

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: P588923

Luminaire Tested: **FMR-24-2-LD4-1STD-40-UNV-80-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588923
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-LD4-1STD-40-UNV-80-96-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

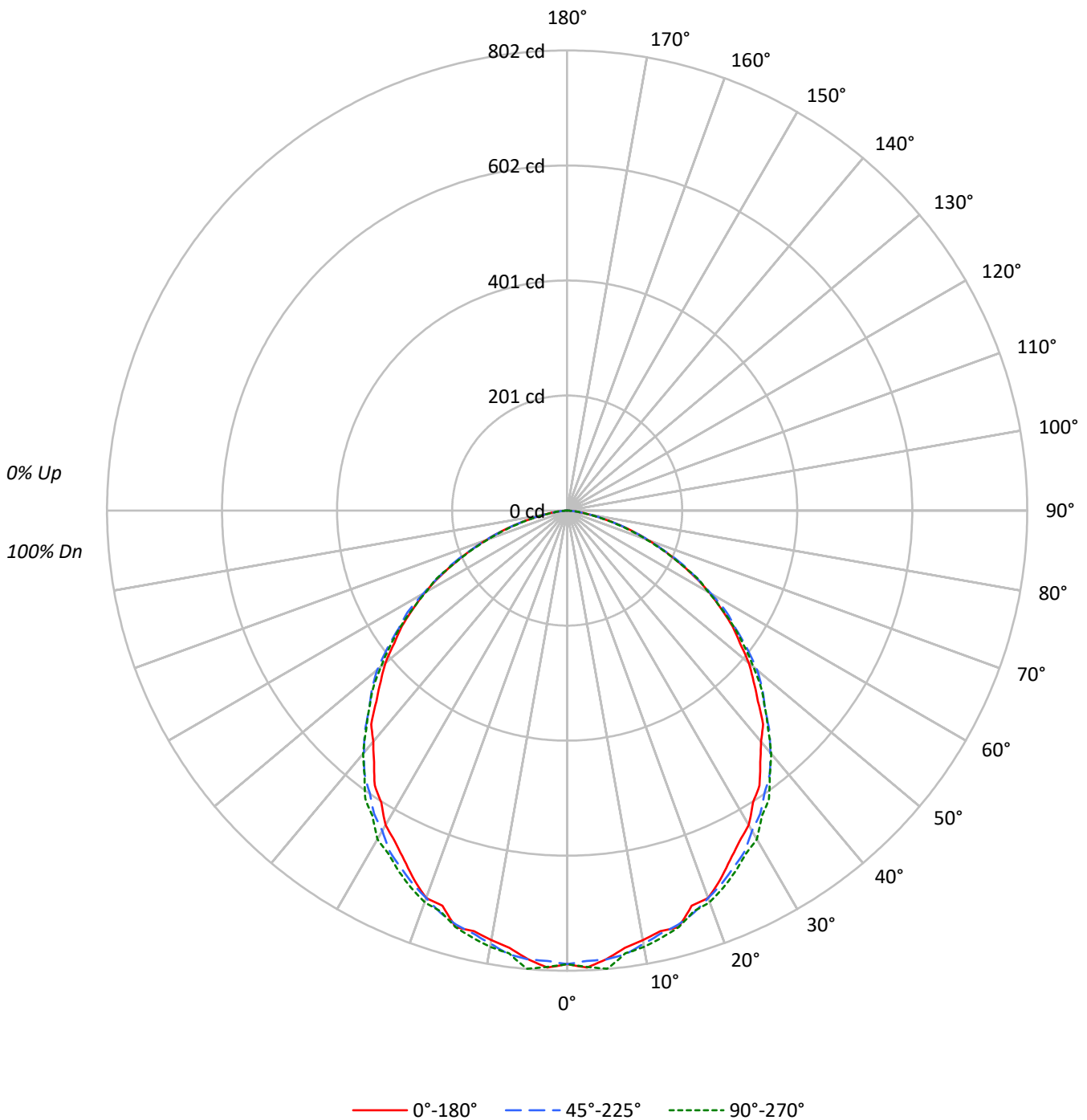
Lumens per Lamp: N/A
Luminaire Lumens: 1992.0 lumens
Efficiency: N/A
Efficacy: 120.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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: P588923

