

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: P589272

Luminaire Tested: **FMR-24-2-LD4-3HI-35-UNV-80-87-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589272
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-80-87-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

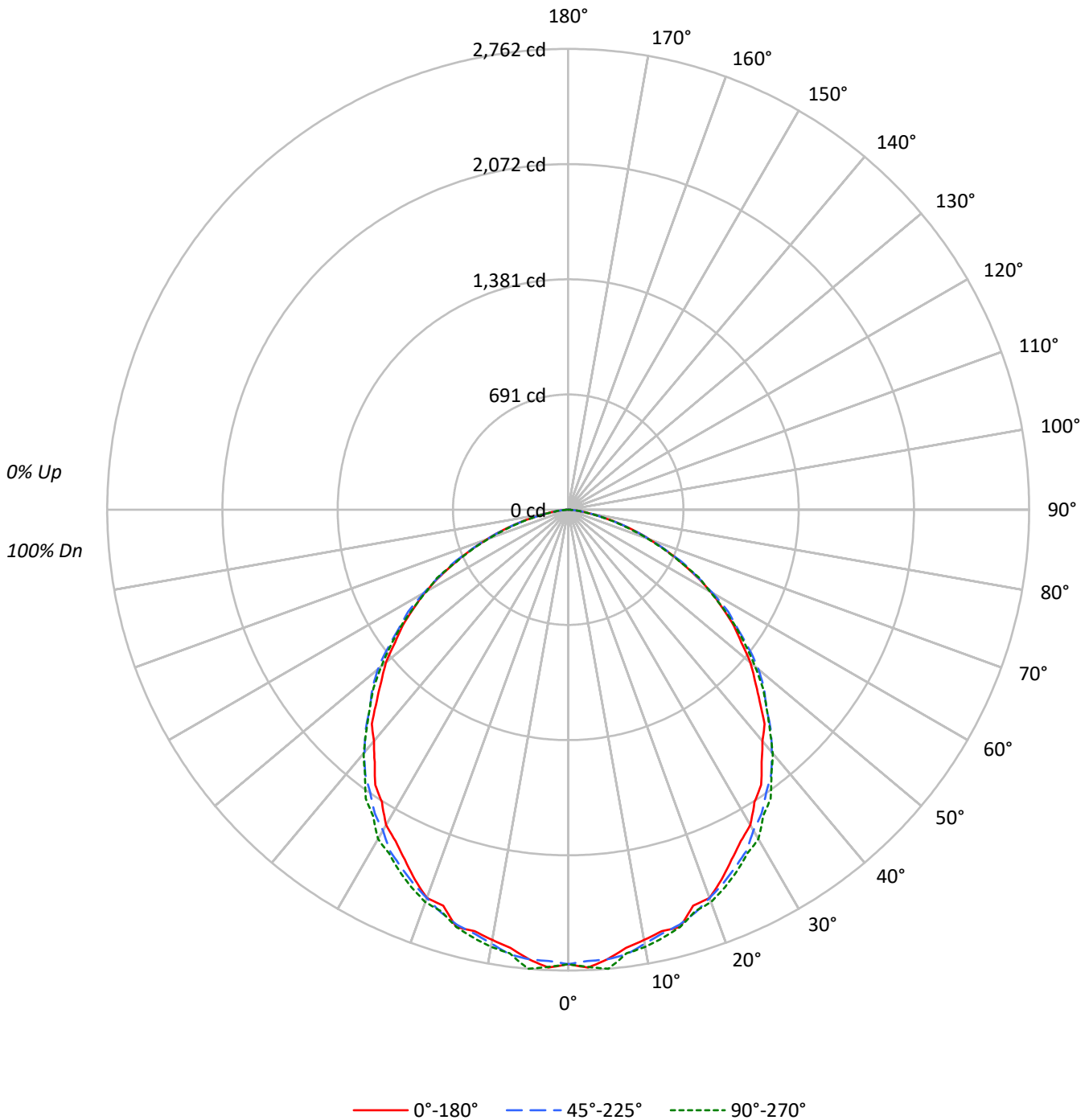
Lumens per Lamp: N/A
Luminaire Lumens: 6864.0 lumens
Efficiency: N/A
Efficacy: 105.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 64.8
Input Voltage (V): NR
Input Current (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	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					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°	7329	7329	7329
5°	7304	7307	7461
10°	7156	7219	7270
15°	7213	7174	7214
20°	7091	7091	7167
25°	6873	7024	7101
30°	6779	6898	7081
35°	6619	6793	6945
40°	6362	6668	6698
45°	6169	6388	6398
50°	5966	6236	6117
55°	5685	5796	5754
60°	5316	5369	5273
65°	4740	4861	4706
70°	4067	4081	3968
75°	3221	3214	3089
80°	2157	2098	2016
85°	1173	1161	1087



