

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: P589788

Luminaire Tested: **FMR-24-2-LD4-4STD-40-UNV-80-97-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589788
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-LD4-4STD-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

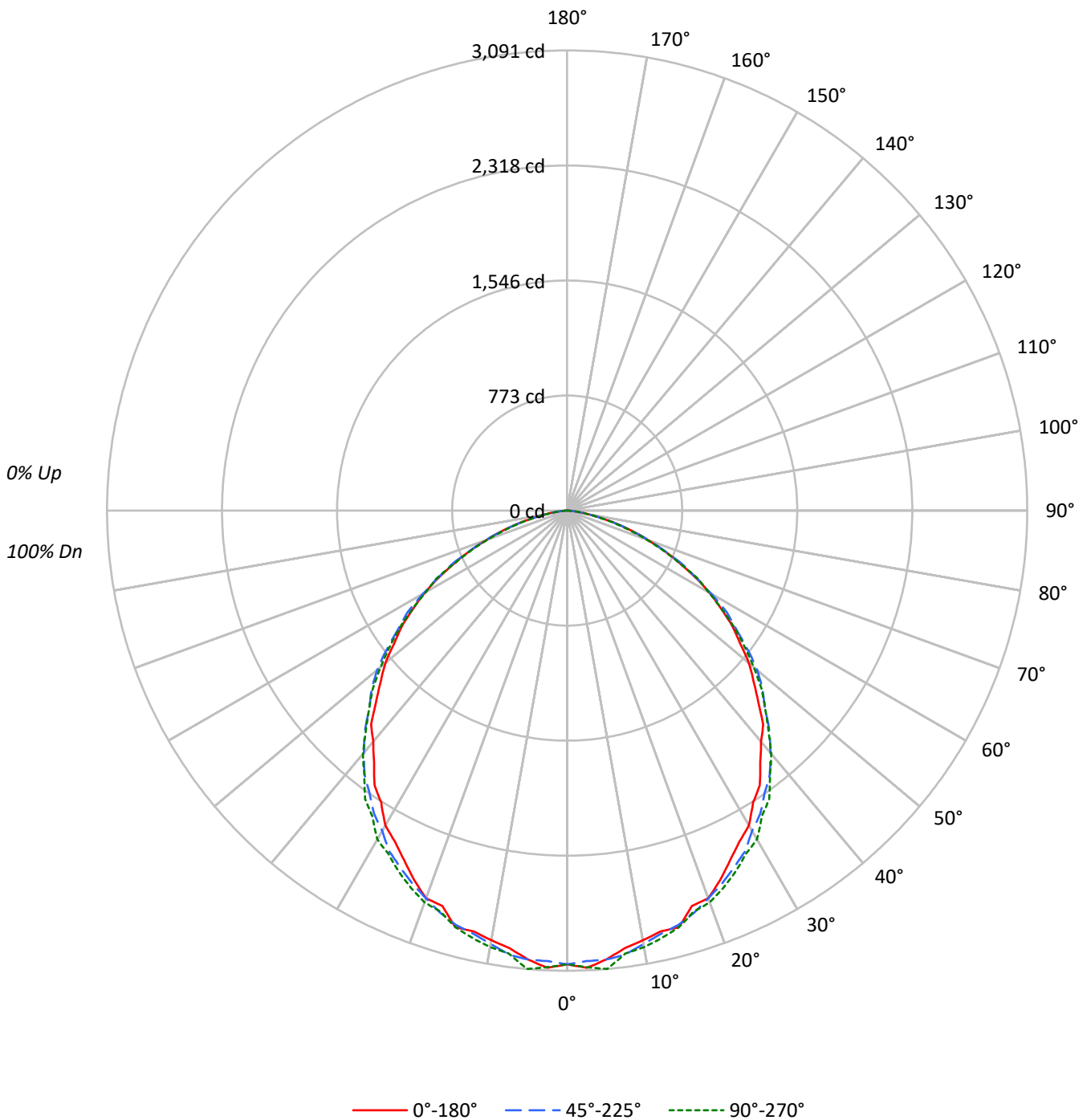
Lumens per Lamp: N/A
Luminaire Lumens: 7681.0 lumens
Efficiency: N/A
Efficacy: 115.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 66.6
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°	8201	8201	8201
5°	8174	8177	8349
10°	8008	8078	8135
15°	8072	8028	8073
20°	7935	7935	8020
25°	7691	7859	7946
30°	7585	7719	7924
35°	7407	7601	7772
40°	7119	7462	7495
45°	6903	7149	7160
50°	6677	6978	6845
55°	6362	6486	6439
60°	5949	6008	5900
65°	5304	5440	5266
70°	4551	4567	4440
75°	3605	3596	3457
80°	2414	2348	2256
85°	1312	1300	1213



