

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: P412035

Luminaire Tested: **MRI-22ATR-60-L935-OPL**

Issue Date: 10/5/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P412035  
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-60-L935-OPL  
Description: 2X2 TROFFER, 6000LM, OPAL LENS  
Light Source: (588) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5103.0 lumens  
Efficiency: N/A  
Efficacy: 53.8 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

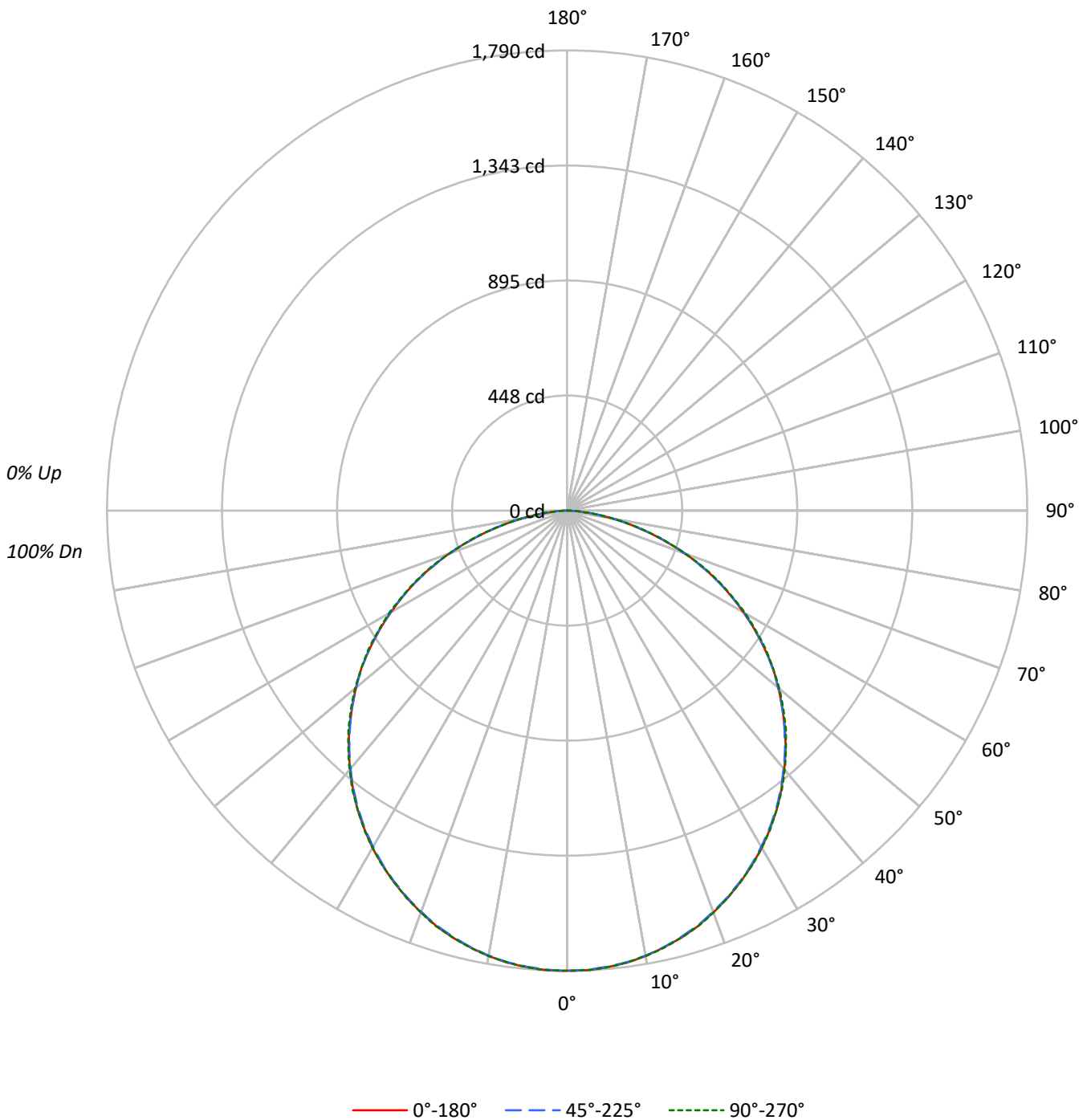
Input Watts (W): 94.8  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4816	4816	4816
5°	4816	4812	4819
10°	4808	4803	4808
15°	4791	4781	4788
20°	4762	4755	4765
25°	4734	4727	4734
30°	4705	4692	4705
35°	4669	4655	4666
40°	4612	4603	4624
45°	4556	4546	4579
50°	4488	4488	4509
55°	4399	4407	4431
60°	4264	4277	4304
65°	4108	4091	4129
70°	3832	3838	3838
75°	3393	3402	3446
80°	2791	2791	2844
85°	1828	1933	1800



