

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: P589660

Luminaire Tested: **FMR-24-2-LD4-4LO-35-UNV-80-97-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589660
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-35-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 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

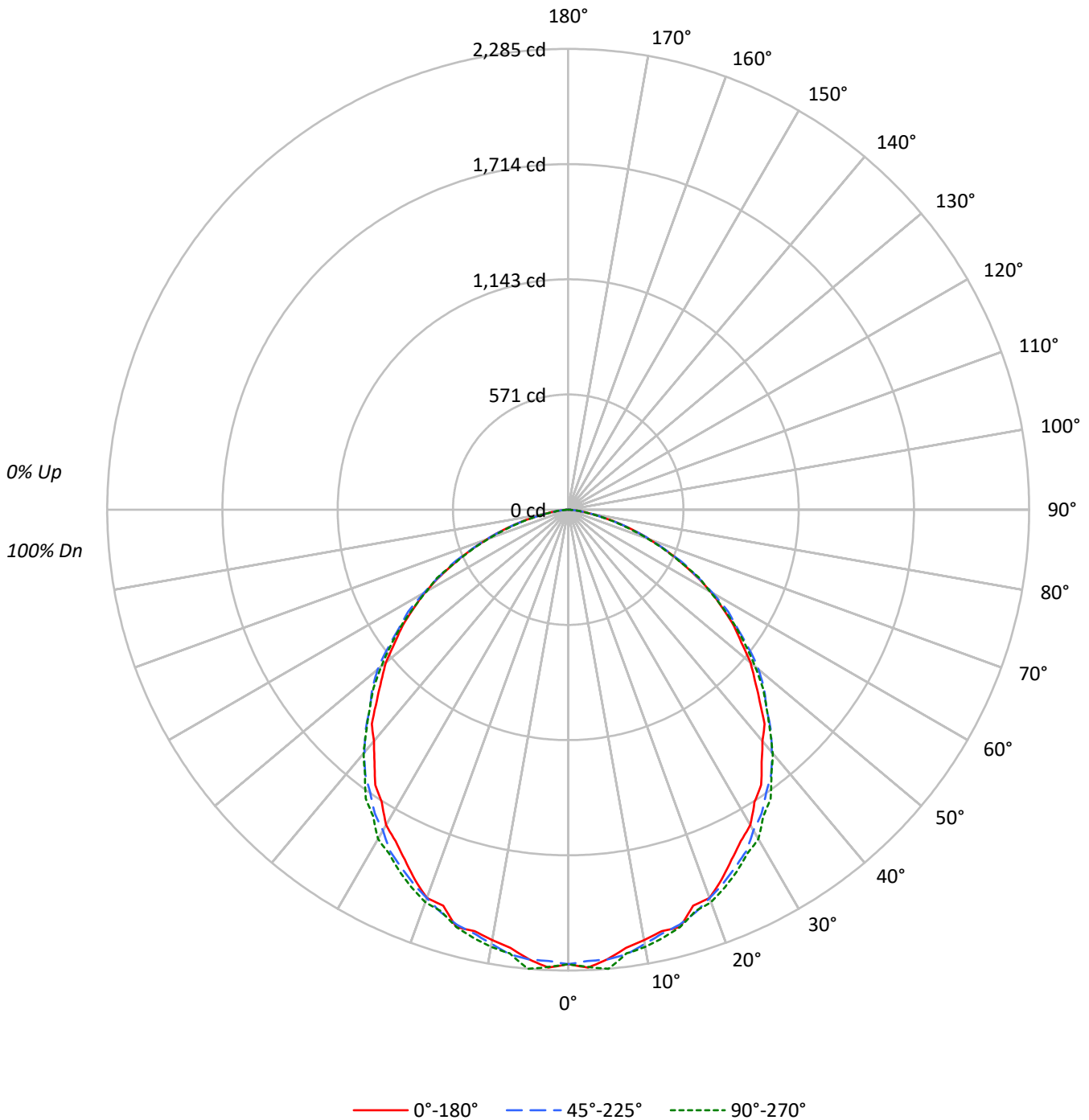
Lumens per Lamp: N/A
Luminaire Lumens: 5679.0 lumens
Efficiency: N/A
Efficacy: 121.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	6064	6064	6064
5°	6044	6046	6173
10°	5921	5973	6015
15°	5968	5935	5969
20°	5867	5867	5930
25°	5687	5811	5875
30°	5609	5707	5859
35°	5477	5620	5746
40°	5263	5517	5541
45°	5104	5286	5294
50°	4937	5159	5061
55°	4704	4795	4761
60°	4398	4442	4362
65°	3922	4022	3894
70°	3365	3376	3282
75°	2665	2659	2556
80°	1785	1736	1667
85°	969	960	898



