

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: P412182

Luminaire Tested: **MRI-4ASR-4-250-L935-HEO**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412182
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2006-829-2)
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-L935-HEO
Description: 4 FT, 4 INCH CHANNEL, HIGH EFFICIENCY LENS
Light Source: (336) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1670.0 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.32
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

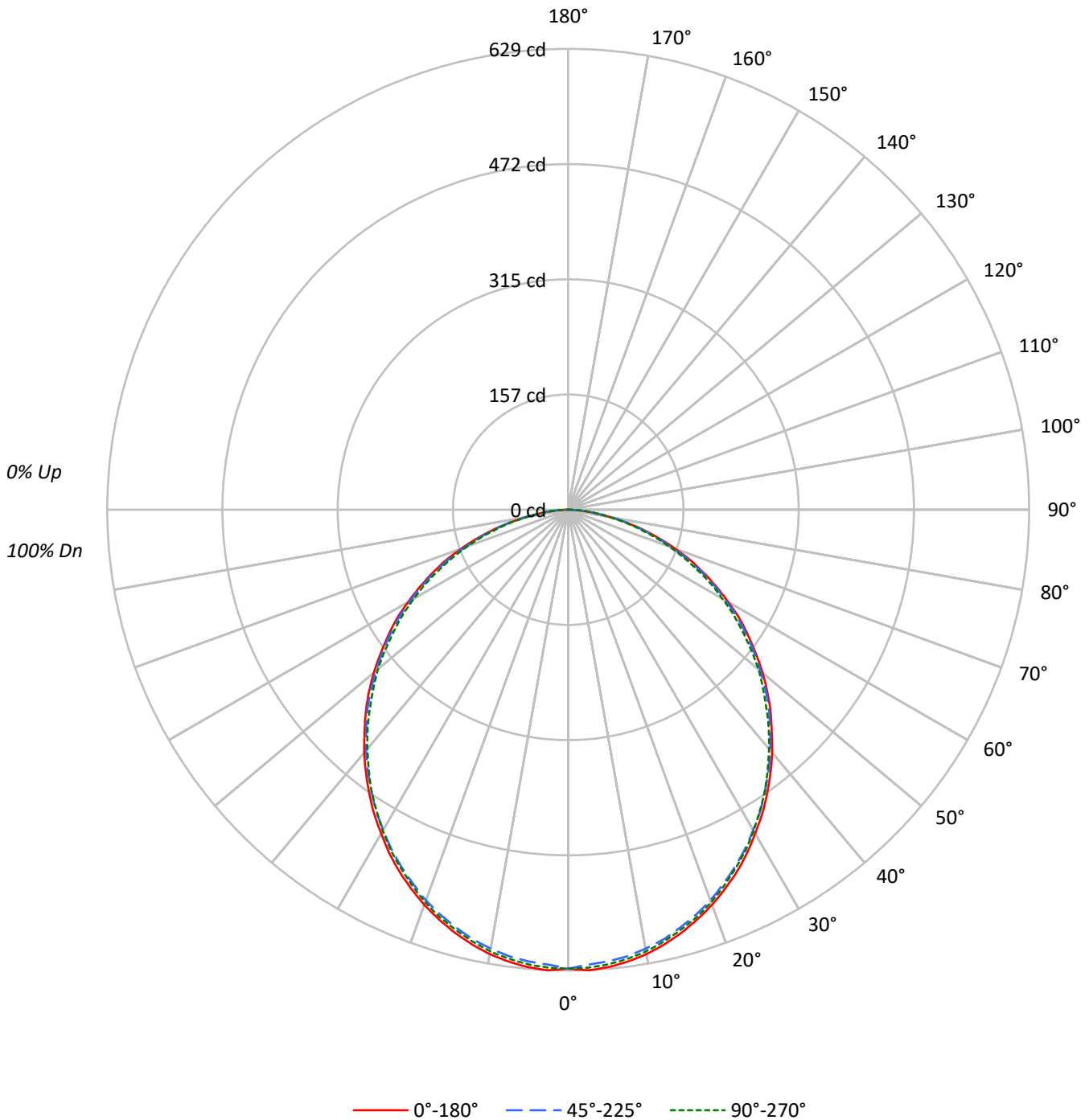
Input Watts (W): 16.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	98	95	92		94	91	89		90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76		82	78	74		79	76	72	70
3	90	80	72	65	88	78	71	65	75	69	64		73	67	63		70	65	62	59
4	83	71	62	56	81	70	61	55	67	60	54		65	59	54		63	57	53	51
5	76	63	55	48	74	62	54	48	60	53	47		58	52	47		56	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41		53	46	41		51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37		48	41	36		47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33		44	37	33		43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30		41	34	29		40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5057	5057	5057
5°	5079	5016	5049
10°	5049	4987	5018
15°	4995	4935	4960
20°	4931	4875	4899
25°	4855	4793	4810
30°	4756	4705	4718
35°	4664	4613	4613
40°	4565	4521	4492
45°	4461	4424	4365
50°	4349	4299	4256
55°	4220	4172	4092
60°	4072	4017	3922
65°	3901	3828	3712
70°	3654	3552	3458
75°	3325	3244	3119
80°	2724	2771	2655
85°	1954	2214	2371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.1	3.5
10°-20°	167.6	10.0
20°-30°	249.2	14.9
30°-40°	293.9	17.6
40°-50°	298.6	17.9
50°-60°	265.0	15.9
60°-70°	198.2	11.9
70°-80°	109.8	6.6
80°-90°	28.6	1.7
