

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: P589050

Luminaire Tested: **FMR-24-2-LD4-2HI-50-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589050
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-80-94-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

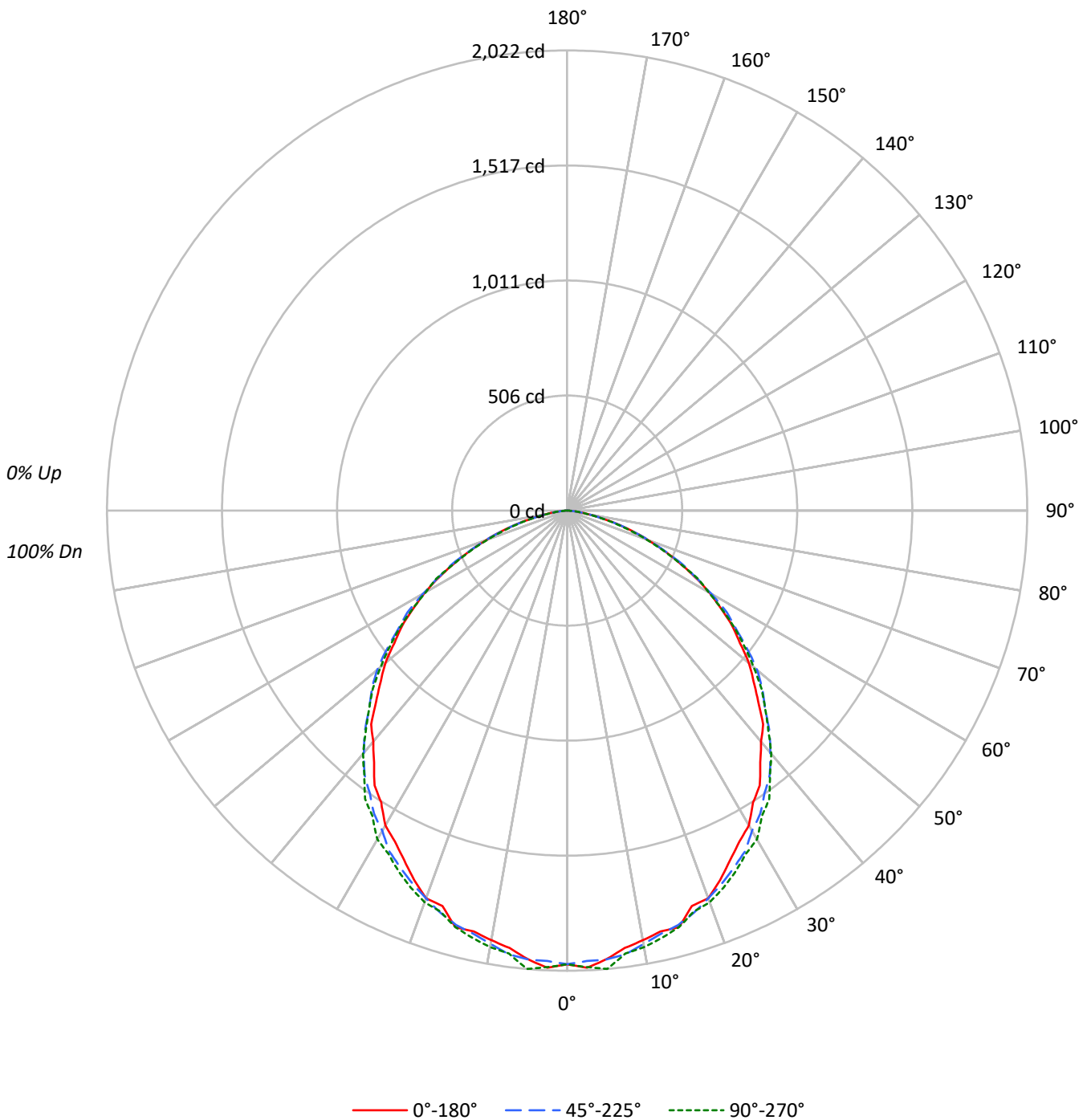
Lumens per Lamp: N/A
Luminaire Lumens: 5024.0 lumens
Efficiency: N/A
Efficacy: 116.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P589050

CATALOG NUMBER: FMR-24-2-LD4-2HI-50-UNV-80-94-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P589050

