

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: P412185

Luminaire Tested: **MRI-4ASR-4-250-L940-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412185
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-4-250-L940-OPL
Description: 4 FT, 4 INCH CHANNEL, OPAL LENS
Light Source: (336) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

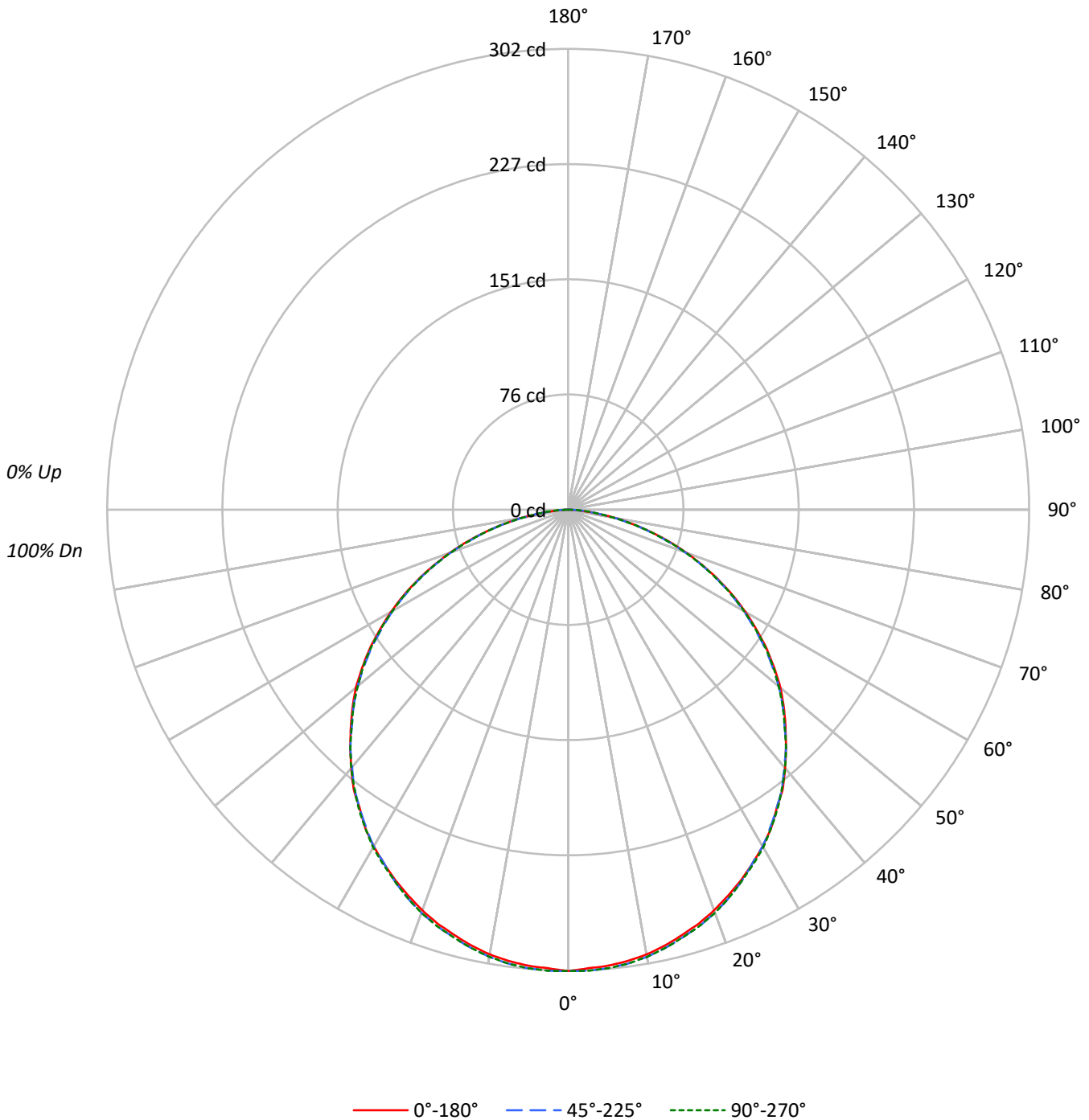
Lumens per Lamp: N/A
Luminaire Lumens: 858.0 lumens
Efficiency: N/A
Efficacy: 53.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.25 / 1.37
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 16.1
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°	2441	2441	2441
5°	2431	2444	2444
10°	2426	2439	2439
15°	2411	2425	2425
20°	2400	2415	2415
25°	2386	2393	2393
30°	2375	2375	2383
35°	2349	2349	2357
40°	2330	2322	2330
45°	2298	2289	2289
50°	2281	2261	2261
55°	2232	2210	2221
60°	2164	2149	2149
65°	2073	2057	2057
70°	1940	1921	1921
75°	1744	1719	1719
80°	1450	1413	1413
85°	917	991	1065



