

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: P412241

Luminaire Tested: **MRI-4ASR-8-1000-L850-OPL**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412241  
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-8-1000-L850-OPL  
Description: 8 FT, 4 INCH CHANNEL, OPAL LENS  
Light Source: (672) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

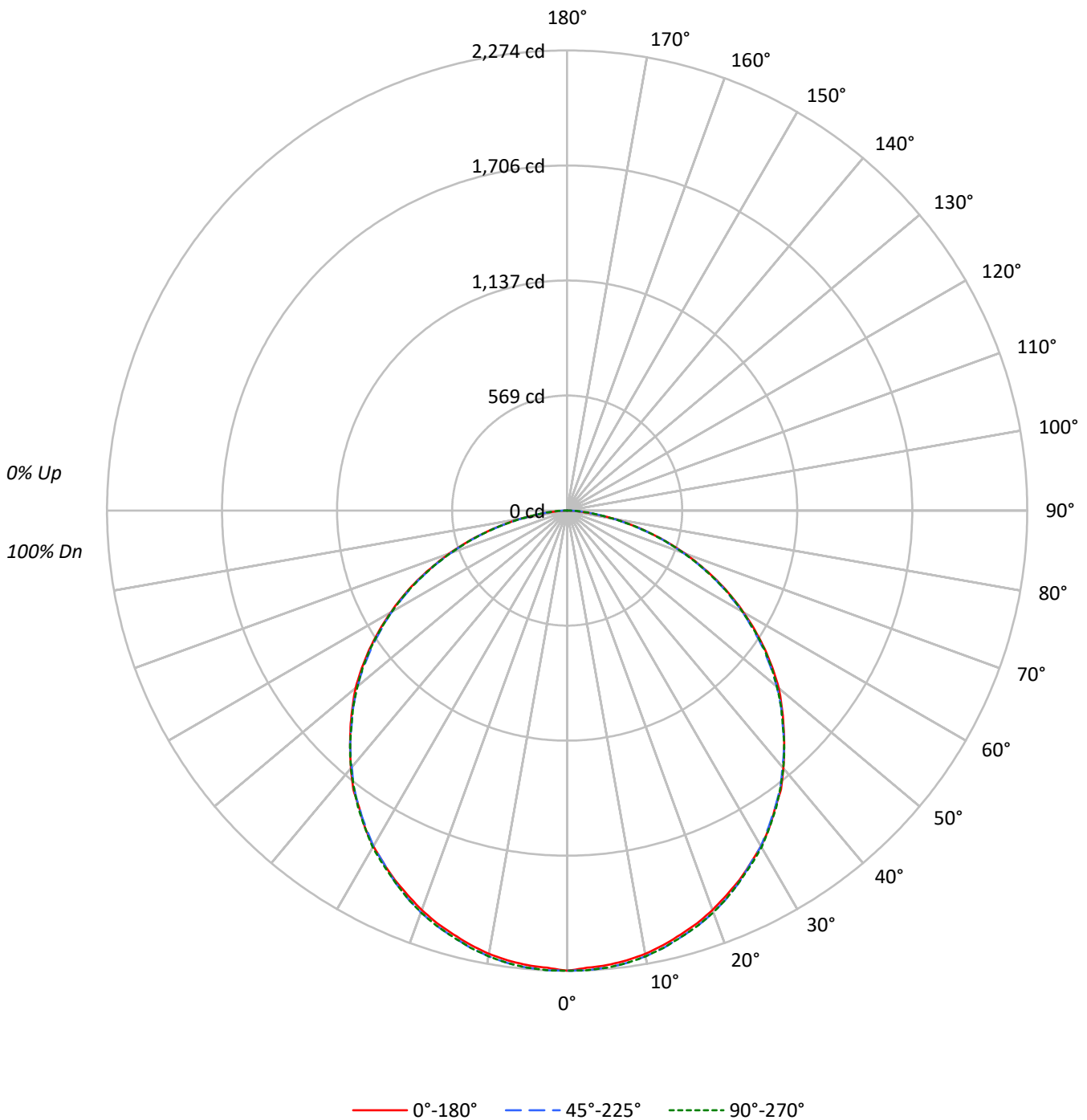
Lumens per Lamp: N/A  
Luminaire Lumens: 6450.0 lumens  
Efficiency: N/A  
Efficacy: 66.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 0.33' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 97.4  
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	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°	9177	9177	9177
5°	9137	9187	9187
10°	9116	9167	9167
15°	9062	9114	9114
20°	9023	9076	9076
25°	8970	8997	8997
30°	8927	8927	8955
35°	8829	8829	8859
40°	8757	8724	8757
45°	8640	8605	8605
50°	8574	8496	8496
55°	8391	8304	8348
60°	8129	8080	8080
65°	7789	7730	7730
70°	7291	7218	7218
75°	6552	6455	6455
80°	5458	5314	5314
85°	3432	3719	4006



