

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: P588982

Luminaire Tested: **FMR-24-2-LD4-2HI-35-UNV-80-85-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588982
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-80-85-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

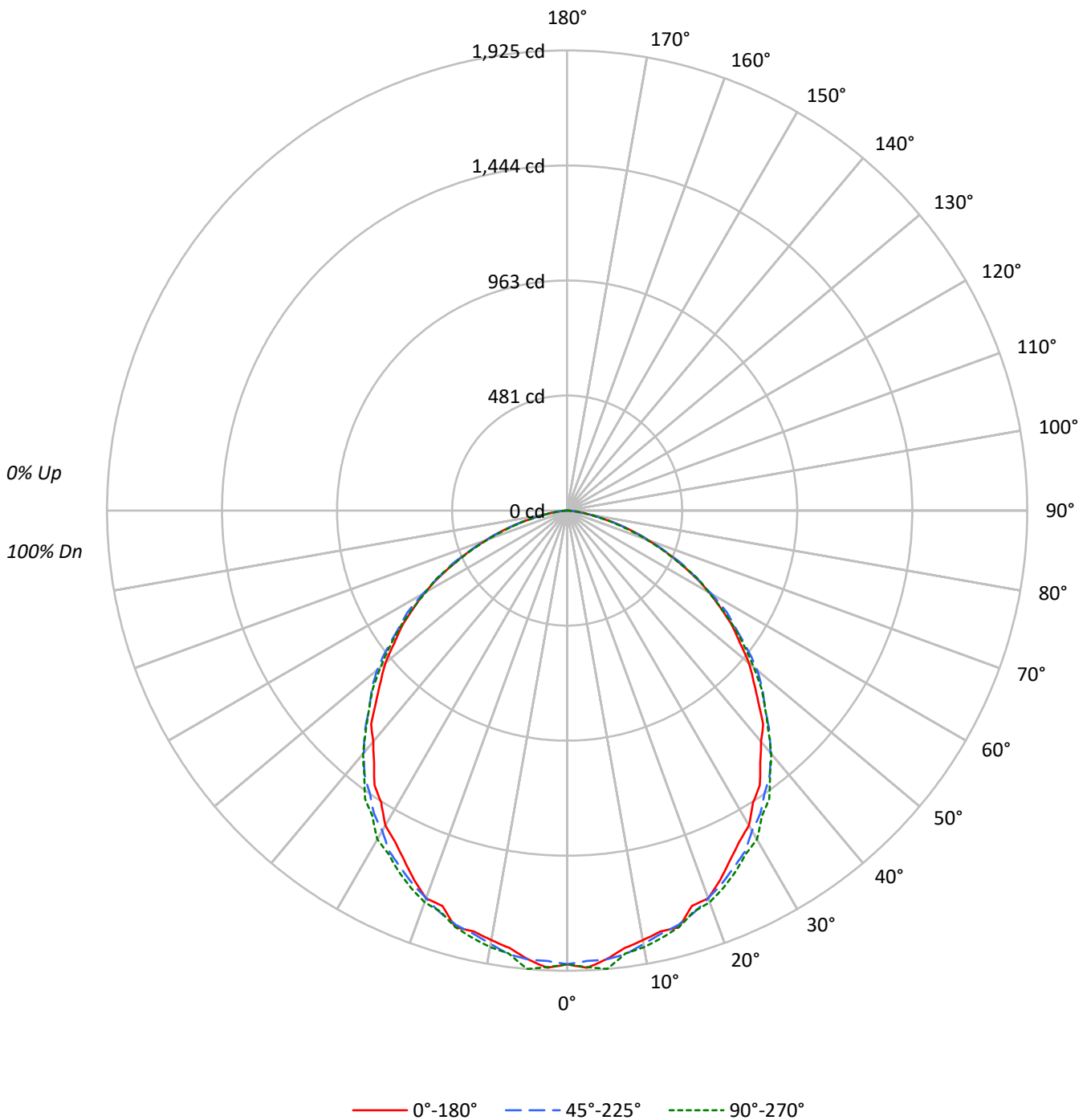
Lumens per Lamp: N/A
Luminaire Lumens: 4783.0 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P588982

