

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: P588915

Luminaire Tested: **FMR-24-2-LD4-1STD-35-UNV-93-96-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588915
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-93-96-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

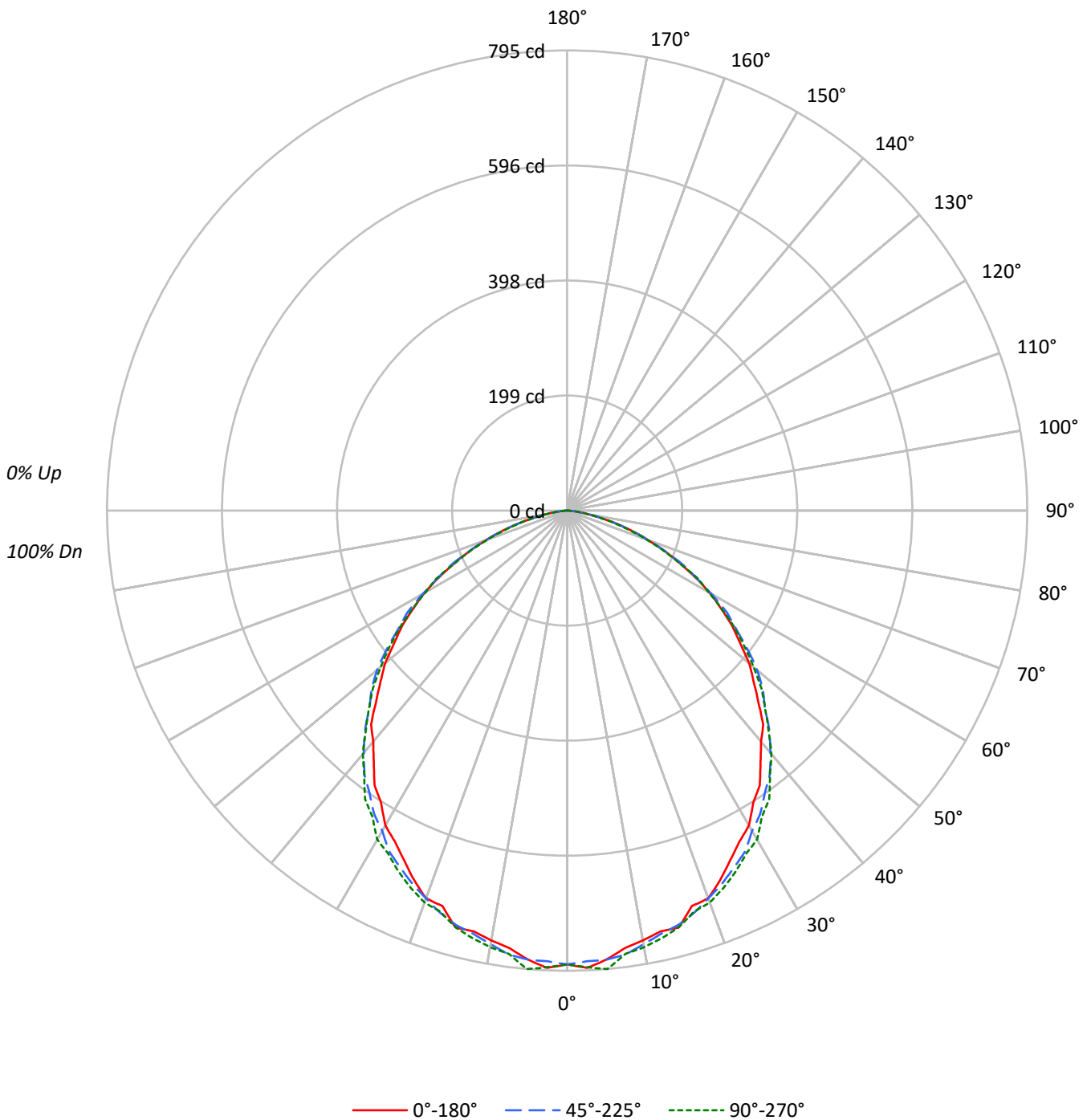
Lumens per Lamp: N/A
Luminaire Lumens: 1976.0 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	2110	2110	2110
5°	2103	2104	2148
10°	2060	2078	2093
15°	2077	2065	2077
20°	2042	2042	2063
25°	1979	2022	2044
30°	1951	1986	2039
35°	1905	1955	1999
40°	1831	1919	1928
45°	1776	1839	1842
50°	1718	1795	1761
55°	1636	1668	1657
60°	1531	1546	1518
65°	1365	1400	1355
70°	1171	1175	1142
75°	927	925	889
80°	621	604	581
85°	337	333	312



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.7	3.7
10°-20°	209.0	10.6
20°-30°	313.2	15.8
30°-40°	371.1	18.8
40°-50°	371.8	18.8
50°-60°	315.6	16.0
60°-70°	212.8	10.8
70°-80°	93.5	4.7
80°-90°	15.2	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°	595.9	30.2
0°-40°	967.1	48.9
0°-60°	1654.5	83.7
0°-90°	1976.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1976.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	784	784	784	784	784	
5°	778	777	779	776	795	73
15°	745	737	741	745	746	208
25°	666	670	681	690	688	308
35°	580	582	595	609	609	360
45°	467	475	483	496	484	361
55°	349	346	356	353	353	310
65°	214	212	220	211	213	213
75°	89	87	89	83	86	96
85°	11	11	11	10	10	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	784.0	784.0	784.0	784.0	784.0
2.5°	790.8	784.8	779.3	785.7	789.7
5°	778.5	776.6	778.8	776.4	795.2
7.5°	762.5	769.4	773.5	771.0	772.1
10°	754.0	751.5	760.5	766.8	765.9
12.5°	744.9	748.5	749.0	755.8	756.4
15°	745.4	736.8	741.3	745.2	745.5
17.5°	716.4	725.7	728.9	737.7	726.7
20°	712.9	706.1	712.9	721.9	720.5
22.5°	691.1	683.5	698.1	706.1	705.6
25°	666.4	670.0	681.0	689.9	688.5
27.5°	644.7	649.0	664.6	676.8	668.9
30°	628.0	625.9	639.1	650.0	656.1
32.5°	598.2	605.9	621.2	632.1	626.3
35°	580.0	581.8	595.2	609.0	608.6
37.5°	548.4	556.4	575.3	579.1	575.6
40°	521.3	529.3	546.4	550.6	548.9
42.5°	501.4	502.8	517.5	522.2	514.7
45°	466.7	475.4	483.3	495.7	484.0
47.5°	437.1	441.2	458.2	461.5	455.3
50°	410.3	411.7	428.8	424.7	420.6
52.5°	376.6	382.5	392.2	391.4	386.6
55°	348.8	346.5	355.6	353.2	353.1
57.5°	315.5	319.6	327.1	323.2	317.1
60°	284.4	284.5	287.2	282.8	282.0
62.5°	249.6	250.8	251.5	246.1	254.8
65°	214.3	211.5	219.8	211.4	212.8
67.5°	181.8	183.2	182.4	177.2	179.2
70°	148.8	150.6	149.3	143.3	145.2
72.5°	118.6	116.4	117.8	110.3	113.8
75°	89.2	87.4	89.0	82.7	85.5
77.5°	60.7	62.2	61.1	57.8	59.7
80°	40.1	39.0	39.0	37.1	37.5
82.5°	23.4	22.3	22.0	21.4	22.3
85°	10.9	10.6	10.8	10.5	10.1
87.5°	3.9	4.0	4.0	3.8	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)