

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: P412036

Luminaire Tested: **MRI-22ATR-60-L940-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412036
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-L940-OPL
Description: 2X2 TROFFER, 6000LM, OPAL LENS
Light Source: (588) 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5156.0 lumens
Efficiency: N/A
Efficacy: 54.4 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

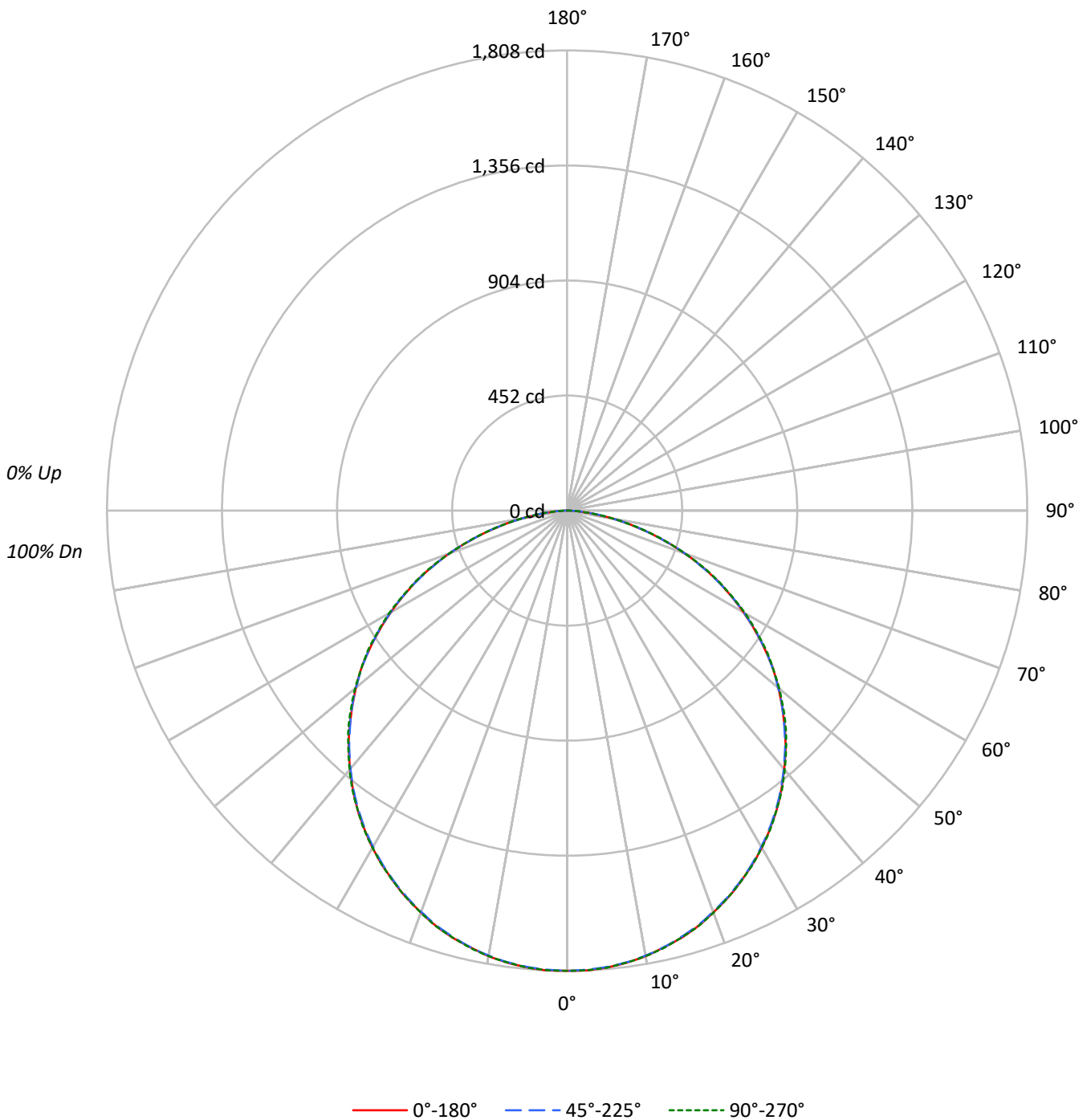
Input Watts (W): 94.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	4866	4866	4866
5°	4867	4862	4869
10°	4857	4853	4857
15°	4841	4831	4838
20°	4812	4804	4814
25°	4784	4776	4784
30°	4754	4740	4754
35°	4717	4703	4714
40°	4660	4651	4672
45°	4603	4593	4626
50°	4535	4535	4556
55°	4444	4452	4477
60°	4308	4322	4349
65°	4150	4134	4172
70°	3871	3878	3878
75°	3428	3437	3482
80°	2820	2820	2873
85°	1846	1951	1819



