

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: P412156

Luminaire Tested: **MRI-2ASR-4-500-L850-HEO**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412156  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2006-829-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 10/5/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: MRI-2ASR-4-500-L850-HEO  
Description: 4 FT, 2 INCH CHANNEL, HIGH EFFICIENCY LENS  
Light Source: (168) 5000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4304.0 lumens  
Efficiency: N/A  
Efficacy: 99.2 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.17 / 1.32  
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')  
CIE Type: Direct

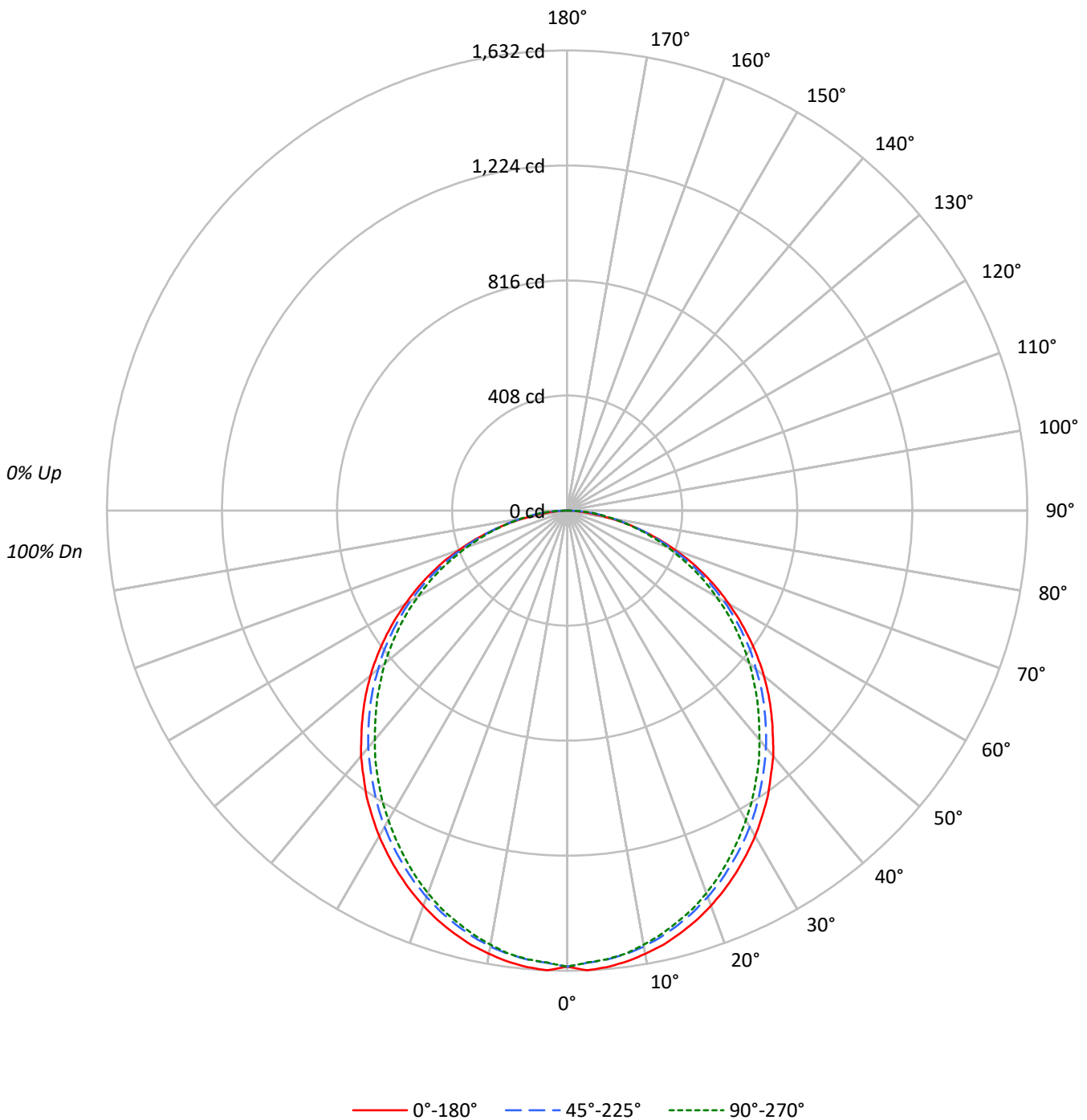
Input Watts (W): 43.4  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P412156

