

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: P412100

Luminaire Tested: **MRI-4ASR-2-1000-L940-HEO**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412100
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-L940-HEO
Description: 2 FT, 4 INCH CHANNEL, HIGH EFFICIENCY LENS
Light Source: (196) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

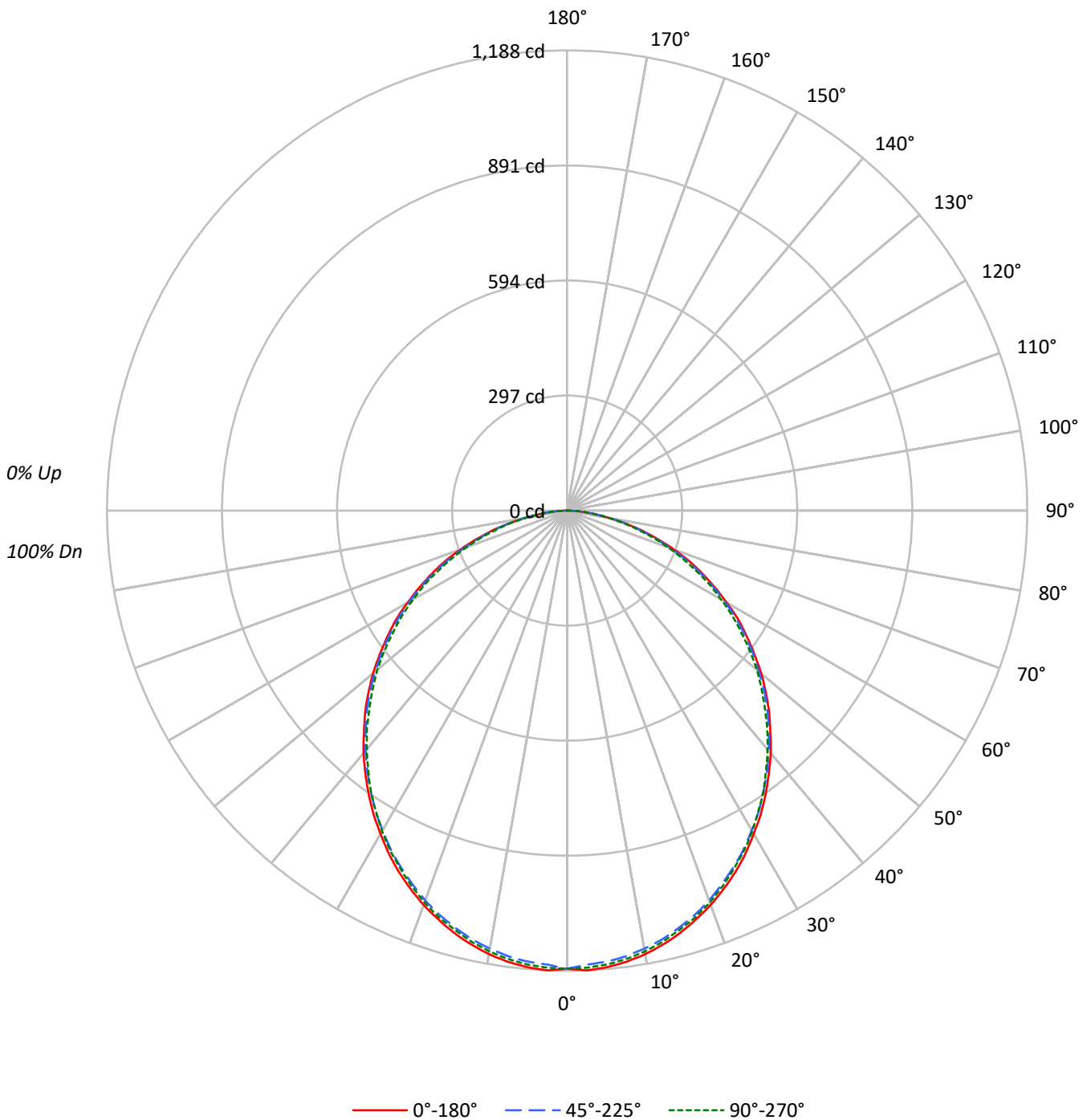
Lumens per Lamp: N/A
Luminaire Lumens: 3153.0 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.32
Luminous Opening: Rectangular (W 0.33' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 34.9
Input Voltage (V): NR
Input Current (A_{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°	19096	19096	19096
5°	19175	18943	19067
10°	19064	18828	18946
15°	18863	18636	18730
20°	18620	18409	18498
25°	18333	18098	18162
30°	17958	17764	17816
35°	17607	17420	17420
40°	17239	17070	16961
45°	16844	16707	16479
50°	16423	16234	16073
55°	15933	15752	15451
60°	15377	15171	14809
65°	14732	14457	14013
70°	13794	13416	13058
75°	12551	12252	11778
80°	10284	10470	10023
85°	7392	8355	8948