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	286.7	3.7
10°-20°	812.5	10.6
20°-30°	1217.3	15.8
30°-40°	1442.7	18.8
40°-50°	1445.4	18.8
50°-60°	1226.9	16.0
60°-70°	827.1	10.8
70°-80°	363.5	4.7
80°-90°	59.1	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°	2316.4	30.2
0°-40°	3759.1	48.9
0°-60°	6431.3	83.7
0°-90°	7681.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7681.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3048	3048	3048	3048	3048	
5°	3026	3019	3027	3018	3091	285
15°	2897	2864	2882	2896	2898	807
25°	2590	2605	2647	2682	2676	1198
35°	2255	2261	2314	2367	2366	1400
45°	1814	1848	1879	1927	1881	1403
55°	1356	1347	1382	1373	1372	1206
65°	833	822	854	822	827	828
75°	347	340	346	322	332	372
85°	42	41	42	41	39	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3047.6	3047.6	3047.6	3047.6	3047.6
2.5°	3074.0	3050.8	3029.1	3054.3	3069.7
5°	3026.0	3018.9	3027.2	3018.1	3090.9
7.5°	2963.8	2991.0	3006.7	2996.9	3001.2
10°	2930.8	2921.3	2956.3	2980.7	2977.2
12.5°	2895.3	2909.5	2911.5	2937.8	2940.2
15°	2897.3	2863.9	2881.6	2896.5	2897.7
17.5°	2784.8	2821.0	2833.2	2867.4	2824.9
20°	2771.0	2744.6	2771.0	2806.0	2800.5
22.5°	2686.4	2656.9	2713.5	2744.6	2742.7
25°	2590.4	2604.6	2647.0	2681.7	2676.2
27.5°	2506.2	2522.7	2583.3	2630.9	2600.2
30°	2441.2	2433.0	2484.1	2526.6	2550.2
32.5°	2325.2	2355.1	2414.9	2457.0	2434.6
35°	2254.7	2261.4	2313.8	2367.3	2365.7
37.5°	2131.6	2162.7	2236.2	2251.2	2237.4
40°	2026.5	2057.6	2124.1	2140.2	2133.5
42.5°	1949.0	1954.5	2011.6	2030.0	2000.5
45°	1814.0	1847.9	1878.6	1927.0	1881.3
47.5°	1699.1	1714.9	1781.0	1793.9	1769.9
50°	1594.8	1600.3	1666.8	1650.7	1635.0
52.5°	1463.8	1487.0	1524.4	1521.3	1502.8
55°	1356.0	1346.9	1382.4	1372.9	1372.5
57.5°	1226.5	1242.3	1271.4	1256.4	1232.4
60°	1105.3	1105.7	1116.3	1099.4	1096.3
62.5°	970.4	975.1	977.4	956.6	990.4
65°	833.0	822.0	854.3	821.6	827.1
67.5°	706.7	712.2	709.1	688.6	696.5
70°	578.4	585.5	580.4	557.2	564.3
72.5°	461.2	452.5	458.0	428.9	442.3
75°	346.7	339.6	345.9	321.5	332.5
77.5°	236.1	241.6	237.7	224.7	232.2
80°	155.8	151.5	151.5	144.0	145.6
82.5°	90.9	86.6	85.4	83.0	86.6
85°	42.5	41.3	42.1	40.9	39.3
87.5°	15.3	15.7	15.7	15.0	14.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)