

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: P412191

Luminaire Tested: **MRI-4ASR-4-500-L840-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412191
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-L840-OPL
Description: 4 FT, 4 INCH CHANNEL, OPAL LENS
Light Source: (336) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

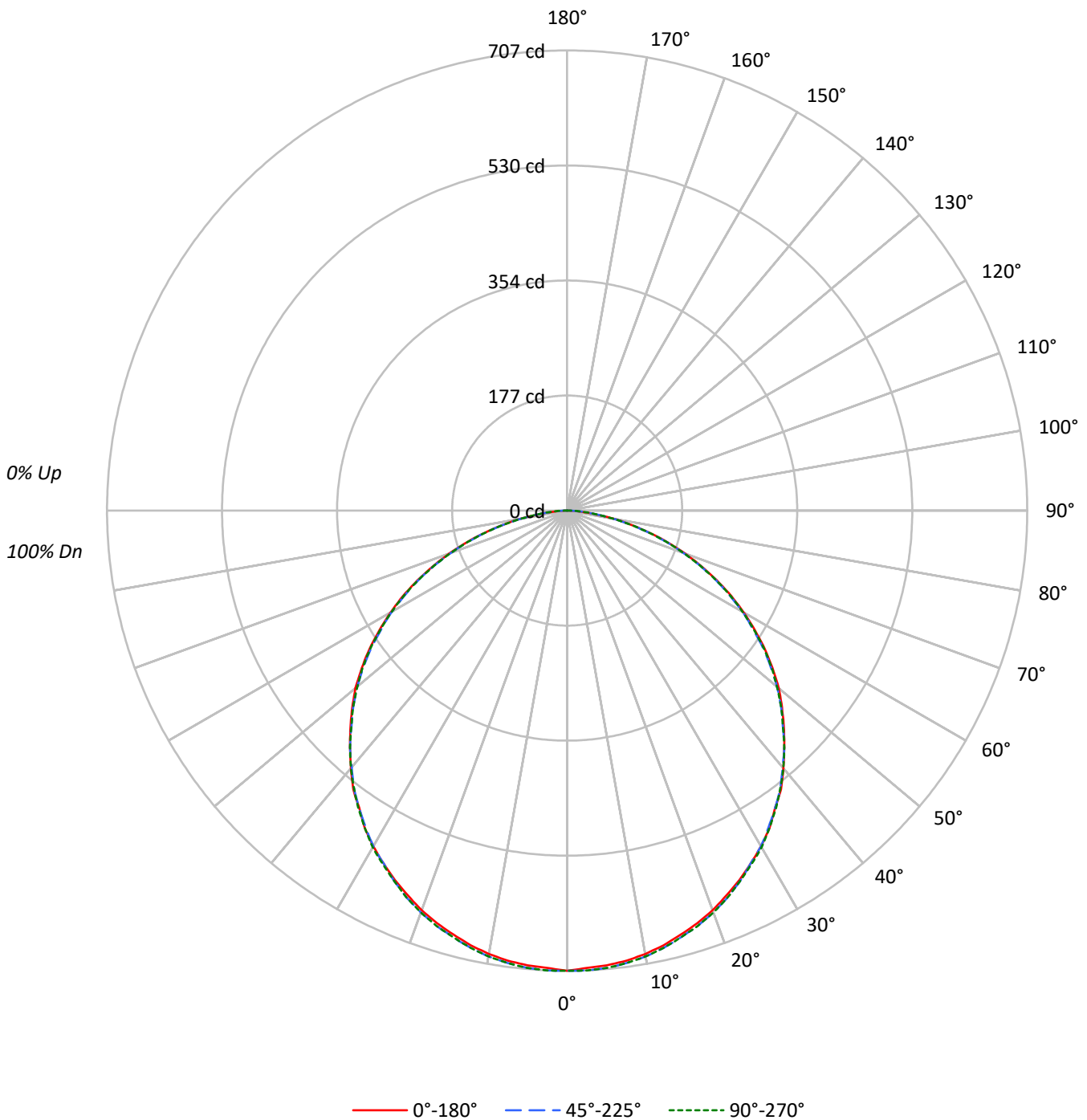
Lumens per Lamp: N/A
Luminaire Lumens: 2006.0 lumens
Efficiency: N/A
Efficacy: 65.1 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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°	5708	5708	5708
5°	5683	5715	5715
10°	5670	5702	5702
15°	5636	5669	5669
20°	5613	5645	5645
25°	5580	5597	5597
30°	5552	5552	5571
35°	5491	5491	5510
40°	5447	5426	5447
45°	5375	5352	5352
50°	5333	5285	5285
55°	5219	5165	5192
60°	5057	5026	5026
65°	4844	4808	4808
70°	4534	4489	4489
75°	4077	4014	4014
80°	3394	3305	3305
85°	2140	2316	2492



