

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: P34512

Luminaire Tested: **MAO-G-24-2-LD4-3-HI**

Test Date: 10/05/15

Test Information

Test Method: LM-79-08
Report Number: P34512
Test Lab: INNOVATION CENTER-P3
Test Date: 10/05/15
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MAO-G-24-2-LD4-3-HI
Description: FAILSAFE MAO LED 2X2 FIXTURE
Light Source: (126) NICHIA ELM 3500K LED
2UT217042A8404A
Ballast/Driver: (2) OSRAM ELECTRONIC DRIVER
OT50W/PRG1400C/UNV/DIM/L, OT25W/PRG1250C/UNV/DIM

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5913.0 lumens
Efficiency: N/A
Efficacy: 87.6 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

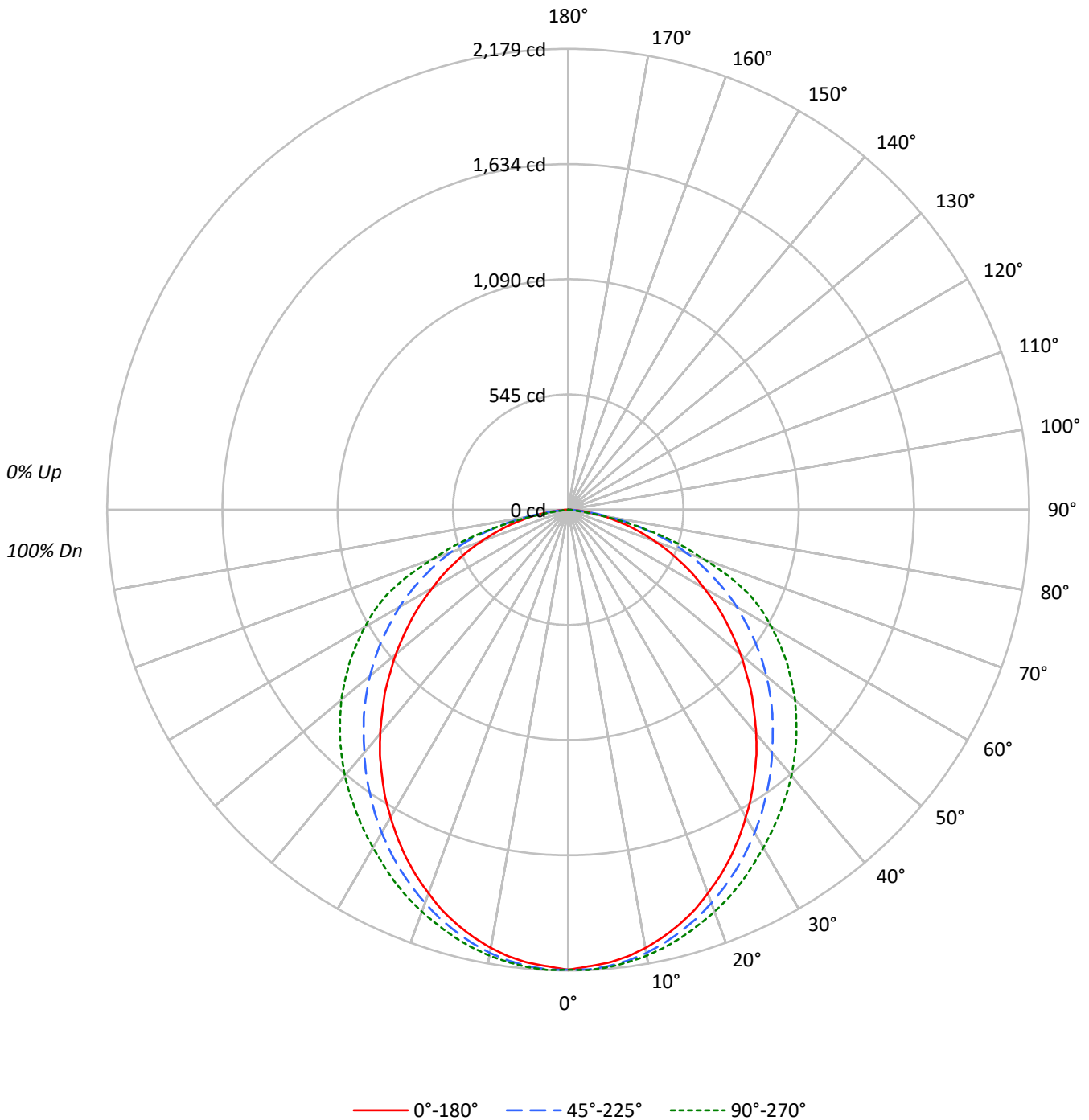
Input Watts (W): 67.5
Input Voltage (V): 120.0
Input Current (Ain): 0.564
Voltage Rise (V): NR
Power Factor: 0.999
Total Harmonic Distortion (THDi): 6.67%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 5 HR
Ambient Temperature (°C): 25.0
Test Distance: 25 FT