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	28.6	3.3
10°-20°	81.8	9.5
20°-30°	123.8	14.4
30°-40°	149.3	17.4
40°-50°	155.1	18.1
50°-60°	140.5	16.4
60°-70°	106.5	12.4
70°-80°	58.6	6.8
80°-90°	13.7	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°	234.3	27.3
0°-40°	383.6	44.7
0°-60°	679.2	79.2
0°-90°	858.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	858.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	302	302	302	302	302	
5°	300	301	302	302	302	29
15°	288	289	290	291	290	81
25°	268	268	269	269	269	123
35°	238	238	238	238	239	150
45°	201	200	200	201	200	156
55°	159	157	157	157	158	142
65°	108	108	108	108	108	107
75°	56	56	55	55	55	59
85°	10	11	11	12	12	13
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	302.4	302.4	302.4	302.4	302.4
2.5°	300.8	301.6	302.4	303.3	302.4
5°	300.0	300.8	301.6	302.4	301.6
7.5°	298.3	299.1	300.0	300.8	300.0
10°	295.9	296.7	297.5	298.3	297.5
12.5°	292.6	293.4	294.2	294.2	294.2
15°	288.5	289.3	290.1	290.9	290.1
17.5°	284.4	285.2	286.0	286.0	286.0
20°	279.4	280.2	281.1	281.1	281.1
22.5°	273.7	274.5	275.3	275.3	275.3
25°	267.9	267.9	268.7	268.7	268.7
27.5°	261.3	261.3	261.3	262.2	262.2
30°	254.8	254.8	254.8	254.8	255.6
32.5°	247.4	247.4	246.6	247.4	247.4
35°	238.3	238.3	238.3	238.3	239.2
37.5°	230.9	229.3	230.1	230.1	230.1
40°	221.1	221.1	220.3	221.1	221.1
42.5°	211.2	211.2	211.2	211.2	211.2
45°	201.3	200.5	200.5	201.3	200.5
47.5°	191.5	190.7	190.7	190.7	190.7
50°	181.6	180.0	180.0	180.0	180.0
52.5°	170.1	168.5	168.5	168.5	169.3
55°	158.6	157.0	157.0	157.0	157.8
57.5°	146.3	145.5	144.6	145.5	145.5
60°	134.0	133.1	133.1	133.1	133.1
62.5°	121.6	120.8	120.0	120.0	120.8
65°	108.5	107.7	107.7	107.7	107.7
67.5°	95.3	94.5	94.5	94.5	94.5
70°	82.2	81.4	81.4	82.2	81.4
72.5°	69.0	68.2	68.2	68.2	68.2
75°	55.9	55.9	55.1	55.1	55.1
77.5°	42.7	42.7	42.7	42.7	42.7
80°	31.2	30.4	30.4	30.4	30.4
82.5°	18.9	18.9	19.7	19.7	19.7
85°	9.9	10.7	10.7	11.5	11.5
87.5°	3.3	4.1	4.9	5.8	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)