

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: P589083

Luminaire Tested: **FMR-24-2-LD4-2LO-35-UNV-80-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589083
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-LD4-2LO-35-UNV-80-96-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

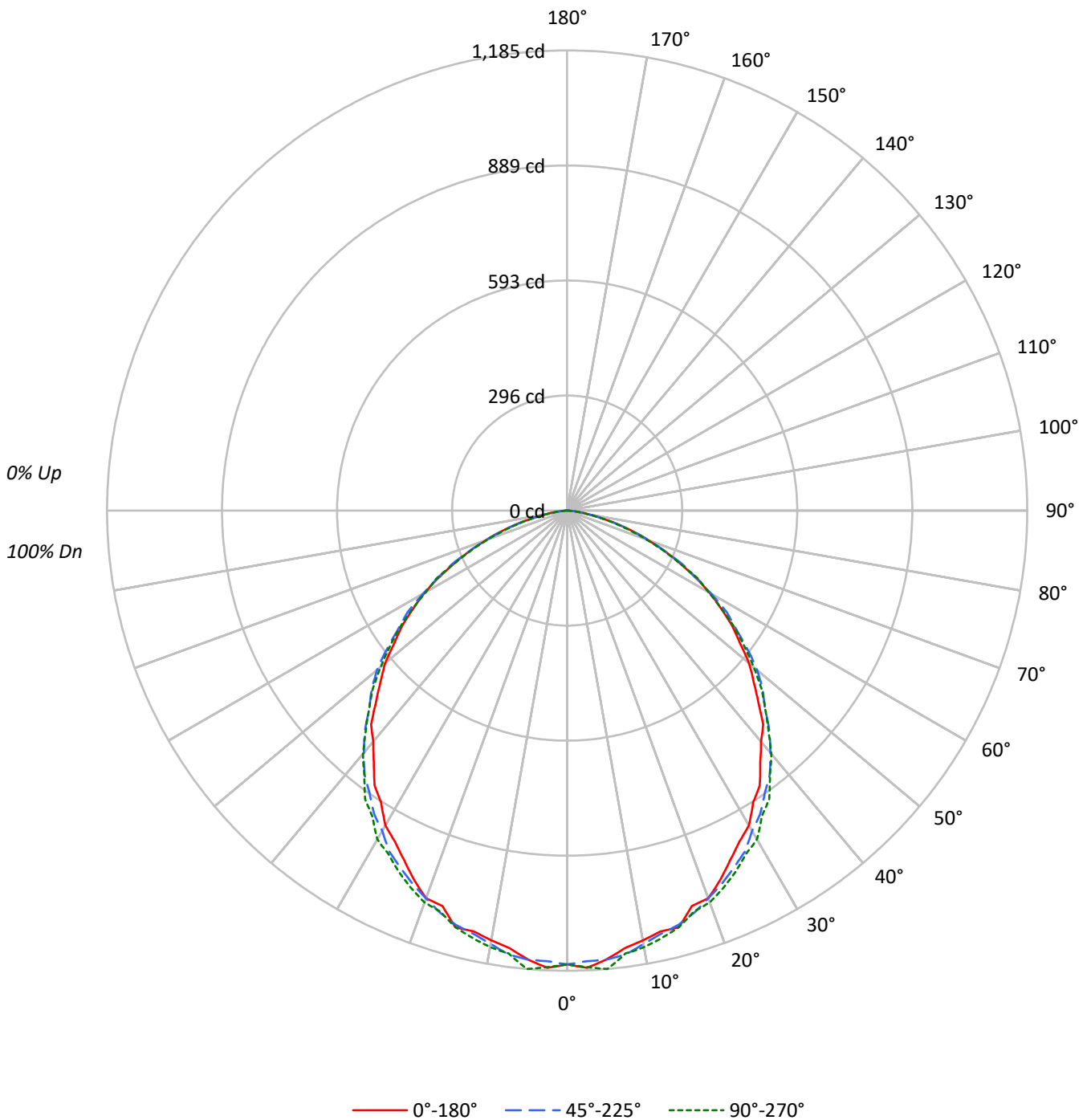
Lumens per Lamp: N/A
Luminaire Lumens: 2945.0 lumens
Efficiency: N/A
Efficacy: 125.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	3144	3144	3144
5°	3134	3135	3201
10°	3071	3097	3119
15°	3095	3078	3095
20°	3042	3042	3075
25°	2949	3013	3047
30°	2908	2960	3038
35°	2840	2914	2980
40°	2729	2861	2873
45°	2647	2741	2745
50°	2560	2676	2624
55°	2439	2487	2469
60°	2281	2303	2262
65°	2034	2085	2019
70°	1745	1751	1703
75°	1382	1379	1326
80°	925	900	865
85°	503	497	466



