

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: P183408

Luminaire Tested: **MAO-G-24-4-LD4-1-LO**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183408
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34513)
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-LD4-1-LO
Description:
Light Source: 2UT217042A8404A
Ballast/Driver: ELECTRONIC DRIVER

Summary

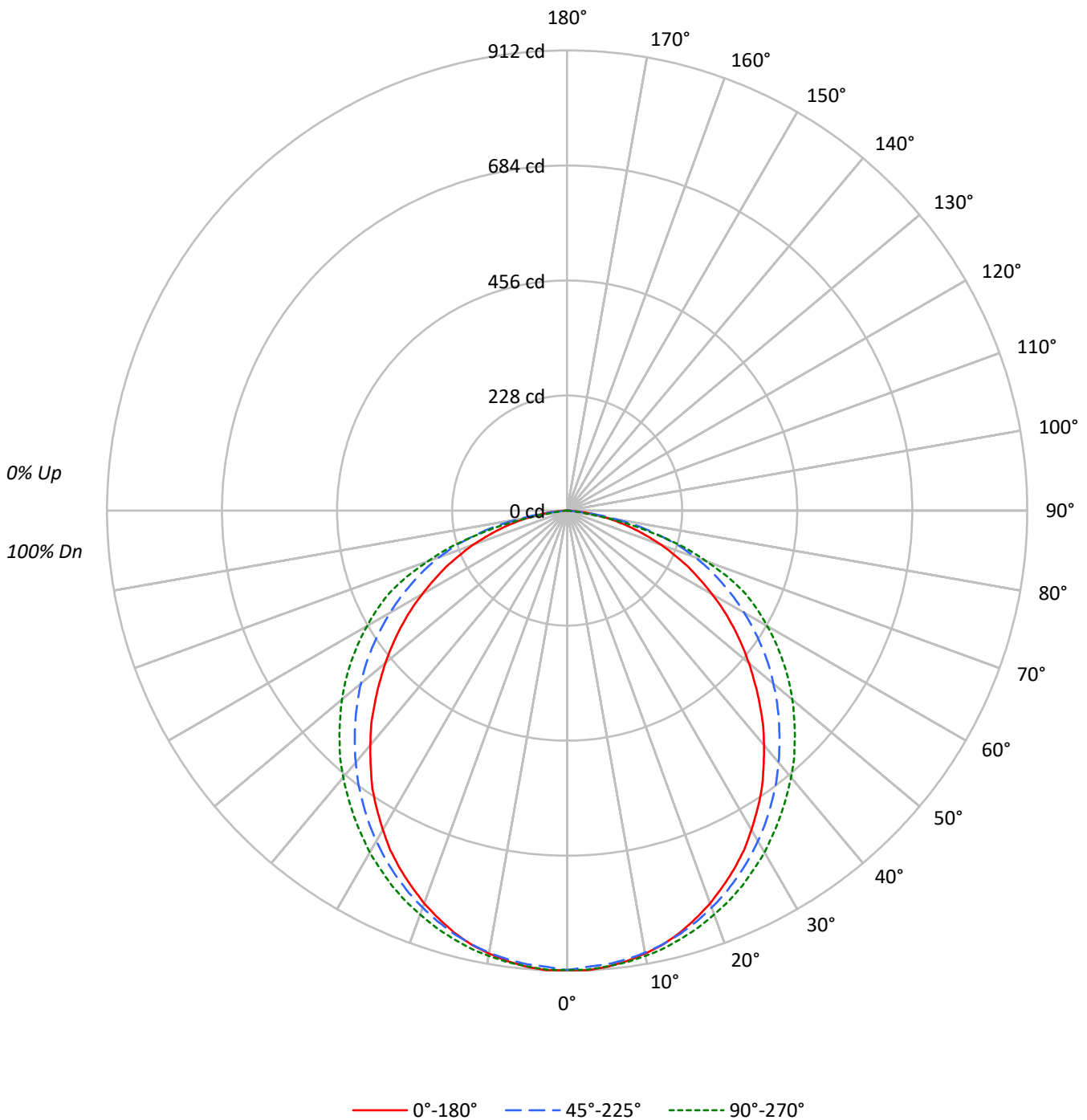
Lumens per Lamp: N/A
Luminaire Lumens: 2558.3 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