CATALOG NUMBER: FMR-24-2-LD4-1STD-40-UNV-80-96-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P588923

CATALOG NUMBER: FMR-24-2-LD4-1STD-40-UNV-80-96-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°	2127	2127	2127
5°	2120	2121	2165
10°	2077	2095	2110
15°	2093	2082	2094
20°	2058	2058	2080
25°	1995	2038	2061
30°	1967	2002	2055
35°	1921	1971	2015
40°	1846	1935	1944
45°	1790	1854	1857
50°	1732	1810	1775
55°	1650	1682	1670
60°	1543	1558	1530
65°	1375	1410	1366
70°	1180	1184	1151
75°	935	933	896
80°	626	609	586
85°	340	337	315



TEST NUMBER: P588923

CATALOG NUMBER: FMR-24-2-LD4-1STD-40-UNV-80-96-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.3	3.7
10°-20°	210.7	10.6
20°-30°	315.7	15.8
30°-40°	374.2	18.8
40°-50°	374.8	18.8
50°-60°	318.2	16.0
60°-70°	214.5	10.8
70°-80°	94.3	4.7
80°-90°	15.3	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°	600.7	30.2
0°-40°	974.9	48.9
0°-60°	1667.9	83.7
0°-90°	1992.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1992.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	790	790	790	790	790	
5°	785	783	785	783	802	74
15°	751	743	747	751	752	209
25°	672	676	686	696	694	311
35°	585	586	600	614	614	363
45°	470	479	487	500	488	364
55°	352	349	358	356	356	313
65°	216	213	222	213	214	215
75°	90	88	90	83	86	96
85°	11	11	11	11	10	16
90°	0	0	0	0	0	



TEST NUMBER: P588923

CATALOG NUMBER: FMR-24-2-LD4-1STD-40-UNV-80-96-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	790.4	790.4	790.4	790.4	790.4
2.5°	797.2	791.2	785.6	792.1	796.1
5°	784.8	782.9	785.1	782.7	801.6
7.5°	768.6	775.7	779.8	777.2	778.3
10°	760.1	757.6	766.7	773.0	772.1
12.5°	750.9	754.6	755.1	761.9	762.5
15°	751.4	742.7	747.3	751.2	751.5
17.5°	722.2	731.6	734.8	743.6	732.6
20°	718.6	711.8	718.6	727.7	726.3
22.5°	696.7	689.0	703.7	711.8	711.3
25°	671.8	675.5	686.5	695.5	694.0
27.5°	650.0	654.2	670.0	682.3	674.3
30°	633.1	631.0	644.2	655.3	661.4
32.5°	603.0	610.8	626.3	637.2	631.4
35°	584.7	586.5	600.1	613.9	613.5
37.5°	552.8	560.9	579.9	583.8	580.3
40°	525.6	533.6	550.9	555.0	553.3
42.5°	505.5	506.9	521.7	526.5	518.8
45°	470.4	479.2	487.2	499.7	487.9
47.5°	440.7	444.7	461.9	465.2	459.0
50°	413.6	415.0	432.3	428.1	424.0
52.5°	379.6	385.6	395.3	394.5	389.7
55°	351.7	349.3	358.5	356.1	355.9
57.5°	318.1	322.2	329.7	325.8	319.6
60°	286.7	286.8	289.5	285.1	284.3
62.5°	251.7	252.9	253.5	248.1	256.9
65°	216.0	213.2	221.5	213.1	214.5
67.5°	183.3	184.7	183.9	178.6	180.6
70°	150.0	151.9	150.5	144.5	146.3
72.5°	119.6	117.4	118.8	111.2	114.7
75°	89.9	88.1	89.7	83.4	86.2
77.5°	61.2	62.7	61.6	58.3	60.2
80°	40.4	39.3	39.3	37.4	37.8
82.5°	23.6	22.5	22.1	21.5	22.5
85°	11.0	10.7	10.9	10.6	10.2
87.5°	4.0	4.1	4.1	3.9	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)