

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: P588988

Luminaire Tested: **FMR-24-2-LD4-2HI-35-UNV-80-97-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588988
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-1)
Test Lab: INNOVATION CENTER
Issue Date: 12/8/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FMR-24-2-LD4-2HI-35-UNV-80-97-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

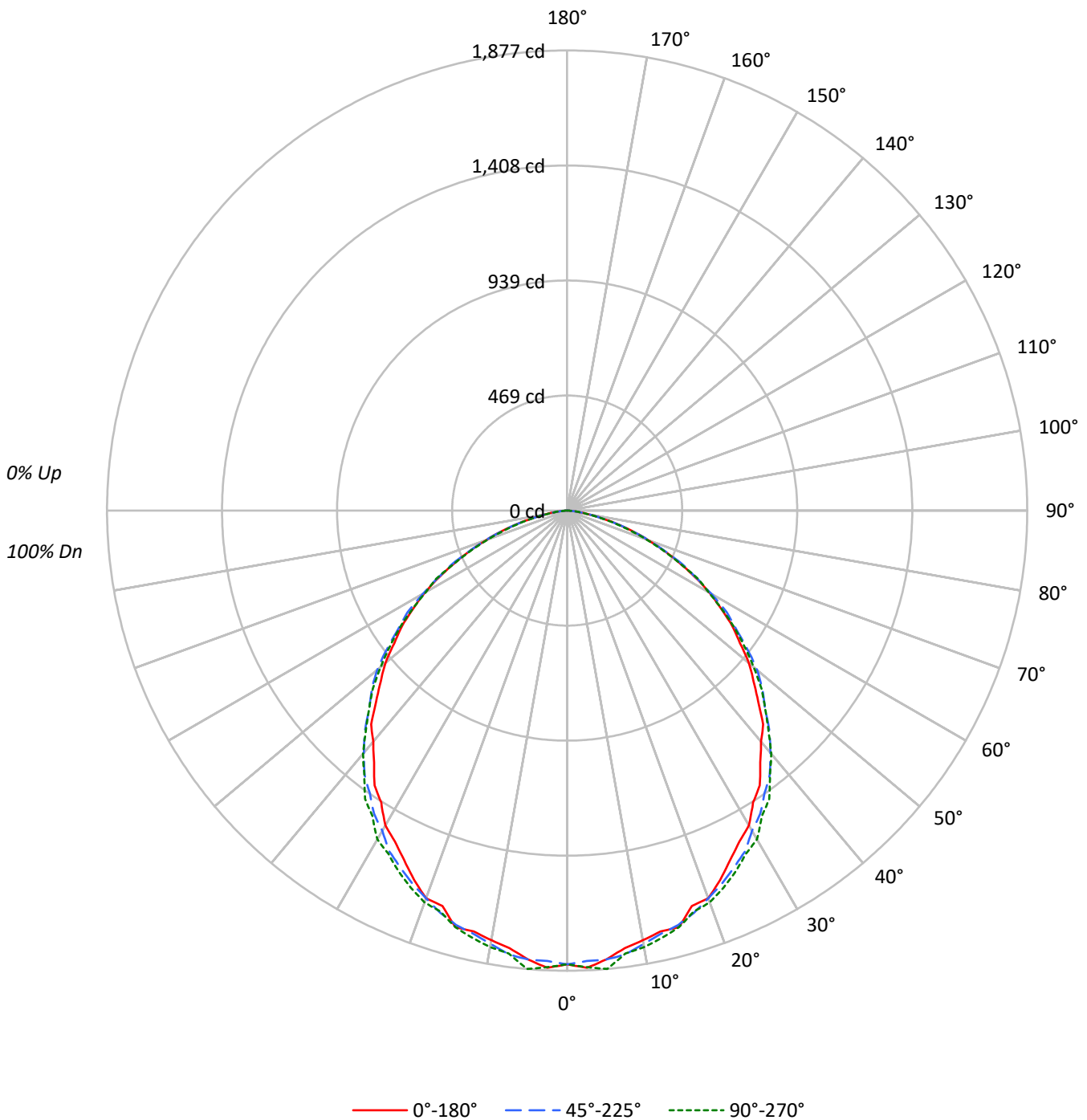
Lumens per Lamp: N/A
Luminaire Lumens: 4664.0 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (A_{in}): 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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	64	58	69	62	57	67	61	56	65	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41
7	67	53	45	39	65	53	45	39	51	44	39	50	43	38	48	42	38	36
8	62	49	41	35	61	48	40	35	47	40	34	46	39	34	44	39	34	32
9	58	45	37	31	57	44	37	31	43	36	31	42	36	31	41	35	31	29
10	54	41	34	29	53	41	33	28	40	33	28	39	33	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4980	4980	4980
5°	4963	4965	5070
10°	4863	4905	4940
15°	4901	4875	4902
20°	4818	4818	4870
25°	4670	4772	4825
30°	4606	4687	4812
35°	4498	4615	4719
40°	4323	4531	4551
45°	4192	4341	4348
50°	4054	4237	4156
55°	3863	3938	3910
60°	3612	3648	3583
65°	3221	3303	3198
70°	2763	2773	2696
75°	2189	2183	2099
80°	1466	1426	1370
85°	797	790	738



