

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: P412199

Luminaire Tested: **MRI-4ASR-4-500-L950-OPL**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412199  
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-4-500-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: 1819.0 lumens  
Efficiency: N/A  
Efficacy: 59.1 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

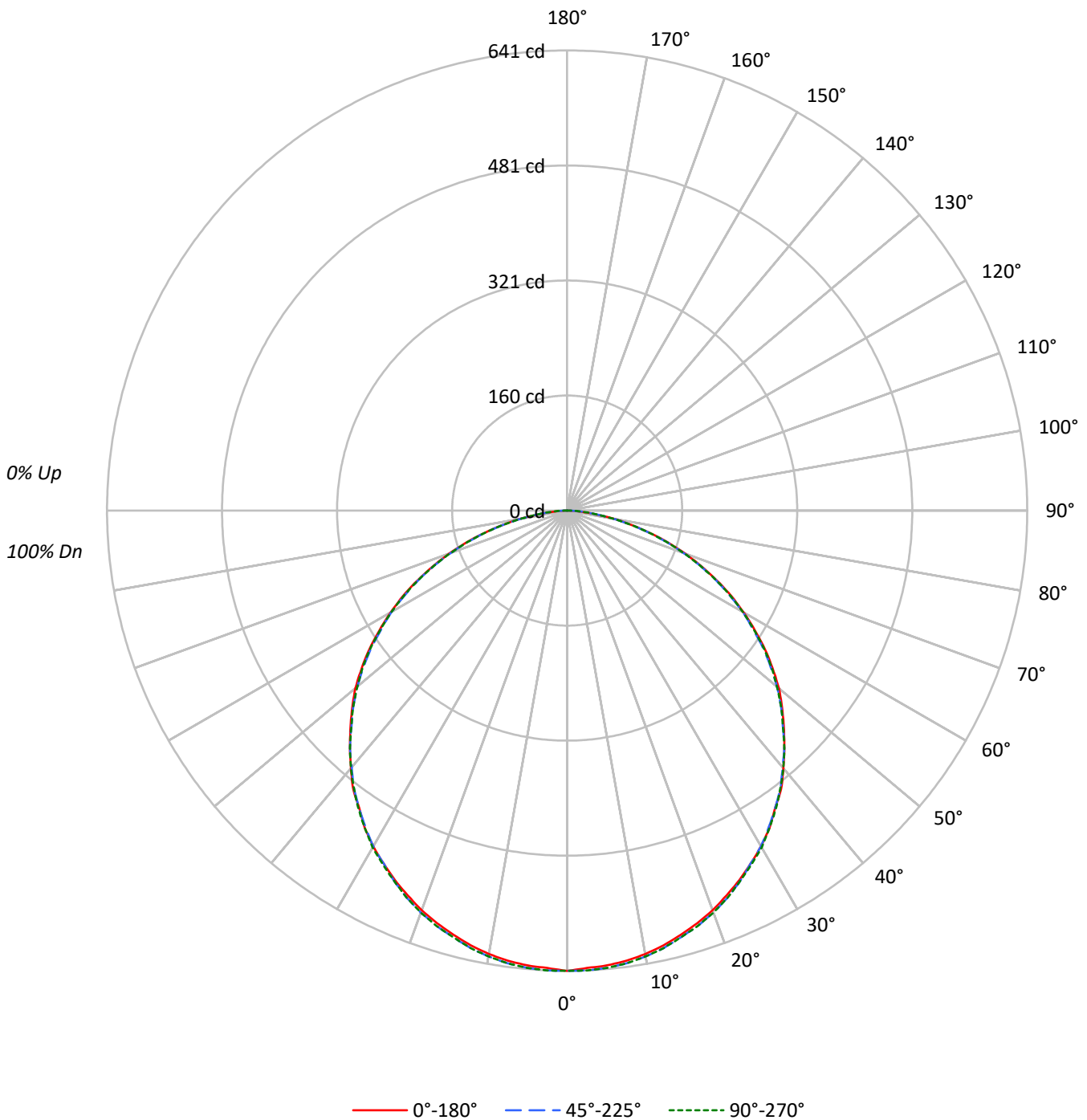
Input Watts (W): 30.8  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5176	5176	5176
5°	5154	5182	5182
10°	5141	5170	5170
15°	5112	5140	5140
20°	5089	5119	5119
25°	5059	5075	5075
30°	5035	5035	5052
35°	4980	4980	4997
40°	4939	4920	4939
45°	4874	4853	4853
50°	4837	4793	4793
55°	4733	4684	4708
60°	4585	4558	4558
65°	4394	4359	4359
70°	4112	4072	4072
75°	3696	3640	3640
80°	3078	2999	2999
85°	1936	2103	2260



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.7	3.3
10°-20°	173.5	9.5
20°-30°	262.4	14.4
30°-40°	316.6	17.4
40°-50°	328.8	18.1
50°-60°	297.8	16.4
60°-70°	225.7	12.4
70°-80°	124.3	6.8
80°-90°	29.1	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°	496.7	27.3
0°-40°	813.2	44.7
0°-60°	1439.9	79.2
0°-90°	1819.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1819.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	641	641	641	641	641	
5°	636	638	639	641	639	60
15°	612	613	615	617	615	173
25°	568	568	570	570	570	262
35°	505	505	505	505	507	317
45°	427	425	425	427	425	330
55°	336	333	333	333	334	300
65°	230	228	228	228	228	227
75°	118	118	117	117	117	125
85°	21	23	23	24	24	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	641.2	641.2	641.2	641.2	641.2
2.5°	637.7	639.4	641.2	642.9	641.2
5°	636.0	637.7	639.4	641.2	639.4
7.5°	632.5	634.2	636.0	637.7	636.0
10°	627.2	629.0	630.7	632.5	630.7
12.5°	620.3	622.0	623.8	623.8	623.8
15°	611.6	613.3	615.0	616.8	615.0
17.5°	602.8	604.6	606.3	606.3	606.3
20°	592.4	594.1	595.9	595.9	595.9
22.5°	580.2	581.9	583.7	583.7	583.7
25°	568.0	568.0	569.7	569.7	569.7
27.5°	554.1	554.1	554.1	555.8	555.8
30°	540.1	540.1	540.1	540.1	541.9
32.5°	524.4	524.4	522.7	524.4	524.4
35°	505.3	505.3	505.3	505.3	507.0
37.5°	489.6	486.1	487.9	487.9	487.9
40°	468.7	468.7	466.9	468.7	468.7
42.5°	447.8	447.8	447.8	447.8	447.8
45°	426.9	425.1	425.1	426.9	425.1
47.5°	406.0	404.2	404.2	404.2	404.2
50°	385.1	381.6	381.6	381.6	381.6
52.5°	360.7	357.2	357.2	357.2	358.9
55°	336.3	332.8	332.8	332.8	334.5
57.5°	310.1	308.4	306.6	308.4	308.4
60°	284.0	282.3	282.3	282.3	282.3
62.5°	257.9	256.1	254.4	254.4	256.1
65°	230.0	228.2	228.2	228.2	228.2
67.5°	202.1	200.4	200.4	200.4	200.4
70°	174.2	172.5	172.5	174.2	172.5
72.5°	146.4	144.6	144.6	144.6	144.6
75°	118.5	118.5	116.7	116.7	116.7
77.5°	90.6	90.6	90.6	90.6	90.6
80°	66.2	64.5	64.5	64.5	64.5
82.5°	40.1	40.1	41.8	41.8	41.8
85°	20.9	22.7	22.7	24.4	24.4
87.5°	7.0	8.7	10.5	12.2	12.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)