

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: P412180

Luminaire Tested: **MRI-4ASR-4-250-L850-HEO**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412180
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-L850-HEO
Description: 4 FT, 4 INCH CHANNEL, HIGH EFFICIENCY LENS
Light Source: (336) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

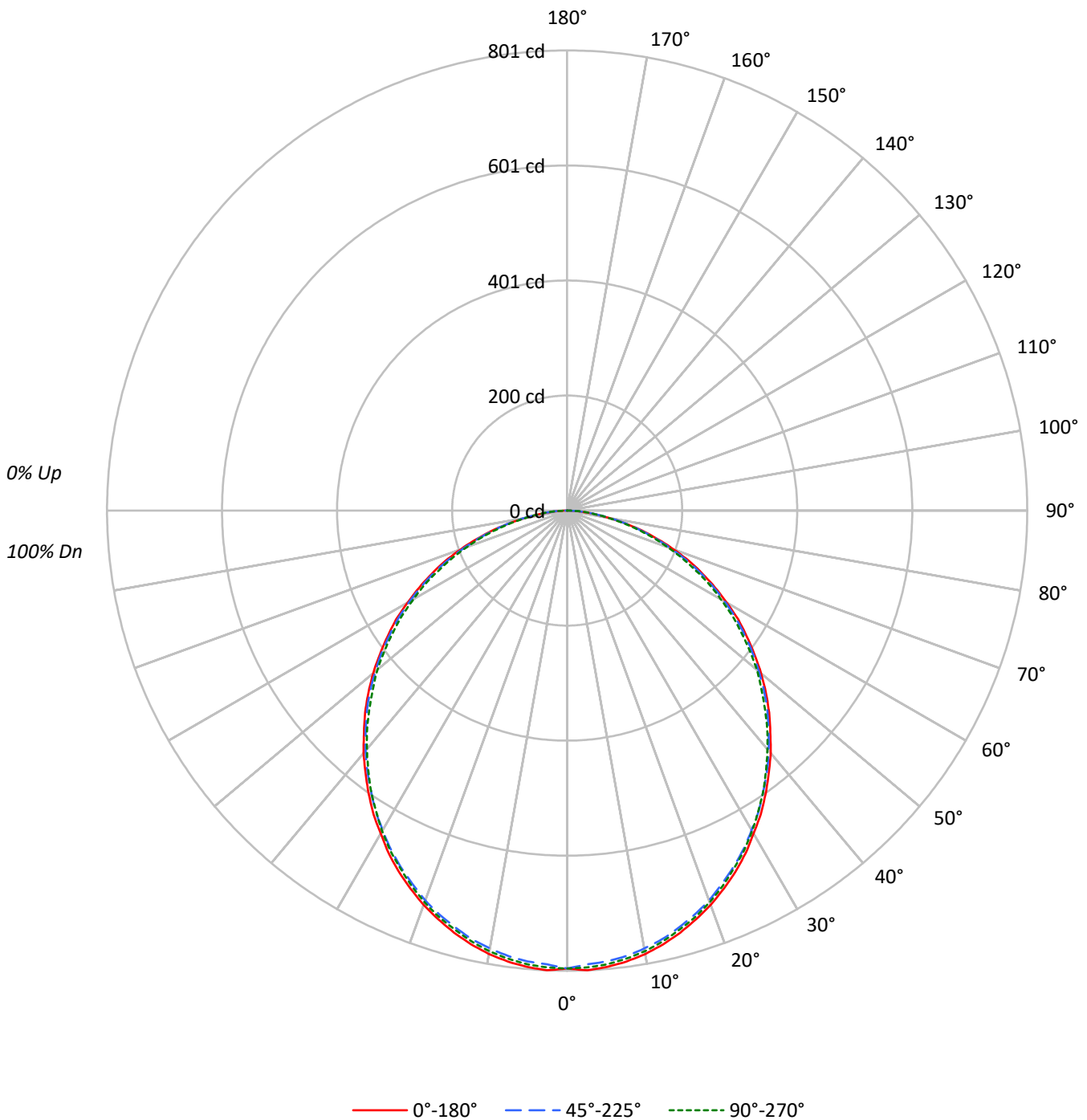
Lumens per Lamp: N/A
Luminaire Lumens: 2125.0 lumens
Efficiency: N/A
Efficacy: 132.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.32
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Direct

