

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: P412197

Luminaire Tested: **MRI-4ASR-4-500-L940-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412197
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-L940-OPL
Description: 4 FT, 4 INCH CHANNEL, OPAL LENS
Light Source: (336) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

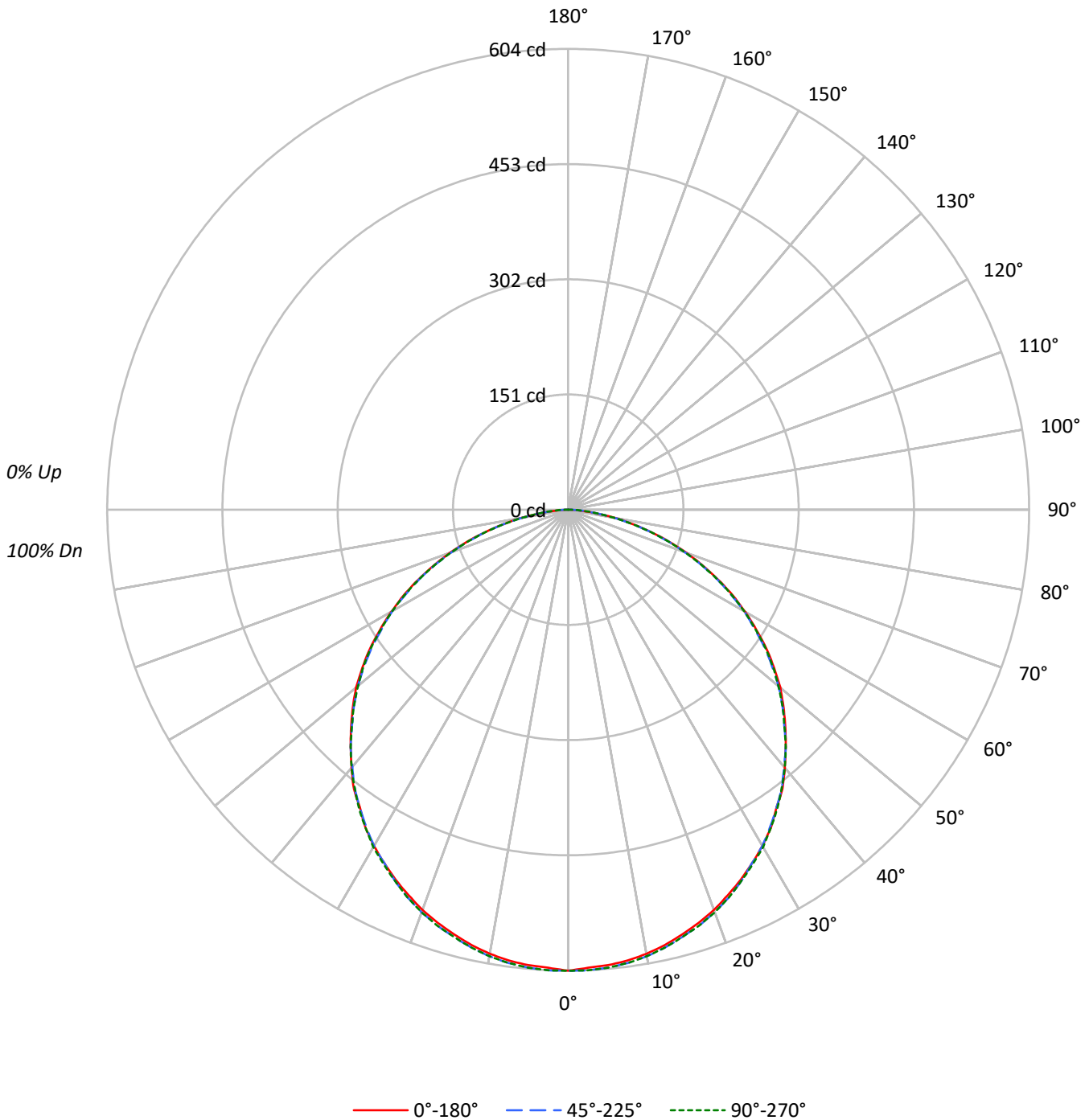
Lumens per Lamp: N/A
Luminaire Lumens: 1714.0 lumens
Efficiency: N/A
Efficacy: 55.6 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 30.8
Input Voltage (V): NR
Input Current (Ain): 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°	4878	4878	4878
5°	4856	4883	4883
10°	4845	4872	4872
15°	4817	4843	4843
20°	4796	4824	4824
25°	4767	4782	4782
30°	4744	4744	4760
35°	4692	4692	4709
40°	4654	4637	4654
45°	4592	4574	4574
50°	4557	4515	4515
55°	4460	4414	4436
60°	4321	4295	4295
65°	4139	4109	4109
70°	3876	3836	3836
75°	3481	3431	3431
80°	2901	2822	2822
85°	1825	1973	2130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.2	3.3
10°-20°	163.5	9.5
20°-30°	247.3	14.4
30°-40°	298.3	17.4
40°-50°	309.8	18.1
50°-60°	280.6	16.4
60°-70°	212.7	12.4
70°-80°	117.2	6.8
80°-90°	27.4	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°	468.0	27.3
0°-40°	766.3	44.7
0°-60°	1356.8	79.2
0°-90°	1714.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1714.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	604	604	604	604	604	
5°	599	601	602	604	602	57
15°	576	578	580	581	580	163
25°	535	535	537	537	537	247
