

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: P588890

Luminaire Tested: **FMR-24-2-LD4-1STD-35-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588890
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-LD4-1STD-35-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 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

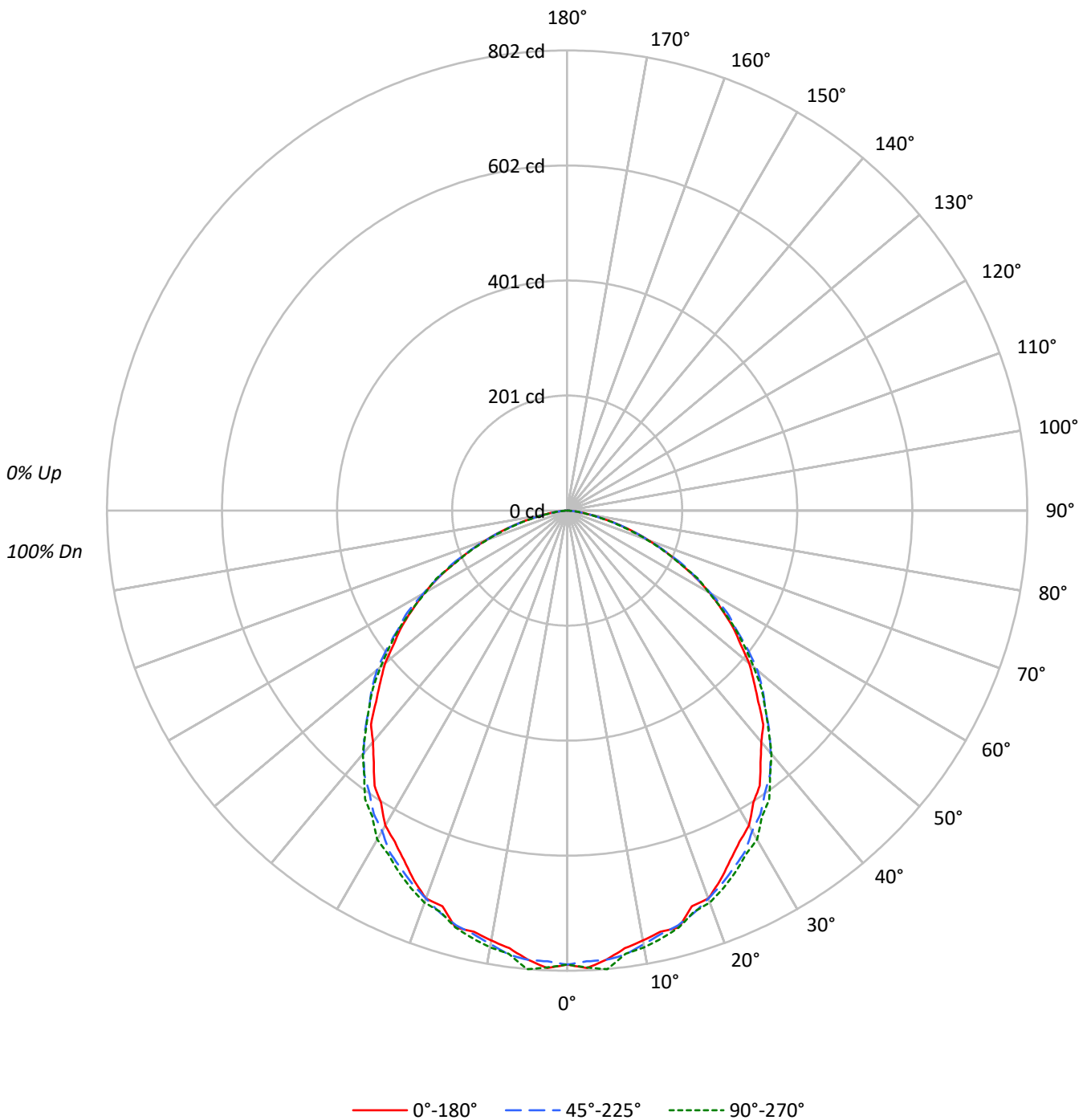
Lumens per Lamp: N/A
Luminaire Lumens: 1994.0 lumens
Efficiency: N/A
Efficacy: 120.1 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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

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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°	2129	2129	2129
5°	2122	2123	2167
10°	2079	2097	2112
15°	2095	2084	2096
20°	2060	2060	2082
25°	1997	2040	2063
30°	1969	2004	2057
35°	1923	1973	2017
40°	1848	1937	1946
45°	1792	1856	1859
50°	1733	1811	1777
55°	1651	1684	1672
60°	1544	1560	1532
65°	1377	1412	1367
70°	1182	1186	1153
75°	936	934	897
80°	628	609	586
85°	340	337	315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.4	3.7
10°-20°	210.9	10.6
20°-30°	316.0	15.8
30°-40°	374.5	18.8
40°-50°	375.2	18.8
50°-60°	318.5	16.0
60°-70°	214.7	10.8
70°-80°	94.4	4.7
80°-90°	15.3	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°	601.3	30.2
0°-40°	975.9	48.9
0°-60°	1669.6	83.7
0°-90°	1994.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1994.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	791	791	791	791	791	
5°	786	784	786	784	802	74
15°	752	744	748	752	752	210
25°	672	676	687	696	695	311
35°	585	587	601	614	614	363
45°	471	480	488	500	488	364
55°	352	350	359	356	356	313
65°	216	213	222	213	215	215
75°	90	88	90	84	86	96
85°	11	11	11	11	10	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	791.2	791.2	791.2	791.2	791.2
2.5°	798.0	792.0	786.4	792.9	796.9
5°	785.6	783.7	785.9	783.5	802.4
7.5°	769.4	776.5	780.5	778.0	779.1
10°	760.8	758.4	767.5	773.8	772.9
12.5°	751.6	755.3	755.8	762.7	763.3
15°	752.1	743.5	748.1	751.9	752.2
17.5°	722.9	732.3	735.5	744.4	733.4
20°	719.4	712.5	719.4	728.4	727.0
22.5°	697.4	689.7	704.4	712.5	712.0
25°	672.5	676.1	687.2	696.2	694.7
27.5°	650.6	654.9	670.6	683.0	675.0
30°	633.8	631.6	644.9	655.9	662.0
32.5°	603.6	611.4	626.9	637.8	632.0
35°	585.3	587.1	600.7	614.5	614.1
37.5°	553.4	561.4	580.5	584.4	580.8
40°	526.1	534.2	551.4	555.6	553.9
42.5°	506.0	507.4	522.2	527.0	519.3
45°	470.9	479.7	487.7	500.2	488.4
47.5°	441.1	445.2	462.3	465.7	459.5
50°	414.0	415.5	432.7	428.5	424.4
52.5°	380.0	386.0	395.7	394.9	390.1
55°	352.0	349.7	358.9	356.4	356.3
57.5°	318.4	322.5	330.1	326.2	319.9
60°	286.9	287.0	289.8	285.4	284.6
62.5°	251.9	253.1	253.7	248.3	257.1
65°	216.3	213.4	221.8	213.3	214.7
67.5°	183.5	184.9	184.1	178.8	180.8
70°	150.2	152.0	150.7	144.6	146.5
72.5°	119.7	117.5	118.9	111.3	114.8
75°	90.0	88.2	89.8	83.5	86.3
77.5°	61.3	62.7	61.7	58.3	60.3
80°	40.5	39.3	39.3	37.4	37.8
82.5°	23.6	22.5	22.2	21.6	22.5
85°	11.0	10.7	10.9	10.6	10.2
87.5°	4.0	4.1	4.1	3.9	3.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)