

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: P412030

Luminaire Tested: **MRI-22ATR-40-L940-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412030
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-L940-OPL
Description: 2X2 TROFFER, 4000LM, OPAL LENS
Light Source: (588) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3446.0 lumens
Efficiency: N/A
Efficacy: 57.7 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

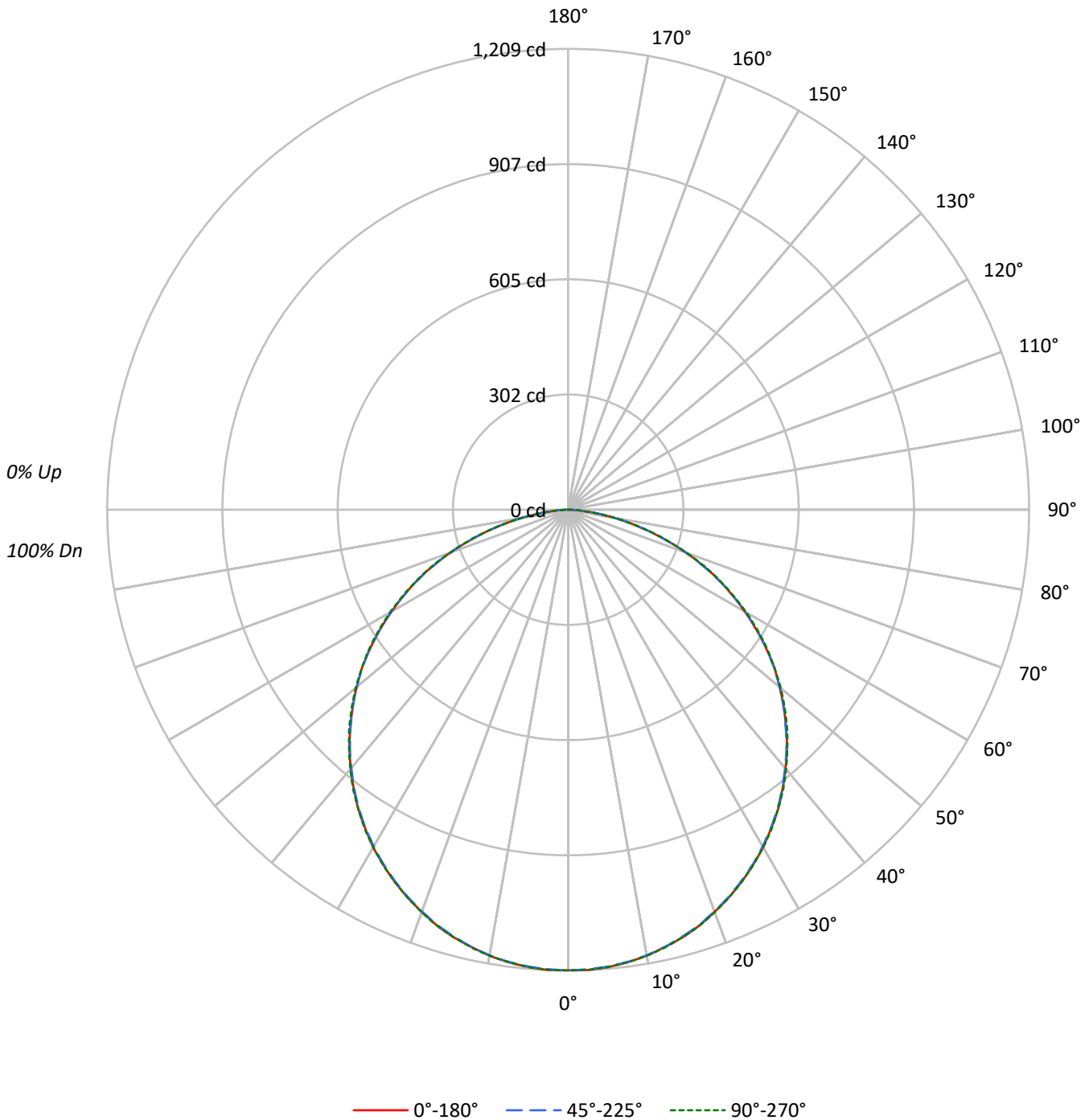
Input Watts (W): 59.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3252	3252	3252
5°	3253	3249	3254
10°	3246	3243	3246
15°	3235	3229	3234
20°	3216	3211	3218
25°	3197	3192	3197
30°	3177	3168	3177
35°	3153	3143	3151
40°	3114	3108	3123
45°	3076	3070	3092
50°	3031	3031	3045
55°	2971	2976	2992
60°	2879	2888	2907
65°	2774	2763	2788
70°	2587	2592	2592
75°	2292	2297	2327
80°	1884	1884	1920
85°	1235	1303	1216



