

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: P412029

Luminaire Tested: **MRI-22ATR-40-L935-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412029
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2008-915-2)
Test Lab: INNOVATION CENTER
Issue Date: 10/5/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: MRI-22ATR-40-L935-OPL
Description: 2X2 TROFFER, 4000LM, OPAL LENS
Light Source: (588) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3411.0 lumens
Efficiency: N/A
Efficacy: 57.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.26 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

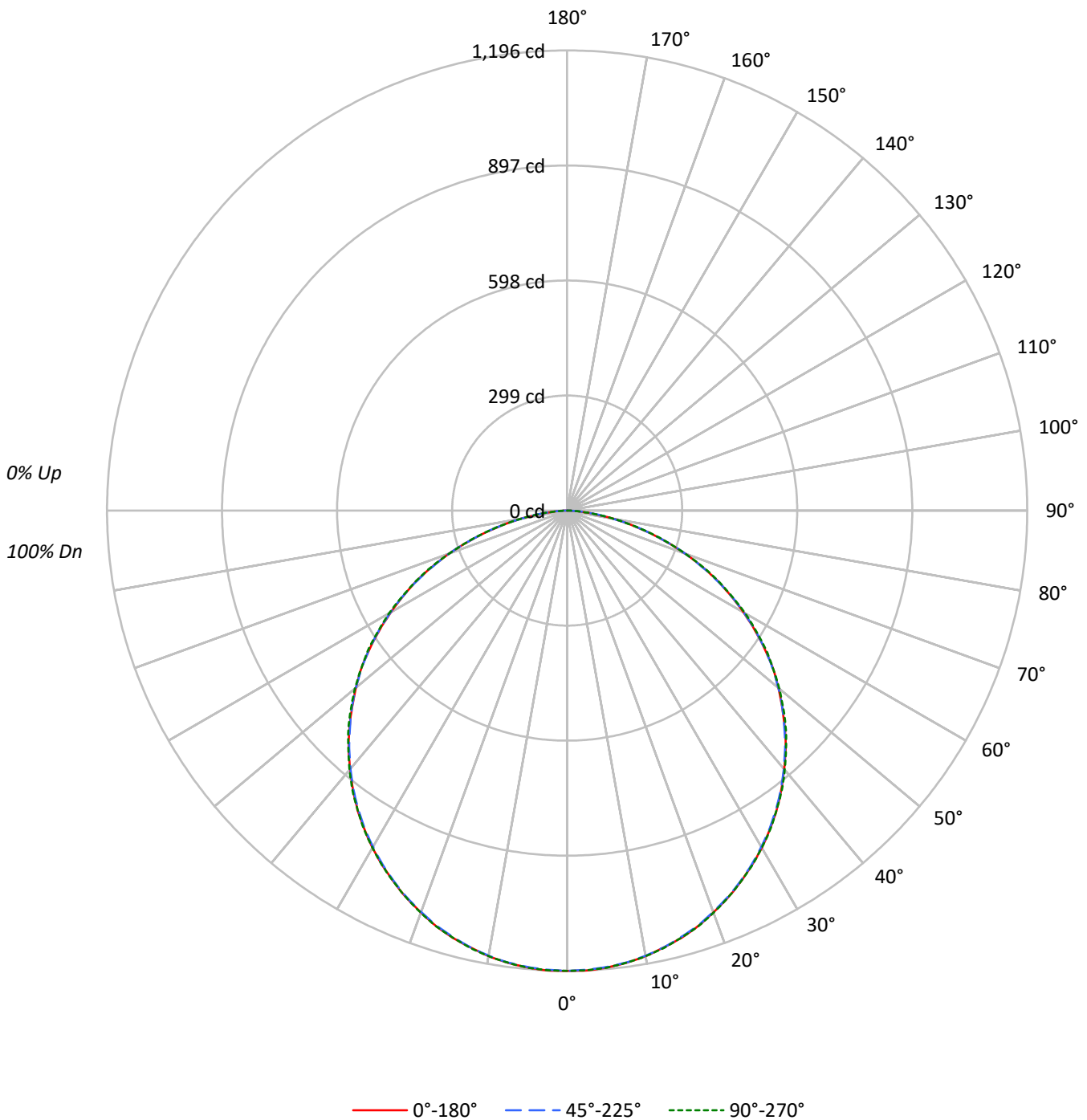
Input Watts (W): 59.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	94	98	94	91		94	91	89		90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75		82	77	74		79	75	72	70
3	90	80	71	65	88	78	70	64	75	68	63		72	67	62		70	65	61	59
4	82	70	62	55	80	69	61	54	67	59	54		64	58	53		62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46		58	51	46		56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	41		52	45	40		50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36		47	41	36		46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32		43	37	32		42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29		40	33	29		39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26		37	31	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3219	3219	3219
5°	3219	3216	3221
10°	3213	3210	3213
15°	3202	3196	3201
20°	3183	3178	3185
25°	3165	3159	3165
30°	3145	3136	3145
35°	3121	3111	3119
40°	3083	3077	3091
45°	3045	3039	3060
50°	3000	3000	3014
55°	2940	2945	2961
60°	2850	2859	2877
65°	2746	2735	2760
70°	2561	2566	2566
75°	2268	2274	2303
80°	1866	1866	1900
85°	1223	1291	1204



