

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: P588730

Luminaire Tested: **FMR-24-2-LD4-1HI-40-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588730
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-LD4-1HI-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

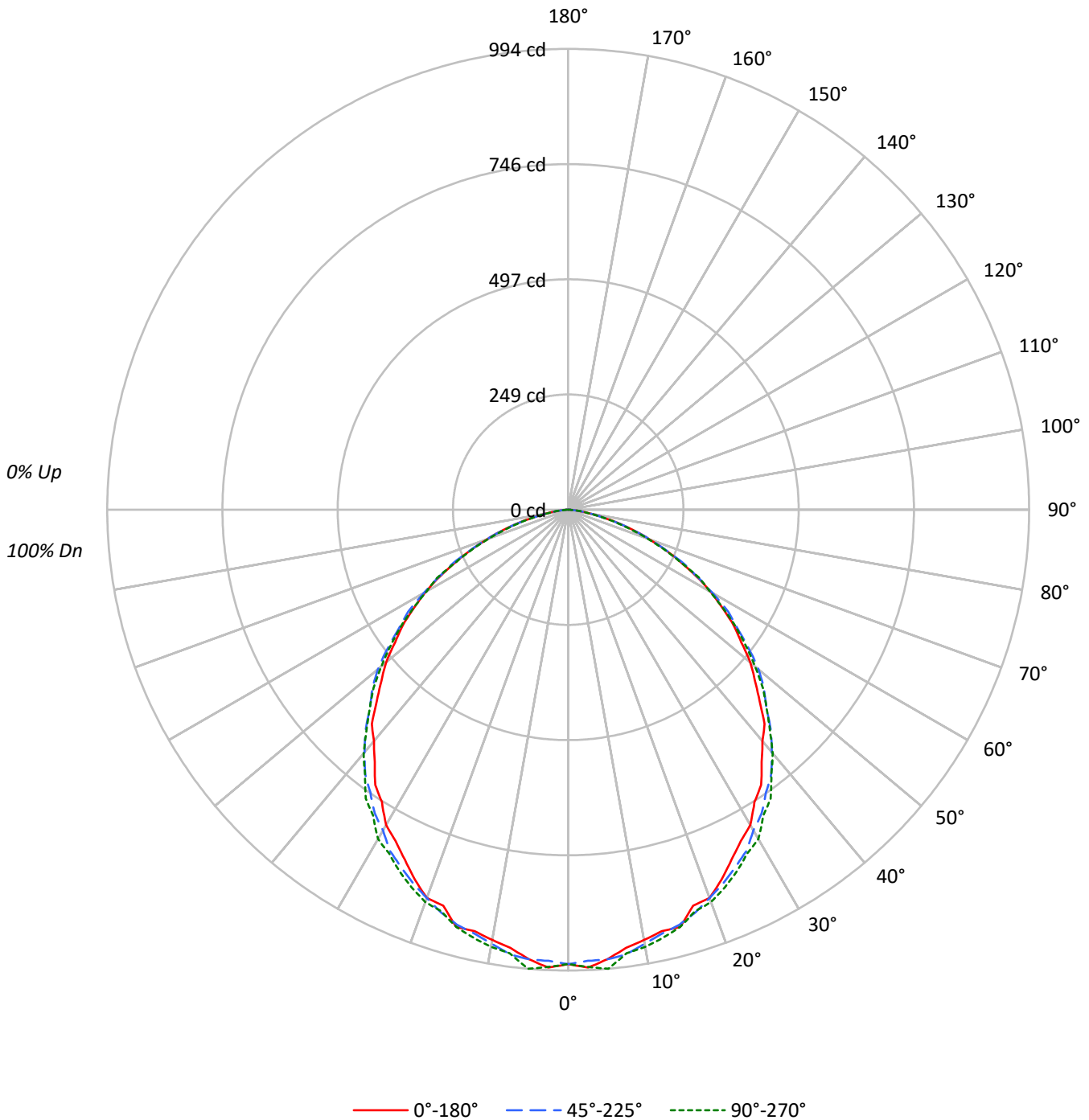
Lumens per Lamp: N/A
Luminaire Lumens: 2470.0 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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	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°	2637	2637	2637
5°	2629	2630	2685
10°	2575	2598	2616
15°	2596	2581	2596
20°	2552	2552	2579
25°	2473	2527	2555
30°	2439	2482	2548
35°	2382	2444	2499
40°	2289	2399	2410
45°	2220	2299	2302
50°	2147	2244	2201
55°	2046	2085	2071
60°	1913	1932	1897
65°	1706	1749	1694
70°	1463	1468	1428
75°	1159	1156	1111
80°	776	755	725
85°	423	417	392



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.2	3.7
10°-20°	261.3	10.6
20°-30°	391.4	15.8
30°-40°	463.9	18.8
40°-50°	464.8	18.8
50°-60°	394.5	16.0
60°-70°	266.0	10.8
70°-80°	116.9	4.7
80°-90°	19.0	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°	744.9	30.2
0°-40°	1208.8	48.9
0°-60°	2068.1	83.7
0°-90°	2470.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2470.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	980	980	980	980	980	
5°	973	971	974	970	994	92
15°	932	921	927	931	932	260
25°	833	838	851	862	861	385
35°	725	727	744	761	761	450
45°	583	594	604	620	605	451
55°	436	433	444	442	441	388
65°	268	264	275	264	266	266
75°	112	109	111	103	107	119
85°	14	13	14	13	13	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	980.0	980.0	980.0	980.0	980.0
2.5°	988.5	981.0	974.1	982.2	987.1
5°	973.1	970.8	973.5	970.5	994.0
7.5°	953.1	961.8	966.9	963.7	965.1
10°	942.5	939.4	950.7	958.5	957.4
12.5°	931.1	935.6	936.3	944.7	945.5
15°	931.7	920.9	926.6	931.4	931.8
17.5°	895.5	907.1	911.1	922.1	908.4
20°	891.1	882.6	891.1	902.3	900.6
22.5°	863.9	854.4	872.6	882.6	882.0
25°	833.0	837.6	851.2	862.4	860.6
27.5°	805.9	811.2	830.7	846.0	836.2
30°	785.0	782.4	798.8	812.5	820.1
32.5°	747.7	757.3	776.6	790.1	782.9
35°	725.1	727.2	744.0	761.3	760.7
37.5°	685.5	695.5	719.1	723.9	719.5
40°	651.7	661.7	683.0	688.2	686.1
42.5°	626.7	628.5	646.9	652.8	643.3
45°	583.3	594.2	604.1	619.7	605.0
47.5°	546.4	551.5	572.7	576.9	569.2
50°	512.9	514.6	536.0	530.8	525.8
52.5°	470.7	478.2	490.2	489.2	483.2
55°	436.0	433.1	444.5	441.5	441.4
57.5°	394.4	399.5	408.8	404.0	396.3
60°	355.4	355.6	359.0	353.5	352.5
62.5°	312.0	313.6	314.3	307.6	318.5
65°	267.9	264.3	274.7	264.2	266.0
67.5°	227.3	229.0	228.0	221.4	224.0
70°	186.0	188.3	186.6	179.2	181.5
72.5°	148.3	145.5	147.3	137.9	142.2
75°	111.5	109.2	111.2	103.4	106.9
77.5°	75.9	77.7	76.4	72.3	74.7
80°	50.1	48.7	48.7	46.3	46.8
82.5°	29.2	27.8	27.5	26.7	27.8
85°	13.7	13.3	13.5	13.2	12.7
87.5°	4.9	5.1	5.1	4.8	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)