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.2	3.7
10°-20°	726.1	10.6
20°-30°	1087.8	15.8
30°-40°	1289.2	18.8
40°-50°	1291.6	18.8
50°-60°	1096.4	16.0
60°-70°	739.2	10.8
70°-80°	324.8	4.7
80°-90°	52.8	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°	2070.0	30.2
0°-40°	3359.3	48.9
0°-60°	5747.3	83.7
0°-90°	6864.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6864.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2724	2724	2724	2724	2724	
5°	2704	2698	2705	2697	2762	255
15°	2589	2559	2575	2588	2590	721
25°	2315	2328	2366	2396	2392	1070
35°	2015	2021	2068	2116	2114	1251
45°	1621	1651	1679	1722	1681	1254
55°	1212	1204	1235	1227	1226	1078
65°	744	735	763	734	739	740
75°	310	304	309	287	297	332
85°	38	37	38	37	35	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2723.5	2723.5	2723.5	2723.5	2723.5
2.5°	2747.0	2726.3	2706.9	2729.4	2743.2
5°	2704.1	2697.8	2705.2	2697.1	2762.1
7.5°	2648.6	2672.8	2686.9	2678.1	2682.0
10°	2619.0	2610.6	2641.9	2663.7	2660.5
12.5°	2587.4	2600.0	2601.8	2625.4	2627.5
15°	2589.1	2559.2	2575.1	2588.4	2589.5
17.5°	2488.6	2520.9	2531.8	2562.4	2524.4
20°	2476.3	2452.7	2476.3	2507.6	2502.6
22.5°	2400.7	2374.3	2424.9	2452.7	2450.9
25°	2314.9	2327.5	2365.5	2396.4	2391.5
27.5°	2239.6	2254.4	2308.5	2351.1	2323.6
30°	2181.6	2174.2	2219.9	2257.9	2279.0
32.5°	2077.8	2104.6	2158.0	2195.6	2175.6
35°	2014.9	2020.9	2067.7	2115.5	2114.1
37.5°	1904.8	1932.6	1998.4	2011.7	1999.4
40°	1811.0	1838.7	1898.2	1912.6	1906.6
42.5°	1741.7	1746.6	1797.6	1814.1	1787.7
45°	1621.1	1651.3	1678.7	1722.0	1681.2
47.5°	1518.4	1532.5	1591.5	1603.1	1581.7
50°	1425.2	1430.1	1489.6	1475.1	1461.1
52.5°	1308.1	1328.9	1362.3	1359.4	1342.9
55°	1211.8	1203.7	1235.3	1226.9	1226.5
57.5°	1096.1	1110.1	1136.2	1122.8	1101.3
60°	987.8	988.1	997.6	982.5	979.7
62.5°	867.1	871.4	873.5	854.8	885.1
65°	744.4	734.6	763.4	734.2	739.1
67.5°	631.5	636.5	633.7	615.4	622.4
70°	516.9	523.2	518.7	497.9	504.3
72.5°	412.1	404.4	409.3	383.3	395.2
75°	309.8	303.5	309.1	287.3	297.1
77.5°	211.0	215.9	212.4	200.8	207.5
80°	139.2	135.4	135.4	128.7	130.1
82.5°	81.2	77.4	76.3	74.2	77.4
85°	38.0	36.9	37.6	36.6	35.2
87.5°	13.7	14.1	14.1	13.4	12.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)