

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: P34508

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

Test Date: 10/05/15

Test Information

Test Method: LM-79-08
Report Number: P34508
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-HI
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: 2050.7 lumens
Efficiency: N/A
Efficacy: 89.9 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

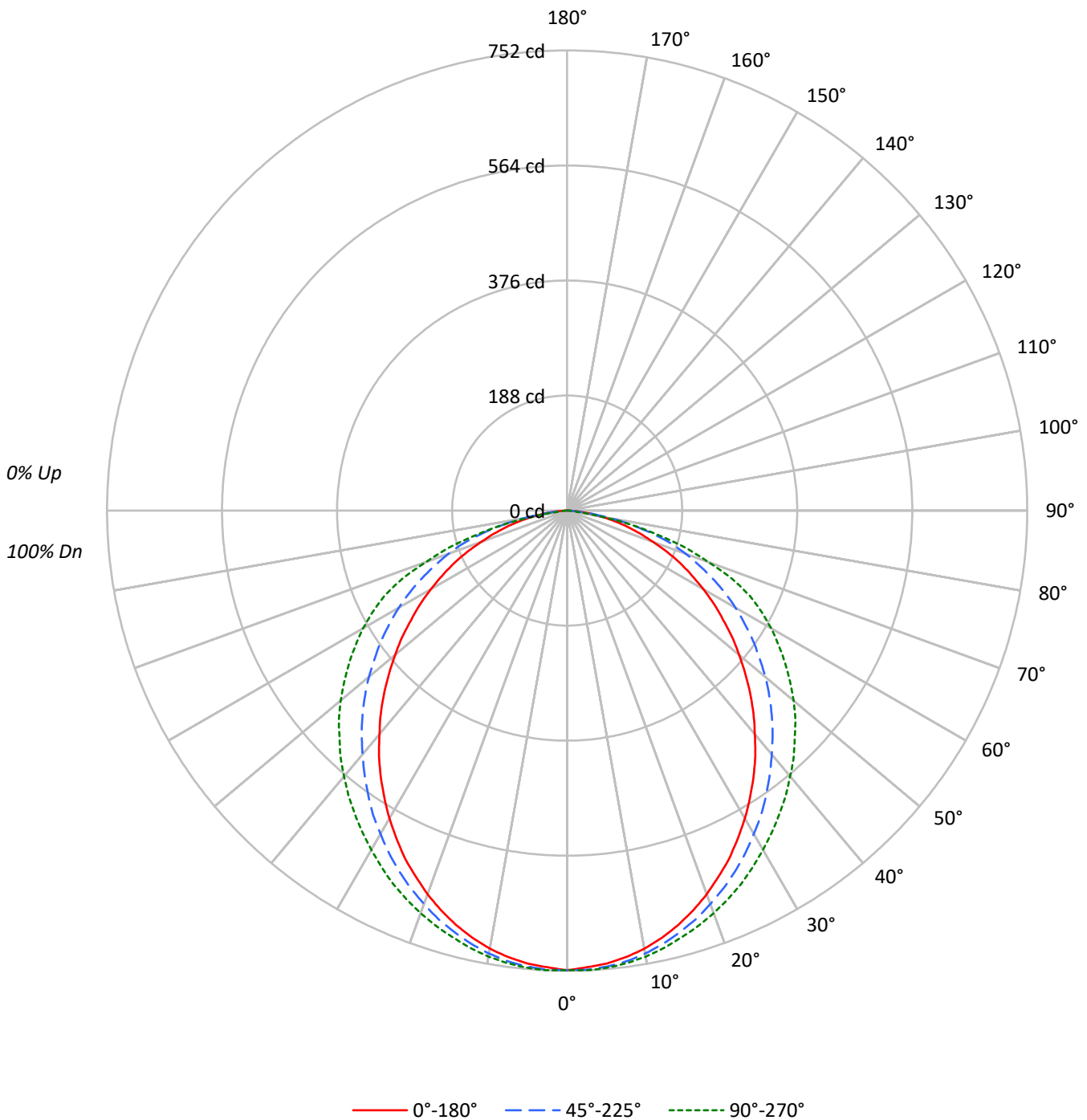
Input Watts (W): 22.8
Input Voltage (V): 120.1
Input Current (A_{in}): 0.190
Voltage Rise (V): NR
Power Factor: 0.9982
Total Harmonic Distortion (THDi): 5.64%
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 5 HR
Ambient Temperature (°C): 25.0
Test Distance: 25 FT



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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	75	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	38	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°	2021	2021	2021
5°	2007	2021	2026
10°	1987	2008	2022
15°	1953	1986	2011
20°	1910	1959	2005
25°	1862	1930	1998
30°	1805	1895	1989
35°	1744	1863	1987
40°	1676	1827	1992
45°	1610	1800	2002
50°	1536	1771	2022
55°	1459	1741	2041
60°	1383	1711	2072
65°	1299	1668	2095
70°	1172	1621	1928
75°	1050	1476	1612
80°	868	1116	883
85°	618	432	247



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.9	3.5
10°-20°	201.0	9.8
20°-30°	299.4	14.6
30°-40°	355.2	17.3
40°-50°	365.6	17.8
50°-60°	332.8	16.2
60°-70°	260.3	12.7
70°-80°	142.0	6.9
80°-90°	23.6	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°	571.3	27.9
0°-40°	926.5	45.2
0°-60°	1624.9	79.2
0°-90°	2050.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2050.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	751	751	751	751	751	
5°	743	745	748	750	750	70
15°	701	705	713	721	722	197
25°	627	633	650	667	673	288
35°	531	542	567	594	605	332
45°	423	437	473	510	526	326
55°	311	329	371	415	435	279
65°	204	220	262	309	329	201
75°	101	118	142	154	155	107
85°	20	22	14	10	8	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	751	751	751	751	751
2.5°	747	748	751	753	752
5°	743	745	748	750	750
7.5°	736	738	743	746	746
10°	727	730	735	739	740
12.5°	715	718	725	731	732
15°	701	705	713	721	722
17.5°	685	690	700	710	712
20°	667	673	684	696	700
22.5°	647	654	668	683	687
25°	627	633	650	667	673
27.5°	604	612	631	650	657
30°	581	590	610	632	640
32.5°	556	566	590	614	623
35°	531	542	567	594	605
37.5°	505	517	544	574	587
40°	477	489	520	553	567
42.5°	451	464	497	532	548
45°	423	437	473	510	526
47.5°	395	410	448	488	506
50°	367	383	423	465	483
52.5°	340	357	396	441	459
55°	311	329	371	415	435
57.5°	285	302	344	390	410
60°	257	275	318	363	385
62.5°	230	247	290	337	358
65°	204	220	262	309	329
67.5°	177	194	233	278	292
70°	149	167	206	238	245
72.5°	125	141	177	196	204
75°	101	118	142	154	155
77.5°	78	93	107	109	107
80°	56	68	72	63	57
82.5°	37	42	40	24	16
85°	20	22	14	10	8
87.5°	7	8	6	5	4
90°	0	0	0	0	0

(END OF REPORT)