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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°	5853	5853	5853
5°	5810	5854	5867
10°	5749	5815	5850
15°	5655	5747	5823
20°	5527	5667	5793
25°	5386	5576	5763
30°	5217	5478	5733
35°	5043	5371	5736
40°	4855	5266	5768
45°	4662	5195	5804
50°	4454	5124	5861
55°	4241	5034	5916
60°	3988	4957	5974
65°	3738	4826	5998
70°	3430	4666	5327
75°	3036	4128	4398
80°	2526	3084	2309
85°	1760	1266	710



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.4	3.5
10°-20°	581.4	9.8
20°-30°	865.0	14.6
30°-40°	1025.3	17.3
40°-50°	1056.1	17.9
50°-60°	964.4	16.3
60°-70°	751.1	12.7
70°-80°	398.6	6.7
80°-90°	65.9	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°	1651.7	27.9
0°-40°	2676.9	45.3
0°-60°	4697.4	79.4
0°-90°	5913.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5913.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2175	2175	2175	2175	2175	
5°	2151	2157	2167	2172	2172	204
15°	2030	2039	2063	2087	2090	572
25°	1814	1831	1878	1924	1941	835
35°	1535	1565	1635	1712	1746	960
45°	1225	1261	1365	1475	1525	943
55°	904	960	1073	1203	1261	808
65°	587	647	758	886	942	583
75°	292	335	397	422	423	310
85°	57	61	41	29	23	73
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2175	2175	2175	2175	2175
2.5°	2162	2167	2176	2180	2179
5°	2151	2157	2167	2172	2172
7.5°	2132	2138	2151	2159	2159
10°	2104	2112	2128	2140	2141
12.5°	2070	2079	2099	2115	2118
15°	2030	2039	2063	2087	2090
17.5°	1985	1995	2024	2051	2057
20°	1930	1945	1979	2012	2023
22.5°	1875	1890	1930	1971	1984
25°	1814	1831	1878	1924	1941
27.5°	1748	1771	1822	1874	1893
30°	1679	1704	1763	1822	1845
32.5°	1610	1636	1701	1766	1797
35°	1535	1565	1635	1712	1746
37.5°	1461	1493	1570	1656	1695
40°	1382	1415	1499	1597	1642
42.5°	1301	1338	1431	1537	1584
45°	1225	1261	1365	1475	1525
47.5°	1141	1183	1294	1411	1462
50°	1064	1107	1224	1345	1400
52.5°	982	1036	1150	1274	1330
55°	904	960	1073	1203	1261
57.5°	824	881	996	1126	1187
60°	741	801	921	1050	1110
62.5°	669	724	842	967	1032
65°	587	647	758	886	942
67.5°	513	565	677	797	821
70°	436	484	593	663	677
72.5°	360	408	507	544	565
75°	292	335	397	422	423
77.5°	223	264	303	294	278
80°	163	192	199	170	149
82.5°	108	121	107	67	41
85°	57	61	41	29	23
87.5°	21	23	17	14	12
90°	0	0	0	0	0

(END OF REPORT)