

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: P412037

Luminaire Tested: **MRI-22ATR-60-L950-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412037
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-L950-OPL
Description: 2X2 TROFFER, 6000LM, OPAL LENS
Light Source: (588) 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5473.0 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

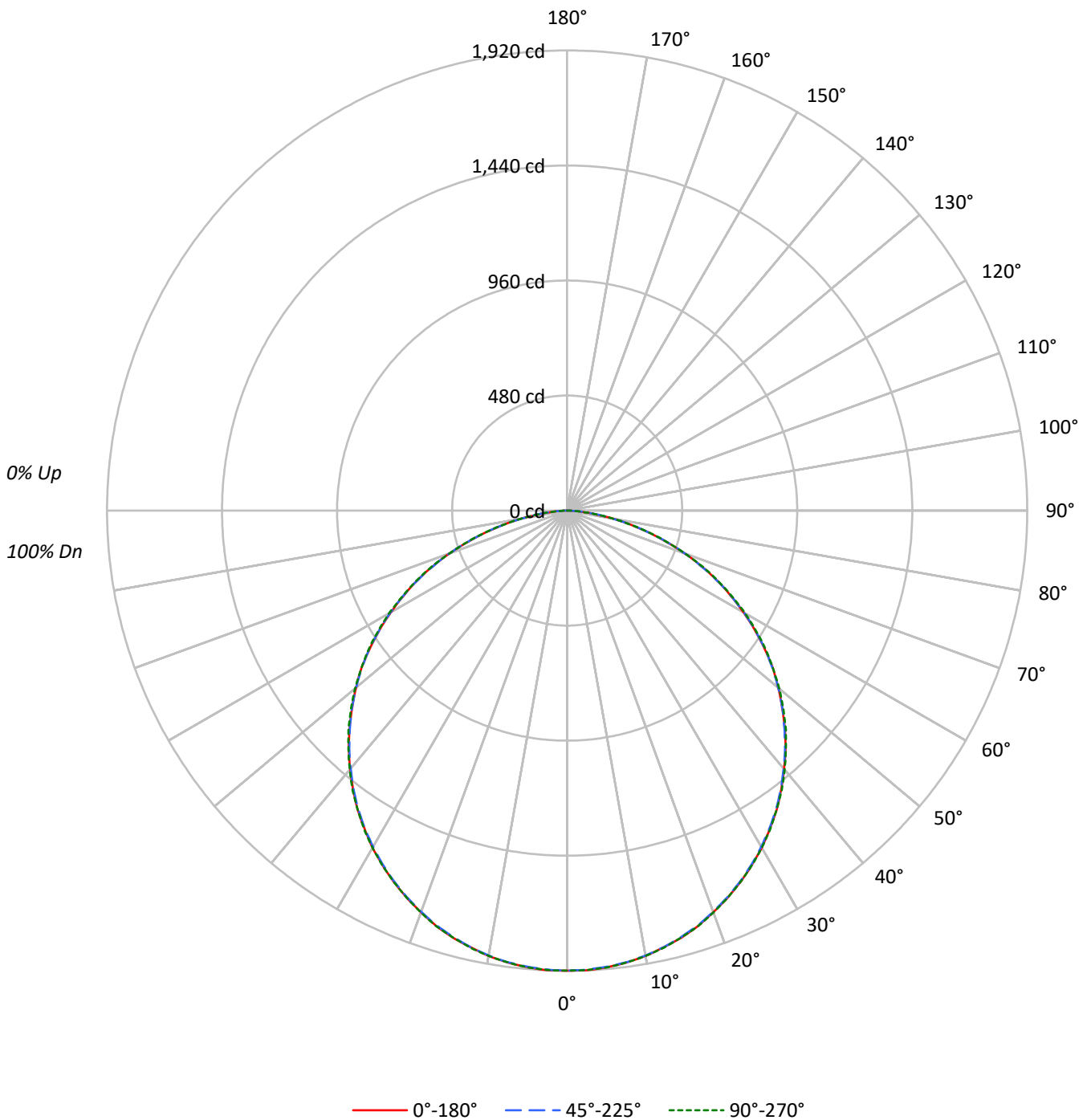
Input Watts (W): 94.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5166	5166	5166
5°	5166	5161	5168
10°	5156	5151	5156
15°	5138	5128	5136
20°	5108	5100	5110
25°	5078	5070	5078
30°	5046	5032	5046
35°	5007	4992	5004
40°	4947	4937	4959
45°	4886	4876	4910
50°	4814	4814	4836
55°	4718	4726	4752
60°	4573	4587	4617
65°	4405	4388	4429
70°	4109	4116	4116
75°	3639	3648	3695
80°	2992	2992	3050
85°	1961	2072	1933



