

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: P588721

Luminaire Tested: **FMR-24-2-LD4-1HI-35-UNV-93-88-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588721
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-LD4-1HI-35-UNV-93-88-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

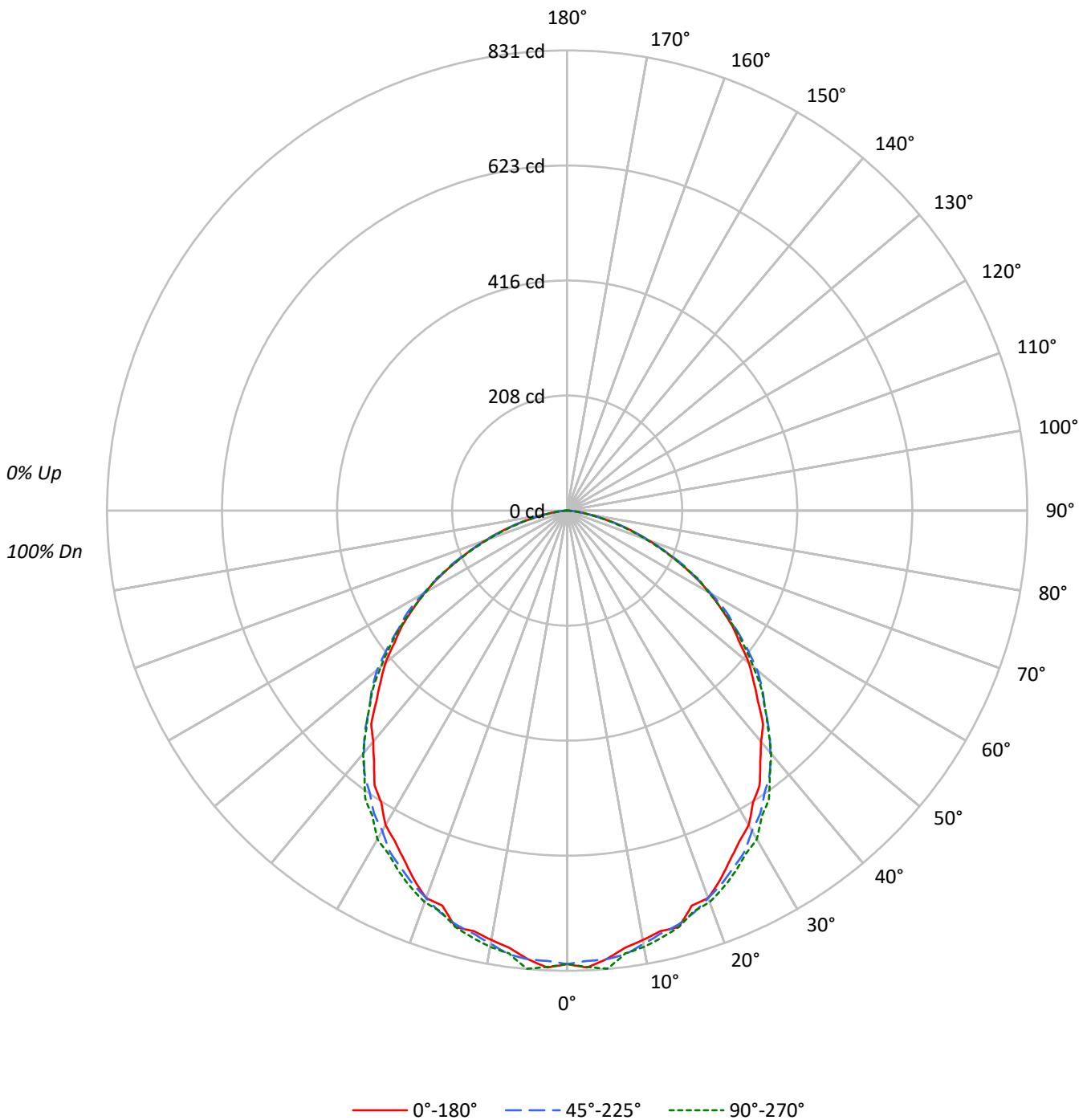
Lumens per Lamp: N/A
Luminaire Lumens: 2064.0 lumens
Efficiency: N/A
Efficacy: 95.6 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 21.6
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°	2204	2204	2204
5°	2196	2197	2244
10°	2152	2171	2186
15°	2169	2157	2169
20°	2132	2132	2155
25°	2067	2112	2135
30°	2038	2074	2129
35°	1990	2042	2088
40°	1913	2005	2014
45°	1855	1921	1924
50°	1794	1875	1839
55°	1710	1743	1730
60°	1598	1615	1586
65°	1425	1462	1415
70°	1223	1227	1193
75°	969	966	928
80°	649	631	606
85°	352	349	327



