

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: P588778

Luminaire Tested: **FMR-24-2-LD4-1HI-50-UNV-82-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588778
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-50-UNV-82-94-EDD
Description: 2X2 FMR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR
TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

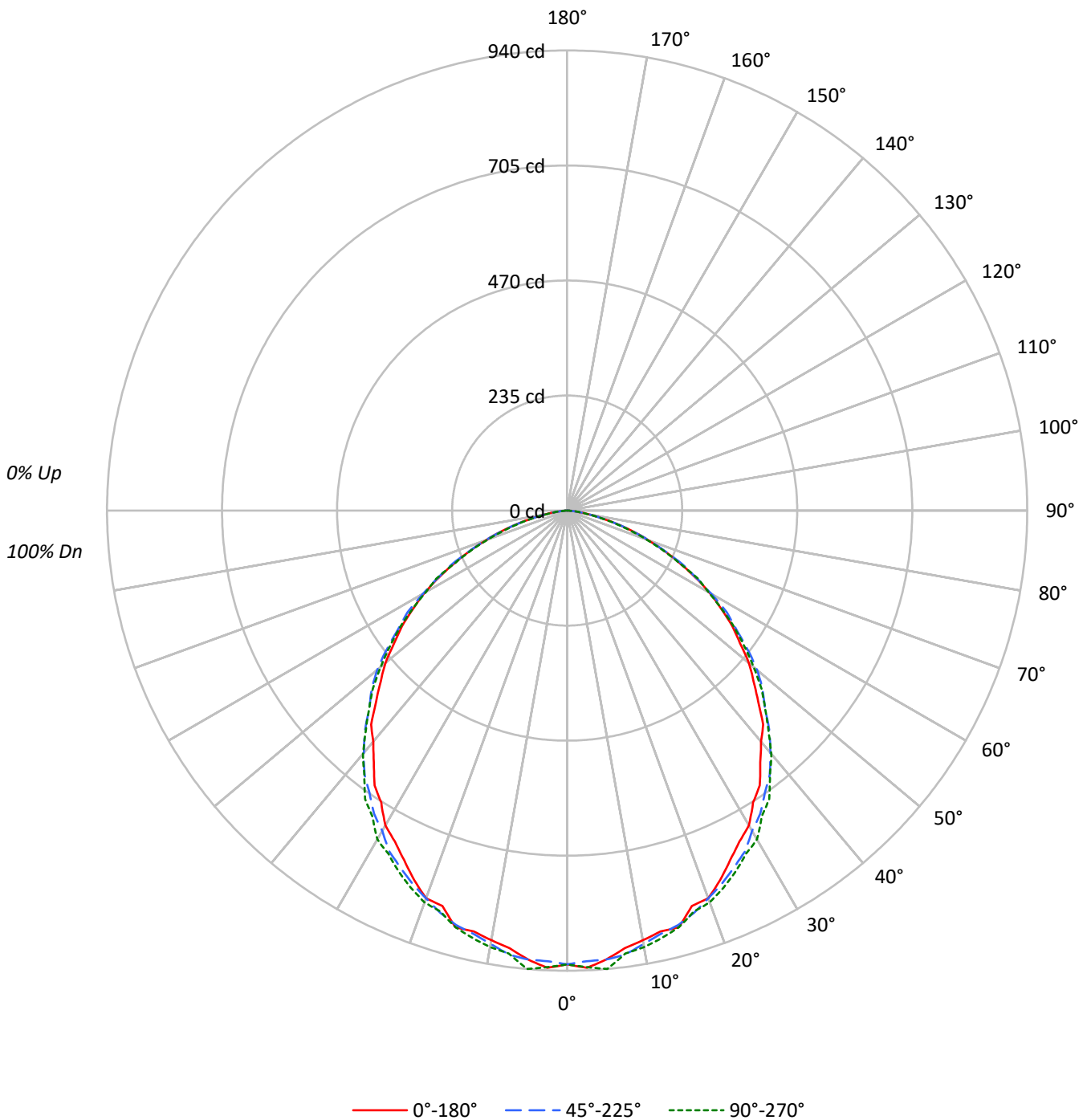
Lumens per Lamp: N/A
Luminaire Lumens: 2336.0 lumens
Efficiency: N/A
Efficacy: 108.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
Input Voltage (V): NR
Input Current (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

