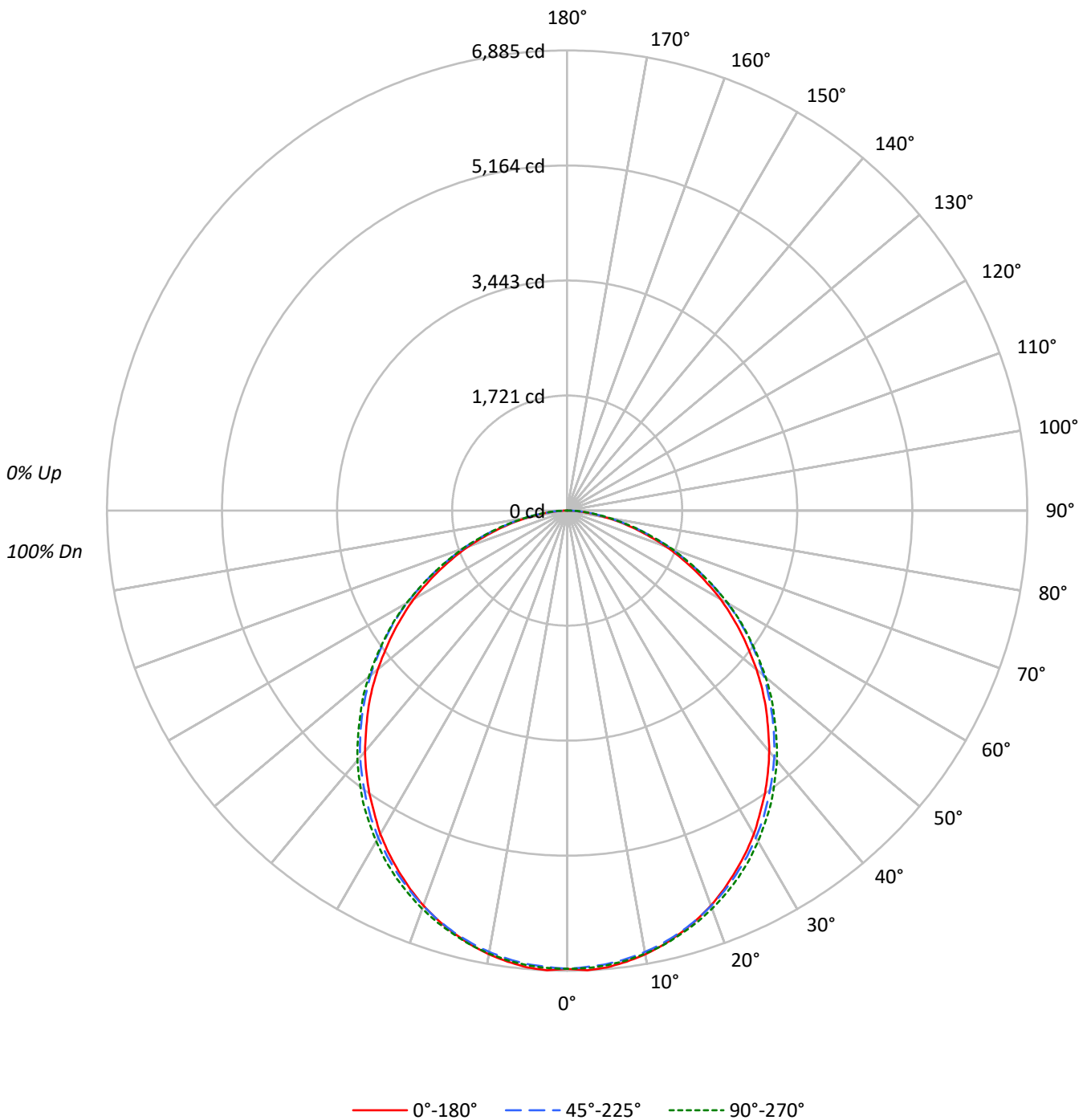
Input Watts (W): 126.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	9225	9225	9225
5°	9265	9199	9224
10°	9212	9162	9195
15°	9120	9102	9143
20°	9005	9015	9077
25°	8845	8904	8996
30°	8684	8779	8878
35°	8477	8620	8750
40°	8262	8468	8576
45°	8015	8260	8346
50°	7743	8042	8114
55°	7440	7770	7813
60°	7134	7450	7479
65°	6685	7002	6985
70°	6192	6476	6541
75°	5487	5806	5843
80°	4565	4901	5013
85°	3460	3795	4269



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	648.0	3.5
10°-20°	1844.9	10.0
20°-30°	2764.2	15.0
30°-40°	3279.6	17.8
40°-50°	3330.7	18.1
50°-60°	2933.2	15.9
60°-70°	2155.3	11.7
70°-80°	1172.2	6.4
80°-90°	298.6	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°	5257.1	28.5
0°-40°	8536.7	46.3
0°-60°	14800.5	80.3
0°-90°	18426.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18426.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6856	6856	6856	6856	6856	
5°	6860	6831	6811	6811	6829	651
15°	6547	6535	6535	6544	6564	1846
25°	5958	5965	5998	6032	6059	2745
35°	5161	5190	5248	5300	5327	3226
45°	4212	4247	4341	4391	4386	3247
55°	3172	3217	3312	3343	3330	2836
65°	2100	2134	2199	2216	2194	2081
75°	1055	1077	1117	1120	1124	1122
85°	224	230	246	268	276	271
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6856.3	6856.3	6856.3	6856.3	6856.3
2.5°	6885.2	6858.1	6834.6	6834.6	6850.8
