

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: P588754

Luminaire Tested: **FMR-24-2-LD4-1HI-40-UNV-93-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588754
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-93-94-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

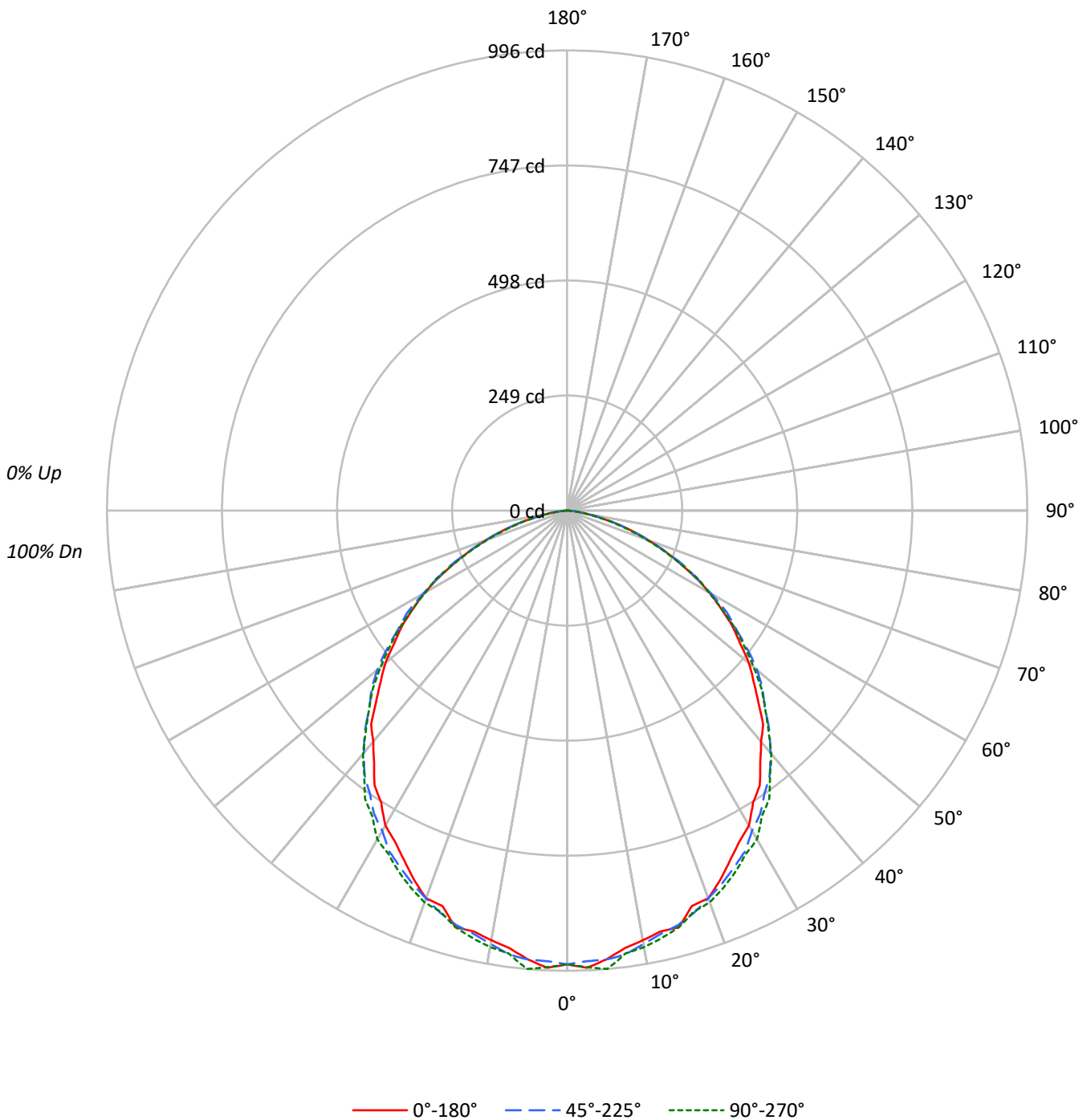
Lumens per Lamp: N/A
Luminaire Lumens: 2475.0 lumens
Efficiency: N/A
Efficacy: 114.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	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°	2643	2643	2643
5°	2634	2635	2690
10°	2581	2603	2621
15°	2601	2587	2601
20°	2557	2557	2584
25°	2478	2532	2560
30°	2444	2487	2554
35°	2387	2449	2504
40°	2294	2404	2415
45°	2224	2304	2307
50°	2151	2249	2205
55°	2050	2090	2075
60°	1917	1936	1901
65°	1709	1753	1697
70°	1467	1471	1430
75°	1161	1159	1114
80°	778	756	727
85°	423	420	392



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	92.4	3.7
10°-20°	261.8	10.6
20°-30°	392.2	15.8
30°-40°	464.9	18.8
40°-50°	465.7	18.8
50°-60°	395.3	16.0
60°-70°	266.5	10.8
70°-80°	117.1	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°	746.4	30.2
0°-40°	1211.3	48.9
0°-60°	2072.3	83.7
0°-90°	2475.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2475.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	982	982	982	982	982	
5°	975	973	975	972	996	92
15°	934	923	928	933	934	260
25°	835	839	853	864	862	386
35°	726	729	746	763	762	451
45°	584	595	605	621	606	452
55°	437	434	445	442	442	389
65°	268	265	275	265	266	267
75°	112	109	112	104	107	120
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°	982.0	982.0	982.0	982.0	982.0
2.5°	990.5	983.0	976.1	984.2	989.1
5°	975.0	972.8	975.4	972.5	996.0
7.5°	955.0	963.8	968.8	965.7	967.1
10°	944.4	941.3	952.6	960.5	959.3
12.5°	932.9	937.5	938.1	946.6	947.4
15°	933.6	922.8	928.5	933.3	933.7
17.5°	897.3	909.0	912.9	923.9	910.3
20°	892.9	884.4	892.9	904.2	902.4
22.5°	865.6	856.1	874.4	884.4	883.8
25°	834.7	839.2	852.9	864.1	862.3
27.5°	807.5	812.9	832.4	847.7	837.9
30°	786.6	784.0	800.4	814.1	821.8
32.5°	749.2	758.9	778.1	791.7	784.5
35°	726.5	728.7	745.5	762.8	762.3
37.5°	686.8	696.9	720.6	725.4	720.9
40°	653.0	663.0	684.4	689.6	687.5
42.5°	628.0	629.8	648.2	654.1	644.6
45°	584.5	595.4	605.3	620.9	606.2
47.5°	547.5	552.6	573.9	578.1	570.3
50°	513.9	515.7	537.1	531.9	526.8
52.5°	471.7	479.2	491.2	490.2	484.2
55°	436.9	434.0	445.4	442.4	442.3
57.5°	395.2	400.3	409.7	404.9	397.1
60°	356.2	356.3	359.7	354.3	353.2
62.5°	312.7	314.2	315.0	308.2	319.1
65°	268.4	264.9	275.3	264.7	266.5
67.5°	227.7	229.5	228.5	221.9	224.4
70°	186.4	188.7	187.0	179.5	181.8
72.5°	148.6	145.8	147.6	138.2	142.5
75°	111.7	109.4	111.5	103.6	107.1
77.5°	76.1	77.9	76.6	72.4	74.8
80°	50.2	48.8	48.8	46.4	46.9
82.5°	29.3	27.9	27.5	26.8	27.9
85°	13.7	13.3	13.6	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)