TEST NUMBER: P588778

CATALOG NUMBER: FMR-24-2-LD4-1HI-50-UNV-82-94-EDD

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°	2494	2494	2494
5°	2486	2487	2539
10°	2435	2457	2474
15°	2455	2442	2455
20°	2413	2413	2439
25°	2339	2390	2417
30°	2307	2348	2410
35°	2253	2312	2364
40°	2165	2269	2279
45°	2100	2174	2178
50°	2030	2122	2081
55°	1935	1972	1958
60°	1809	1827	1794
65°	1613	1654	1602
70°	1384	1389	1350
75°	1096	1094	1051
80°	735	714	687
85°	398	395	371



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.2	3.7
10°-20°	247.1	10.6
20°-30°	370.2	15.8
30°-40°	438.8	18.8
40°-50°	439.6	18.8
50°-60°	373.1	16.0
60°-70°	251.6	10.8
70°-80°	110.5	4.7
80°-90°	18.0	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°	704.5	30.2
0°-40°	1143.2	48.9
0°-60°	1955.9	83.7
0°-90°	2336.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2336.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	927	927	927	927	927	
5°	920	918	921	918	940	87
15°	881	871	876	881	881	246
25°	788	792	805	816	814	364
35°	686	688	704	720	720	426
45°	552	562	571	586	572	427
55°	412	410	420	418	417	367
65°	253	250	260	250	252	252
75°	105	103	105	98	101	113
85°	13	13	13	12	12	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	926.9	926.9	926.9	926.9	926.9
2.5°	934.9	927.8	921.2	928.9	933.6
5°	920.3	918.1	920.6	917.9	940.0
7.5°	901.4	909.6	914.4	911.4	912.7
10°	891.3	888.5	899.1	906.5	905.4
12.5°	880.6	884.9	885.5	893.5	894.2
15°	881.2	871.0	876.4	880.9	881.3
17.5°	846.9	857.9	861.6	872.1	859.1
20°	842.7	834.7	842.7	853.4	851.7
22.5°	817.0	808.0	825.3	834.7	834.1
25°	787.8	792.1	805.0	815.6	813.9
27.5°	762.2	767.2	785.7	800.1	790.8
30°	742.5	739.9	755.5	768.4	775.6
32.5°	707.1	716.2	734.4	747.2	740.4
35°	685.7	687.8	703.7	720.0	719.5
37.5°	648.3	657.7	680.1	684.6	680.5
40°	616.3	625.8	646.0	650.9	648.9
42.5°	592.7	594.4	611.8	617.4	608.4
45°	551.7	562.0	571.3	586.0	572.2
47.5°	516.7	521.5	541.6	545.6	538.3
50°	485.0	486.7	506.9	502.0	497.2
52.5°	445.2	452.2	463.6	462.7	457.0
55°	412.4	409.6	420.4	417.5	417.4
57.5°	373.0	377.8	386.7	382.1	374.8
60°	336.2	336.3	339.5	334.4	333.4
62.5°	295.1	296.5	297.3	290.9	301.2
65°	253.3	250.0	259.8	249.9	251.6
67.5°	214.9	216.6	215.7	209.4	211.8
70°	175.9	178.1	176.5	169.5	171.6
72.5°	140.3	137.6	139.3	130.4	134.5
75°	105.4	103.3	105.2	97.8	101.1
77.5°	71.8	73.5	72.3	68.3	70.6
80°	47.4	46.1	46.1	43.8	44.3
82.5°	27.6	26.3	26.0	25.3	26.3
85°	12.9	12.6	12.8	12.4	12.0
87.5°	4.7	4.8	4.8	4.5	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)