

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: P589075

Luminaire Tested: **FMR-24-2-LD4-2HI-50-UNV-93-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589075
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-50-UNV-93-96-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

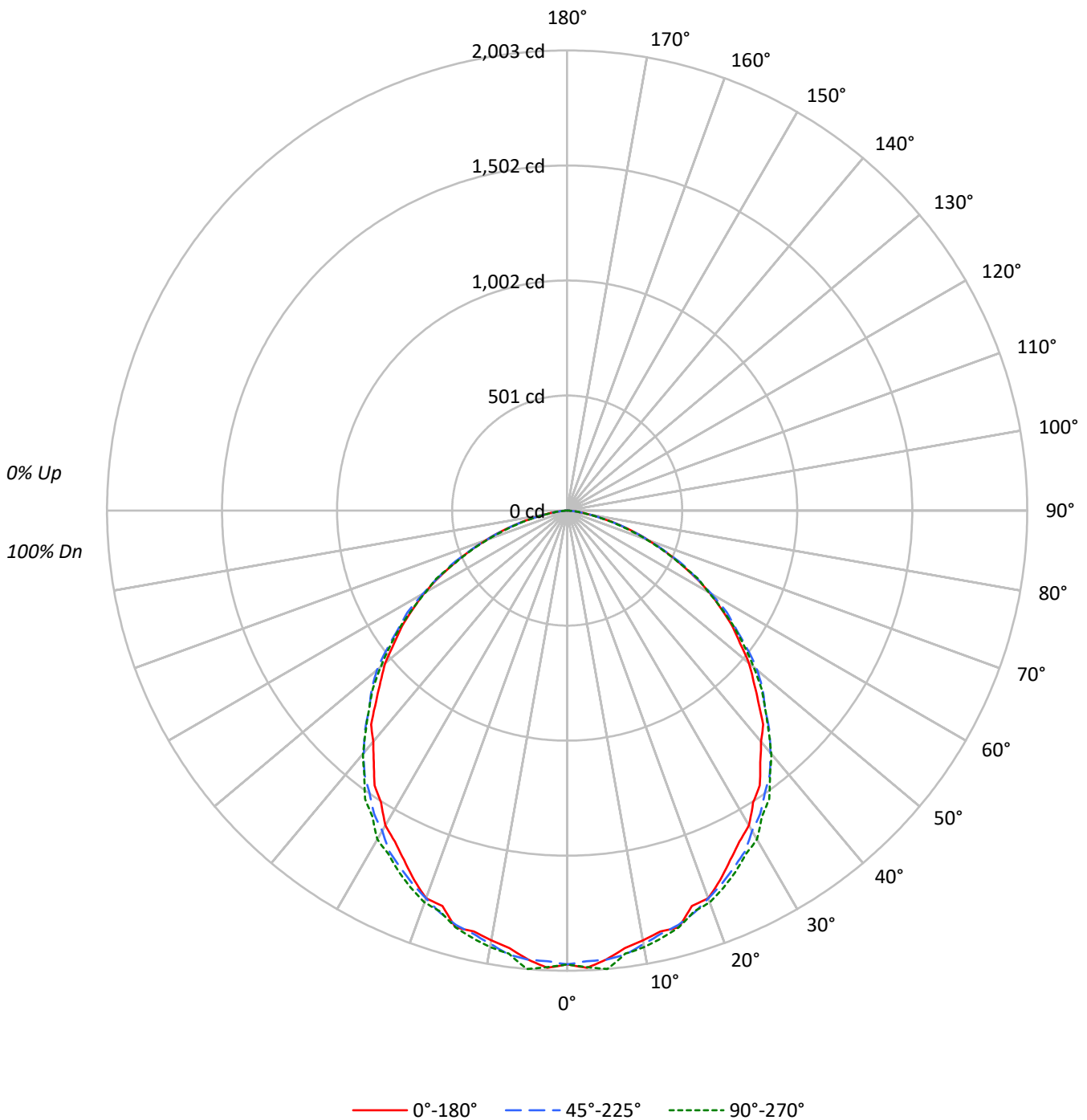
Lumens per Lamp: N/A
Luminaire Lumens: 4978.0 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	5315	5315	5315
5°	5297	5300	5411
10°	5190	5235	5272
15°	5231	5203	5232
20°	5143	5143	5198
25°	4985	5094	5150
30°	4916	5003	5136
35°	4800	4926	5037
40°	4614	4836	4857
45°	4474	4633	4640
50°	4327	4523	4436
55°	4123	4203	4173
60°	3856	3894	3824
65°	3438	3526	3414
70°	2950	2960	2877
75°	2336	2331	2241
80°	1565	1522	1463
85°	849	843	787



