

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: P588975

Luminaire Tested: **FMR-24-2-LD4-1STD-50-UNV-93-86-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588975
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-50-UNV-93-86-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

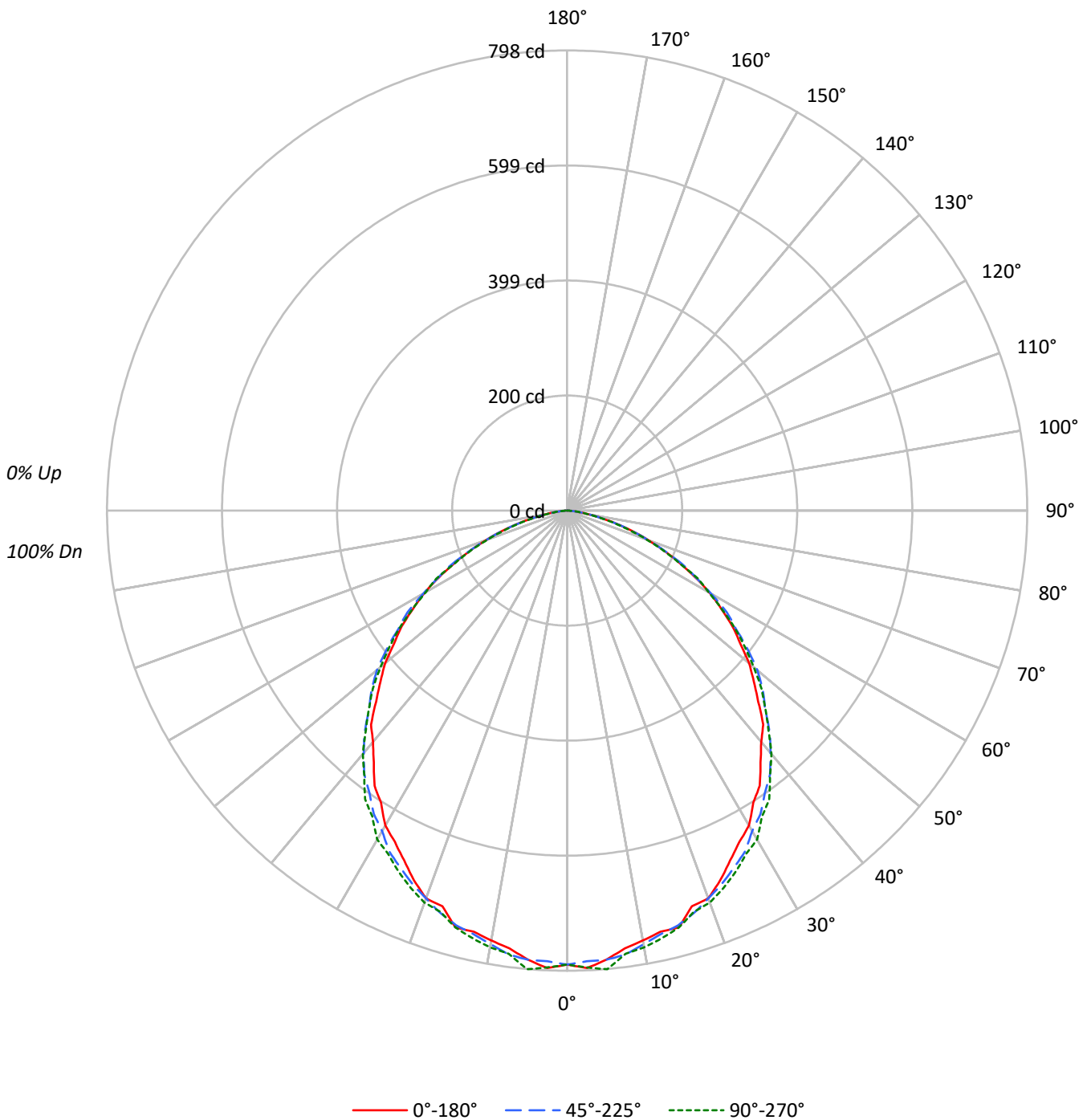
Lumens per Lamp: N/A
Luminaire Lumens: 1984.0 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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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CATALOG NUMBER: FMR-24-2-LD4-1STD-50-UNV-93-86-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°	2118	2118	2118
5°	2111	2112	2157
10°	2068	2087	2101
15°	2085	2074	2085
20°	2050	2050	2072
25°	1987	2030	2053
30°	1959	1994	2047
35°	1913	1963	2008
40°	1839	1927	1936
45°	1783	1846	1849
50°	1724	1802	1768
55°	1643	1675	1663
60°	1537	1552	1524
65°	1370	1405	1360
70°	1175	1179	1147
75°	931	928	893
80°	623	606	583
85°	340	337	315



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.0	3.7
10°-20°	209.9	10.6
20°-30°	314.4	15.8
30°-40°	372.6	18.8
40°-50°	373.3	18.8
50°-60°	316.9	16.0
60°-70°	213.7	10.8
70°-80°	93.9	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°	598.3	30.2
0°-40°	971.0	48.9
0°-60°	1661.2	83.7
0°-90°	1984.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1984.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	787	787	787	787	787	
5°	782	780	782	780	798	74
15°	748	740	744	748	748	209
25°	669	673	684	693	691	309
35°	582	584	598	612	611	362
45°	469	477	485	498	486	362
55°	350	348	357	355	354	312
65°	215	212	221	212	214	214
75°	90	88	89	83	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°	787.2	787.2	787.2	787.2	787.2
2.5°	794.0	788.0	782.4	788.9	792.9
5°	781.6	779.8	781.9	779.6	798.4
7.5°	765.6	772.6	776.6	774.1	775.2
10°	757.0	754.6	763.6	769.9	769.0
12.5°	747.9	751.5	752.0	758.8	759.5
15°	748.4	739.7	744.3	748.2	748.5
17.5°	719.3	728.7	731.8	740.7	729.7
20°	715.7	708.9	715.7	724.8	723.4
22.5°	693.9	686.3	700.9	708.9	708.4
25°	669.1	672.8	683.7	692.7	691.3
27.5°	647.3	651.6	667.3	679.6	671.6
30°	630.6	628.4	641.7	652.6	658.7
32.5°	600.6	608.3	623.8	634.6	628.8
35°	582.4	584.1	597.6	611.5	611.1
37.5°	550.6	558.6	577.6	581.5	577.9
40°	523.4	531.5	548.7	552.8	551.1
42.5°	503.4	504.8	519.6	524.4	516.7
45°	468.6	477.3	485.2	497.7	485.9
47.5°	438.9	442.9	460.0	463.4	457.2
50°	411.9	413.4	430.5	426.4	422.3
52.5°	378.1	384.1	393.8	392.9	388.2
55°	350.3	347.9	357.1	354.6	354.5
57.5°	316.8	320.9	328.4	324.5	318.3
60°	285.5	285.6	288.4	284.0	283.2
62.5°	250.6	251.9	252.5	247.1	255.8
65°	215.2	212.3	220.7	212.2	213.6
67.5°	182.5	184.0	183.2	177.9	179.9
70°	149.4	151.2	149.9	143.9	145.8
72.5°	119.1	116.9	118.3	110.8	114.2
75°	89.5	87.7	89.3	83.0	85.9
77.5°	61.0	62.4	61.4	58.0	60.0
80°	40.2	39.1	39.1	37.2	37.6
82.5°	23.5	22.4	22.1	21.4	22.4
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)