

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: P183401

Luminaire Tested: **MAO-G-24-4-LD4-2-LO**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P183401
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-24-4-LD4-2-LO
Description:
Light Source: 2UT217042A8404A
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4942.4 lumens
Efficiency: N/A
Efficacy: 100.0 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

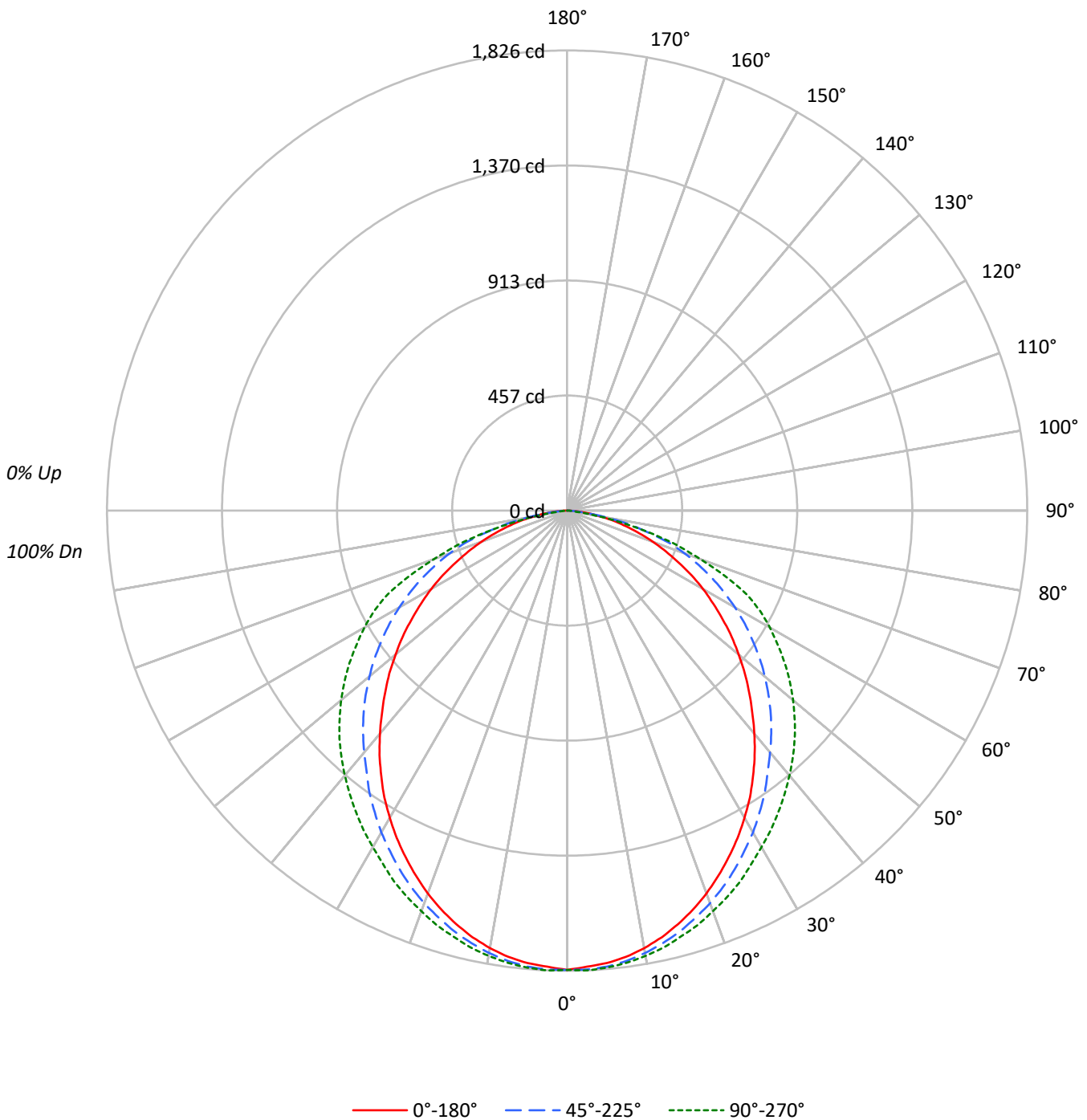
Input Watts (W): 49.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4905	4905	4905
5°	4870	4907	4917
10°	4817	4871	4902
15°	4734	4817	4873
20°	4630	4748	4844
25°	4504	4667	4823
30°	4373	4582	4791
35°	4225	4492	4799
40°	4058	4400	4821
45°	3889	4349	4862
50°	3719	4288	4899
55°	3535	4214	4946
60°	3350	4142	5002
65°	3114	4043	5005
70°	2856	3906	4397
75°	2516	3425	3528
80°	2069	2514	1875
85°	1504	1041	577