CATALOG NUMBER: MRI-2ASR-4-500-L850-HEO

### Luminous Intensity Polar Plot





TEST NUMBER: P412156

CATALOG NUMBER: MRI-2ASR-4-500-L850-HEO

**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	83	77	85	80	76	82	78	74	79	75	72	70
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	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°	26116	26116	26116
5°	26339	25909	25893
10°	26168	25740	25632
15°	25937	25426	25247
20°	25627	25057	24813
25°	25253	24617	24235
30°	24859	24155	23633
35°	24431	23607	23014
40°	23964	23126	22352
45°	23400	22571	21781
50°	22883	21961	21205
55°	22199	21408	20532
60°	21380	20722	19717
65°	20558	19797	18923
70°	19213	18637	17821
75°	17180	17218	16613
80°	14133	15463	15323
85°	9541	14746	15209



TEST NUMBER: P412156

CATALOG NUMBER: MRI-2ASR-4-500-L850-HEO

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.6	3.5
10°-20°	431.2	10.0
20°-30°	639.2	14.9
30°-40°	751.7	17.5
40°-50°	763.5	17.7
50°-60°	679.2	15.8
60°-70°	512.2	11.9
70°-80°	291.0	6.8
80°-90°	83.4	1.9
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°	1222.9	28.4
0°-40°	1974.6	45.9
0°-60°	3417.4	79.4
0°-90°	4304.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4304.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1618	1618	1618	1618	1618	
5°	1625	1614	1599	1610	1598	154
15°	1552	1539	1521	1527	1510	438
25°	1418	1403	1382	1377	1360	653
35°	1240	1223	1198	1182	1168	775
45°	1025	1012	988	969	954	791
55°	789	780	760	739	729	705
65°	538	535	518	502	495	532
75°	275	280	276	268	266	294
85°	52	71	80	80	82	66
90°	0	0	0	0	0	



TEST NUMBER: P412156

CATALOG NUMBER: MRI-2ASR-4-500-L850-HEO

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1617.5	1617.5	1617.5	1617.5	1617.5
2.5°	1631.8	1620.5	1605.7	1618.0	1604.7
5°	1625.1	1613.9	1598.6	1610.3	1597.6
7.5°	1613.4	1602.2	1586.9	1597.6	1585.3
10°	1596.1	1585.9	1570.0	1578.7	1563.4
12.5°	1577.2	1563.9	1547.1	1554.7	1539.4
15°	1551.7	1539.4	1521.1	1526.7	1510.4
17.5°	1523.6	1509.3	1491.5	1494.6	1480.8
20°	1491.5	1477.2	1458.3	1459.4	1444.1
22.5°	1455.8	1442.5	1422.1	1418.5	1404.3
25°	1417.5	1402.7	1381.8	1376.7	1360.4
27.5°	1376.2	1362.4	1340.0	1331.8	1314.5
30°	1333.4	1317.0	1295.6	1283.4	1267.6
32.5°	1286.4	1271.6	1247.7	1232.4	1220.1
35°	1239.5	1222.7	1197.7	1182.4	1167.6
37.5°	1186.5	1170.6	1147.2	1131.9	1117.1
40°	1137.0	1119.6	1097.2	1078.3	1060.5
42.5°	1079.9	1067.6	1043.1	1024.3	1006.9
45°	1024.8	1012.0	988.5	968.7	953.9
47.5°	969.2	956.4	934.0	912.5	898.3
50°	911.0	897.2	874.3	855.4	844.2
52.5°	850.3	840.6	820.2	798.8	786.0
55°	788.6	780.4	760.5	739.1	729.4
57.5°	726.4	719.7	701.4	681.0	671.3
60°	662.1	659.0	641.7	622.3	610.6
62.5°	601.4	596.8	578.9	564.7	554.0
65°	538.1	534.6	518.2	501.9	495.3
67.5°	474.4	470.3	455.0	443.8	433.6
70°	407.0	407.0	394.8	384.1	377.5
72.5°	343.3	343.8	335.6	324.4	321.4
75°	275.4	279.5	276.0	268.3	266.3
77.5°	215.3	218.8	219.3	216.8	213.2
80°	152.0	162.2	166.3	165.8	164.8
82.5°	97.4	113.7	121.4	120.9	121.9
85°	51.5	70.9	79.6	79.6	82.1
87.5°	17.9	36.2	38.8	35.7	34.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)