5°	6859.9	6831.0	6811.1	6811.1	6829.1
7.5°	6807.5	6784.0	6767.7	6767.7	6787.6
10°	6742.4	6718.9	6706.3	6708.1	6729.8
12.5°	6655.7	6634.0	6628.6	6632.2	6659.3
15°	6547.2	6534.6	6534.6	6543.6	6563.5
17.5°	6426.2	6413.5	6422.5	6435.2	6460.5
20°	6288.8	6279.8	6296.0	6315.9	6339.4
22.5°	6131.6	6128.0	6155.1	6182.2	6205.7
25°	5958.1	5965.3	5997.9	6032.2	6059.3
27.5°	5779.2	5786.4	5831.6	5867.8	5894.9
30°	5589.5	5593.1	5650.9	5694.3	5714.1
32.5°	5369.0	5397.9	5459.3	5500.9	5519.0
35°	5161.2	5190.1	5247.9	5300.3	5327.4
37.5°	4935.3	4960.6	5036.5	5092.5	5101.5
40°	4704.0	4727.5	4821.4	4868.4	4882.9
42.5°	4451.0	4496.1	4581.1	4628.1	4637.1
45°	4212.4	4246.8	4340.7	4391.3	4385.9
47.5°	3957.6	3995.6	4087.7	4136.5	4145.6
50°	3699.2	3742.6	3842.0	3874.5	3876.3
52.5°	3428.1	3484.1	3574.5	3617.9	3603.4
55°	3171.5	3216.7	3312.5	3343.2	3330.5
57.5°	2907.7	2958.3	3046.8	3063.1	3064.9
60°	2651.1	2692.6	2768.5	2784.8	2779.4
62.5°	2369.1	2410.7	2479.4	2495.6	2483.0
65°	2099.9	2134.2	2199.3	2215.5	2193.9
67.5°	1832.4	1866.8	1917.4	1942.7	1919.2
70°	1574.0	1601.1	1646.3	1660.8	1662.6
72.5°	1299.3	1348.1	1380.6	1378.8	1373.4
75°	1055.4	1077.1	1116.8	1120.4	1124.0
77.5°	822.2	827.7	869.2	880.1	872.8
80°	589.1	609.0	632.5	645.1	647.0
82.5°	388.5	403.0	422.9	444.6	444.6
85°	224.1	229.5	245.8	267.5	276.5
87.5°	90.4	99.4	115.7	131.9	133.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)