

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: P412033

Luminaire Tested: **MRI-22ATR-60-L840-OPL**

Issue Date: 10/5/2020

Test Information

Test Method: LM-79-08
Report Number: P412033
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-L840-OPL
Description: 2X2 TROFFER, 6000LM, OPAL LENS
Light Source: (588) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6035.9 lumens
Efficiency: N/A
Efficacy: 63.7 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

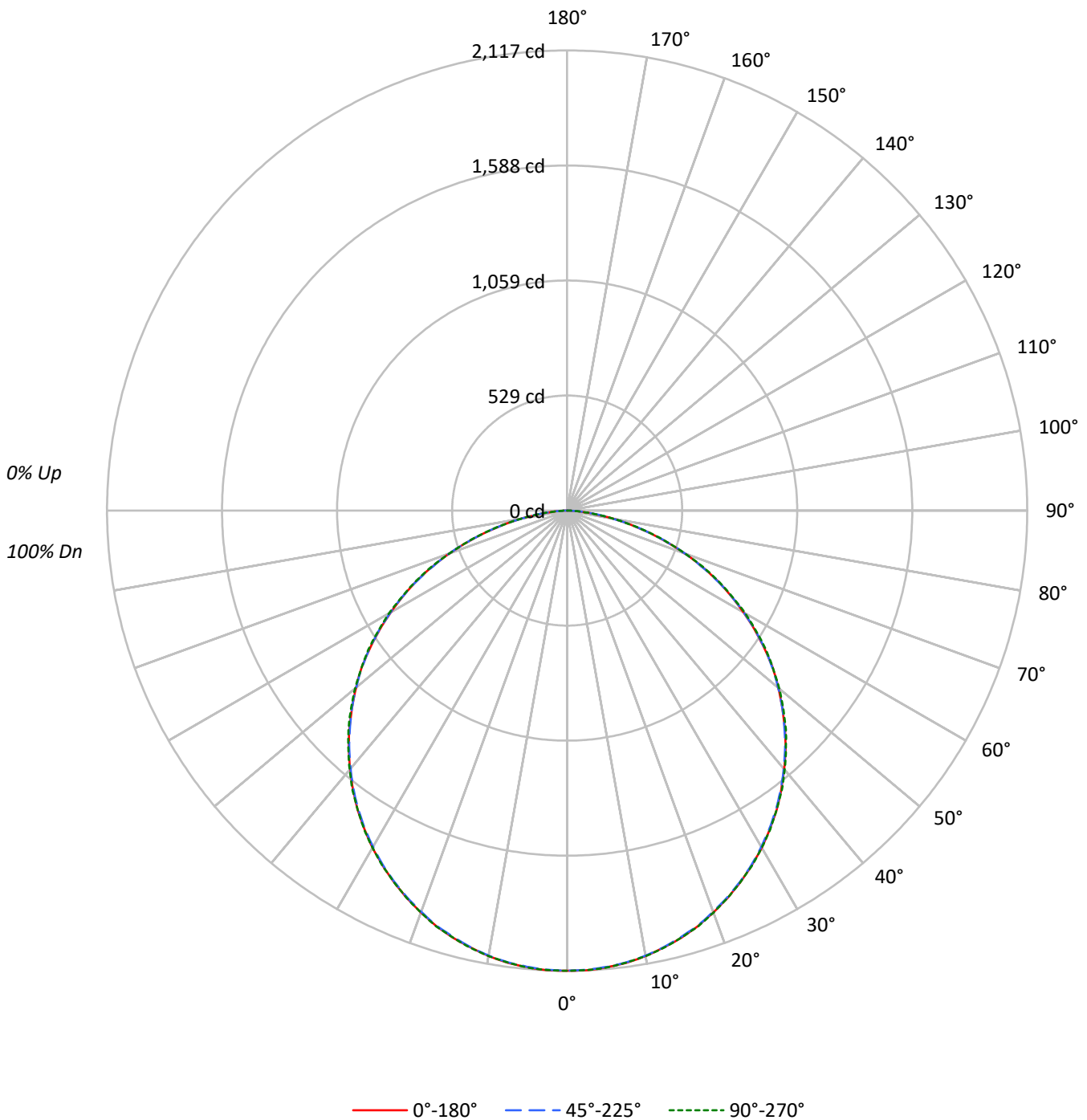
Input Watts (W): 94.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	5697	5697	5697
5°	5697	5692	5700
10°	5686	5681	5686
15°	5667	5655	5664
20°	5633	5624	5636
25°	5600	5591	5600
30°	5565	5550	5565
35°	5522	5506	5519
40°	5455	5445	5469
45°	5389	5377	5415
50°	5308	5308	5333
55°	5203	5212	5240
60°	5043	5059	5091
65°	4858	4839	4884
70°	4532	4540	4540
75°	4013	4024	4076
80°	3301	3301	3363
85°	2161	2285	2130



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.3	3.3
10°-20°	573.4	9.5
20°-30°	868.7	14.4
30°-40°	1049.6	17.4
40°-50°	1093.0	18.1
50°-60°	992.1	16.4
60°-70°	752.4	12.5
70°-80°	412.7	6.8
80°-90°	93.7	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°	1642.5	27.2
0°-40°	2692.0	44.6
0°-60°	4777.1	79.1
0°-90°	6035.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6035.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2117	2117	2117	2117	2117	
5°	2109	2108	2107	2108	2110	200
15°	2034	2032	2030	2031	2033	574
25°	1886	1883	1883	1887	1886	869
35°	1681	1677	1676	1678	1680	1050
45°	1416	1415	1413	1420	1423	1092
55°	1109	1108	1111	1116	1117	991
65°	763	758	760	762	767	751
75°	386	388	387	391	392	410
85°	70	72	74	72	69	92
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2117	2117	2117	2117	2117
2.5°	2117	2115	2114	2115	2116
5°	2109	2108	2107	2108	2110
7.5°	2098	2097	2096	2096	2097
10°	2081	2080	2079	2080	2081
12.5°	2058	2058	2057	2057	2060
15°	2034	2032	2030	2031	2033
17.5°	2004	2001	2001	2002	2005
20°	1967	1967	1964	1966	1968
22.5°	1929	1927	1926	1928	1929
25°	1886	1883	1883	1887	1886
27.5°	1840	1837	1837	1838	1841
30°	1791	1789	1786	1789	1791
32.5°	1736	1733	1733	1736	1739
35°	1681	1677	1676	1678	1680
37.5°	1618	1615	1615	1620	1622
40°	1553	1553	1550	1555	1557
42.5°	1488	1486	1484	1490	1490
45°	1416	1415	1413	1420	1423
47.5°	1342	1345	1343	1348	1349
50°	1268	1267	1268	1271	1274
52.5°	1194	1189	1191	1192	1194
55°	1109	1108	1111	1116	1117
57.5°	1024	1024	1026	1032	1031
60°	937	938	940	944	946
62.5°	849	850	851	857	855
65°	763	758	760	762	767
67.5°	669	666	666	671	675
70°	576	574	577	578	577
72.5°	479	481	482	484	483
75°	386	388	387	391	392
77.5°	297	299	301	301	299
80°	213	213	213	214	217
82.5°	133	136	140	135	137
85°	70	72	74	72	69
87.5°	29	30	29	30	29
90°	0	0	0	0	0

(END OF REPORT)