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°	476.0	28.5
0°-40°	769.9	46.1
0°-60°	1333.4	79.8
0°-90°	1670.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1670.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	626	626	626	626	626	
5°	627	625	619	624	623	59
15°	598	597	590	595	594	169
25°	545	543	538	541	540	251
35°	473	472	468	469	468	296
45°	391	391	388	384	382	301
55°	300	301	296	293	291	268
65°	204	206	200	197	194	202
75°	107	106	104	101	100	112
85°	21	24	24	25	26	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	626.4	626.4	626.4	626.4	626.4
2.5°	629.4	627.5	621.4	626.4	625.6
5°	626.7	625.0	619.0	623.7	623.1
7.5°	622.2	620.3	614.8	619.5	618.4
10°	615.9	614.0	608.3	613.1	612.1
12.5°	607.6	605.9	600.7	604.7	603.8
15°	597.7	596.6	590.5	594.9	593.5
17.5°	586.3	585.2	579.7	583.9	583.1
20°	574.0	572.1	567.5	570.4	570.2
22.5°	559.8	558.2	552.9	556.5	555.8
25°	545.0	542.9	538.1	540.8	540.0
27.5°	528.6	526.4	522.4	524.5	524.1
30°	510.2	509.5	504.7	506.6	506.1
32.5°	492.8	491.1	487.8	487.5	486.9
35°	473.2	472.3	468.1	468.7	468.1
37.5°	453.1	452.7	449.1	448.2	446.9
40°	433.2	431.9	429.0	427.3	426.2
42.5°	411.2	411.9	407.8	405.9	405.1
45°	390.7	390.7	387.5	384.4	382.3
47.5°	368.7	368.9	365.5	361.5	360.3
50°	346.3	346.7	342.3	338.9	338.9
52.5°	322.8	324.1	319.9	316.3	314.8
55°	299.8	301.1	296.4	292.6	290.7
57.5°	277.6	277.4	273.6	268.5	268.1
60°	252.2	253.7	248.8	245.0	242.9
62.5°	228.1	230.0	224.7	221.1	219.9
65°	204.2	205.5	200.4	197.0	194.3
67.5°	180.8	180.3	175.7	171.9	170.4
70°	154.8	155.6	150.5	147.8	146.5
72.5°	130.4	131.3	126.9	125.0	122.8
75°	106.6	105.5	104.0	101.1	100.0
77.5°	81.2	82.2	81.8	78.6	78.2
80°	58.6	60.9	59.6	57.3	57.1
82.5°	38.9	41.2	40.6	40.0	39.3
85°	21.1	24.1	23.9	24.7	25.6
87.5°	8.0	10.4	12.3	12.1	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)