

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: P412095

Luminaire Tested: **MRI-4ASR-2-1000-L840-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412095
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-2-1000-L840-OPL
Description: 2 FT, 4 INCH CHANNEL, OPAL LENS
Light Source: (196) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

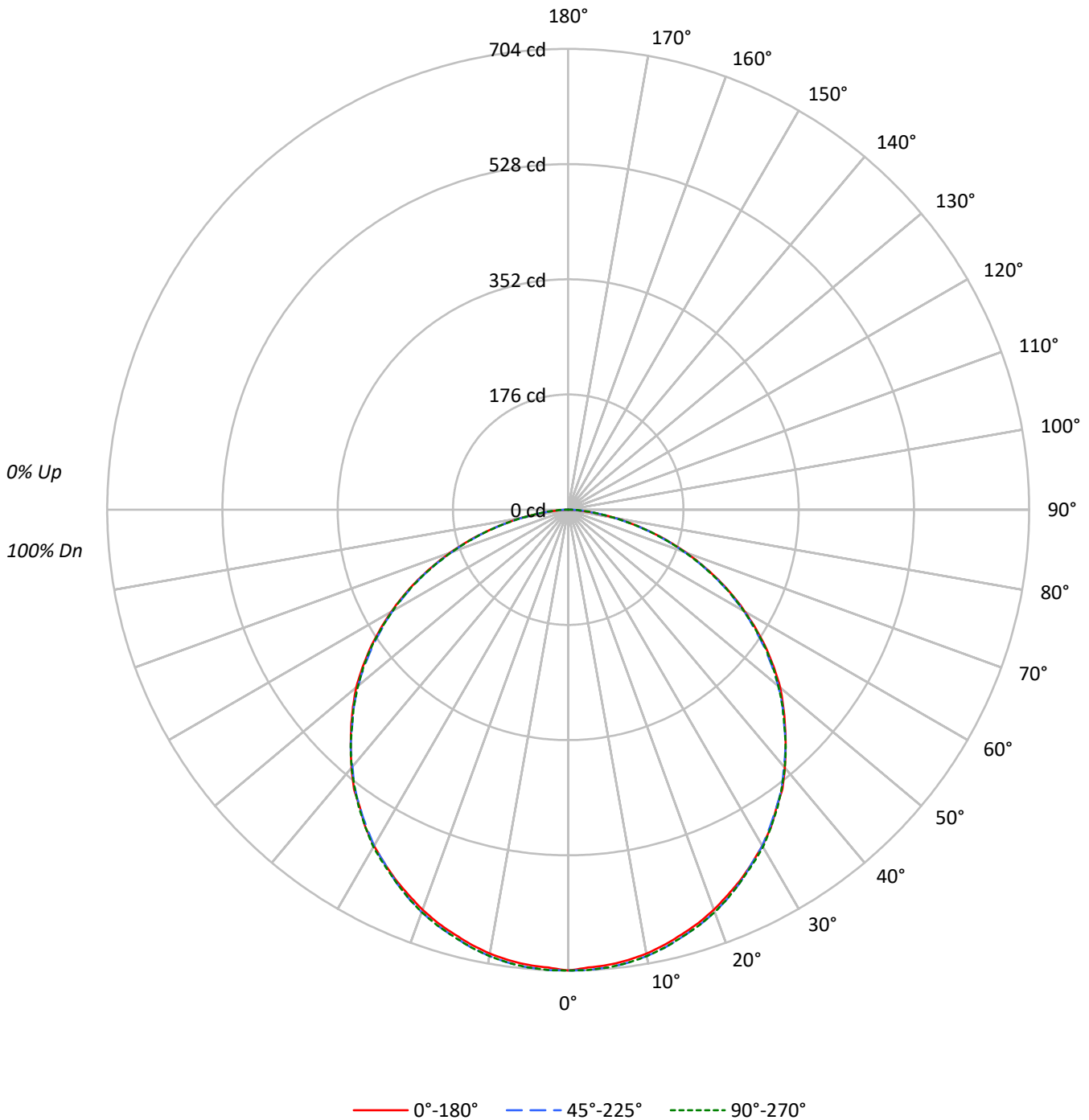
Lumens per Lamp: N/A
Luminaire Lumens: 1997.1 lumens
Efficiency: N/A
Efficacy: 57.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.33' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 34.9
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°	11365	11365	11365
5°	11316	11378	11378
10°	11290	11352	11352
15°	11223	11286	11286
20°	11175	11241	11241
25°	11109	11143	11143
30°	11056	11056	11091
35°	10933	10933	10971
40°	10846	10804	10846
45°	10700	10657	10657
50°	10618	10522	10522
55°	10393	10283	10339
60°	10069	10007	10007
65°	9647	9574	9574
70°	9031	8941	8941
75°	8116	7997	7997
80°	6760	6583	6583
85°	4261	4613	4965



