

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: P589300

Luminaire Tested: **FMR-24-2-LD4-3HI-35-UNV-93-97-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589300
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-LD4-3HI-35-UNV-93-97-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

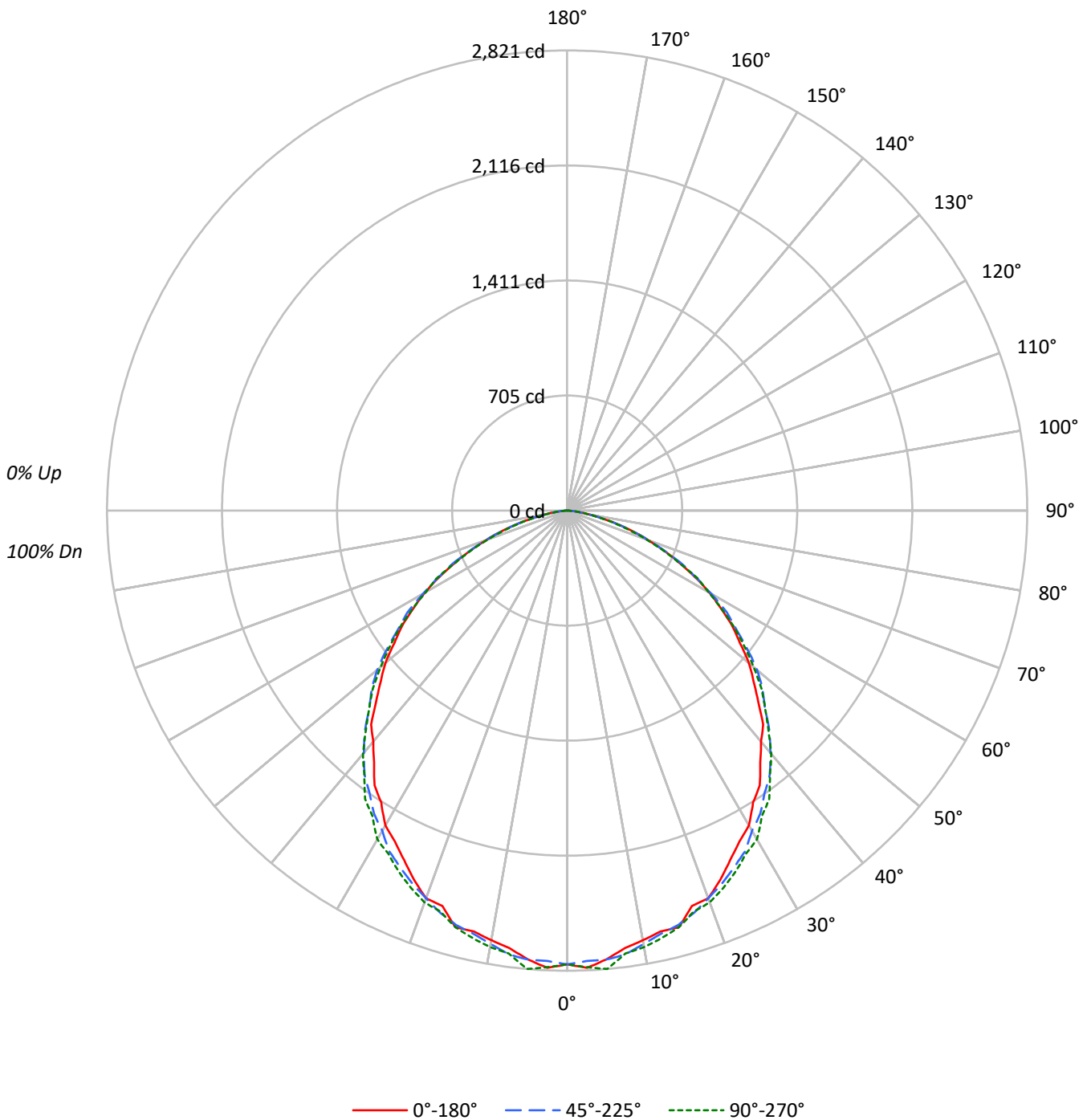
Lumens per Lamp: N/A
Luminaire Lumens: 7010.0 lumens
Efficiency: N/A
Efficacy: 108.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 64.8
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°	7485	7485	7485
5°	7460	7463	7620
10°	7309	7373	7424
15°	7366	7326	7368
20°	7242	7242	7319
25°	7019	7173	7252
30°	6923	7045	7232
35°	6760	6937	7092
40°	6497	6810	6840
45°	6300	6524	6534
50°	6093	6368	6247
55°	5806	5919	5877
60°	5429	5483	5385
65°	4841	4965	4807
70°	4153	4168	4052
75°	3290	3282	3156
80°	2204	2143	2060
85°	1198	1186	1108



