

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: P412175

Luminaire Tested: **MRI-4ASR-4-1000-L950-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412175
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-L950-OPL
Description: 4 FT, 4 INCH CHANNEL, OPAL LENS
Light Source: (336) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

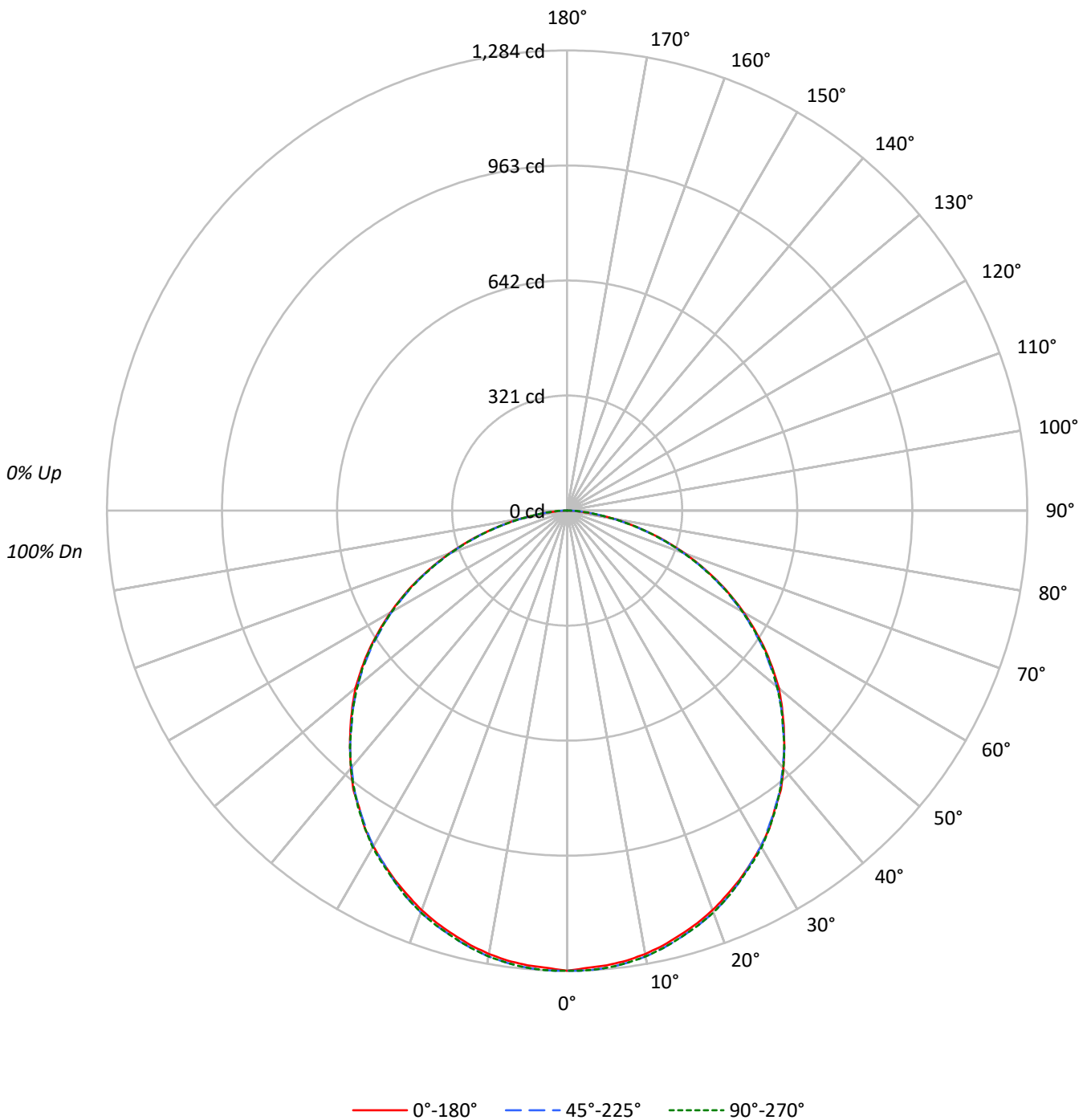
Lumens per Lamp: N/A
Luminaire Lumens: 3643.0 lumens
Efficiency: N/A
Efficacy: 54.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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°	10366	10366	10366
5°	10321	10378	10378
10°	10298	10355	10355
15°	10237	10295	10295
20°	10192	10253	10253
25°	10133	10163	10163
30°	10083	10083	10116
35°	9973	9973	10007
40°	9892	9856	9892
45°	9760	9720	9720
50°	9686	9598	9598
55°	9479	9381	9430
60°	9184	9127	9127
65°	8798	8732	8732
70°	8235	8155	8155
75°	7402	7293	7293
80°	6165	6002	6002
85°	3881	4205	4529



