

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: P412193

Luminaire Tested: **MRI-4ASR-4-500-L850-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412193
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-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: 2158.0 lumens
Efficiency: N/A
Efficacy: 70.1 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

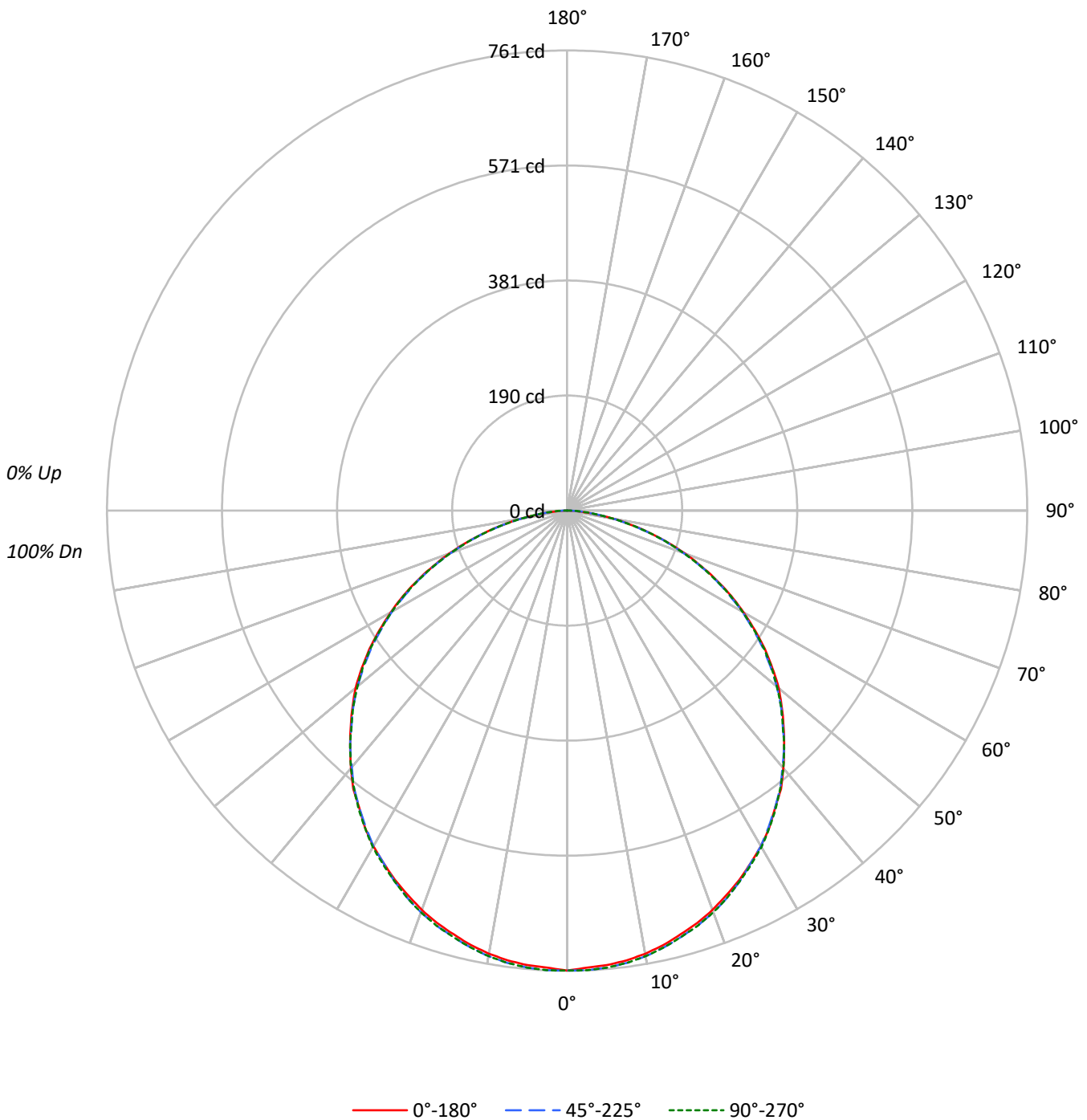
Input Watts (W): 30.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6141	6141	6141
5°	6114	6148	6148
10°	6100	6134	6134
15°	6064	6099	6099
20°	6038	6073	6073
25°	6003	6021	6021
30°	5973	5973	5992
35°	5907	5907	5928
40°	5859	5838	5859
45°	5782	5759	5759
50°	5737	5686	5686
55°	5614	5557	5586
60°	5440	5407	5407
65°	5211	5173	5173
70°	4879	4829	4829
75°	4386	4320	4320
80°	3649	3557	3557
85°	2297	2492	2677



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.0	3.3
10°-20°	205.8	9.5
20°-30°	311.3	14.4
30°-40°	375.6	17.4
40°-50°	390.1	18.1
50°-60°	353.3	16.4
60°-70°	267.8	12.4
70°-80°	147.5	6.8
80°-90°	34.5	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°	589.2	27.3
0°-40°	964.8	44.7
0°-60°	1708.2	79.2
0°-90°	2158.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2158.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	754	756	759	761	759	72
15°	726	728	730	732	730	205
25°	674	674	676	676	676	311
35°	599	599	599	599	602	376
45°	506	504	504	506	504	391
55°	399	395	395	395	397	356
65°	273	271	271	271	271	270
75°	141	141	138	138	138	149
85°	25	27	27	29	29	33
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	760.7	760.7	760.7	760.7	760.7
2.5°	756.5	758.6	760.7	762.7	760.7
5°	754.5	756.5	758.6	760.7	758.6
7.5°	750.3	752.4	754.5	756.5	754.5
10°	744.1	746.2	748.3	750.3	748.3
12.5°	735.9	737.9	740.0	740.0	740.0
15°	725.5	727.6	729.7	731.7	729.7
17.5°	715.2	717.3	719.3	719.3	719.3
20°	702.8	704.9	706.9	706.9	706.9
22.5°	688.3	690.4	692.5	692.5	692.5
25°	673.9	673.9	675.9	675.9	675.9
27.5°	657.3	657.3	657.3	659.4	659.4
30°	640.8	640.8	640.8	640.8	642.8
32.5°	622.2	622.2	620.1	622.2	622.2
35°	599.4	599.4	599.4	599.4	601.5
37.5°	580.8	576.7	578.8	578.8	578.8
40°	556.0	556.0	554.0	556.0	556.0
42.5°	531.2	531.2	531.2	531.2	531.2
45°	506.4	504.4	504.4	506.4	504.4
47.5°	481.6	479.6	479.6	479.6	479.6
50°	456.8	452.7	452.7	452.7	452.7
52.5°	427.9	423.7	423.7	423.7	425.8
55°	398.9	394.8	394.8	394.8	396.9
57.5°	367.9	365.9	363.8	365.9	365.9
60°	336.9	334.9	334.9	334.9	334.9
62.5°	305.9	303.9	301.8	301.8	303.9
65°	272.8	270.8	270.8	270.8	270.8
67.5°	239.8	237.7	237.7	237.7	237.7
70°	206.7	204.6	204.6	206.7	204.6
72.5°	173.6	171.6	171.6	171.6	171.6
75°	140.6	140.6	138.5	138.5	138.5
77.5°	107.5	107.5	107.5	107.5	107.5
80°	78.5	76.5	76.5	76.5	76.5
82.5°	47.5	47.5	49.6	49.6	49.6
85°	24.8	26.9	26.9	28.9	28.9
87.5°	8.3	10.3	12.4	14.5	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)