

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: P589722

Luminaire Tested: **FMR-24-2-LD4-4LO-50-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589722
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-LD4-4LO-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

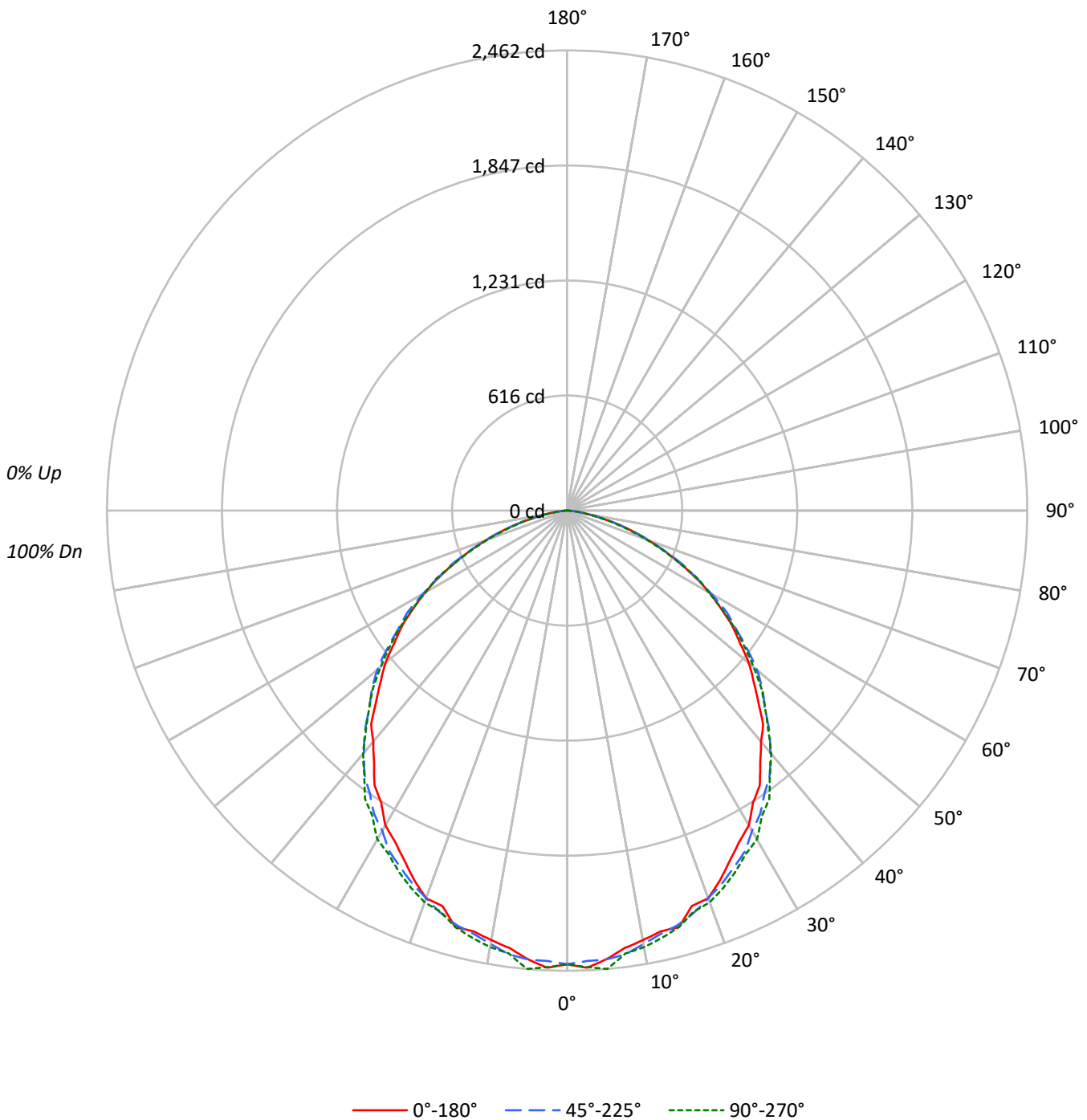
Lumens per Lamp: N/A
Luminaire Lumens: 6117.0 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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°	6531	6531	6531
5°	6509	6512	6649
10°	6378	6433	6479
15°	6428	6393	6429
20°	6320	6320	6387
25°	6125	6259	6328
30°	6041	6147	6311
35°	5899	6053	6189
40°	5669	5942	5969
45°	5498	5693	5702
50°	5317	5557	5451
55°	5066	5165	5128
60°	4738	4785	4699
65°	4224	4332	4194
70°	3625	3637	3536
75°	2871	2864	2753
80°	1923	1869	1796
85°	1044	1034	966



