

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: P589556

Luminaire Tested: **FMR-24-2-LD4-3STD-50-UNV-93-97-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589556
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-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 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

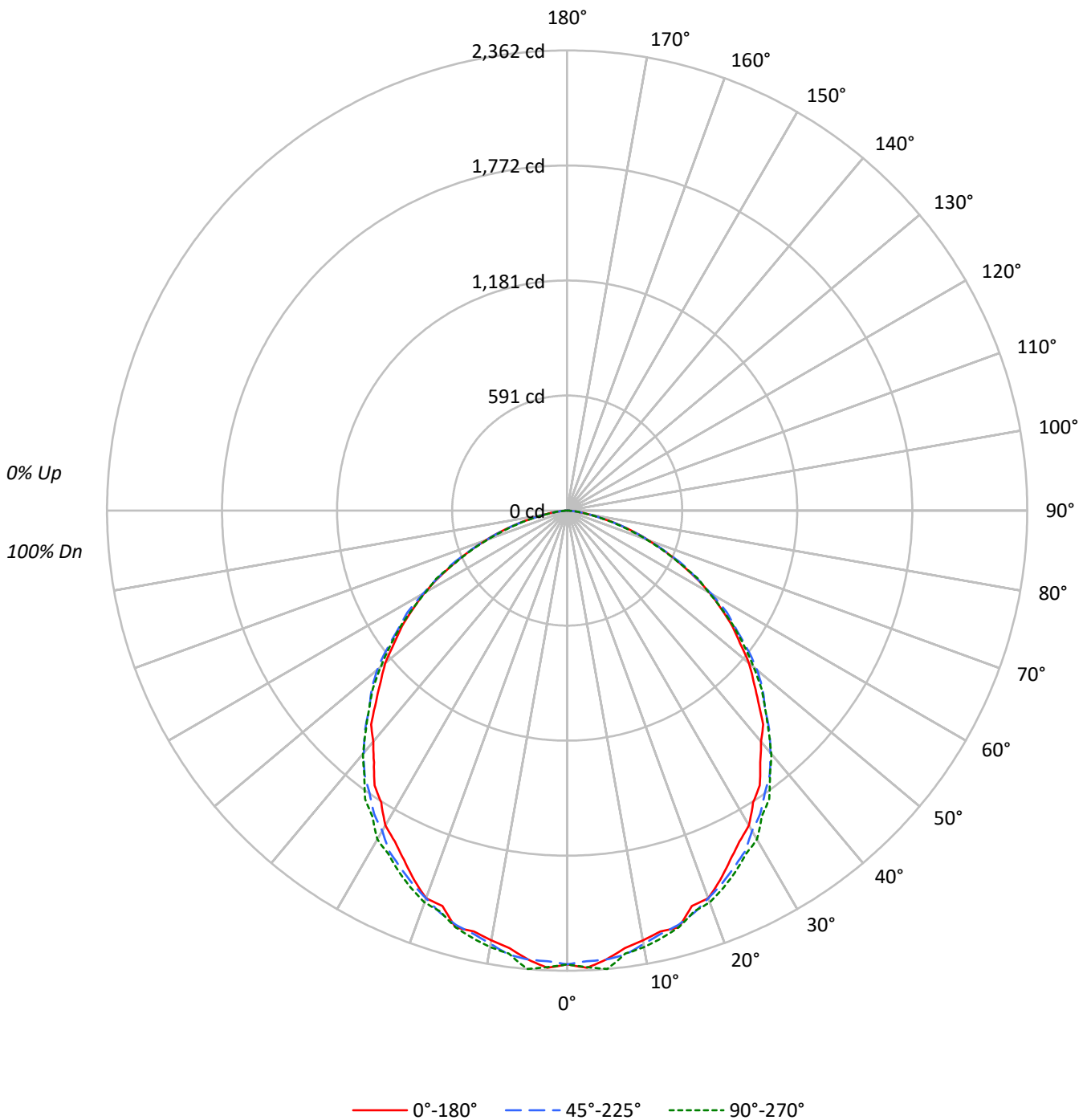
Lumens per Lamp: N/A
Luminaire Lumens: 5870.0 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	6268	6268	6268
5°	6247	6249	6381
10°	6120	6174	6217
15°	6169	6135	6169
20°	6064	6064	6129
25°	5878	6006	6073
30°	5797	5899	6056
35°	5661	5809	5939
40°	5440	5702	5728
45°	5276	5463	5471
50°	5102	5333	5231
55°	4862	4956	4921
60°	4546	4591	4509
65°	4053	4157	4025
70°	3478	3490	3393
75°	2754	2748	2642
80°	1846	1795	1725
85°	1003	994	929