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	174.1	3.7
10°-20°	493.3	10.6
20°-30°	739.1	15.8
30°-40°	876.0	18.8
40°-50°	877.6	18.8
50°-60°	745.0	16.0
60°-70°	502.3	10.8
70°-80°	220.7	4.7
80°-90°	35.9	0.8
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°	1406.5	30.2
0°-40°	2282.6	48.9
0°-60°	3905.2	83.7
0°-90°	4664.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4664.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1851	1851	1851	1851	1851	
5°	1837	1833	1838	1833	1877	173
15°	1759	1739	1750	1759	1760	490
25°	1573	1582	1607	1628	1625	727
35°	1369	1373	1405	1437	1436	850
45°	1102	1122	1141	1170	1142	852
55°	823	818	839	834	833	732
65°	506	499	519	499	502	503
75°	210	206	210	195	202	226
85°	26	25	26	25	24	37
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1850.6	1850.6	1850.6	1850.6	1850.6
2.5°	1866.6	1852.5	1839.3	1854.6	1863.9
5°	1837.4	1833.1	1838.1	1832.6	1876.8
7.5°	1799.7	1816.2	1825.7	1819.7	1822.4
10°	1779.6	1773.9	1795.1	1809.9	1807.8
12.5°	1758.1	1766.7	1767.9	1783.9	1785.3
15°	1759.3	1739.0	1749.7	1758.8	1759.5
17.5°	1690.9	1712.9	1720.3	1741.1	1715.3
20°	1682.6	1666.6	1682.6	1703.9	1700.5
22.5°	1631.2	1613.3	1647.7	1666.6	1665.4
25°	1572.9	1581.5	1607.3	1628.3	1625.0
27.5°	1521.8	1531.8	1568.6	1597.5	1578.9
30°	1482.4	1477.3	1508.4	1534.2	1548.5
32.5°	1411.9	1430.0	1466.3	1491.9	1478.3
35°	1369.1	1373.2	1404.9	1437.4	1436.5
37.5°	1294.3	1313.2	1357.9	1367.0	1358.6
40°	1230.5	1249.4	1289.8	1299.6	1295.5
42.5°	1183.4	1186.8	1221.4	1232.7	1214.7
45°	1101.5	1122.0	1140.7	1170.1	1142.4
47.5°	1031.7	1041.3	1081.4	1089.3	1074.7
50°	968.4	971.8	1012.1	1002.3	992.8
52.5°	888.8	902.9	925.6	923.7	912.5
55°	823.4	817.9	839.4	833.6	833.4
57.5°	744.8	754.3	772.0	762.9	748.3
60°	671.2	671.4	677.9	667.6	665.7
62.5°	589.2	592.1	593.5	580.9	601.4
65°	505.8	499.1	518.7	498.9	502.2
67.5°	429.1	432.5	430.6	418.1	422.9
70°	351.2	355.5	352.4	338.3	342.6
72.5°	280.0	274.8	278.1	260.4	268.6
75°	210.5	206.2	210.0	195.2	201.9
77.5°	143.4	146.7	144.3	136.4	141.0
80°	94.6	92.0	92.0	87.5	88.4
82.5°	55.2	52.6	51.8	50.4	52.6
85°	25.8	25.1	25.6	24.8	23.9
87.5°	9.3	9.6	9.6	9.1	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)