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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	94	92	94	91	89	90	88	86	84
2	99	91	84	78	96	89	83	77	85	80	75	82	78	74	79	75	72	70
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1225	1225	1225
5°	1226	1219	1225
10°	1218	1215	1224
15°	1206	1209	1222
20°	1186	1199	1220
25°	1163	1188	1218
30°	1135	1175	1215
35°	1105	1160	1212
40°	1066	1145	1212
45°	1026	1130	1214
50°	984	1117	1220
55°	942	1105	1226
60°	893	1090	1232
65°	845	1076	1242
70°	782	1060	1155
75°	690	983	958
80°	581	762	507
85°	417	185	130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.1	3.4
10°-20°	245.6	9.6
20°-30°	369.5	14.4
30°-40°	441.7	17.3
40°-50°	456.9	17.9
50°-60°	417.4	16.3
60°-70°	328.6	12.8
70°-80°	182.7	7.1
80°-90°	29.8	1.2
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°	701.1	27.4
0°-40°	1142.9	44.7
0°-60°	2017.2	78.8
0°-90°	2558.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2558.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	911	911	911	911	911	
5°	908	906	903	908	907	86
15°	866	866	868	878	878	244
25°	783	789	800	818	821	361
35°	673	682	706	732	738	420
45°	539	558	594	628	638	416
55°	402	424	471	510	523	359
65°	265	290	338	378	390	262
75°	133	157	189	192	184	141
85°	27	31	12	10	8	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	910.6	910.6	910.6	910.6	910.6
2.5°	911.8	910.0	905.2	910.6	910.6
5°	907.6	906.4	902.8	908.2	907.0
7.5°	901.0	900.4	897.4	903.4	902.8
10°	891.4	890.8	889.6	896.2	896.2
12.5°	880.6	880.0	880.0	887.8	888.4
15°	865.6	865.6	868.0	877.6	877.6
17.5°	847.6	849.4	853.6	864.4	866.2
20°	828.4	831.4	837.4	850.6	851.8
22.5°	806.2	810.4	820.0	835.6	837.4
25°	783.4	788.8	800.2	818.2	820.6
27.5°	758.8	764.2	779.2	797.8	801.4
30°	730.5	737.1	756.4	776.8	782.2
32.5°	701.7	710.7	732.3	754.6	760.0
35°	672.9	682.5	706.5	731.7	737.7
37.5°	639.3	651.9	680.1	706.5	714.3
40°	606.9	620.7	651.9	681.3	690.3
42.5°	574.5	590.1	623.1	655.5	665.7
45°	539.1	558.3	593.7	628.5	638.1
47.5°	504.2	524.6	564.3	600.3	610.5
50°	470.0	490.4	533.6	571.5	582.9
52.5°	436.4	458.6	503.6	540.9	553.5
55°	401.6	424.4	471.2	509.6	522.8
57.5°	367.4	391.4	438.2	477.8	491.0
60°	332.0	357.2	405.2	444.8	458.0
62.5°	297.1	324.8	372.2	411.8	425.0
65°	265.3	289.9	338.0	377.6	390.2
67.5°	229.9	257.5	304.9	341.0	345.2
70°	198.7	223.9	269.5	293.5	293.5
72.5°	163.3	190.9	232.3	241.9	244.3
75°	132.7	157.3	189.1	191.5	184.3
77.5°	102.0	126.1	147.1	134.5	124.9
80°	75.0	94.8	98.4	76.8	65.4
82.5°	48.6	62.4	52.2	24.6	17.4
85°	27.0	31.2	12.0	9.6	8.4
87.5°	10.2	7.8	5.4	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)