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	185.8	3.7
10°-20°	526.6	10.6
20°-30°	788.9	15.8
30°-40°	935.0	18.8
40°-50°	936.7	18.8
50°-60°	795.1	16.0
60°-70°	536.1	10.8
70°-80°	235.6	4.7
80°-90°	38.3	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°	1501.2	30.2
0°-40°	2436.2	48.9
0°-60°	4168.1	83.7
0°-90°	4978.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4978.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1975	1975	1975	1975	1975	
5°	1961	1956	1962	1956	2003	185
15°	1878	1856	1868	1877	1878	523
25°	1679	1688	1716	1738	1734	776
35°	1461	1466	1500	1534	1533	907
45°	1176	1198	1218	1249	1219	909
55°	879	873	896	890	890	782
65°	540	533	554	532	536	537
75°	225	220	224	208	216	241
85°	28	27	27	26	26	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1975.1	1975.1	1975.1	1975.1	1975.1
2.5°	1992.2	1977.2	1963.2	1979.5	1989.4
5°	1961.1	1956.5	1961.9	1956.0	2003.2
7.5°	1920.8	1938.4	1948.6	1942.2	1945.1
10°	1899.4	1893.3	1916.0	1931.8	1929.5
12.5°	1876.5	1885.6	1886.9	1904.0	1905.5
15°	1877.7	1856.0	1867.5	1877.2	1878.0
17.5°	1804.8	1828.3	1836.2	1858.3	1830.8
20°	1795.9	1778.8	1795.9	1818.6	1815.0
22.5°	1741.0	1721.9	1758.6	1778.8	1777.5
25°	1678.8	1688.0	1715.5	1738.0	1734.4
27.5°	1624.2	1634.9	1674.2	1705.1	1685.2
30°	1582.2	1576.8	1610.0	1637.5	1652.8
32.5°	1506.9	1526.3	1565.1	1592.4	1577.8
35°	1461.3	1465.6	1499.5	1534.2	1533.2
37.5°	1381.5	1401.6	1449.3	1459.0	1450.1
40°	1313.4	1333.5	1376.6	1387.1	1382.7
42.5°	1263.1	1266.7	1303.7	1315.7	1296.5
45°	1175.7	1197.6	1217.5	1248.8	1219.3
47.5°	1101.2	1111.4	1154.2	1162.6	1147.1
50°	1033.6	1037.2	1080.3	1069.8	1059.6
52.5°	948.7	963.7	988.0	985.9	973.9
55°	878.8	872.9	895.9	889.8	889.5
57.5°	794.9	805.1	824.0	814.3	798.7
60°	716.4	716.6	723.5	712.5	710.5
62.5°	628.9	631.9	633.5	620.0	641.9
65°	539.9	532.7	553.7	532.5	536.1
67.5°	458.0	461.6	459.5	446.3	451.4
70°	374.9	379.5	376.2	361.1	365.7
72.5°	298.9	293.3	296.8	278.0	286.6
75°	224.7	220.1	224.2	208.4	215.5
77.5°	153.0	156.6	154.0	145.6	150.5
80°	101.0	98.2	98.2	93.3	94.4
82.5°	58.9	56.1	55.3	53.8	56.1
85°	27.5	26.8	27.3	26.5	25.5
87.5°	9.9	10.2	10.2	9.7	9.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)