

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: P589532

Luminaire Tested: **FMR-24-2-LD4-3STD-50-UNV-80-97-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589532
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-LD4-3STD-50-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 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

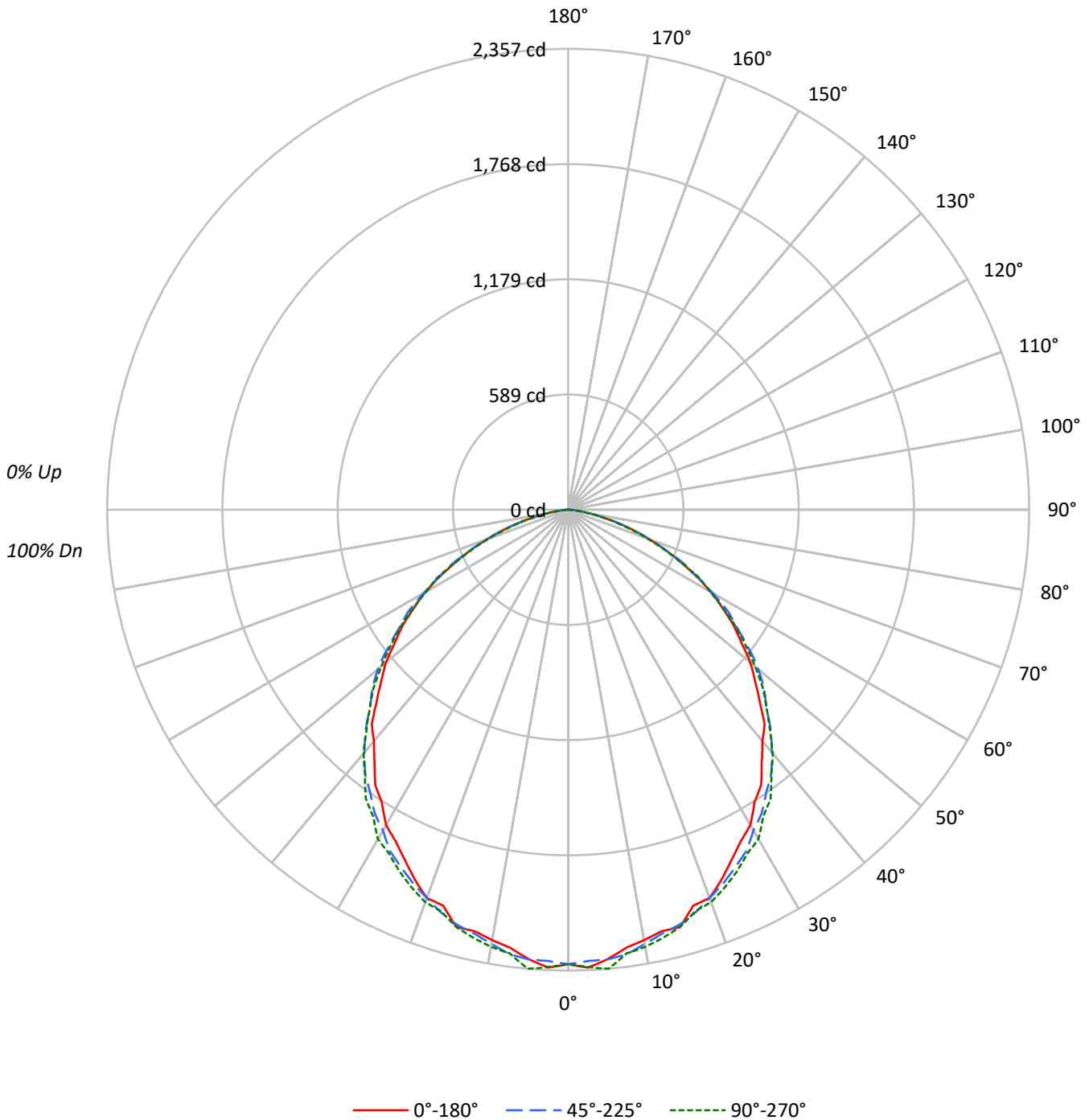
Lumens per Lamp: N/A
Luminaire Lumens: 5858.0 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 50
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

