

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: P412096

Luminaire Tested: **MRI-4ASR-2-1000-L850-HEO**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412096  
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-2-1000-L850-HEO  
Description: 2 FT, 4 INCH CHANNEL, HIGH EFFICIENCY LENS  
Light Source: (196) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

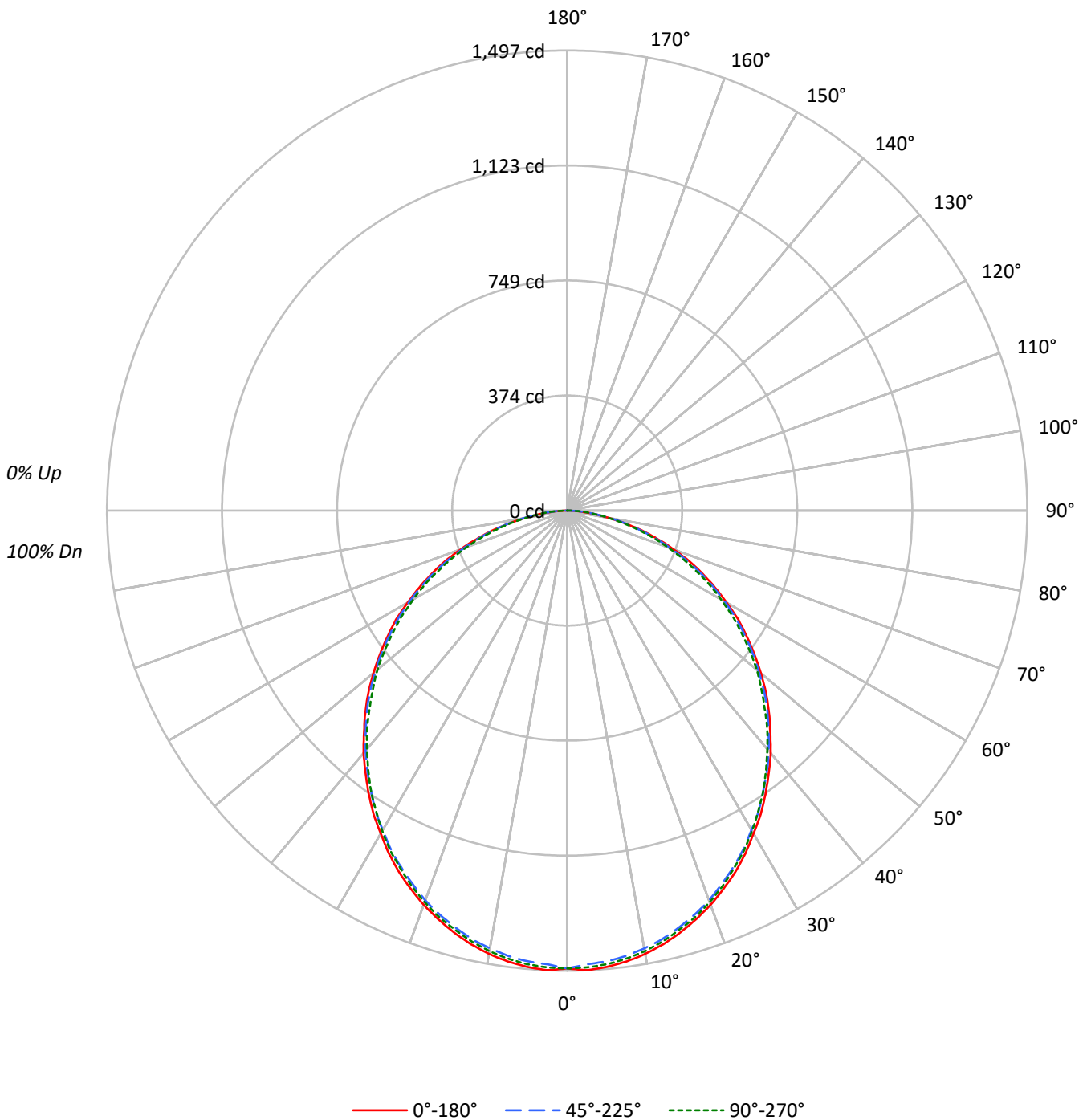
Lumens per Lamp: N/A  
Luminaire Lumens: 3971.0 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.32  
Luminous Opening: Rectangular (W 0.33' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 34.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	24051	24051	24051
5°	24151	23858	24012
10°	24010	23714	23861
15°	23756	23470	23589
20°	23452	23184	23297
25°	23088	22793	22874
30°	22617	22372	22438
35°	22176	21938	21938
40°	21711	21499	21361
45°	21213	21041	20754
50°	20685	20444	20243
55°	20068	19840	19460
60°	19369	19107	18652
65°	18552	18208	17650
70°	17372	16896	16447
75°	15808	15427	14835
80°	12952	13185	12617
85°	9318	10522	11263



