

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: P412169

Luminaire Tested: **MRI-4ASR-4-1000-L850-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412169
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2006-829-8)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MRI-4ASR-4-1000-L850-OPL
Description: 4 FT, 4 INCH CHANNEL, OPAL LENS
Light Source: (336) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

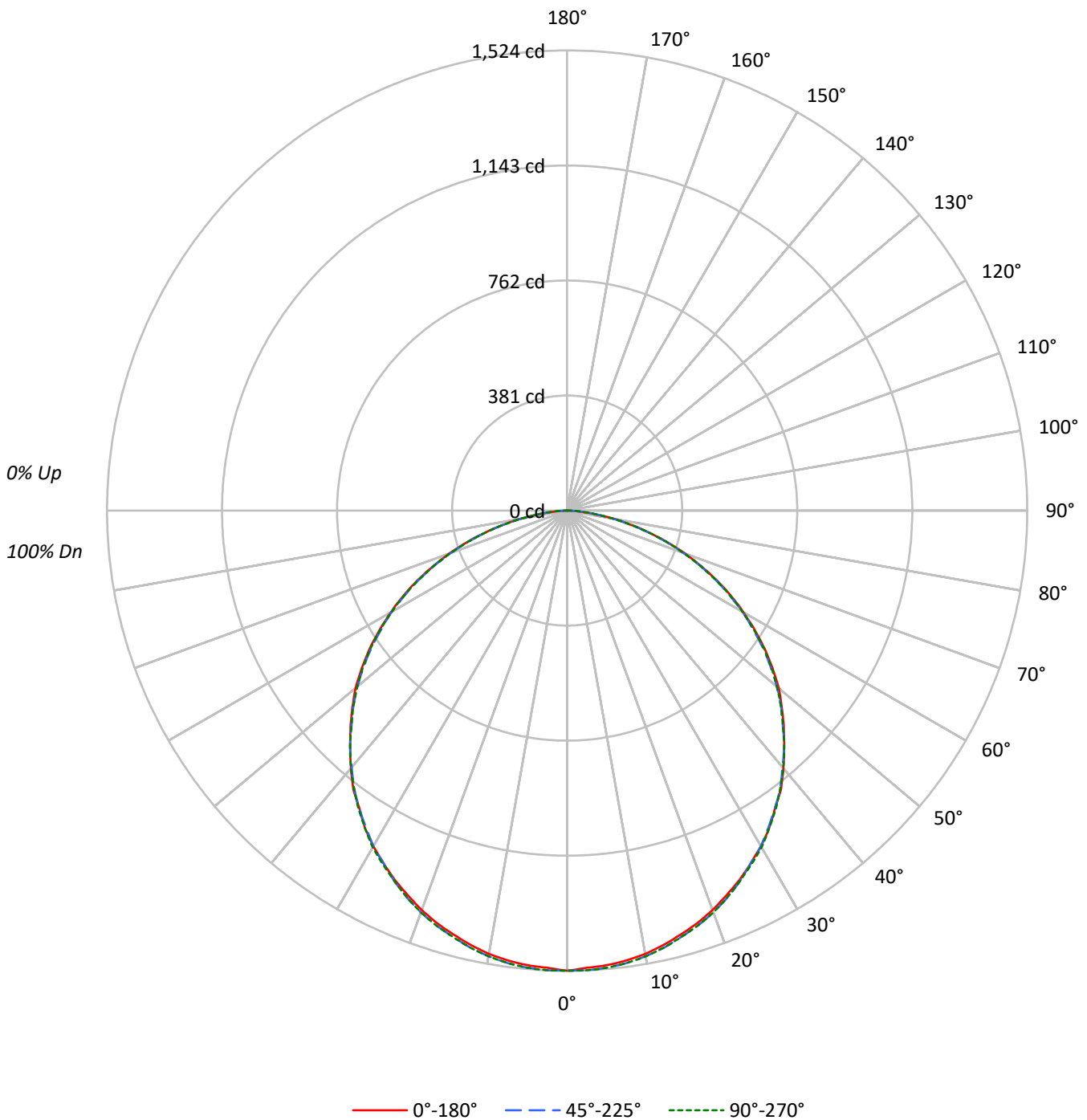
Lumens per Lamp: N/A
Luminaire Lumens: 4323.0 lumens
Efficiency: N/A
Efficacy: 64.8 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 66.7
Input Voltage (V): NR
Input Current (A_{in}): 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	94	98	94	91		94	91	89		90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75		82	77	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		51	45	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°	12302	12302	12302
5°	12248	12315	12315
10°	12220	12288	12288
15°	12147	12216	12216
20°	12095	12166	12166
25°	12024	12061	12061
30°	11966	11966	12005
35°	11834	11834	11876
40°	11739	11695	11739
45°	11582	11536	11536
50°	11493	11389	11389
55°	11249	11132	11189
60°	10897	10831	10831
65°	10441	10361	10361
70°	9774	9675	9675
75°	8784	8653	8653
80°	7313	7122	7122
85°	4604	4983	5372