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.1	3.5
10°-20°	486.9	9.9
20°-30°	723.8	14.6
30°-40°	857.3	17.3
40°-50°	883.9	17.9
50°-60°	807.5	16.3
60°-70°	627.4	12.7
70°-80°	328.9	6.7
80°-90°	54.5	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°	1382.8	28.0
0°-40°	2240.1	45.3
0°-60°	3931.6	79.5
0°-90°	4942.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4942.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1823	1823	1823	1823	1823	
5°	1803	1808	1816	1820	1820	171
15°	1699	1709	1729	1747	1749	479
25°	1517	1533	1572	1609	1624	699
35°	1286	1309	1367	1431	1461	804
45°	1022	1057	1143	1233	1278	789
55°	754	805	898	1004	1054	675
65°	489	543	635	740	786	485
75°	242	278	329	347	339	258
85°	49	52	34	24	19	61
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1822.7	1822.7	1822.7	1822.7	1822.7
2.5°	1811.5	1815.2	1822.7	1826.4	1826.4
5°	1802.7	1807.7	1816.4	1820.2	1820.2
7.5°	1786.5	1791.5	1802.7	1810.2	1810.2
10°	1762.8	1770.3	1782.8	1792.7	1794.0
12.5°	1734.1	1742.8	1757.8	1771.5	1775.3
15°	1699.2	1709.2	1729.1	1746.6	1749.1
17.5°	1660.5	1671.7	1694.2	1716.6	1724.1
20°	1616.8	1629.3	1658.0	1684.2	1691.7
22.5°	1568.2	1583.2	1616.8	1649.3	1659.3
25°	1517.0	1533.3	1571.9	1609.4	1624.3
27.5°	1464.6	1482.1	1523.3	1566.9	1581.9
30°	1407.2	1426.0	1474.6	1522.0	1542.0
32.5°	1349.9	1368.6	1421.0	1475.9	1503.3
35°	1286.2	1308.7	1367.3	1431.0	1460.9
37.5°	1222.6	1248.8	1307.4	1386.0	1417.2
40°	1155.2	1183.9	1252.5	1338.6	1372.3
42.5°	1087.9	1119.1	1198.9	1287.5	1326.2
45°	1021.8	1056.7	1142.8	1232.6	1277.5
47.5°	956.9	990.6	1084.1	1180.2	1225.1
50°	888.3	925.7	1024.2	1126.5	1170.2
52.5°	823.4	869.5	963.1	1066.7	1114.1
55°	753.5	804.7	898.2	1004.3	1054.2
57.5°	687.4	741.1	835.9	943.2	990.6
60°	622.5	673.7	769.7	878.3	929.4
62.5°	556.4	608.8	701.1	809.7	863.3
65°	489.0	542.7	635.0	739.8	786.0
67.5°	424.2	474.1	565.1	662.5	677.4
70°	363.0	405.5	496.5	552.7	558.9
72.5°	300.7	341.8	421.7	444.1	457.9
75°	242.0	278.2	329.4	346.8	339.3
77.5°	189.6	218.3	249.5	237.0	224.6
80°	133.5	154.7	162.2	139.7	121.0
82.5°	88.6	101.1	86.1	56.1	37.4
85°	48.7	52.4	33.7	23.7	18.7
87.5°	18.7	20.0	15.0	11.2	10.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)