

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: P588946

Luminaire Tested: **FMR-24-2-LD4-1STD-40-UNV-93-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588946
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-40-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 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

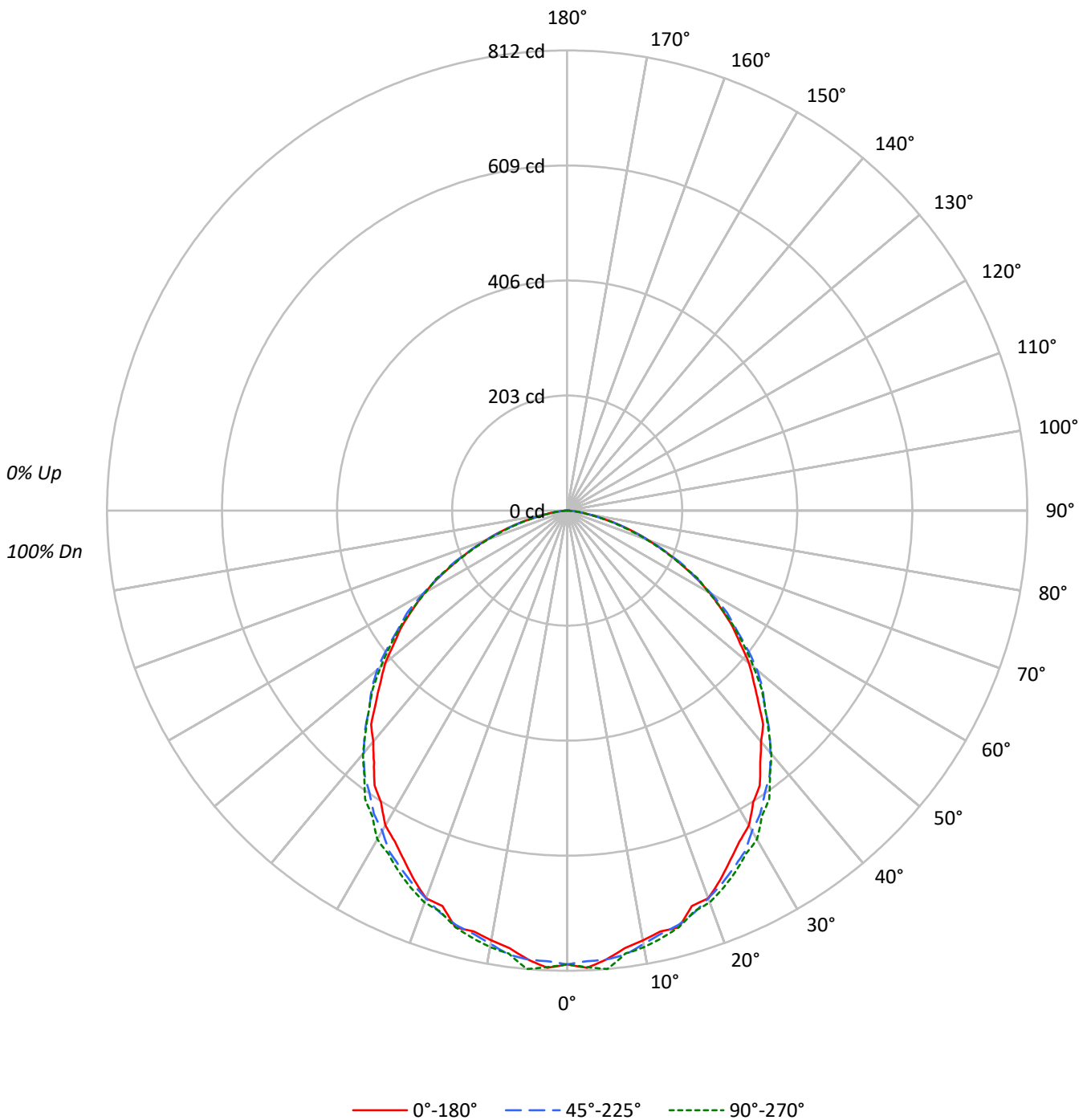
Lumens per Lamp: N/A
Luminaire Lumens: 2018.0 lumens
Efficiency: N/A
Efficacy: 121.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
Input Voltage (V): NR
Input Current (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°	2155	2155	2155
5°	2148	2148	2194
10°	2104	2122	2137
15°	2121	2109	2121
20°	2085	2085	2107
25°	2021	2065	2088
30°	1993	2028	2082
35°	1946	1997	2042
40°	1870	1961	1969
45°	1814	1878	1881
50°	1754	1833	1798
55°	1672	1704	1692
60°	1563	1579	1550
65°	1394	1429	1384
70°	1196	1200	1166
75°	947	945	909
80°	634	617	594
85°	346	343	318



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.3	3.7
10°-20°	213.5	10.6
20°-30°	319.8	15.8
30°-40°	379.0	18.8
40°-50°	379.7	18.8
50°-60°	322.3	16.0
60°-70°	217.3	10.8
70°-80°	95.5	4.7
80°-90°	15.5	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°	608.6	30.2
0°-40°	987.6	48.9
0°-60°	1689.7	83.7
0°-90°	2018.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2018.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	801	801	801	801	801	
5°	795	793	795	793	812	75
15°	761	752	757	761	761	212
25°	681	684	695	704	703	315
35°	592	594	608	622	622	368
45°	477	486	494	506	494	369
55°	356	354	363	361	361	317
65°	219	216	224	216	217	218
75°	91	89	91	84	87	98
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°	800.7	800.7	800.7	800.7	800.7
2.5°	807.6	801.5	795.8	802.4	806.5
5°	795.0	793.1	795.3	792.9	812.1
7.5°	778.7	785.8	789.9	787.4	788.5
10°	770.0	767.5	776.7	783.1	782.2
12.5°	760.7	764.4	764.9	771.8	772.5
15°	761.2	752.4	757.1	761.0	761.3
17.5°	731.6	741.1	744.3	753.3	742.2
20°	728.0	721.1	728.0	737.2	735.8
22.5°	705.8	698.0	712.9	721.1	720.6
25°	680.6	684.3	695.4	704.5	703.1
27.5°	658.4	662.8	678.7	691.2	683.1
30°	641.4	639.2	652.6	663.8	670.0
32.5°	610.9	618.7	634.5	645.5	639.6
35°	592.4	594.1	607.9	621.9	621.5
37.5°	560.0	568.2	587.5	591.4	587.8
40°	532.4	540.6	558.1	562.3	560.5
42.5°	512.0	513.5	528.5	533.3	525.6
45°	476.6	485.5	493.5	506.3	494.3
47.5°	446.4	450.5	467.9	471.3	465.0
50°	419.0	420.5	437.9	433.7	429.6
52.5°	384.6	390.7	400.5	399.7	394.8
55°	356.3	353.9	363.2	360.7	360.6
57.5°	322.2	326.4	334.0	330.1	323.8
60°	290.4	290.5	293.3	288.8	288.0
62.5°	254.9	256.2	256.8	251.3	260.2
65°	218.9	216.0	224.4	215.9	217.3
67.5°	185.7	187.1	186.3	180.9	183.0
70°	152.0	153.8	152.5	146.4	148.2
72.5°	121.2	118.9	120.3	112.7	116.2
75°	91.1	89.2	90.9	84.5	87.4
77.5°	62.0	63.5	62.4	59.0	61.0
80°	40.9	39.8	39.8	37.8	38.3
82.5°	23.9	22.7	22.4	21.8	22.7
85°	11.2	10.9	11.1	10.8	10.3
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)