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	219.1	3.7
10°-20°	620.9	10.6
20°-30°	930.3	15.8
30°-40°	1102.5	18.8
40°-50°	1104.6	18.8
50°-60°	937.6	16.0
60°-70°	632.1	10.8
70°-80°	277.8	4.7
80°-90°	45.2	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°	1770.3	30.2
0°-40°	2872.8	48.9
0°-60°	4915.0	83.7
0°-90°	5870.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5870.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2329	2329	2329	2329	2329	
5°	2312	2307	2313	2306	2362	218
15°	2214	2189	2202	2214	2214	617
25°	1980	1990	2023	2049	2045	915
35°	1723	1728	1768	1809	1808	1070
45°	1386	1412	1436	1473	1438	1072
55°	1036	1029	1056	1049	1049	922
65°	637	628	653	628	632	633
75°	265	260	264	246	254	284
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°	2329.1	2329.1	2329.1	2329.1	2329.1
2.5°	2349.2	2331.5	2314.9	2334.2	2345.9
5°	2312.5	2307.1	2313.4	2306.5	2362.1
7.5°	2265.0	2285.8	2297.8	2290.3	2293.6
10°	2239.8	2232.5	2259.3	2277.9	2275.2
12.5°	2212.7	2223.5	2225.0	2245.2	2247.0
15°	2214.2	2188.6	2202.2	2213.6	2214.5
17.5°	2128.2	2155.9	2165.2	2191.3	2158.9
20°	2117.7	2097.5	2117.7	2144.4	2140.2
22.5°	2053.0	2030.5	2073.8	2097.5	2096.0
25°	1979.6	1990.5	2022.9	2049.4	2045.2
27.5°	1915.3	1927.9	1974.2	2010.6	1987.2
30°	1865.7	1859.3	1898.4	1930.9	1949.0
32.5°	1776.9	1799.8	1845.5	1877.7	1860.5
35°	1723.1	1728.2	1768.2	1809.1	1807.9
37.5°	1629.0	1652.8	1709.0	1720.4	1709.9
40°	1548.7	1572.5	1623.3	1635.6	1630.5
42.5°	1489.5	1493.7	1537.3	1551.4	1528.9
45°	1386.3	1412.2	1435.6	1472.6	1437.7
47.5°	1298.5	1310.5	1361.1	1371.0	1352.6
50°	1218.8	1223.0	1273.8	1261.5	1249.5
52.5°	1118.7	1136.4	1165.0	1162.6	1148.4
55°	1036.3	1029.4	1056.4	1049.2	1048.9
57.5°	937.3	949.4	971.6	960.2	941.9
60°	844.7	845.0	853.1	840.2	837.8
62.5°	741.6	745.2	747.0	731.0	756.9
65°	636.6	628.2	652.9	627.9	632.1
67.5°	540.1	544.3	541.9	526.3	532.3
70°	442.1	447.5	443.6	425.8	431.2
72.5°	352.4	345.8	350.0	327.8	338.0
75°	264.9	259.5	264.3	245.7	254.1
77.5°	180.4	184.6	181.6	171.7	177.4
80°	119.1	115.8	115.8	110.1	111.3
82.5°	69.5	66.2	65.3	63.5	66.2
85°	32.5	31.6	32.2	31.3	30.1
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)