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.7	3.3
10°-20°	190.5	9.5
20°-30°	288.1	14.4
30°-40°	347.6	17.4
40°-50°	361.0	18.1
50°-60°	327.0	16.4
60°-70°	247.8	12.4
70°-80°	136.5	6.8
80°-90°	31.9	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°	545.3	27.3
0°-40°	892.8	44.7
0°-60°	1580.8	79.2
0°-90°	1997.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1997.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	704	704	704	704	704	
5°	698	700	702	704	702	66
15°	671	673	675	677	675	190
25°	624	624	626	626	626	287
35°	555	555	555	555	557	348
45°	469	467	467	469	467	362
55°	369	365	365	365	367	329
65°	252	251	251	251	251	250
75°	130	130	128	128	128	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°	703.9	703.9	703.9	703.9	703.9
2.5°	700.1	702.0	703.9	705.8	703.9
5°	698.2	700.1	702.0	703.9	702.0
7.5°	694.4	696.3	698.2	700.1	698.2
10°	688.6	690.5	692.4	694.4	692.4
12.5°	681.0	682.9	684.8	684.8	684.8
15°	671.4	673.3	675.2	677.1	675.2
17.5°	661.8	663.8	665.7	665.7	665.7
20°	650.4	652.3	654.2	654.2	654.2
22.5°	637.0	638.9	640.8	640.8	640.8
25°	623.6	623.6	625.5	625.5	625.5
27.5°	608.3	608.3	608.3	610.2	610.2
30°	593.0	593.0	593.0	593.0	594.9
32.5°	575.8	575.8	573.8	575.8	575.8
35°	554.7	554.7	554.7	554.7	556.6
37.5°	537.5	533.7	535.6	535.6	535.6
40°	514.6	514.6	512.6	514.6	514.6
42.5°	491.6	491.6	491.6	491.6	491.6
45°	468.6	466.7	466.7	468.6	466.7
47.5°	445.7	443.8	443.8	443.8	443.8
50°	422.7	418.9	418.9	418.9	418.9
52.5°	396.0	392.1	392.1	392.1	394.0
55°	369.2	365.3	365.3	365.3	367.3
57.5°	340.5	338.6	336.7	338.6	338.6
60°	311.8	309.9	309.9	309.9	309.9
62.5°	283.1	281.2	279.3	279.3	281.2
65°	252.5	250.6	250.6	250.6	250.6
67.5°	221.9	220.0	220.0	220.0	220.0
70°	191.3	189.4	189.4	191.3	189.4
72.5°	160.7	158.8	158.8	158.8	158.8
75°	130.1	130.1	128.2	128.2	128.2
77.5°	99.5	99.5	99.5	99.5	99.5
80°	72.7	70.8	70.8	70.8	70.8
82.5°	44.0	44.0	45.9	45.9	45.9
85°	23.0	24.9	24.9	26.8	26.8
87.5°	7.7	9.6	11.5	13.4	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)