

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: P183406

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183406
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-LO
Description:
Light Source: 2UT217042A8404A
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7376.8 lumens
Efficiency: N/A
Efficacy: 99.6 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

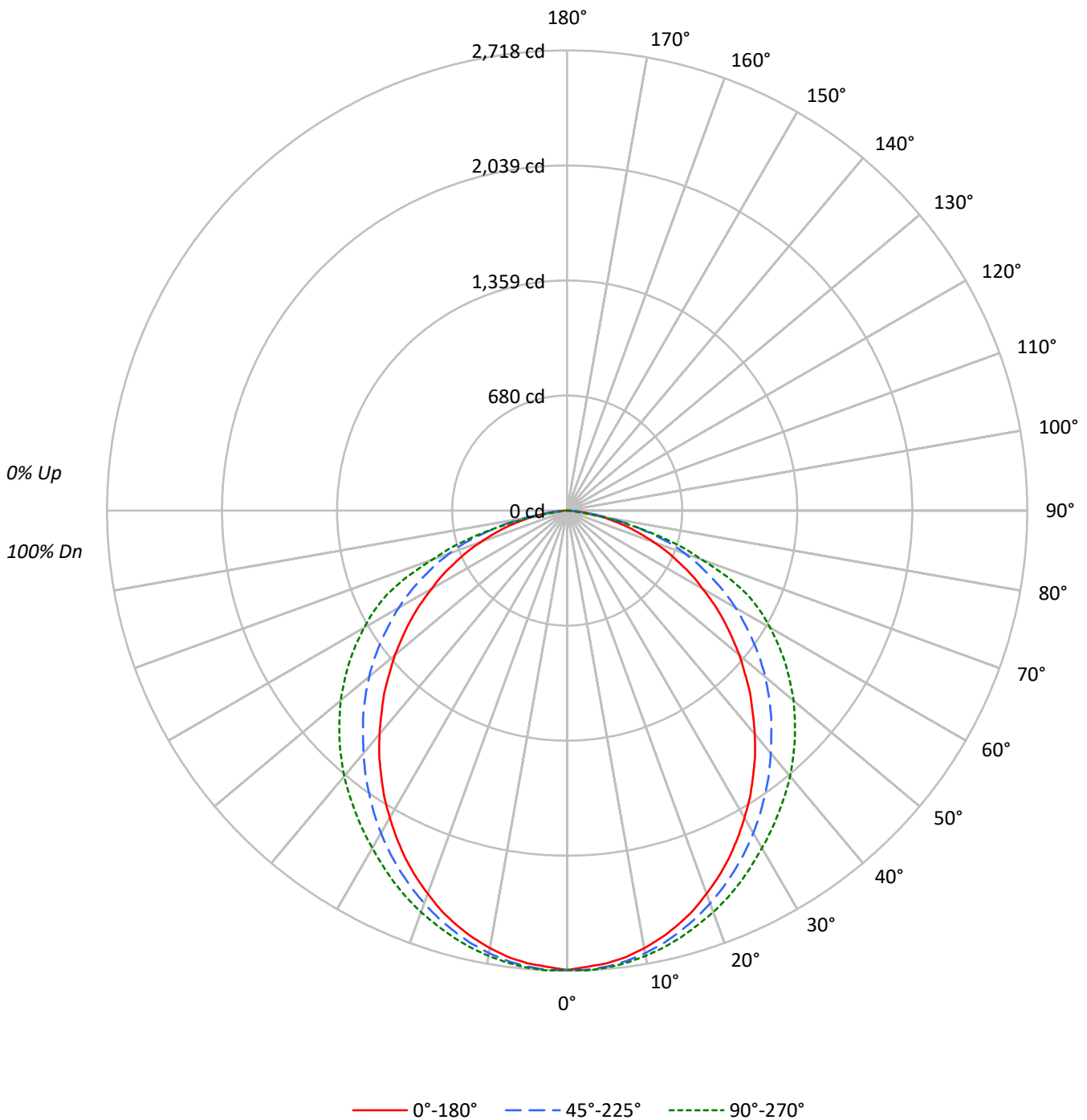
Input Watts (W): 74.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7302	7302	7302
5°	7249	7303	7320
10°	7172	7254	7298
15°	7055	7170	7264
20°	6895	7070	7227
25°	6720	6956	7190
30°	6508	6834	7152
35°	6291	6701	7156
40°	6056	6569	7196
45°	5816	6481	7240
50°	5557	6393	7312
55°	5291	6280	7381
60°	4975	6184	7453
65°	4663	6021	7483
70°	4279	5821	6645
75°	3788	5150	5487
80°	3152	3848	2881
85°	2195	1578	886



