

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: P34509

Luminaire Tested: **MAO-G-24-2-LD4-1-STD**

Test Date: 10/05/15

**Test Information**

Test Method: LM-79-08  
Report Number: P34509  
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-LD4-1-STD  
Description: FAILSAFE MAO LED 2X2 FIXTURE  
Light Source: (42) NICHIA ELM 3500K LED  
2UT217042A8404A  
Ballast/Driver: (1) OSRAM ELECTRONIC DRIVER  
OT25W/PRG1250C/UNV/DIM

**Summary**

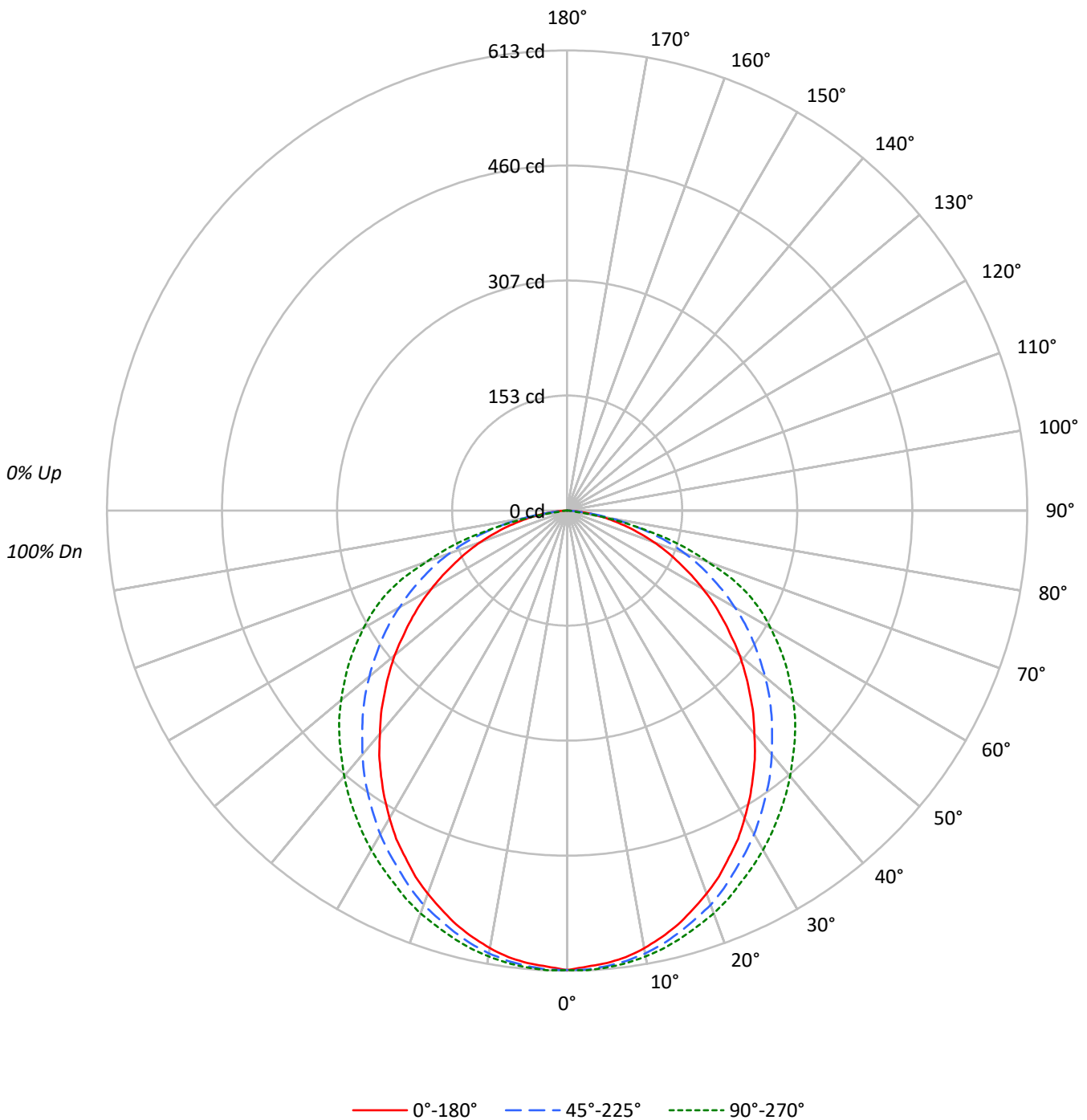
Lumens per Lamp: N/A  
Luminaire Lumens: 1669.7 lumens  
Efficiency: N/A  
Efficacy: 94.9 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.27 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 17.6  
Input Voltage (V): 120.0  
Input Current (Ain): 0.147  
Voltage Rise (V): NR  
Power Factor: 0.9965  
Total Harmonic Distortion (THDi): 6.36%  
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	78	96	89	83	77	85	80	76	82	78	74	79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50
5	76	63	54	47	74	62	54	47	60	52	47	58	51	46	56	50	46	44
6	70	57	48	41	68	56	47	41	54	46	41	52	46	40	51	45	40	38
7	65	52	43	37	63	51	42	36	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	36	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	26	37	31	26	36	31	26	24

