

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: P475550

Luminaire Tested: **24GR-LD5-180-F1-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475550
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-L835-CD1-U
Description: GR 2'X4' LED TROFFER w/ F1 LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18065.4 lumens
Efficiency: N/A
Efficacy: 143.0 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

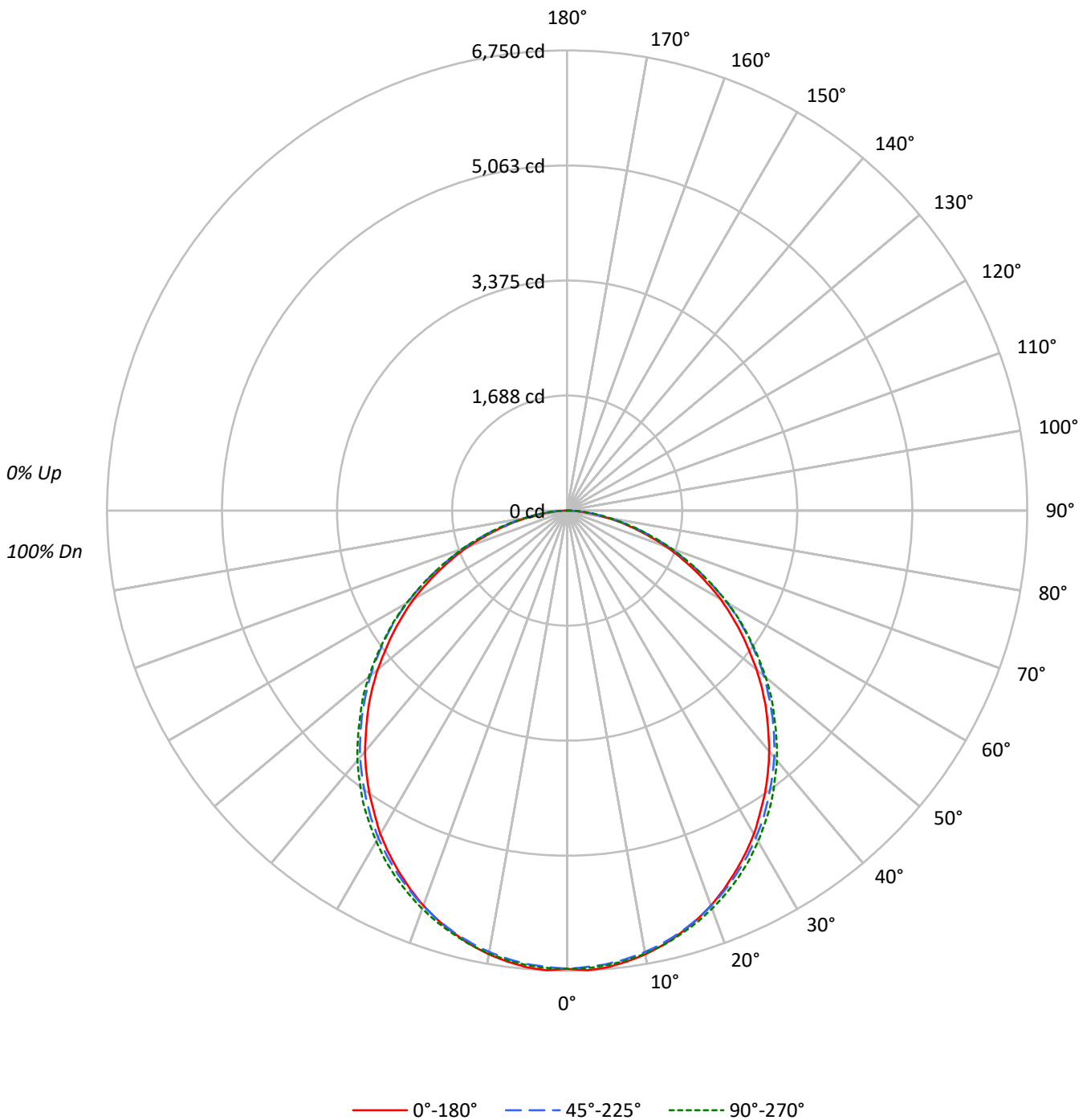
Input Watts (W): 126.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	9044	9044	9044
5°	9084	9019	9043
10°	9031	8983	9014
15°	8941	8924	8963
20°	8828	8838	8899
25°	8672	8730	8819
30°	8514	8607	8704
35°	8311	8451	8579
40°	8100	8302	8408
45°	7858	8098	8182
50°	7591	7884	7955
55°	7294	7618	7659
60°	6994	7304	7333
65°	6554	6865	6848
70°	6070	6349	6412
75°	5379	5692	5729
80°	4475	4805	4915
85°	3392	3721	4185