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.2	3.5
10°-20°	725.3	9.8
20°-30°	1079.1	14.6
30°-40°	1279.1	17.3
40°-50°	1317.5	17.9
50°-60°	1203.2	16.3
60°-70°	937.0	12.7
70°-80°	497.2	6.7
80°-90°	82.2	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°	2060.6	27.9
0°-40°	3339.6	45.3
0°-60°	5860.3	79.4
0°-90°	7376.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7376.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2713	2713	2713	2713	2713	
5°	2684	2691	2703	2710	2710	254
15°	2532	2544	2574	2604	2607	713
25°	2263	2284	2343	2400	2422	1041
35°	1915	1952	2040	2136	2178	1198
45°	1528	1573	1703	1840	1902	1177
55°	1128	1198	1339	1501	1573	1007
65°	732	807	946	1105	1175	727
75°	364	418	495	526	528	386
85°	71	76	51	36	29	91
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2713.4	2713.4	2713.4	2713.4	2713.4
2.5°	2697.2	2703.4	2714.7	2719.7	2718.4
5°	2683.5	2691.0	2703.4	2709.7	2709.7
7.5°	2659.8	2667.3	2683.5	2693.5	2693.5
10°	2624.8	2634.8	2654.8	2669.8	2671.0
12.5°	2582.4	2593.7	2618.6	2638.6	2642.3
15°	2532.5	2543.8	2573.7	2603.6	2607.4
17.5°	2476.4	2488.9	2525.0	2558.7	2566.2
20°	2407.8	2426.5	2468.9	2510.1	2523.8
22.5°	2339.2	2357.9	2407.8	2458.9	2475.1
25°	2263.1	2284.3	2342.9	2400.3	2421.5
27.5°	2180.7	2209.4	2273.0	2337.9	2361.6
30°	2094.6	2125.8	2199.4	2273.0	2301.7
32.5°	2008.6	2041.0	2122.1	2203.2	2241.9
35°	1915.0	1952.4	2039.7	2135.8	2178.2
37.5°	1822.7	1862.6	1958.7	2065.9	2114.6
40°	1724.1	1765.3	1870.1	1992.3	2048.5
42.5°	1623.1	1669.2	1785.2	1917.5	1976.1
45°	1528.3	1573.2	1702.9	1840.1	1902.5
47.5°	1423.5	1475.9	1614.3	1760.3	1823.9
50°	1327.4	1381.0	1527.0	1678.0	1746.6
52.5°	1225.1	1292.5	1434.7	1589.4	1659.2
55°	1127.8	1197.6	1338.6	1500.8	1573.2
57.5°	1028.0	1099.1	1242.6	1404.7	1480.8
60°	924.4	999.3	1149.0	1309.9	1384.8
62.5°	834.6	903.2	1050.4	1206.4	1287.5
65°	732.3	807.2	945.6	1105.3	1175.2
67.5°	640.0	704.9	844.6	994.3	1024.2
70°	543.9	603.8	739.8	827.1	844.6
72.5°	449.1	509.0	632.5	678.7	704.9
75°	364.3	417.9	495.3	526.5	527.7
77.5°	278.2	329.4	378.0	366.8	346.8
80°	203.4	239.5	248.3	212.1	185.9
82.5°	134.7	151.0	133.5	83.6	51.1
85°	71.1	76.1	51.1	36.2	28.7
87.5°	26.2	28.7	21.2	17.5	15.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)