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.0	3.7
10°-20°	600.7	10.6
20°-30°	900.0	15.8
30°-40°	1066.7	18.8
40°-50°	1068.6	18.8
50°-60°	907.1	16.0
60°-70°	611.6	10.8
70°-80°	268.7	4.7
80°-90°	43.7	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°	1712.7	30.2
0°-40°	2779.3	48.9
0°-60°	4755.1	83.7
0°-90°	5679.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5679.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2253	2253	2253	2253	2253	
5°	2237	2232	2238	2232	2285	211
15°	2142	2117	2130	2142	2142	597
25°	1915	1926	1957	1983	1979	885
35°	1667	1672	1711	1750	1749	1035
45°	1341	1366	1389	1425	1391	1038
55°	1003	996	1022	1015	1015	892
65°	616	608	632	608	612	613
75°	256	251	256	238	246	275
85°	31	30	31	30	29	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2253.3	2253.3	2253.3	2253.3	2253.3
2.5°	2272.8	2255.6	2239.6	2258.2	2269.6
5°	2237.3	2232.0	2238.2	2231.5	2285.3
7.5°	2191.3	2211.4	2223.0	2215.8	2219.0
10°	2166.9	2159.9	2185.8	2203.8	2201.2
12.5°	2140.7	2151.2	2152.6	2172.1	2173.9
15°	2142.1	2117.4	2130.5	2141.6	2142.4
17.5°	2058.9	2085.7	2094.7	2120.0	2088.6
20°	2048.8	2029.3	2048.8	2074.7	2070.6
22.5°	1986.2	1964.4	2006.3	2029.3	2027.8
25°	1915.2	1925.7	1957.1	1982.7	1978.6
27.5°	1853.0	1865.2	1910.0	1945.2	1922.5
30°	1805.0	1798.8	1836.7	1868.1	1885.5
32.5°	1719.1	1741.2	1785.5	1816.6	1800.0
35°	1667.1	1672.0	1710.7	1750.3	1749.1
37.5°	1576.0	1599.0	1653.4	1664.4	1654.3
40°	1498.3	1521.3	1570.5	1582.4	1577.4
42.5°	1441.0	1445.1	1487.3	1500.9	1479.1
45°	1341.2	1366.2	1388.9	1424.7	1391.0
47.5°	1256.3	1267.9	1316.8	1326.4	1308.6
50°	1179.2	1183.2	1232.4	1220.5	1208.8
52.5°	1082.3	1099.4	1127.1	1124.8	1111.1
55°	1002.6	995.9	1022.1	1015.1	1014.8
57.5°	906.8	918.5	940.0	929.0	911.2
60°	817.2	817.5	825.4	812.9	810.5
62.5°	717.4	720.9	722.7	707.3	732.3
65°	615.9	607.8	631.6	607.5	611.5
67.5°	522.5	526.6	524.3	509.1	515.0
70°	427.7	432.9	429.1	412.0	417.2
72.5°	341.0	334.6	338.6	317.1	327.0
75°	256.3	251.1	255.7	237.7	245.8
77.5°	174.6	178.6	175.7	166.1	171.7
80°	115.2	112.0	112.0	106.5	107.6
82.5°	67.2	64.0	63.1	61.4	64.0
85°	31.4	30.5	31.1	30.3	29.1
87.5°	11.3	11.6	11.6	11.1	10.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)