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	67.0	3.3
10°-20°	191.4	9.5
20°-30°	289.4	14.4
30°-40°	349.1	17.4
40°-50°	362.6	18.1
50°-60°	328.5	16.4
60°-70°	248.9	12.4
70°-80°	137.1	6.8
80°-90°	32.0	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°	547.7	27.3
0°-40°	896.8	44.7
0°-60°	1587.9	79.2
0°-90°	2006.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2006.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	707	707	707	707	707	
5°	701	703	705	707	705	67
15°	674	676	678	680	678	190
25°	626	626	628	628	628	289
35°	557	557	557	557	559	350
45°	471	469	469	471	469	364
55°	371	367	367	367	369	331
65°	254	252	252	252	252	251
75°	131	131	129	129	129	138
85°	23	25	25	27	27	30
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	707.1	707.1	707.1	707.1	707.1
2.5°	703.2	705.2	707.1	709.0	707.1
5°	701.3	703.2	705.2	707.1	705.2
7.5°	697.5	699.4	701.3	703.2	701.3
10°	691.7	693.6	695.6	697.5	695.6
12.5°	684.0	686.0	687.9	687.9	687.9
15°	674.4	676.3	678.3	680.2	678.3
17.5°	664.8	666.7	668.7	668.7	668.7
20°	653.3	655.2	657.1	657.1	657.1
22.5°	639.8	641.8	643.7	643.7	643.7
25°	626.4	626.4	628.3	628.3	628.3
27.5°	611.0	611.0	611.0	612.9	612.9
30°	595.6	595.6	595.6	595.6	597.6
32.5°	578.4	578.4	576.4	578.4	578.4
35°	557.2	557.2	557.2	557.2	559.1
37.5°	539.9	536.1	538.0	538.0	538.0
40°	516.9	516.9	514.9	516.9	516.9
42.5°	493.8	493.8	493.8	493.8	493.8
45°	470.8	468.8	468.8	470.8	468.8
47.5°	447.7	445.8	445.8	445.8	445.8
50°	424.6	420.8	420.8	420.8	420.8
52.5°	397.7	393.9	393.9	393.9	395.8
55°	370.8	367.0	367.0	367.0	368.9
57.5°	342.0	340.1	338.2	340.1	340.1
60°	313.2	311.3	311.3	311.3	311.3
62.5°	284.4	282.5	280.5	280.5	282.5
65°	253.6	251.7	251.7	251.7	251.7
67.5°	222.9	221.0	221.0	221.0	221.0
70°	192.1	190.2	190.2	192.1	190.2
72.5°	161.4	159.5	159.5	159.5	159.5
75°	130.7	130.7	128.7	128.7	128.7
77.5°	99.9	99.9	99.9	99.9	99.9
80°	73.0	71.1	71.1	71.1	71.1
82.5°	44.2	44.2	46.1	46.1	46.1
85°	23.1	25.0	25.0	26.9	26.9
87.5°	7.7	9.6	11.5	13.5	13.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)