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	171.1	3.3
10°-20°	489.8	9.5
20°-30°	742.0	14.4
30°-40°	896.6	17.4
40°-50°	933.7	18.1
50°-60°	847.5	16.4
60°-70°	642.7	12.5
70°-80°	352.5	6.8
80°-90°	80.1	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°	1403.0	27.2
0°-40°	2299.6	44.6
0°-60°	4080.7	79.1
0°-90°	5156.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5156.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1808	1808	1808	1808	1808	
5°	1802	1801	1800	1801	1802	171
15°	1738	1736	1734	1735	1737	490
25°	1611	1608	1608	1612	1611	743
35°	1436	1432	1432	1433	1435	897
45°	1210	1209	1207	1213	1216	933
55°	947	946	949	953	954	846
65°	652	648	649	651	655	642
75°	330	331	331	334	335	350
85°	60	62	63	62	59	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1808.4	1808.4	1808.4	1808.4	1808.4
2.5°	1808.4	1806.7	1805.8	1806.7	1807.5
5°	1801.6	1800.7	1799.9	1800.7	1802.4
7.5°	1792.2	1791.3	1790.5	1790.5	1791.3
10°	1777.6	1776.8	1775.9	1776.8	1777.6
12.5°	1758.0	1758.0	1757.1	1757.1	1759.7
15°	1737.5	1735.8	1734.1	1734.9	1736.6
17.5°	1711.9	1709.3	1709.3	1710.2	1712.7
20°	1680.3	1680.3	1677.7	1679.4	1681.1
22.5°	1647.8	1646.1	1645.2	1646.9	1647.8
25°	1611.1	1608.5	1608.5	1611.9	1611.1
27.5°	1571.8	1569.2	1569.2	1570.1	1572.6
30°	1529.9	1528.2	1525.6	1528.2	1529.9
32.5°	1482.9	1480.4	1480.4	1482.9	1485.5
35°	1436.0	1432.5	1431.7	1433.4	1435.1
37.5°	1382.1	1379.6	1379.6	1383.8	1385.6
40°	1326.6	1326.6	1324.1	1328.3	1330.0
42.5°	1271.1	1269.4	1267.7	1272.8	1272.8
45°	1209.6	1208.7	1207.0	1213.0	1215.6
47.5°	1146.4	1148.9	1147.2	1151.5	1152.4
50°	1083.2	1082.3	1083.2	1085.7	1088.3
52.5°	1019.9	1015.7	1017.4	1018.2	1019.9
55°	947.3	946.5	949.0	953.3	954.2
57.5°	874.7	874.7	876.4	881.6	880.7
60°	800.4	801.3	803.0	806.4	808.1
62.5°	725.2	726.1	726.9	732.1	730.4
65°	651.8	647.5	649.2	650.9	655.2
67.5°	571.5	568.9	568.9	573.2	576.6
70°	492.0	490.3	492.9	493.7	492.9
72.5°	409.2	410.9	411.7	413.4	412.6
75°	329.7	331.4	330.6	334.0	334.9
77.5°	253.7	255.4	257.1	257.1	255.4
80°	182.0	182.0	182.0	182.8	185.4
82.5°	113.6	116.2	119.6	115.3	117.0
85°	59.8	61.5	63.2	61.5	58.9
87.5°	24.8	25.6	24.8	25.6	24.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)