35°	476	476	476	476	478	299
45°	402	401	401	402	401	311
55°	317	314	314	314	315	283
65°	217	215	215	215	215	214
75°	112	112	110	110	110	118
85°	20	21	21	23	23	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	604.2	604.2	604.2	604.2	604.2
2.5°	600.9	602.5	604.2	605.8	604.2
5°	599.2	600.9	602.5	604.2	602.5
7.5°	596.0	597.6	599.2	600.9	599.2
10°	591.0	592.7	594.3	596.0	594.3
12.5°	584.5	586.1	587.7	587.7	587.7
15°	576.3	577.9	579.5	581.2	579.5
17.5°	568.0	569.7	571.3	571.3	571.3
20°	558.2	559.8	561.5	561.5	561.5
22.5°	546.7	548.3	550.0	550.0	550.0
25°	535.2	535.2	536.9	536.9	536.9
27.5°	522.1	522.1	522.1	523.7	523.7
30°	508.9	508.9	508.9	508.9	510.6
32.5°	494.2	494.2	492.5	494.2	494.2
35°	476.1	476.1	476.1	476.1	477.8
37.5°	461.3	458.0	459.7	459.7	459.7
40°	441.6	441.6	440.0	441.6	441.6
42.5°	421.9	421.9	421.9	421.9	421.9
45°	402.2	400.6	400.6	402.2	400.6
47.5°	382.5	380.9	380.9	380.9	380.9
50°	362.8	359.5	359.5	359.5	359.5
52.5°	339.8	336.6	336.6	336.6	338.2
55°	316.9	313.6	313.6	313.6	315.2
57.5°	292.2	290.6	288.9	290.6	290.6
60°	267.6	266.0	266.0	266.0	266.0
62.5°	243.0	241.3	239.7	239.7	241.3
65°	216.7	215.1	215.1	215.1	215.1
67.5°	190.4	188.8	188.8	188.8	188.8
70°	164.2	162.5	162.5	164.2	162.5
72.5°	137.9	136.3	136.3	136.3	136.3
75°	111.6	111.6	110.0	110.0	110.0
77.5°	85.4	85.4	85.4	85.4	85.4
80°	62.4	60.7	60.7	60.7	60.7
82.5°	37.8	37.8	39.4	39.4	39.4
85°	19.7	21.3	21.3	23.0	23.0
87.5°	6.6	8.2	9.9	11.5	11.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)