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.9	3.7
10°-20°	311.5	10.6
20°-30°	466.7	15.8
30°-40°	553.1	18.8
40°-50°	554.2	18.8
50°-60°	470.4	16.0
60°-70°	317.1	10.8
70°-80°	139.3	4.7
80°-90°	22.6	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°	888.1	30.2
0°-40°	1441.3	48.9
0°-60°	2465.8	83.7
0°-90°	2945.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2945.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1160	1158	1161	1157	1185	109
15°	1111	1098	1105	1111	1111	310
25°	993	999	1015	1028	1026	459
35°	864	867	887	908	907	537
45°	696	708	720	739	721	538
55°	520	516	530	526	526	462
65°	319	315	328	315	317	318
75°	133	130	133	123	128	142
85°	16	16	16	16	15	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1168.5	1168.5	1168.5	1168.5	1168.5
2.5°	1178.6	1169.7	1161.4	1171.1	1177.0
5°	1160.2	1157.5	1160.7	1157.2	1185.1
7.5°	1136.4	1146.8	1152.8	1149.0	1150.7
10°	1123.7	1120.1	1133.5	1142.9	1141.5
12.5°	1110.1	1115.5	1116.3	1126.4	1127.3
15°	1110.9	1098.0	1104.8	1110.6	1111.0
17.5°	1067.7	1081.6	1086.3	1099.4	1083.1
20°	1062.4	1052.3	1062.4	1075.9	1073.8
22.5°	1030.0	1018.7	1040.4	1052.3	1051.6
25°	993.2	998.6	1014.9	1028.2	1026.1
27.5°	960.9	967.2	990.5	1008.7	997.0
30°	936.0	932.8	952.5	968.7	977.8
32.5°	891.5	903.0	925.9	942.0	933.4
35°	864.5	867.1	887.1	907.6	907.0
37.5°	817.3	829.2	857.4	863.1	857.9
40°	777.0	788.9	814.4	820.6	818.0
42.5°	747.3	749.4	771.3	778.3	767.0
45°	695.5	708.5	720.3	738.8	721.3
47.5°	651.5	657.5	682.8	687.8	678.6
50°	611.5	613.6	639.1	632.9	626.9
52.5°	561.2	570.1	584.5	583.3	576.2
55°	519.9	516.4	530.0	526.4	526.2
57.5°	470.3	476.3	487.5	481.7	472.5
60°	423.8	423.9	428.0	421.5	420.3
62.5°	372.0	373.9	374.8	366.8	379.7
65°	319.4	315.2	327.5	315.0	317.1
67.5°	271.0	273.1	271.9	264.0	267.0
70°	221.8	224.5	222.5	213.6	216.4
72.5°	176.8	173.5	175.6	164.5	169.6
75°	132.9	130.2	132.6	123.3	127.5
77.5°	90.5	92.6	91.1	86.1	89.0
80°	59.7	58.1	58.1	55.2	55.8
82.5°	34.9	33.2	32.7	31.8	33.2
85°	16.3	15.8	16.1	15.7	15.1
87.5°	5.9	6.0	6.0	5.7	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)