

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: P412245

Luminaire Tested: **MRI-4ASR-8-1000-L940-OPL**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412245  
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-L940-OPL  
Description: 8 FT, 4 INCH CHANNEL, OPAL LENS  
Light Source: (672) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

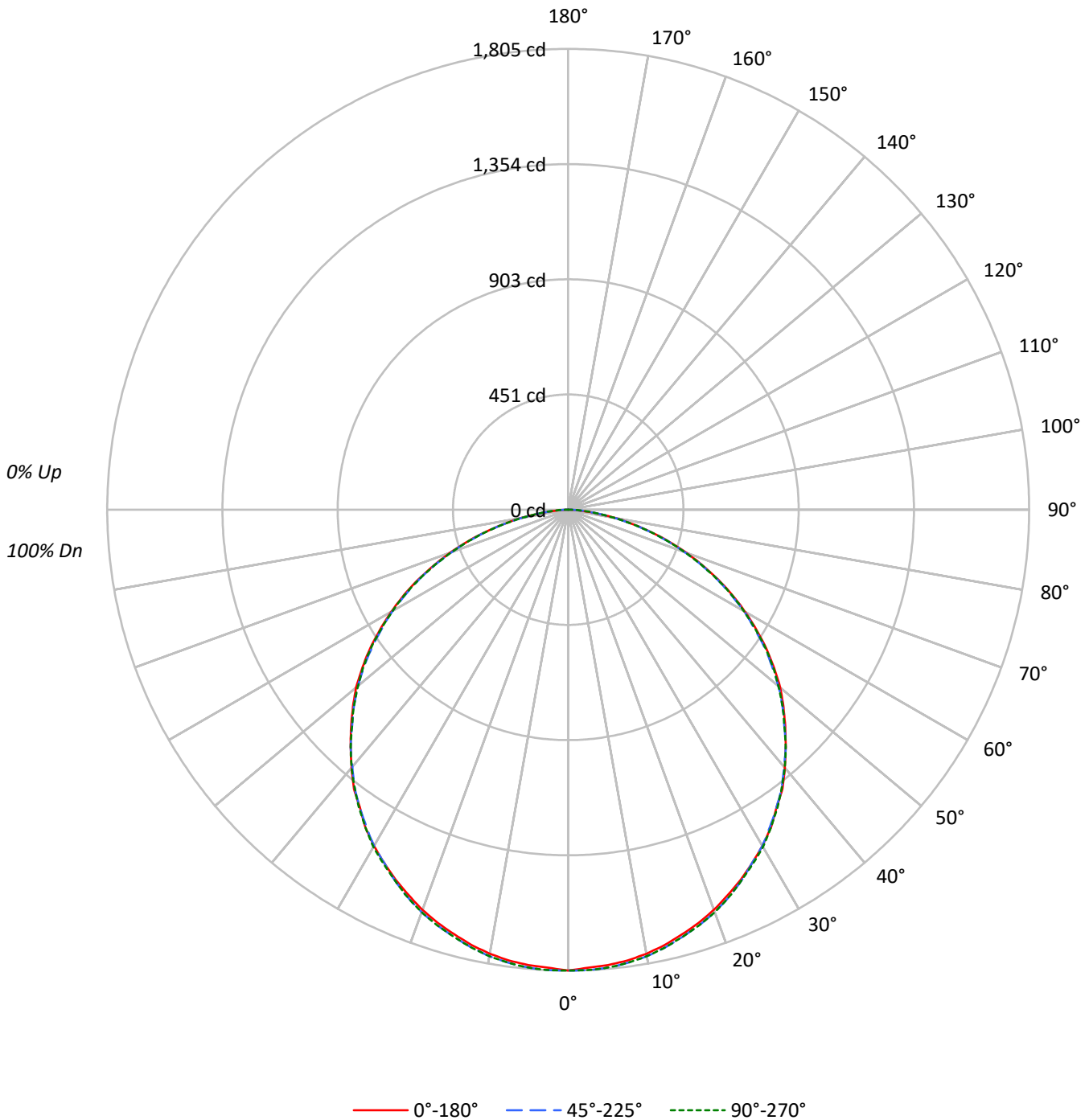
Lumens per Lamp: N/A  
Luminaire Lumens: 5121.0 lumens  
Efficiency: N/A  
Efficacy: 52.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 0.33' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 97.4  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	7286	7286	7286
5°	7255	7294	7294
10°	7238	7278	7278
15°	7195	7236	7236
20°	7164	7206	7206
25°	7122	7144	7144
30°	7087	7087	7110
35°	7010	7010	7034
40°	6953	6927	6953
45°	6860	6832	6832
50°	6807	6746	6746
55°	6662	6593	6628
60°	6454	6415	6415
65°	6184	6138	6138
70°	5789	5731	5731
75°	5203	5125	5125
80°	4333	4219	4219
85°	2728	2955	3182