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.0	3.7
10°-20°	218.3	10.6
20°-30°	327.1	15.8
30°-40°	387.7	18.8
40°-50°	388.4	18.8
50°-60°	329.7	16.0
60°-70°	222.3	10.8
70°-80°	97.7	4.7
80°-90°	15.9	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°	622.4	30.2
0°-40°	1010.1	48.9
0°-60°	1728.2	83.7
0°-90°	2064.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2064.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	819	819	819	819	819	
5°	813	811	813	811	831	77
15°	779	770	774	778	779	217
25°	696	700	711	721	719	322
35°	606	608	622	636	636	376
45°	488	496	505	518	506	377
55°	364	362	372	369	369	324
65°	224	221	230	221	222	223
75°	93	91	93	86	89	100
85°	11	11	11	11	11	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	818.9	818.9	818.9	818.9	818.9
2.5°	826.0	819.8	814.0	820.7	824.9
5°	813.1	811.2	813.4	811.0	830.6
7.5°	796.4	803.7	807.9	805.3	806.5
10°	787.5	785.0	794.4	801.0	800.0
12.5°	778.0	781.8	782.4	789.4	790.1
15°	778.6	769.6	774.3	778.3	778.7
17.5°	748.3	758.0	761.3	770.5	759.1
20°	744.6	737.5	744.6	754.0	752.5
22.5°	721.9	713.9	729.2	737.5	737.0
25°	696.1	699.9	711.3	720.6	719.1
27.5°	673.4	677.9	694.2	707.0	698.7
30°	656.0	653.8	667.5	678.9	685.3
32.5°	624.8	632.8	648.9	660.2	654.2
35°	605.9	607.7	621.7	636.1	635.7
37.5°	572.8	581.1	600.9	604.9	601.2
40°	544.6	552.9	570.8	575.1	573.3
42.5°	523.7	525.2	540.5	545.5	537.6
45°	487.5	496.5	504.8	517.8	505.5
47.5°	456.6	460.8	478.6	482.1	475.6
50°	428.6	430.0	447.9	443.6	439.3
52.5°	393.3	399.6	409.6	408.8	403.8
55°	364.4	361.9	371.5	368.9	368.8
57.5°	329.6	333.8	341.6	337.6	331.2
60°	297.0	297.1	300.0	295.4	294.6
62.5°	260.8	262.0	262.7	257.0	266.1
65°	223.8	220.9	229.6	220.8	222.3
67.5°	189.9	191.4	190.5	185.0	187.2
70°	155.4	157.3	156.0	149.7	151.6
72.5°	123.9	121.6	123.1	115.3	118.8
75°	93.2	91.3	92.9	86.4	89.3
77.5°	63.4	64.9	63.9	60.4	62.4
80°	41.9	40.7	40.7	38.7	39.1
82.5°	24.4	23.3	22.9	22.3	23.3
85°	11.4	11.1	11.3	11.0	10.6
87.5°	4.1	4.2	4.2	4.0	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)