

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: P183398

Luminaire Tested: **MAO-G-24-2-LD4-2-LO**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183398
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34511)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MAO-G-24-2-LD4-2-LO
Description:
Light Source: 2UT217042A8404A
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2378.1 lumens
Efficiency: N/A
Efficacy: 96.3 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

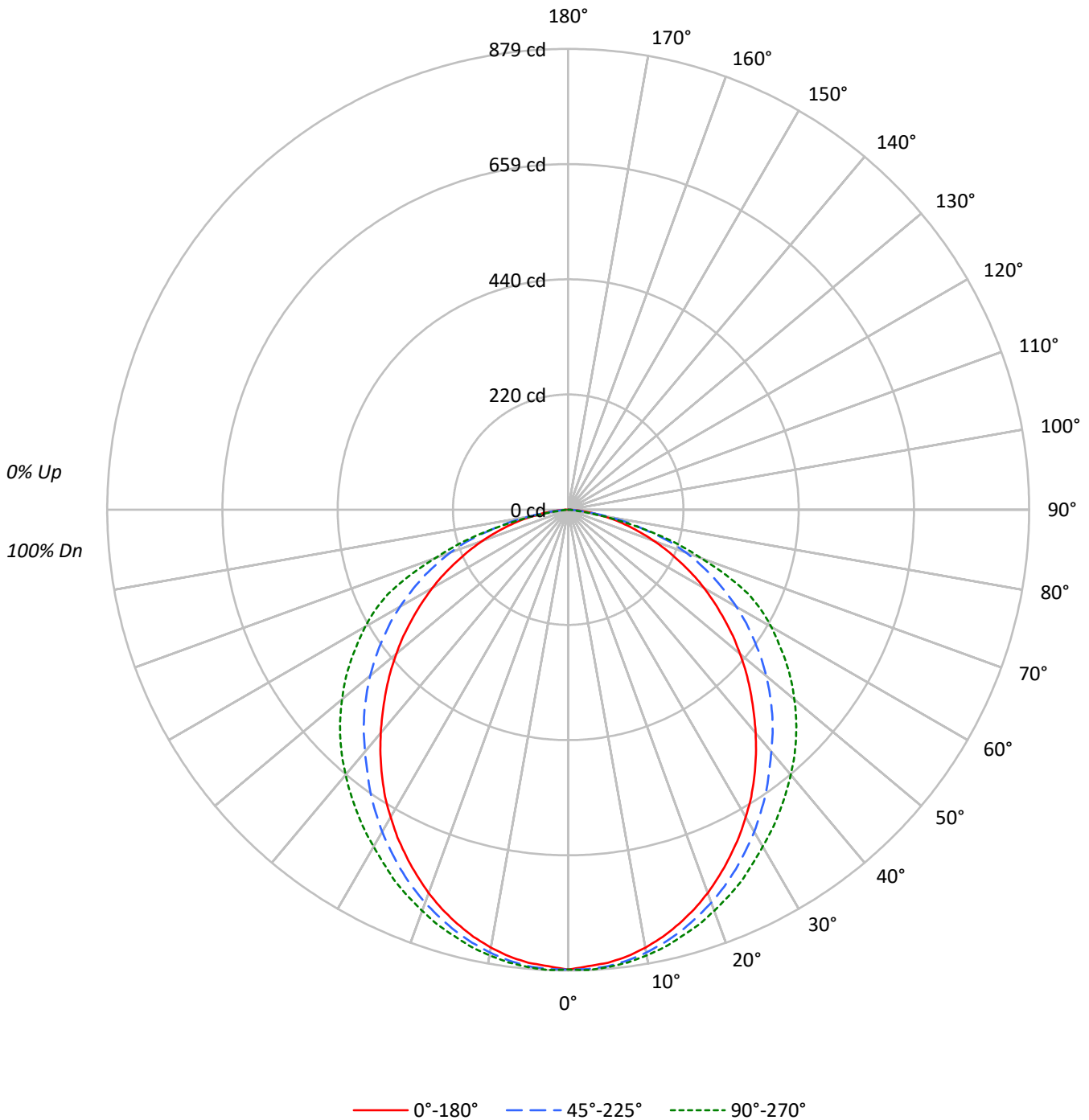
Input Watts (W): 24.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P183398