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	181.7	3.3
10°-20°	520.0	9.5
20°-30°	787.7	14.4
30°-40°	951.7	17.4
40°-50°	991.1	18.1
50°-60°	899.6	16.4
60°-70°	682.2	12.5
70°-80°	374.2	6.8
80°-90°	85.0	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°	1489.3	27.2
0°-40°	2441.0	44.6
0°-60°	4331.6	79.1
0°-90°	5473.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5473.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1920	1920	1920	1920	1920	
5°	1912	1911	1910	1911	1913	182
15°	1844	1842	1841	1842	1843	520
25°	1710	1707	1707	1711	1710	788
35°	1524	1521	1520	1522	1523	952
45°	1284	1283	1281	1288	1290	990
55°	1006	1005	1007	1012	1013	898
65°	692	687	689	691	696	681
75°	350	352	351	354	355	372
85°	64	65	67	65	63	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1919.6	1919.6	1919.6	1919.6	1919.6
2.5°	1919.6	1917.8	1916.9	1917.8	1918.7
5°	1912.3	1911.4	1910.5	1911.4	1913.2
7.5°	1902.4	1901.4	1900.5	1900.5	1901.4
10°	1886.9	1886.0	1885.1	1886.0	1886.9
12.5°	1866.1	1866.1	1865.2	1865.2	1867.9
15°	1844.3	1842.5	1840.7	1841.6	1843.4
17.5°	1817.1	1814.4	1814.4	1815.3	1818.0
20°	1783.6	1783.6	1780.8	1782.7	1784.5
22.5°	1749.1	1747.3	1746.4	1748.2	1749.1
25°	1710.1	1707.4	1707.4	1711.0	1710.1
27.5°	1668.4	1665.7	1665.7	1666.6	1669.3
30°	1624.0	1622.2	1619.4	1622.2	1624.0
32.5°	1574.1	1571.4	1571.4	1574.1	1576.8
35°	1524.2	1520.6	1519.7	1521.5	1523.3
37.5°	1467.1	1464.4	1464.4	1468.9	1470.7
40°	1408.2	1408.2	1405.5	1410.0	1411.8
42.5°	1349.2	1347.4	1345.6	1351.1	1351.1
45°	1284.0	1283.0	1281.2	1287.6	1290.3
47.5°	1216.9	1219.6	1217.8	1222.3	1223.2
50°	1149.8	1148.8	1149.8	1152.5	1155.2
52.5°	1082.7	1078.1	1079.9	1080.8	1082.7
55°	1005.6	1004.7	1007.4	1011.9	1012.8
57.5°	928.5	928.5	930.3	935.8	934.9
60°	849.6	850.5	852.3	856.0	857.8
62.5°	769.8	770.7	771.6	777.1	775.3
65°	691.8	687.3	689.1	690.9	695.5
67.5°	606.6	603.9	603.9	608.4	612.1
70°	522.3	520.5	523.2	524.1	523.2
72.5°	434.3	436.1	437.1	438.9	438.0
75°	350.0	351.8	350.9	354.5	355.4
77.5°	269.3	271.1	272.9	272.9	271.1
80°	193.1	193.1	193.1	194.0	196.8
82.5°	120.6	123.3	126.9	122.4	124.2
85°	63.5	65.3	67.1	65.3	62.6
87.5°	26.3	27.2	26.3	27.2	26.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)