

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: P588694

Luminaire Tested: **FMR-24-2-LD4-1HI-35-UNV-80-85-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588694
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-80-85-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

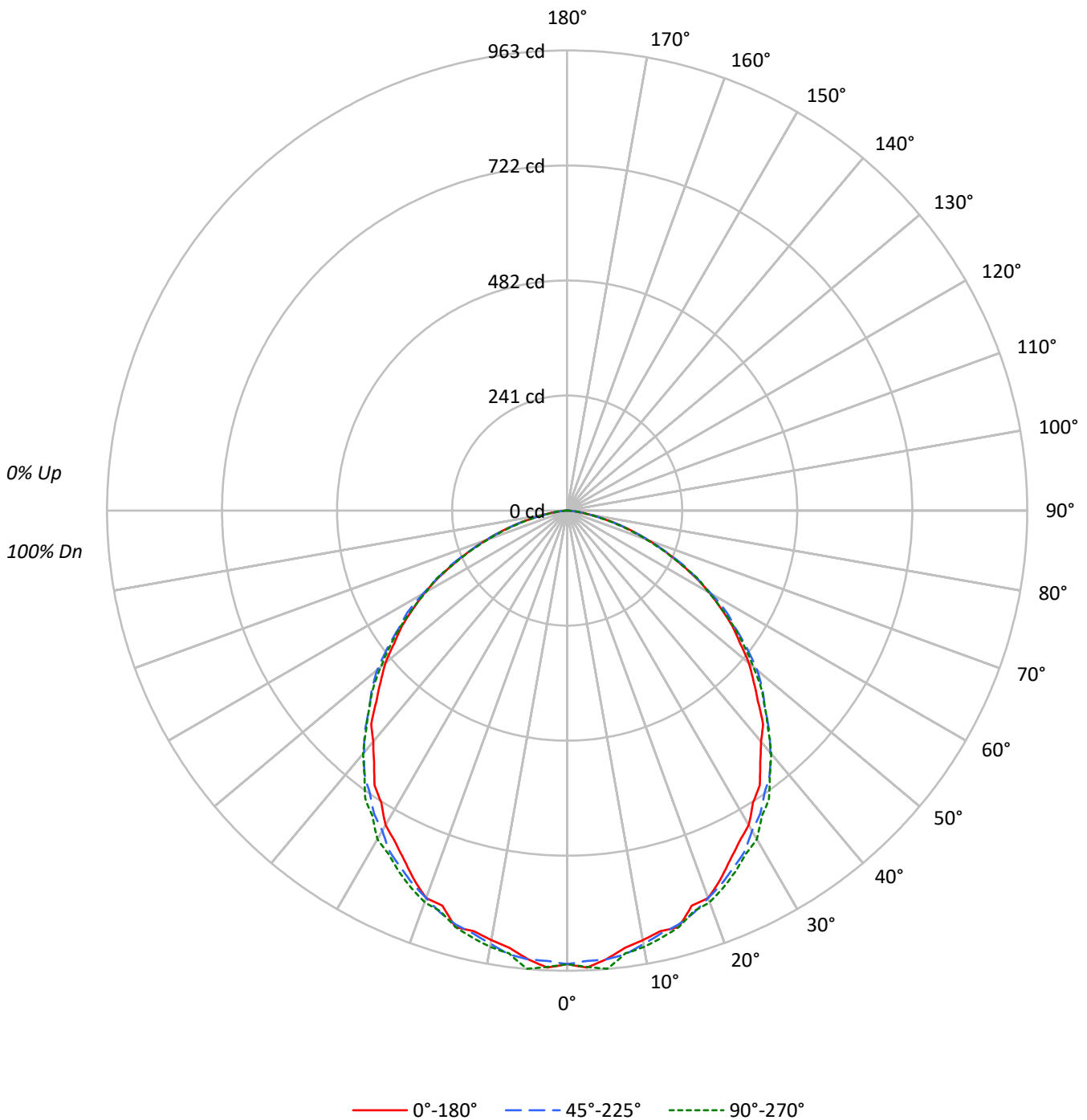
Lumens per Lamp: N/A
Luminaire Lumens: 2392.0 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	2554	2554	2554
5°	2545	2546	2600
10°	2494	2516	2534
15°	2514	2500	2514
20°	2471	2471	2497
25°	2395	2447	2475
30°	2362	2404	2468
35°	2307	2367	2420
40°	2217	2324	2334
45°	2150	2226	2230
50°	2079	2173	2132
55°	1981	2020	2005
60°	1852	1871	1837
65°	1652	1694	1640
70°	1417	1422	1382
75°	1123	1120	1076
80°	752	731	702
85°	408	404	380



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	89.3	3.7
10°-20°	253.0	10.6
20°-30°	379.1	15.8
30°-40°	449.3	18.8
40°-50°	450.1	18.8
50°-60°	382.1	16.0
60°-70°	257.6	10.8
70°-80°	113.2	4.7
80°-90°	18.4	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°	721.4	30.2
0°-40°	1170.6	48.9
0°-60°	2002.8	83.7
0°-90°	2392.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2392.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	949	949	949	949	949	
5°	942	940	943	940	963	89
15°	902	892	897	902	902	251
25°	807	811	824	835	833	373
35°	702	704	720	737	737	436
45°	565	576	585	600	586	437
55°	422	420	430	428	427	376
65°	259	256	266	256	258	258
75°	108	106	108	100	104	116
85°	13	13	13	13	12	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	949.1	949.1	949.1	949.1	949.1
2.5°	957.3	950.1	943.3	951.2	955.9
5°	942.3	940.1	942.7	939.9	962.6
7.5°	923.0	931.4	936.3	933.3	934.6
10°	912.7	909.7	920.7	928.3	927.2
12.5°	901.7	906.1	906.7	914.9	915.6
15°	902.3	891.9	897.4	902.0	902.4
17.5°	867.2	878.5	882.3	893.0	879.7
20°	862.9	854.7	862.9	873.8	872.1
22.5°	836.6	827.4	845.0	854.7	854.1
25°	806.7	811.1	824.3	835.1	833.4
27.5°	780.5	785.6	804.5	819.3	809.8
30°	760.2	757.7	773.6	786.8	794.2
32.5°	724.1	733.4	752.0	765.2	758.2
35°	702.2	704.2	720.5	737.2	736.7
37.5°	663.8	673.5	696.4	701.1	696.8
40°	631.1	640.8	661.5	666.5	664.4
42.5°	606.9	608.7	626.4	632.2	623.0
45°	564.9	575.5	585.0	600.1	585.9
47.5°	529.1	534.0	554.6	558.7	551.2
50°	496.7	498.4	519.1	514.1	509.2
52.5°	455.9	463.1	474.7	473.7	468.0
55°	422.3	419.5	430.5	427.5	427.4
57.5°	382.0	386.9	395.9	391.3	383.8
60°	344.2	344.3	347.7	342.4	341.4
62.5°	302.2	303.7	304.4	297.9	308.4
65°	259.4	256.0	266.0	255.9	257.6
67.5°	220.1	221.8	220.8	214.4	216.9
70°	180.1	182.3	180.7	173.5	175.7
72.5°	143.6	140.9	142.6	133.6	137.7
75°	108.0	105.8	107.7	100.1	103.5
77.5°	73.5	75.2	74.0	70.0	72.3
80°	48.5	47.2	47.2	44.9	45.3
82.5°	28.3	27.0	26.6	25.9	27.0
85°	13.2	12.9	13.1	12.7	12.3
87.5°	4.8	4.9	4.9	4.7	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)