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	144.3	3.3
10°-20°	412.4	9.5
20°-30°	623.7	14.4
30°-40°	752.4	17.4
40°-50°	781.5	18.1
50°-60°	707.8	16.4
60°-70°	536.4	12.4
70°-80°	295.5	6.8
80°-90°	69.0	1.6
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°	1180.3	27.3
0°-40°	1932.7	44.7
0°-60°	3422.0	79.2
0°-90°	4323.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4323.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1524	1524	1524	1524	1524	
5°	1511	1516	1520	1524	1520	144
15°	1453	1458	1462	1466	1462	411
25°	1350	1350	1354	1354	1354	622
35°	1201	1201	1201	1201	1205	753
45°	1014	1010	1010	1014	1010	784
55°	799	791	791	791	795	713
65°	547	542	542	542	542	540
75°	282	282	277	277	277	298
85°	50	54	54	58	58	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1523.8	1523.8	1523.8	1523.8	1523.8
2.5°	1515.5	1519.7	1523.8	1527.9	1523.8
5°	1511.4	1515.5	1519.7	1523.8	1519.7
7.5°	1503.1	1507.2	1511.4	1515.5	1511.4
10°	1490.7	1494.8	1499.0	1503.1	1499.0
12.5°	1474.1	1478.3	1482.4	1482.4	1482.4
15°	1453.4	1457.6	1461.7	1465.8	1461.7
17.5°	1432.7	1436.9	1441.0	1441.0	1441.0
20°	1407.9	1412.0	1416.1	1416.1	1416.1
22.5°	1378.9	1383.0	1387.2	1387.2	1387.2
25°	1349.9	1349.9	1354.0	1354.0	1354.0
27.5°	1316.8	1316.8	1316.8	1320.9	1320.9
30°	1283.6	1283.6	1283.6	1283.6	1287.8
32.5°	1246.4	1246.4	1242.2	1246.4	1246.4
35°	1200.8	1200.8	1200.8	1200.8	1205.0
37.5°	1163.6	1155.3	1159.4	1159.4	1159.4
40°	1113.9	1113.9	1109.7	1113.9	1113.9
42.5°	1064.2	1064.2	1064.2	1064.2	1064.2
45°	1014.5	1010.4	1010.4	1014.5	1010.4
47.5°	964.8	960.7	960.7	960.7	960.7
50°	915.1	906.8	906.8	906.8	906.8
52.5°	857.1	848.9	848.9	848.9	853.0
55°	799.2	790.9	790.9	790.9	795.0
57.5°	737.1	732.9	728.8	732.9	732.9
60°	674.9	670.8	670.8	670.8	670.8
62.5°	612.8	608.7	604.6	604.6	608.7
65°	546.6	542.4	542.4	542.4	542.4
67.5°	480.3	476.2	476.2	476.2	476.2
70°	414.1	409.9	409.9	414.1	409.9
72.5°	347.8	343.7	343.7	343.7	343.7
75°	281.6	281.6	277.4	277.4	277.4
77.5°	215.3	215.3	215.3	215.3	215.3
80°	157.3	153.2	153.2	153.2	153.2
82.5°	95.2	95.2	99.4	99.4	99.4
85°	49.7	53.8	53.8	58.0	58.0
87.5°	16.6	20.7	24.8	29.0	29.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)