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.4	3.3
10°-20°	327.4	9.5
20°-30°	496.0	14.4
30°-40°	599.2	17.4
40°-50°	624.0	18.1
50°-60°	566.4	16.4
60°-70°	429.5	12.5
70°-80°	235.6	6.8
80°-90°	53.5	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°	937.7	27.2
0°-40°	1536.9	44.6
0°-60°	2727.3	79.1
0°-90°	3446.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3446.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1204	1204	1203	1204	1205	114
15°	1161	1160	1159	1160	1161	328
25°	1077	1075	1075	1077	1077	496
35°	960	957	957	958	959	600
45°	808	808	807	811	812	624
55°	633	633	634	637	638	566
65°	436	433	434	435	438	429
75°	220	222	221	223	224	234
85°	40	41	42	41	39	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1208.6	1208.6	1208.6	1208.6	1208.6
2.5°	1208.6	1207.5	1206.9	1207.5	1208.1
5°	1204.1	1203.5	1202.9	1203.5	1204.6
7.5°	1197.8	1197.2	1196.6	1196.6	1197.2
10°	1188.1	1187.5	1186.9	1187.5	1188.1
12.5°	1175.0	1175.0	1174.4	1174.4	1176.1
15°	1161.3	1160.1	1159.0	1159.5	1160.7
17.5°	1144.1	1142.4	1142.4	1143.0	1144.7
20°	1123.0	1123.0	1121.3	1122.4	1123.6
22.5°	1101.3	1100.2	1099.6	1100.7	1101.3
25°	1076.8	1075.0	1075.0	1077.3	1076.8
27.5°	1050.5	1048.8	1048.8	1049.4	1051.1
30°	1022.5	1021.4	1019.7	1021.4	1022.5
32.5°	991.1	989.4	989.4	991.1	992.8
35°	959.7	957.4	956.9	958.0	959.1
37.5°	923.7	922.0	922.0	924.9	926.0
40°	886.6	886.6	884.9	887.8	888.9
42.5°	849.5	848.4	847.2	850.7	850.7
45°	808.4	807.9	806.7	810.7	812.4
47.5°	766.2	767.9	766.7	769.6	770.2
50°	723.9	723.4	723.9	725.6	727.4
52.5°	681.7	678.8	680.0	680.5	681.7
55°	633.2	632.6	634.3	637.1	637.7
57.5°	584.6	584.6	585.8	589.2	588.6
60°	535.0	535.5	536.7	538.9	540.1
62.5°	484.7	485.3	485.9	489.3	488.1
65°	435.6	432.8	433.9	435.0	437.9
67.5°	381.9	380.2	380.2	383.1	385.4
70°	328.8	327.7	329.4	330.0	329.4
72.5°	273.5	274.6	275.2	276.3	275.8
75°	220.4	221.5	220.9	223.2	223.8
77.5°	169.6	170.7	171.8	171.8	170.7
80°	121.6	121.6	121.6	122.2	123.9
82.5°	75.9	77.6	79.9	77.1	78.2
85°	40.0	41.1	42.2	41.1	39.4
87.5°	16.6	17.1	16.6	17.1	16.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)