CATALOG NUMBER: MAO-G-24-2-LD4-2-LO

Luminous Intensity Polar Plot





TEST NUMBER: P183398

CATALOG NUMBER: MAO-G-24-2-LD4-2-LO

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	64	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	51
5	76	63	54	48	74	62	54	47	60	53	47	58	51	46	56	50	46	44
6	70	57	48	42	68	56	48	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	42	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°	2360	2360	2360
5°	2343	2361	2366
10°	2318	2344	2359
15°	2278	2318	2345
20°	2228	2285	2331
25°	2167	2246	2321
30°	2104	2205	2306
35°	2033	2161	2309
40°	1953	2117	2320
45°	1871	2093	2339
50°	1789	2063	2357
55°	1701	2028	2380
60°	1612	1993	2407
65°	1498	1945	2408
70°	1375	1880	2116
75°	1211	1648	1698
80°	995	1209	902
85°	722	500	278



TEST NUMBER: P183398

CATALOG NUMBER: MAO-G-24-2-LD4-2-LO

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	82.8	3.5
10°-20°	234.3	9.9
20°-30°	348.3	14.6
30°-40°	412.5	17.3
40°-50°	425.3	17.9
50°-60°	388.5	16.3
60°-70°	301.9	12.7
70°-80°	158.3	6.7
80°-90°	26.2	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°	665.4	28.0
0°-40°	1077.9	45.3
0°-60°	1891.8	79.5
0°-90°	2378.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2378.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	877	877	877	877	877	
5°	867	870	874	876	876	82
15°	818	822	832	840	842	230
25°	730	738	756	774	782	336
35°	619	630	658	688	703	387
45°	492	508	550	593	615	380
55°	363	387	432	483	507	325
65°	235	261	306	356	378	234
75°	116	134	158	167	163	124
85°	23	25	16	11	9	29
90°	0	0	0	0	0	



TEST NUMBER: P183398

CATALOG NUMBER: MAO-G-24-2-LD4-2-LO

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	877.0	877.0	877.0	877.0	877.0
2.5°	871.6	873.4	877.0	878.8	878.8
5°	867.4	869.8	874.0	875.8	875.8
7.5°	859.6	862.0	867.4	871.0	871.0
10°	848.2	851.8	857.8	862.6	863.2
12.5°	834.4	838.6	845.8	852.4	854.2
15°	817.6	822.4	832.0	840.4	841.6
17.5°	799.0	804.4	815.2	826.0	829.6
20°	778.0	784.0	797.8	810.4	814.0
22.5°	754.6	761.8	778.0	793.6	798.4
25°	730.0	737.8	756.4	774.4	781.6
27.5°	704.7	713.1	733.0	754.0	761.2
30°	677.1	686.1	709.5	732.4	742.0
32.5°	649.5	658.5	683.7	710.1	723.3
35°	618.9	629.7	657.9	688.5	702.9
37.5°	588.3	600.9	629.1	666.9	681.9
40°	555.9	569.7	602.7	644.1	660.3
42.5°	523.5	538.5	576.9	619.5	638.1
45°	491.6	508.4	549.9	593.1	614.7
47.5°	460.4	476.6	521.7	567.9	589.5
50°	427.4	445.4	492.8	542.1	563.1
52.5°	396.2	418.4	463.4	513.2	536.1
55°	362.6	387.2	432.2	483.2	507.2
57.5°	330.8	356.6	402.2	453.8	476.6
60°	299.5	324.2	370.4	422.6	447.2
62.5°	267.7	292.9	337.4	389.6	415.4
65°	235.3	261.1	305.5	356.0	378.2
67.5°	204.1	228.1	271.9	318.8	326.0
70°	174.7	195.1	238.9	265.9	268.9
72.5°	144.7	164.5	202.9	213.7	220.3
75°	116.5	133.9	158.5	166.9	163.3
77.5°	91.2	105.1	120.1	114.1	108.1
80°	64.2	74.4	78.0	67.2	58.2
82.5°	42.6	48.6	41.4	27.0	18.0
85°	23.4	25.2	16.2	11.4	9.0
87.5°	9.0	9.6	7.2	5.4	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)