CATALOG NUMBER: FMR-24-2-LD4-2HI-50-UNV-80-94-EDD

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°	5364	5364	5364
5°	5346	5348	5461
10°	5238	5284	5321
15°	5280	5251	5280
20°	5190	5190	5246
25°	5031	5141	5197
30°	4962	5049	5183
35°	4845	4972	5083
40°	4656	4880	4902
45°	4515	4676	4683
50°	4367	4564	4477
55°	4161	4242	4212
60°	3891	3930	3859
65°	3470	3558	3445
70°	2976	2987	2904
75°	2358	2352	2261
80°	1579	1536	1475
85°	858	849	794



TEST NUMBER: P589050

CATALOG NUMBER: FMR-24-2-LD4-2HI-50-UNV-80-94-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.5	3.7
10°-20°	531.4	10.6
20°-30°	796.2	15.8
30°-40°	943.6	18.8
40°-50°	945.4	18.8
50°-60°	802.5	16.0
60°-70°	541.0	10.8
70°-80°	237.7	4.7
80°-90°	38.6	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°	1515.1	30.2
0°-40°	2458.8	48.9
0°-60°	4206.6	83.7
0°-90°	5024.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5024.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1993	1993	1993	1993	1993	
5°	1979	1975	1980	1974	2022	187
15°	1895	1873	1885	1895	1895	528
25°	1694	1704	1731	1754	1750	783
35°	1475	1479	1513	1548	1547	916
45°	1186	1209	1229	1260	1230	918
55°	887	881	904	898	898	789
65°	545	538	559	537	541	542
75°	227	222	226	210	218	243
85°	28	27	28	27	26	40
90°	0	0	0	0	0	



TEST NUMBER: P589050

CATALOG NUMBER: FMR-24-2-LD4-2HI-50-UNV-80-94-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1993.4	1993.4	1993.4	1993.4	1993.4
2.5°	2010.6	1995.5	1981.3	1997.8	2007.8
5°	1979.2	1974.6	1980.0	1974.1	2021.7
7.5°	1938.6	1956.3	1966.6	1960.2	1963.0
10°	1917.0	1910.8	1933.7	1949.6	1947.3
12.5°	1893.8	1903.1	1904.3	1921.6	1923.1
15°	1895.1	1873.2	1884.8	1894.6	1895.3
17.5°	1821.5	1845.1	1853.1	1875.5	1847.7
20°	1812.5	1795.2	1812.5	1835.4	1831.8
22.5°	1757.1	1737.8	1774.9	1795.2	1793.9
25°	1694.3	1703.6	1731.4	1754.0	1750.4
27.5°	1639.2	1650.1	1689.7	1720.8	1700.8
30°	1596.8	1591.4	1624.8	1652.6	1668.1
32.5°	1520.8	1540.4	1579.5	1607.1	1592.4
35°	1474.8	1479.2	1513.4	1548.4	1547.4
37.5°	1394.2	1414.6	1462.7	1472.5	1463.5
40°	1325.5	1345.8	1389.3	1399.9	1395.5
42.5°	1274.8	1278.4	1315.7	1327.8	1308.5
45°	1186.5	1208.6	1228.7	1260.4	1230.5
47.5°	1111.4	1121.7	1164.9	1173.4	1157.7
50°	1043.2	1046.8	1090.3	1079.7	1069.4
52.5°	957.4	972.6	997.1	995.0	982.9
55°	886.9	881.0	904.2	898.0	897.7
57.5°	802.2	812.5	831.6	821.8	806.1
60°	723.0	723.2	730.2	719.1	717.1
62.5°	634.7	637.8	639.3	625.7	647.8
65°	544.9	537.7	558.8	537.4	541.0
67.5°	462.3	465.9	463.8	450.4	455.6
70°	378.3	383.0	379.6	364.4	369.1
72.5°	301.6	296.0	299.6	280.5	289.3
75°	226.8	222.1	226.2	210.3	217.5
77.5°	154.4	158.0	155.5	147.0	151.9
80°	101.9	99.1	99.1	94.2	95.2
82.5°	59.5	56.6	55.9	54.3	56.6
85°	27.8	27.0	27.5	26.8	25.7
87.5°	10.0	10.3	10.3	9.8	9.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)