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.4	3.3
10°-20°	484.8	9.5
20°-30°	734.4	14.4
30°-40°	887.3	17.4
40°-50°	924.1	18.1
50°-60°	838.8	16.4
60°-70°	636.1	12.5
70°-80°	348.9	6.8
80°-90°	79.3	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°	1388.6	27.2
0°-40°	2275.9	44.6
0°-60°	4038.8	79.1
0°-90°	5103.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5103.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1790	1790	1790	1790	1790	
5°	1783	1782	1781	1782	1784	169
15°	1720	1718	1716	1717	1719	485
25°	1594	1592	1592	1595	1594	735
35°	1421	1418	1417	1419	1420	888
45°	1197	1196	1195	1200	1203	923
55°	938	937	939	944	944	838
65°	645	641	642	644	648	635
75°	326	328	327	331	331	347
85°	59	61	63	61	58	78
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1789.8	1789.8	1789.8	1789.8	1789.8
2.5°	1789.8	1788.1	1787.3	1788.1	1789.0
5°	1783.0	1782.2	1781.4	1782.2	1783.9
7.5°	1773.7	1772.9	1772.1	1772.1	1772.9
10°	1759.4	1758.5	1757.7	1758.5	1759.4
12.5°	1739.9	1739.9	1739.1	1739.1	1741.6
15°	1719.6	1717.9	1716.3	1717.1	1718.8
17.5°	1694.3	1691.7	1691.7	1692.6	1695.1
20°	1663.0	1663.0	1660.5	1662.1	1663.8
22.5°	1630.9	1629.2	1628.3	1630.0	1630.9
25°	1594.5	1592.0	1592.0	1595.4	1594.5
27.5°	1555.6	1553.1	1553.1	1553.9	1556.5
30°	1514.2	1512.5	1510.0	1512.5	1514.2
32.5°	1467.7	1465.2	1465.2	1467.7	1470.2
35°	1421.2	1417.8	1417.0	1418.7	1420.3
37.5°	1367.9	1365.4	1365.4	1369.6	1371.3
40°	1313.0	1313.0	1310.4	1314.7	1316.4
42.5°	1258.0	1256.3	1254.6	1259.7	1259.7
45°	1197.2	1196.3	1194.6	1200.5	1203.1
47.5°	1134.6	1137.1	1135.4	1139.7	1140.5
50°	1072.0	1071.2	1072.0	1074.6	1077.1
52.5°	1009.5	1005.2	1006.9	1007.8	1009.5
55°	937.6	936.8	939.3	943.5	944.4
57.5°	865.7	865.7	867.4	872.5	871.7
60°	792.2	793.0	794.7	798.1	799.8
62.5°	717.8	718.6	719.5	724.5	722.9
65°	645.1	640.8	642.5	644.2	648.5
67.5°	565.6	563.1	563.1	567.3	570.7
70°	487.0	485.3	487.8	488.7	487.8
72.5°	405.0	406.7	407.5	409.2	408.4
75°	326.3	328.0	327.2	330.6	331.4
77.5°	251.1	252.8	254.5	254.5	252.8
80°	180.1	180.1	180.1	180.9	183.5
82.5°	112.4	115.0	118.4	114.1	115.8
85°	59.2	60.9	62.6	60.9	58.3
87.5°	24.5	25.4	24.5	25.4	24.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)