

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: P588914

Luminaire Tested: **FMR-24-2-LD4-1STD-35-UNV-93-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588914
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-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 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

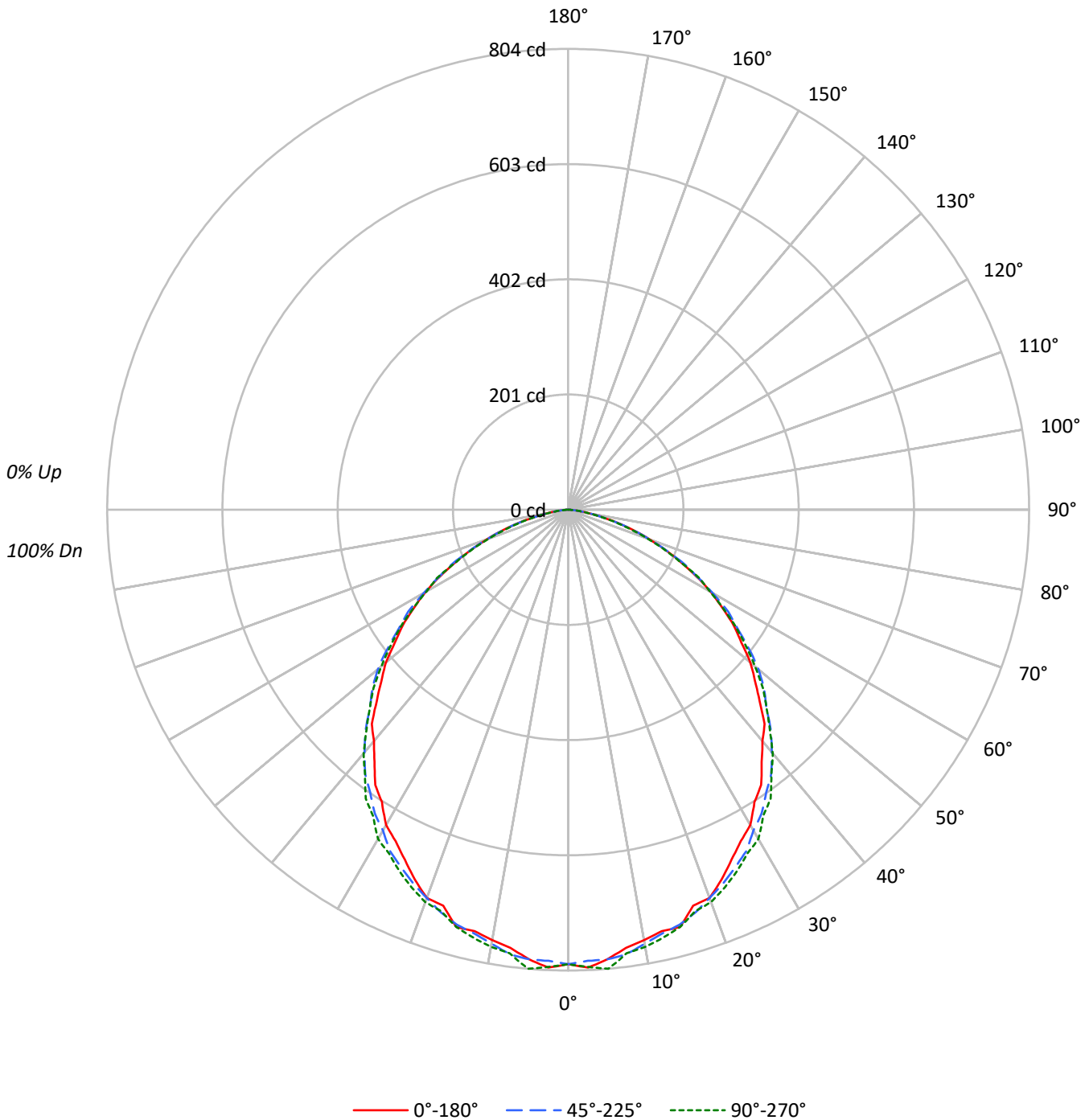
Lumens per Lamp: N/A
Luminaire Lumens: 1998.0 lumens
Efficiency: N/A
Efficacy: 120.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	2133	2133	2133
5°	2126	2127	2172
10°	2083	2101	2116
15°	2100	2088	2100
20°	2064	2064	2086
25°	2001	2045	2067
30°	1973	2008	2061
35°	1927	1977	2022
40°	1852	1941	1950
45°	1796	1860	1862
50°	1737	1815	1780
55°	1655	1687	1675
60°	1547	1563	1535
65°	1380	1415	1370
70°	1184	1188	1155
75°	938	936	899
80°	628	611	587
85°	343	340	315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	3.7
10°-20°	211.3	10.6
20°-30°	316.6	15.8
30°-40°	375.3	18.8
40°-50°	376.0	18.8
50°-60°	319.1	16.0
60°-70°	215.2	10.8
70°-80°	94.5	4.7
80°-90°	15.4	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°	602.6	30.2
0°-40°	977.8	48.9
0°-60°	1672.9	83.7
0°-90°	1998.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1998.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	793	793	793	793	793	
5°	787	785	787	785	804	74
15°	754	745	750	754	754	210
25°	674	678	689	698	696	312
35°	586	588	602	616	615	364
45°	472	481	489	501	489	365
55°	353	350	360	357	357	314
65°	217	214	222	214	215	215
75°	90	88	90	84	86	97
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°	792.8	792.8	792.8	792.8	792.8
2.5°	799.6	793.6	787.9	794.5	798.5
5°	787.1	785.3	787.4	785.1	804.0
7.5°	771.0	778.0	782.1	779.6	780.7
10°	762.4	759.9	769.0	775.4	774.4
12.5°	753.1	756.8	757.3	764.2	764.8
15°	753.7	745.0	749.6	753.5	753.8
17.5°	724.4	733.8	737.0	745.9	734.8
20°	720.8	713.9	720.8	729.9	728.5
22.5°	698.8	691.1	705.9	713.9	713.4
25°	673.8	677.5	688.6	697.6	696.1
27.5°	651.9	656.2	672.0	684.4	676.4
30°	635.0	632.9	646.2	657.2	663.4
32.5°	604.8	612.6	628.2	639.1	633.3
35°	586.5	588.2	601.9	615.8	615.4
37.5°	554.5	562.6	581.7	585.6	582.0
40°	527.1	535.2	552.5	556.7	555.0
42.5°	507.0	508.4	523.2	528.1	520.4
45°	471.9	480.7	488.7	501.2	489.4
47.5°	442.0	446.1	463.3	466.6	460.4
50°	414.9	416.3	433.6	429.4	425.3
52.5°	380.8	386.8	396.5	395.7	390.9
55°	352.7	350.4	359.6	357.1	357.0
57.5°	319.0	323.1	330.7	326.8	320.6
60°	287.5	287.6	290.4	286.0	285.2
62.5°	252.4	253.6	254.3	248.8	257.6
65°	216.7	213.8	222.2	213.7	215.2
67.5°	183.8	185.3	184.4	179.1	181.2
70°	150.5	152.3	151.0	144.9	146.8
72.5°	120.0	117.7	119.1	111.6	115.0
75°	90.2	88.3	90.0	83.6	86.5
77.5°	61.4	62.8	61.8	58.4	60.4
80°	40.5	39.4	39.4	37.5	37.9
82.5°	23.6	22.5	22.2	21.6	22.5
85°	11.1	10.7	11.0	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)