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.9	3.3
10°-20°	488.5	9.5
20°-30°	738.8	14.4
30°-40°	891.2	17.4
40°-50°	925.8	18.1
50°-60°	838.5	16.4
60°-70°	635.4	12.4
70°-80°	350.1	6.8
80°-90°	81.8	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°	1398.2	27.3
0°-40°	2289.5	44.7
0°-60°	4053.7	79.2
0°-90°	5121.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5121.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1805	1805	1805	1805	1805	
5°	1790	1795	1800	1805	1800	170
15°	1722	1727	1732	1736	1732	486
25°	1599	1599	1604	1604	1604	737
35°	1422	1422	1422	1422	1427	892
45°	1202	1197	1197	1202	1197	928
55°	947	937	937	937	942	845
65°	648	643	643	643	643	640
75°	334	334	329	329	329	353
85°	59	64	64	69	69	77
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1805.1	1805.1	1805.1	1805.1	1805.1
2.5°	1795.3	1800.2	1805.1	1810.0	1805.1
5°	1790.4	1795.3	1800.2	1805.1	1800.2
7.5°	1780.6	1785.5	1790.4	1795.3	1790.4
10°	1765.9	1770.8	1775.7	1780.6	1775.7
12.5°	1746.2	1751.1	1756.0	1756.0	1756.0
15°	1721.7	1726.6	1731.5	1736.4	1731.5
17.5°	1697.2	1702.1	1707.0	1707.0	1707.0
20°	1667.8	1672.7	1677.6	1677.6	1677.6
22.5°	1633.4	1638.3	1643.2	1643.2	1643.2
25°	1599.1	1599.1	1604.0	1604.0	1604.0
27.5°	1559.8	1559.8	1559.8	1564.7	1564.7
30°	1520.6	1520.6	1520.6	1520.6	1525.5
32.5°	1476.4	1476.4	1471.5	1476.4	1476.4
35°	1422.5	1422.5	1422.5	1422.5	1427.4
37.5°	1378.3	1368.5	1373.4	1373.4	1373.4
40°	1319.5	1319.5	1314.6	1319.5	1319.5
42.5°	1260.6	1260.6	1260.6	1260.6	1260.6
45°	1201.8	1196.9	1196.9	1201.8	1196.9
47.5°	1142.9	1138.0	1138.0	1138.0	1138.0
50°	1084.0	1074.2	1074.2	1074.2	1074.2
52.5°	1015.4	1005.6	1005.6	1005.6	1010.5
55°	946.7	936.9	936.9	936.9	941.8
57.5°	873.1	868.2	863.3	868.2	868.2
60°	799.5	794.6	794.6	794.6	794.6
62.5°	726.0	721.1	716.2	716.2	721.1
65°	647.5	642.6	642.6	642.6	642.6
67.5°	569.0	564.1	564.1	564.1	564.1
70°	490.5	485.6	485.6	490.5	485.6
72.5°	412.0	407.1	407.1	407.1	407.1
75°	333.6	333.6	328.6	328.6	328.6
77.5°	255.1	255.1	255.1	255.1	255.1
80°	186.4	181.5	181.5	181.5	181.5
82.5°	112.8	112.8	117.7	117.7	117.7
85°	58.9	63.8	63.8	68.7	68.7
87.5°	19.6	24.5	29.4	34.3	34.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)