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.2	3.3
10°-20°	324.1	9.5
20°-30°	490.9	14.4
30°-40°	593.1	17.4
40°-50°	617.7	18.1
50°-60°	560.7	16.4
60°-70°	425.2	12.5
70°-80°	233.2	6.8
80°-90°	53.0	1.6
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°	928.2	27.2
0°-40°	1521.3	44.6
0°-60°	2699.7	79.1
0°-90°	3411.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3411.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1196	1196	1196	1196	1196	
5°	1192	1191	1191	1191	1192	113
15°	1150	1148	1147	1148	1149	324
25°	1066	1064	1064	1066	1066	491
35°	950	948	947	948	949	594
45°	800	800	798	802	804	617
55°	627	626	628	631	631	560
65°	431	428	430	431	433	425
75°	218	219	219	221	222	232
85°	40	41	42	41	39	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1196.4	1196.4	1196.4	1196.4	1196.4
2.5°	1196.4	1195.2	1194.7	1195.2	1195.8
5°	1191.8	1191.3	1190.7	1191.3	1192.4
7.5°	1185.6	1185.1	1184.5	1184.5	1185.1
10°	1176.0	1175.5	1174.9	1175.5	1176.0
12.5°	1163.0	1163.0	1162.5	1162.5	1164.1
15°	1149.5	1148.3	1147.2	1147.8	1148.9
17.5°	1132.5	1130.8	1130.8	1131.4	1133.1
20°	1111.6	1111.6	1109.9	1111.0	1112.2
22.5°	1090.1	1089.0	1088.4	1089.6	1090.1
25°	1065.8	1064.1	1064.1	1066.4	1065.8
27.5°	1039.8	1038.1	1038.1	1038.7	1040.4
30°	1012.1	1011.0	1009.3	1011.0	1012.1
32.5°	981.1	979.4	979.4	981.1	982.7
35°	950.0	947.7	947.1	948.3	949.4
37.5°	914.4	912.7	912.7	915.5	916.6
40°	877.6	877.6	875.9	878.8	879.9
42.5°	840.9	839.8	838.6	842.0	842.0
45°	800.2	799.6	798.5	802.5	804.2
47.5°	758.4	760.1	759.0	761.8	762.3
50°	716.6	716.0	716.6	718.3	720.0
52.5°	674.8	671.9	673.1	673.6	674.8
55°	626.7	626.2	627.8	630.7	631.2
57.5°	578.7	578.7	579.8	583.2	582.6
60°	529.5	530.1	531.2	533.5	534.6
62.5°	479.8	480.4	480.9	484.3	483.2
65°	431.2	428.4	429.5	430.6	433.4
67.5°	378.1	376.4	376.4	379.2	381.5
70°	325.5	324.4	326.1	326.6	326.1
72.5°	270.7	271.8	272.4	273.5	273.0
75°	218.1	219.3	218.7	221.0	221.5
77.5°	167.8	169.0	170.1	170.1	169.0
80°	120.4	120.4	120.4	120.9	122.6
82.5°	75.2	76.9	79.1	76.3	77.4
85°	39.6	40.7	41.8	40.7	39.0
87.5°	16.4	17.0	16.4	17.0	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)