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	635.3	3.5
10°-20°	1808.7	10.0
20°-30°	2710.0	15.0
30°-40°	3215.3	17.8
40°-50°	3265.4	18.1
50°-60°	2875.7	15.9
60°-70°	2113.0	11.7
70°-80°	1149.3	6.4
80°-90°	292.8	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°	5154.0	28.5
0°-40°	8369.3	46.3
0°-60°	14510.3	80.3
0°-90°	18065.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18065.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6722	6722	6722	6722	6722	
5°	6725	6697	6678	6678	6695	638
15°	6419	6406	6406	6415	6435	1810
25°	5841	5848	5880	5914	5940	2692
35°	5060	5088	5145	5196	5223	3163
45°	4130	4164	4256	4305	4300	3183
55°	3109	3154	3248	3278	3265	2780
65°	2059	2092	2156	2172	2151	2040
75°	1035	1056	1095	1098	1102	1101
85°	220	225	241	262	271	266
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6721.8	6721.8	6721.8	6721.8	6721.8
2.5°	6750.2	6723.6	6700.6	6700.6	6716.5
5°	6725.4	6697.0	6677.5	6677.5	6695.2
7.5°	6674.0	6651.0	6635.0	6635.0	6654.5
10°	6610.2	6587.2	6574.8	6576.5	6597.8
12.5°	6525.2	6503.9	6498.6	6502.1	6528.7
15°	6418.9	6406.5	6406.5	6415.3	6434.8
17.5°	6300.2	6287.8	6296.6	6309.0	6333.8
20°	6165.5	6156.6	6172.6	6192.1	6215.1
22.5°	6011.4	6007.8	6034.4	6061.0	6084.0
25°	5841.3	5848.4	5880.3	5913.9	5940.5
27.5°	5665.9	5673.0	5717.3	5752.7	5779.3
30°	5479.9	5483.4	5540.1	5582.6	5602.1
32.5°	5263.7	5292.1	5352.3	5393.0	5410.8
35°	5060.0	5088.3	5145.0	5196.4	5223.0
37.5°	4838.5	4863.3	4937.7	4992.6	5001.5
40°	4611.7	4634.8	4726.9	4773.0	4787.1
42.5°	4363.7	4408.0	4491.3	4537.3	4546.2
45°	4129.8	4163.5	4255.6	4305.2	4299.9
47.5°	3880.0	3917.2	4007.6	4055.4	4064.3
50°	3626.7	3669.2	3766.6	3798.5	3800.3
52.5°	3360.9	3415.8	3504.4	3546.9	3532.8
55°	3109.3	3153.6	3247.5	3277.6	3265.2
57.5°	2850.7	2900.3	2987.1	3003.0	3004.8
60°	2599.1	2639.8	2714.2	2730.2	2724.9
62.5°	2322.7	2363.4	2430.8	2446.7	2434.3
65°	2058.7	2092.4	2156.2	2172.1	2150.8
67.5°	1796.5	1830.2	1879.8	1904.6	1881.5
70°	1543.1	1569.7	1614.0	1628.2	1630.0
72.5°	1273.9	1321.7	1353.6	1351.8	1346.5
75°	1034.7	1055.9	1094.9	1098.5	1102.0
77.5°	806.1	811.4	852.2	862.8	855.7
80°	577.6	597.1	620.1	632.5	634.3
82.5°	380.9	395.1	414.6	435.8	435.8
85°	219.7	225.0	241.0	262.2	271.1
87.5°	88.6	97.4	113.4	129.3	131.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)