CATALOG NUMBER: FMR-24-2-LD4-2HI-35-UNV-80-85-EDD

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°	5107	5107	5107
5°	5090	5092	5199
10°	4987	5030	5066
15°	5026	4999	5027
20°	4941	4941	4994
25°	4789	4894	4948
30°	4724	4807	4935
35°	4612	4733	4839
40°	4433	4646	4667
45°	4299	4452	4458
50°	4158	4346	4262
55°	3962	4039	4010
60°	3704	3742	3674
65°	3303	3387	3280
70°	2834	2843	2765
75°	2245	2240	2153
80°	1503	1461	1406
85°	818	809	756



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	178.5	3.7
10°-20°	505.9	10.6
20°-30°	758.0	15.8
30°-40°	898.4	18.8
40°-50°	900.0	18.8
50°-60°	764.0	16.0
60°-70°	515.1	10.8
70°-80°	226.3	4.7
80°-90°	36.8	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°	1442.4	30.2
0°-40°	2340.8	48.9
0°-60°	4004.8	83.7
0°-90°	4783.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4783.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1898	1898	1898	1898	1898	
5°	1884	1880	1885	1879	1925	178
15°	1804	1783	1794	1804	1804	503
25°	1613	1622	1648	1670	1666	746
35°	1404	1408	1441	1474	1473	872
45°	1130	1151	1170	1200	1172	874
55°	844	839	861	855	855	751
65°	519	512	532	512	515	516
75°	216	212	215	200	207	231
85°	26	26	26	26	24	38
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1897.8	1897.8	1897.8	1897.8	1897.8
2.5°	1914.2	1899.7	1886.3	1901.9	1911.5
5°	1884.3	1879.9	1885.0	1879.4	1924.7
7.5°	1845.6	1862.5	1872.3	1866.2	1868.9
10°	1825.0	1819.1	1840.9	1856.1	1853.9
12.5°	1802.9	1811.8	1813.0	1829.4	1830.9
15°	1804.2	1783.3	1794.4	1803.7	1804.4
17.5°	1734.1	1756.6	1764.2	1785.5	1759.1
20°	1725.5	1709.1	1725.5	1747.3	1743.9
22.5°	1672.8	1654.5	1689.7	1709.1	1707.9
25°	1613.0	1621.9	1648.3	1669.9	1666.5
27.5°	1560.6	1570.9	1608.6	1638.3	1619.2
30°	1520.2	1515.0	1546.9	1573.4	1588.1
32.5°	1447.9	1466.5	1503.8	1530.0	1516.0
35°	1404.0	1408.2	1440.8	1474.1	1473.1
37.5°	1327.3	1346.7	1392.5	1401.8	1393.3
40°	1261.9	1281.3	1322.7	1332.7	1328.6
42.5°	1213.6	1217.1	1252.6	1264.1	1245.7
45°	1129.6	1150.7	1169.8	1199.9	1171.5
47.5°	1058.0	1067.8	1109.0	1117.1	1102.2
50°	993.1	996.5	1038.0	1027.9	1018.1
52.5°	911.5	926.0	949.3	947.3	935.8
55°	844.4	838.7	860.8	854.9	854.7
57.5°	763.8	773.6	791.7	782.4	767.4
60°	688.3	688.5	695.2	684.6	682.7
62.5°	604.2	607.2	608.7	595.7	616.7
65°	518.7	511.9	532.0	511.6	515.1
67.5°	440.1	443.5	441.5	428.8	433.7
70°	360.2	364.6	361.4	347.0	351.4
72.5°	287.2	281.8	285.2	267.1	275.4
75°	215.9	211.5	215.4	200.2	207.1
77.5°	147.0	150.4	148.0	139.9	144.6
80°	97.0	94.3	94.3	89.7	90.7
82.5°	56.6	53.9	53.2	51.7	53.9
85°	26.5	25.7	26.2	25.5	24.5
87.5°	9.6	9.8	9.8	9.3	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)