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	215.3	3.3
10°-20°	615.3	9.5
20°-30°	930.5	14.4
30°-40°	1122.6	17.4
40°-50°	1166.0	18.1
50°-60°	1056.1	16.4
60°-70°	800.3	12.4
70°-80°	440.9	6.8
80°-90°	103.0	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°	1761.1	27.3
0°-40°	2883.6	44.7
0°-60°	5105.7	79.2
0°-90°	6450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6450.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2274	2274	2274	2274	2274	
5°	2255	2261	2267	2274	2267	214
15°	2168	2175	2181	2187	2181	612
25°	2014	2014	2020	2020	2020	928
35°	1792	1792	1792	1792	1798	1124
45°	1514	1508	1508	1514	1508	1169
55°	1192	1180	1180	1180	1186	1064
65°	816	809	809	809	809	806
75°	420	420	414	414	414	445
85°	74	80	80	86	86	97
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2273.6	2273.6	2273.6	2273.6	2273.6
2.5°	2261.2	2267.4	2273.6	2279.7	2273.6
5°	2255.0	2261.2	2267.4	2273.6	2267.4
7.5°	2242.7	2248.8	2255.0	2261.2	2255.0
10°	2224.1	2230.3	2236.5	2242.7	2236.5
12.5°	2199.4	2205.6	2211.8	2211.8	2211.8
15°	2168.5	2174.7	2180.9	2187.1	2180.9
17.5°	2137.6	2143.8	2150.0	2150.0	2150.0
20°	2100.6	2106.7	2112.9	2112.9	2112.9
22.5°	2057.3	2063.5	2069.7	2069.7	2069.7
25°	2014.1	2014.1	2020.2	2020.2	2020.2
27.5°	1964.6	1964.6	1964.6	1970.8	1970.8
30°	1915.2	1915.2	1915.2	1915.2	1921.4
32.5°	1859.6	1859.6	1853.4	1859.6	1859.6
35°	1791.7	1791.7	1791.7	1791.7	1797.8
37.5°	1736.1	1723.7	1729.9	1729.9	1729.9
40°	1661.9	1661.9	1655.7	1661.9	1661.9
42.5°	1587.8	1587.8	1587.8	1587.8	1587.8
45°	1513.6	1507.5	1507.5	1513.6	1507.5
47.5°	1439.5	1433.3	1433.3	1433.3	1433.3
50°	1365.4	1353.0	1353.0	1353.0	1353.0
52.5°	1278.9	1266.5	1266.5	1266.5	1272.7
55°	1192.4	1180.0	1180.0	1180.0	1186.2
57.5°	1099.7	1093.5	1087.4	1093.5	1093.5
60°	1007.0	1000.9	1000.9	1000.9	1000.9
62.5°	914.4	908.2	902.0	902.0	908.2
65°	815.5	809.3	809.3	809.3	809.3
67.5°	716.7	710.5	710.5	710.5	710.5
70°	617.8	611.6	611.6	617.8	611.6
72.5°	519.0	512.8	512.8	512.8	512.8
75°	420.1	420.1	413.9	413.9	413.9
77.5°	321.3	321.3	321.3	321.3	321.3
80°	234.8	228.6	228.6	228.6	228.6
82.5°	142.1	142.1	148.3	148.3	148.3
85°	74.1	80.3	80.3	86.5	86.5
87.5°	24.7	30.9	37.1	43.2	43.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)