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	140.6	3.5
10°-20°	398.5	10.0
20°-30°	592.6	14.9
30°-40°	698.8	17.6
40°-50°	710.0	17.9
50°-60°	630.0	15.9
60°-70°	471.4	11.9
70°-80°	261.1	6.6
80°-90°	67.9	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°	1131.8	28.5
0°-40°	1830.6	46.1
0°-60°	3170.6	79.8
0°-90°	3971.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3971.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1490	1490	1490	1490	1490	
5°	1490	1486	1472	1483	1482	141
15°	1421	1419	1404	1415	1411	401
25°	1296	1291	1279	1286	1284	597
35°	1125	1123	1113	1115	1113	704
45°	929	929	922	914	909	716
55°	713	716	705	696	691	638
65°	486	489	477	468	462	480
75°	253	251	247	240	238	266
85°	50	57	57	59	61	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1489.6	1489.6	1489.6	1489.6	1489.6
2.5°	1496.6	1492.1	1477.5	1489.6	1487.6
5°	1490.1	1486.1	1472.0	1483.1	1481.5
7.5°	1479.5	1475.0	1461.9	1473.0	1470.5
10°	1464.5	1459.9	1446.4	1457.9	1455.4
12.5°	1444.8	1440.8	1428.3	1437.8	1435.8
15°	1421.2	1418.7	1404.1	1414.7	1411.2
17.5°	1394.1	1391.6	1378.5	1388.5	1386.5
20°	1364.9	1360.4	1349.3	1356.4	1355.9
22.5°	1331.2	1327.2	1314.6	1323.2	1321.7
25°	1296.0	1291.0	1279.4	1286.0	1284.0
27.5°	1256.8	1251.8	1242.2	1247.3	1246.3
30°	1213.1	1211.6	1200.0	1204.5	1203.5
32.5°	1171.9	1167.8	1159.8	1159.3	1157.8
35°	1125.1	1123.1	1113.0	1114.6	1113.0
37.5°	1077.3	1076.3	1067.8	1065.8	1062.8
40°	1030.1	1027.1	1020.0	1016.0	1013.5
42.5°	977.8	979.3	969.8	965.2	963.2
45°	929.0	929.0	921.5	914.0	908.9
47.5°	876.8	877.3	869.2	859.7	856.7
50°	823.5	824.5	813.9	805.9	805.9
52.5°	767.7	770.7	760.6	752.1	748.6
55°	712.9	715.9	704.8	695.8	691.3
57.5°	660.1	659.6	650.5	638.5	637.5
60°	599.8	603.3	591.7	582.7	577.6
62.5°	542.4	547.0	534.4	525.9	522.8
65°	485.6	488.7	476.6	468.5	462.0
67.5°	429.8	428.8	417.8	408.7	405.2
70°	368.0	370.0	357.9	351.4	348.4
72.5°	310.2	312.2	301.6	297.1	292.1
75°	253.4	250.9	247.3	240.3	237.8
77.5°	193.0	195.6	194.6	187.0	186.0
80°	139.3	144.8	141.8	136.2	135.7
82.5°	92.5	98.0	96.5	95.0	93.5
85°	50.3	57.3	56.8	58.8	60.8
87.5°	19.1	24.6	29.2	28.7	30.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)