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	228.3	3.7
10°-20°	647.0	10.6
20°-30°	969.4	15.8
30°-40°	1148.9	18.8
40°-50°	1151.1	18.8
50°-60°	977.1	16.0
60°-70°	658.7	10.8
70°-80°	289.4	4.7
80°-90°	47.0	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°	1844.7	30.2
0°-40°	2993.7	48.9
0°-60°	5121.8	83.7
0°-90°	6117.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6117.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2427	2427	2427	2427	2427	
5°	2410	2404	2411	2404	2462	227
15°	2307	2281	2295	2307	2308	643
25°	2063	2074	2108	2136	2131	954
35°	1796	1801	1843	1885	1884	1115
45°	1445	1472	1496	1535	1498	1117
55°	1080	1073	1101	1093	1093	961
65°	663	655	680	654	659	660
75°	276	270	276	256	265	296
85°	34	33	34	33	31	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2427.1	2427.1	2427.1	2427.1	2427.1
2.5°	2448.1	2429.6	2412.3	2432.4	2444.6
5°	2409.8	2404.2	2410.8	2403.6	2461.5
7.5°	2360.3	2381.9	2394.5	2386.6	2390.1
10°	2334.0	2326.5	2354.4	2373.8	2371.0
12.5°	2305.8	2317.1	2318.6	2339.6	2341.5
15°	2307.4	2280.7	2294.8	2306.7	2307.7
17.5°	2217.7	2246.6	2256.3	2283.5	2249.7
20°	2206.8	2185.8	2206.8	2234.7	2230.3
22.5°	2139.4	2115.9	2161.0	2185.8	2184.2
25°	2062.9	2074.2	2108.1	2135.6	2131.2
27.5°	1995.9	2009.0	2057.3	2095.2	2070.8
30°	1944.2	1937.6	1978.3	2012.2	2031.0
32.5°	1851.7	1875.5	1923.2	1956.7	1938.8
35°	1795.6	1801.0	1842.6	1885.2	1884.0
37.5°	1697.5	1722.3	1780.9	1792.8	1781.8
40°	1613.9	1638.6	1691.6	1704.4	1699.1
42.5°	1552.1	1556.5	1602.0	1616.7	1593.2
45°	1444.6	1471.6	1496.0	1534.6	1498.2
47.5°	1353.1	1365.7	1418.3	1428.7	1409.6
50°	1270.1	1274.5	1327.4	1314.6	1302.1
52.5°	1165.7	1184.2	1214.0	1211.5	1196.8
55°	1079.9	1072.7	1100.9	1093.4	1093.0
57.5°	976.8	989.3	1012.5	1000.6	981.5
60°	880.3	880.6	889.0	875.6	873.1
62.5°	772.8	776.5	778.4	761.8	788.8
65°	663.4	654.6	680.3	654.3	658.7
67.5°	562.8	567.2	564.7	548.4	554.7
70°	460.7	466.3	462.2	443.7	449.4
72.5°	367.3	360.4	364.8	341.6	352.2
75°	276.1	270.4	275.5	256.0	264.8
77.5°	188.0	192.4	189.3	178.9	184.9
80°	124.1	120.6	120.6	114.7	115.9
82.5°	72.4	68.9	68.0	66.1	68.9
85°	33.8	32.9	33.5	32.6	31.3
87.5°	12.2	12.5	12.5	11.9	11.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)