

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: FAIL-SAFE

Report Number: P183404

Luminaire Tested: **MAO-G-24-4-LD4-3-HI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183404
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34512)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MAO-G-24-4-LD4-3-HI
Description:
Light Source: 2UT217042A8404A
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12288.8 lumens
Efficiency: N/A
Efficacy: 91.4 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.26 / 1.34
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

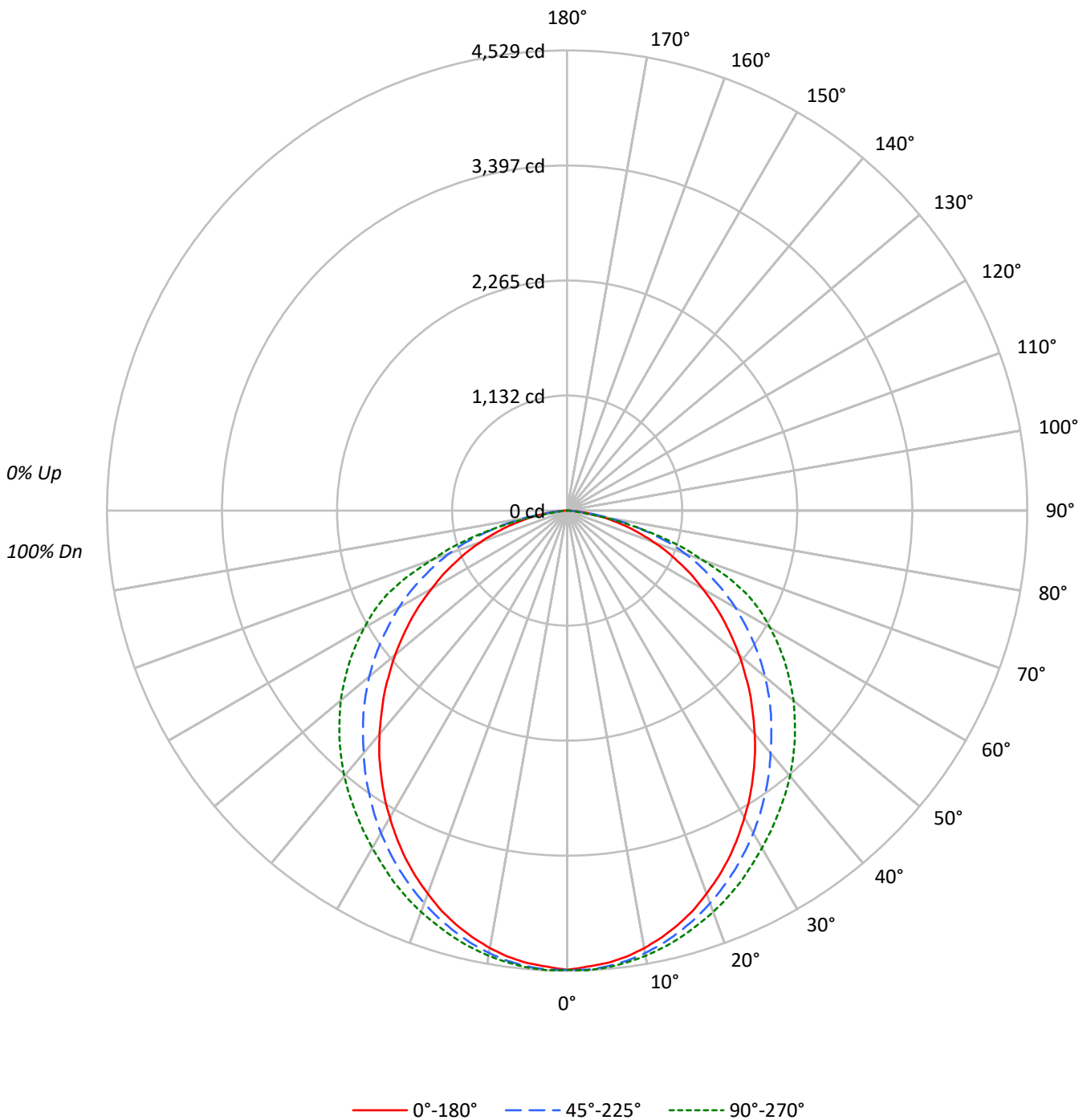
Input Watts (W): 134.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	63	73	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	50
5	76	63	54	48	74	62	54	47	60	52	47	58	51	46	56	50	46	44
6	70	57	48	42	68	56	47	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12164	12164	12164
5°	12076	12165	12193
10°	11948	12085	12158
15°	11753	11945	12101
20°	11487	11778	12040
25°	11194	11589	11977
30°	10843	11385	11915
35°	10480	11163	11921
40°	10090	10943	11988
45°	9689	10796	12062
50°	9257	10649	12181
55°	8815	10462	12295
60°	8288	10302	12416
65°	7768	10031	12465
70°	7129	9696	11070
75°	6310	8579	9140
80°	5250	6409	4799
85°	3659	2631	1476