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°	6435	6435	6435
5°	6462	6383	6425
10°	6424	6345	6384
15°	6356	6280	6312
20°	6275	6204	6234
25°	6177	6099	6120
30°	6052	5986	6003
35°	5934	5870	5870
40°	5809	5753	5716
45°	5676	5630	5553
50°	5535	5471	5416
55°	5370	5309	5206
60°	5181	5112	4991
65°	4965	4871	4722
70°	4648	4520	4400
75°	4230	4130	3968
80°	3464	3529	3375
85°	2492	2816	3020



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.3	3.5
10°-20°	213.3	10.0
20°-30°	317.1	14.9
30°-40°	374.0	17.6
40°-50°	379.9	17.9
50°-60°	337.1	15.9
60°-70°	252.3	11.9
70°-80°	139.7	6.6
80°-90°	36.3	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°	605.7	28.5
0°-40°	979.6	46.1
0°-60°	1696.7	79.8
0°-90°	2125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2125.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	797	797	797	797	797	
5°	797	795	788	794	793	76
15°	760	759	751	757	755	214
25°	694	691	685	688	687	319
35°	602	601	596	596	596	377
45°	497	497	493	489	486	383
55°	382	383	377	372	370	341
65°	260	262	255	251	247	257
75°	136	134	132	129	127	142
85°	27	31	30	32	33	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	797.1	797.1	797.1	797.1	797.1
2.5°	800.9	798.5	790.7	797.1	796.0
5°	797.4	795.2	787.7	793.6	792.8
7.5°	791.7	789.3	782.3	788.2	786.9
10°	783.7	781.2	774.0	780.2	778.8
12.5°	773.2	771.0	764.3	769.4	768.3
15°	760.5	759.2	751.4	757.0	755.2
17.5°	746.0	744.7	737.7	743.0	742.0
20°	730.4	728.0	722.1	725.8	725.6
22.5°	712.4	710.2	703.5	708.1	707.3
25°	693.5	690.9	684.7	688.2	687.1
27.5°	672.6	669.9	664.8	667.5	666.9
30°	649.2	648.4	642.2	644.6	644.0
32.5°	627.1	624.9	620.6	620.4	619.6
35°	602.1	601.0	595.6	596.4	595.6
37.5°	576.5	576.0	571.4	570.3	568.7
40°	551.2	549.6	545.9	543.7	542.4
42.5°	523.3	524.1	519.0	516.5	515.5
45°	497.2	497.2	493.1	489.1	486.4
47.5°	469.2	469.4	465.1	460.0	458.4
50°	440.7	441.2	435.6	431.2	431.2
52.5°	410.8	412.4	407.0	402.5	400.6
55°	381.5	383.1	377.2	372.3	369.9
57.5°	353.2	353.0	348.1	341.7	341.1
60°	320.9	322.8	316.6	311.8	309.1
62.5°	290.3	292.7	286.0	281.4	279.8
65°	259.9	261.5	255.0	250.7	247.2
67.5°	230.0	229.5	223.6	218.7	216.8
70°	196.9	198.0	191.5	188.0	186.4
72.5°	166.0	167.1	161.4	159.0	156.3
75°	135.6	134.2	132.4	128.6	127.2
77.5°	103.3	104.7	104.1	100.1	99.5
80°	74.5	77.5	75.9	72.9	72.6
82.5°	49.5	52.5	51.7	50.8	50.0
85°	26.9	30.7	30.4	31.5	32.6
87.5°	10.2	13.2	15.6	15.3	16.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)