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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°	6255	6255	6255
5°	6234	6236	6368
10°	6108	6161	6204
15°	6156	6123	6157
20°	6052	6052	6116
25°	5866	5994	6060
30°	5785	5887	6044
35°	5649	5797	5927
40°	5429	5691	5716
45°	5265	5452	5460
50°	5092	5322	5220
55°	4852	4946	4911
60°	4537	4582	4500
65°	4045	4148	4017
70°	3471	3483	3386
75°	2749	2743	2637
80°	1841	1790	1720
85°	1000	991	926



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.6	3.7
10°-20°	619.6	10.6
20°-30°	928.4	15.8
30°-40°	1100.3	18.8
40°-50°	1102.3	18.8
50°-60°	935.7	16.0
60°-70°	630.9	10.8
70°-80°	277.2	4.7
80°-90°	45.0	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°	1766.6	30.2
0°-40°	2866.9	48.9
0°-60°	4904.9	83.7
0°-90°	5858.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5858.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2324	2324	2324	2324	2324	
5°	2308	2302	2309	2302	2357	218
15°	2210	2184	2198	2209	2210	616
25°	1976	1986	2019	2045	2041	913
35°	1720	1725	1765	1805	1804	1068
45°	1384	1409	1433	1470	1435	1070
55°	1034	1027	1054	1047	1047	920
65°	635	627	652	627	631	632
75°	264	259	264	245	254	283
85°	32	32	32	31	30	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2324.3	2324.3	2324.3	2324.3	2324.3
2.5°	2344.4	2326.7	2310.2	2329.4	2341.1
5°	2307.8	2302.4	2308.7	2301.8	2357.3
7.5°	2260.4	2281.1	2293.1	2285.6	2288.9
10°	2235.2	2228.0	2254.7	2273.3	2270.6
12.5°	2208.2	2219.0	2220.5	2240.6	2242.4
15°	2209.7	2184.2	2197.7	2209.1	2210.0
17.5°	2123.8	2151.4	2160.7	2186.9	2154.4
20°	2113.3	2093.2	2113.3	2140.0	2135.8
22.5°	2048.8	2026.3	2069.5	2093.2	2091.7
25°	1975.6	1986.4	2018.8	2045.2	2041.0
27.5°	1911.4	1924.0	1970.2	2006.5	1983.1
30°	1861.8	1855.5	1894.6	1927.0	1945.0
32.5°	1773.3	1796.1	1841.7	1873.9	1856.7
35°	1719.6	1724.7	1764.6	1805.4	1804.2
37.5°	1625.7	1649.4	1705.5	1716.9	1706.4
40°	1545.5	1569.2	1620.0	1632.3	1627.2
42.5°	1486.4	1490.6	1534.1	1548.2	1525.7
45°	1383.5	1409.3	1432.7	1469.6	1434.8
47.5°	1295.8	1307.9	1358.3	1368.2	1349.9
50°	1216.3	1220.5	1271.2	1258.9	1246.9
52.5°	1116.4	1134.1	1162.6	1160.2	1146.1
55°	1034.2	1027.3	1054.3	1047.1	1046.8
57.5°	935.4	947.4	969.6	958.2	939.9
60°	843.0	843.3	851.4	838.5	836.1
62.5°	740.1	743.7	745.5	729.6	755.4
65°	635.3	626.9	651.5	626.6	630.8
67.5°	539.0	543.2	540.8	525.2	531.2
70°	441.2	446.6	442.7	424.9	430.3
72.5°	351.7	345.1	349.3	327.1	337.3
75°	264.4	259.0	263.8	245.2	253.6
77.5°	180.1	184.3	181.3	171.4	177.1
80°	118.8	115.5	115.5	109.8	111.0
82.5°	69.3	66.0	65.1	63.3	66.0
85°	32.4	31.5	32.1	31.2	30.0
87.5°	11.7	12.0	12.0	11.4	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)