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.7	3.5
10°-20°	316.4	10.0
20°-30°	470.6	14.9
30°-40°	554.9	17.6
40°-50°	563.7	17.9
50°-60°	500.2	15.9
60°-70°	374.3	11.9
70°-80°	207.3	6.6
80°-90°	53.9	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°	898.6	28.5
0°-40°	1453.5	46.1
0°-60°	2517.5	79.8
0°-90°	3153.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3153.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1183	1183	1183	1183	1183	
5°	1183	1180	1169	1178	1176	112
15°	1128	1126	1115	1123	1120	318
25°	1029	1025	1016	1021	1020	474
35°	893	892	884	885	884	559
45°	738	738	732	726	722	569
55°	566	568	560	552	549	506
65°	386	388	378	372	367	381
75°	201	199	196	191	189	211
85°	40	46	45	47	48	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1182.7	1182.7	1182.7	1182.7	1182.7
2.5°	1188.3	1184.7	1173.2	1182.7	1181.1
5°	1183.1	1179.9	1168.8	1177.6	1176.4
7.5°	1174.8	1171.2	1160.8	1169.6	1167.6
10°	1162.8	1159.2	1148.4	1157.6	1155.6
12.5°	1147.2	1144.0	1134.0	1141.6	1140.0
15°	1128.5	1126.5	1114.9	1123.3	1120.5
17.5°	1106.9	1104.9	1094.5	1102.5	1100.9
20°	1083.7	1080.2	1071.4	1077.0	1076.6
22.5°	1057.0	1053.8	1043.8	1050.6	1049.4
25°	1029.1	1025.1	1015.9	1021.1	1019.5
27.5°	997.9	993.9	986.4	990.3	989.5
30°	963.2	962.0	952.8	956.4	955.6
32.5°	930.5	927.3	920.9	920.5	919.3
35°	893.3	891.7	883.8	885.0	883.8
37.5°	855.4	854.6	847.8	846.2	843.8
40°	817.9	815.5	809.9	806.7	804.7
42.5°	776.4	777.6	770.0	766.4	764.8
45°	737.7	737.7	731.7	725.7	721.7
47.5°	696.2	696.6	690.2	682.6	680.2
50°	653.8	654.6	646.3	639.9	639.9
52.5°	609.5	611.9	603.9	597.2	594.4
55°	566.0	568.4	559.6	552.5	548.9
57.5°	524.1	523.7	516.5	506.9	506.1
60°	476.2	479.0	469.8	462.6	458.6
62.5°	430.7	434.3	424.3	417.5	415.1
65°	385.6	388.0	378.4	372.0	366.8
67.5°	341.3	340.5	331.7	324.5	321.7
70°	292.2	293.8	284.2	279.0	276.6
72.5°	246.3	247.9	239.5	235.9	231.9
75°	201.2	199.2	196.4	190.8	188.8
77.5°	153.3	155.3	154.5	148.5	147.7
80°	110.6	115.0	112.6	108.2	107.8
82.5°	73.4	77.8	76.6	75.4	74.2
85°	39.9	45.5	45.1	46.7	48.3
87.5°	15.2	19.6	23.2	22.8	24.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)