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1647	1647	1647
5°	1634	1645	1650
10°	1618	1637	1648
15°	1591	1619	1641
20°	1555	1601	1635
25°	1514	1571	1624
30°	1470	1547	1622
35°	1419	1518	1620
40°	1363	1489	1623
45°	1309	1465	1633
50°	1256	1440	1645
55°	1192	1417	1666
60°	1125	1389	1685
65°	1044	1356	1706
70°	968	1314	1566
75°	853	1196	1320
80°	713	914	713
85°	494	340	185



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	57.8	3.5
10°-20°	163.7	9.8
20°-30°	244.0	14.6
30°-40°	289.4	17.3
40°-50°	297.7	17.8
50°-60°	271.0	16.2
60°-70°	211.9	12.7
70°-80°	115.3	6.9
80°-90°	19.1	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°	465.4	27.9
0°-40°	754.8	45.2
0°-60°	1323.4	79.3
0°-90°	1669.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1669.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	605	607	609	611	611	57
15°	571	574	581	588	589	161
25°	510	516	529	543	547	235
35°	432	441	462	484	493	270
45°	344	356	385	416	429	266
55°	254	268	302	338	355	227
65°	164	180	213	251	268	163
75°	82	96	115	125	127	87
85°	16	17	11	8	6	20
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	612	612	612	612	612
2.5°	608	609	612	612	613
5°	605	607	609	611	611
7.5°	600	602	605	607	608
10°	592	594	599	602	603
12.5°	582	585	591	596	597
15°	571	574	581	588	589
17.5°	557	561	570	577	580
20°	543	548	559	567	571
22.5°	528	533	545	556	560
25°	510	516	529	543	547
27.5°	493	498	514	530	535
30°	473	480	498	515	522
32.5°	453	461	480	499	508
35°	432	441	462	484	493
37.5°	411	421	444	468	478
40°	388	399	424	451	462
42.5°	367	378	404	433	445
45°	344	356	385	416	429
47.5°	322	334	365	397	412
50°	300	312	344	378	393
52.5°	276	290	323	358	374
55°	254	268	302	338	355
57.5°	232	246	281	317	334
60°	209	224	258	296	313
62.5°	187	202	236	274	292
65°	164	180	213	251	268
67.5°	144	158	191	225	238
70°	123	136	167	193	199
72.5°	102	115	143	159	167
75°	82	96	115	125	127
77.5°	63	76	87	88	84
80°	46	55	59	52	46
82.5°	30	35	32	20	12
85°	16	17	11	8	6
87.5°	6	7	5	4	3
90°	0	0	0	0	0

(END OF REPORT)