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	261.6	3.7
10°-20°	741.5	10.6
20°-30°	1110.9	15.8
30°-40°	1316.7	18.8
40°-50°	1319.1	18.8
50°-60°	1119.7	16.0
60°-70°	754.9	10.8
70°-80°	331.7	4.7
80°-90°	53.9	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°	2114.0	30.2
0°-40°	3430.7	48.9
0°-60°	5869.5	83.7
0°-90°	7010.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7010.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2781	2781	2781	2781	2781	
5°	2762	2755	2763	2754	2821	260
15°	2644	2614	2630	2644	2645	737
25°	2364	2377	2416	2447	2442	1093
35°	2058	2064	2112	2160	2159	1278
45°	1656	1686	1714	1759	1717	1281
55°	1238	1229	1262	1253	1253	1101
65°	760	750	780	750	755	756
75°	316	310	316	293	304	339
85°	39	38	38	37	36	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2781.4	2781.4	2781.4	2781.4	2781.4
2.5°	2805.5	2784.3	2764.5	2787.5	2801.5
5°	2761.6	2755.2	2762.7	2754.5	2820.9
7.5°	2704.9	2729.7	2744.0	2735.1	2739.0
10°	2674.7	2666.1	2698.1	2720.3	2717.1
12.5°	2642.4	2655.3	2657.1	2681.2	2683.4
15°	2644.2	2613.7	2629.8	2643.5	2644.6
17.5°	2541.5	2574.5	2585.7	2616.9	2578.1
20°	2528.9	2504.9	2528.9	2560.9	2555.9
22.5°	2451.7	2424.8	2476.5	2504.9	2503.1
25°	2364.1	2377.0	2415.8	2447.4	2442.4
27.5°	2287.2	2302.3	2357.6	2401.1	2373.1
30°	2228.0	2220.4	2267.1	2305.9	2327.5
32.5°	2122.0	2149.3	2203.9	2242.4	2221.9
35°	2057.8	2063.9	2111.6	2160.5	2159.0
37.5°	1945.4	1973.7	2040.9	2054.5	2042.0
40°	1849.5	1877.8	1938.5	1953.3	1947.2
42.5°	1778.7	1783.8	1835.8	1852.7	1825.8
45°	1655.5	1686.4	1714.4	1758.6	1717.0
47.5°	1550.7	1565.0	1625.4	1637.2	1615.3
50°	1455.5	1460.5	1521.2	1506.5	1492.1
52.5°	1335.9	1357.1	1391.2	1388.4	1371.5
55°	1237.5	1229.3	1261.6	1253.0	1252.6
57.5°	1119.4	1133.7	1160.3	1146.7	1124.8
60°	1008.8	1009.1	1018.8	1003.4	1000.5
62.5°	885.6	889.9	892.1	873.0	903.9
65°	760.3	750.2	779.7	749.8	754.9
67.5°	645.0	650.0	647.1	628.5	635.6
70°	527.9	534.4	529.7	508.5	515.0
72.5°	420.9	413.0	418.0	391.4	403.7
75°	316.4	309.9	315.7	293.4	303.5
77.5°	215.5	220.5	216.9	205.1	211.9
80°	142.2	138.3	138.3	131.4	132.9
82.5°	83.0	79.0	77.9	75.8	79.0
85°	38.8	37.7	38.4	37.3	35.9
87.5°	14.0	14.4	14.4	13.6	12.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)