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.6	3.3
10°-20°	347.5	9.5
20°-30°	525.6	14.4
30°-40°	634.0	17.4
40°-50°	658.6	18.1
50°-60°	596.5	16.4
60°-70°	452.0	12.4
70°-80°	249.0	6.8
80°-90°	58.2	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°	994.7	27.3
0°-40°	1628.7	44.7
0°-60°	2883.7	79.2
0°-90°	3643.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3643.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1284	1284	1284	1284	1284	
5°	1274	1277	1281	1284	1281	121
15°	1225	1228	1232	1235	1232	346
25°	1138	1138	1141	1141	1141	524
35°	1012	1012	1012	1012	1015	635
45°	855	851	851	855	851	660
55°	674	666	666	666	670	601
65°	461	457	457	457	457	455
75°	237	237	234	234	234	251
85°	42	45	45	49	49	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1284.1	1284.1	1284.1	1284.1	1284.1
2.5°	1277.1	1280.6	1284.1	1287.6	1284.1
5°	1273.6	1277.1	1280.6	1284.1	1280.6
7.5°	1266.7	1270.2	1273.6	1277.1	1273.6
10°	1256.2	1259.7	1263.2	1266.7	1263.2
12.5°	1242.2	1245.7	1249.2	1249.2	1249.2
15°	1224.8	1228.3	1231.8	1235.3	1231.8
17.5°	1207.3	1210.8	1214.3	1214.3	1214.3
20°	1186.4	1189.9	1193.4	1193.4	1193.4
22.5°	1162.0	1165.5	1169.0	1169.0	1169.0
25°	1137.6	1137.6	1141.0	1141.0	1141.0
27.5°	1109.6	1109.6	1109.6	1113.1	1113.1
30°	1081.7	1081.7	1081.7	1081.7	1085.2
32.5°	1050.3	1050.3	1046.8	1050.3	1050.3
35°	1011.9	1011.9	1011.9	1011.9	1015.4
37.5°	980.5	973.6	977.0	977.0	977.0
40°	938.7	938.7	935.2	938.7	938.7
42.5°	896.8	896.8	896.8	896.8	896.8
45°	854.9	851.4	851.4	854.9	851.4
47.5°	813.0	809.6	809.6	809.6	809.6
50°	771.2	764.2	764.2	764.2	764.2
52.5°	722.3	715.3	715.3	715.3	718.8
55°	673.5	666.5	666.5	666.5	670.0
57.5°	621.1	617.6	614.1	617.6	617.6
60°	568.8	565.3	565.3	565.3	565.3
62.5°	516.4	512.9	509.5	509.5	512.9
65°	460.6	457.1	457.1	457.1	457.1
67.5°	404.8	401.3	401.3	401.3	401.3
70°	348.9	345.5	345.5	348.9	345.5
72.5°	293.1	289.6	289.6	289.6	289.6
75°	237.3	237.3	233.8	233.8	233.8
77.5°	181.5	181.5	181.5	181.5	181.5
80°	132.6	129.1	129.1	129.1	129.1
82.5°	80.3	80.3	83.7	83.7	83.7
85°	41.9	45.4	45.4	48.9	48.9
87.5°	14.0	17.4	20.9	24.4	24.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)