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	426.8	3.5
10°-20°	1208.2	9.8
20°-30°	1797.6	14.6
30°-40°	2130.8	17.3
40°-50°	2194.8	17.9
50°-60°	2004.3	16.3
60°-70°	1561.0	12.7
70°-80°	828.3	6.7
80°-90°	136.9	1.1
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°	3432.6	27.9
0°-40°	5563.4	45.3
0°-60°	9762.6	79.4
0°-90°	12288.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12288.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4520	4520	4520	4520	4520	
5°	4470	4483	4504	4514	4514	424
15°	4219	4238	4288	4337	4344	1188
25°	3770	3805	3903	3999	4034	1734
35°	3190	3252	3398	3558	3629	1995
45°	2546	2621	2837	3066	3169	1961
55°	1879	1995	2230	2500	2621	1678
65°	1220	1345	1575	1841	1958	1212
75°	607	696	825	877	879	643
85°	118	127	85	60	48	151
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4520.2	4520.2	4520.2	4520.2	4520.2
2.5°	4493.2	4503.6	4522.3	4530.6	4528.6
5°	4470.4	4482.8	4503.6	4514.0	4514.0
7.5°	4430.9	4443.3	4470.4	4487.0	4487.0
10°	4372.7	4389.3	4422.6	4447.5	4449.6
12.5°	4302.0	4320.7	4362.3	4395.5	4401.8
15°	4218.9	4237.6	4287.5	4337.4	4343.6
17.5°	4125.4	4146.2	4206.4	4262.5	4275.0
20°	4011.1	4042.2	4112.9	4181.5	4204.3
22.5°	3896.8	3927.9	4011.1	4096.3	4123.3
25°	3770.0	3805.3	3903.0	3998.6	4033.9
27.5°	3632.8	3680.6	3786.6	3894.7	3934.2
30°	3489.4	3541.4	3664.0	3786.6	3834.4
32.5°	3346.0	3400.1	3535.1	3670.2	3734.7
35°	3190.2	3252.5	3398.0	3558.0	3628.7
37.5°	3036.4	3102.9	3262.9	3441.6	3522.7
40°	2872.2	2940.8	3115.3	3319.0	3412.5
42.5°	2703.8	2780.7	2974.0	3194.3	3292.0
45°	2545.9	2620.7	2836.8	3065.5	3169.4
47.5°	2371.3	2458.6	2689.3	2932.4	3038.4
50°	2211.3	2300.6	2543.8	2795.3	2909.6
52.5°	2040.9	2153.1	2390.0	2647.7	2764.1
55°	1878.8	1995.1	2230.0	2500.2	2620.7
57.5°	1712.5	1831.0	2070.0	2340.1	2466.9
60°	1540.0	1664.7	1914.1	2182.2	2306.9
62.5°	1390.4	1504.7	1749.9	2009.7	2144.8
65°	1219.9	1344.6	1575.3	1841.4	1957.7
67.5°	1066.2	1174.2	1407.0	1656.4	1706.3
70°	906.1	1005.9	1232.4	1377.9	1407.0
72.5°	748.2	847.9	1053.7	1130.6	1174.2
75°	606.9	696.2	825.1	877.0	879.1
77.5°	463.5	548.7	629.7	611.0	577.8
80°	338.8	399.0	413.6	353.3	309.7
82.5°	224.5	251.5	222.4	139.2	85.2
85°	118.5	126.8	85.2	60.3	47.8
87.5°	43.6	47.8	35.3	29.1	24.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)