

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: P588693

Luminaire Tested: **FMR-24-2-LD4-1HI-35-UNV-80-84-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588693
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-80-84-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

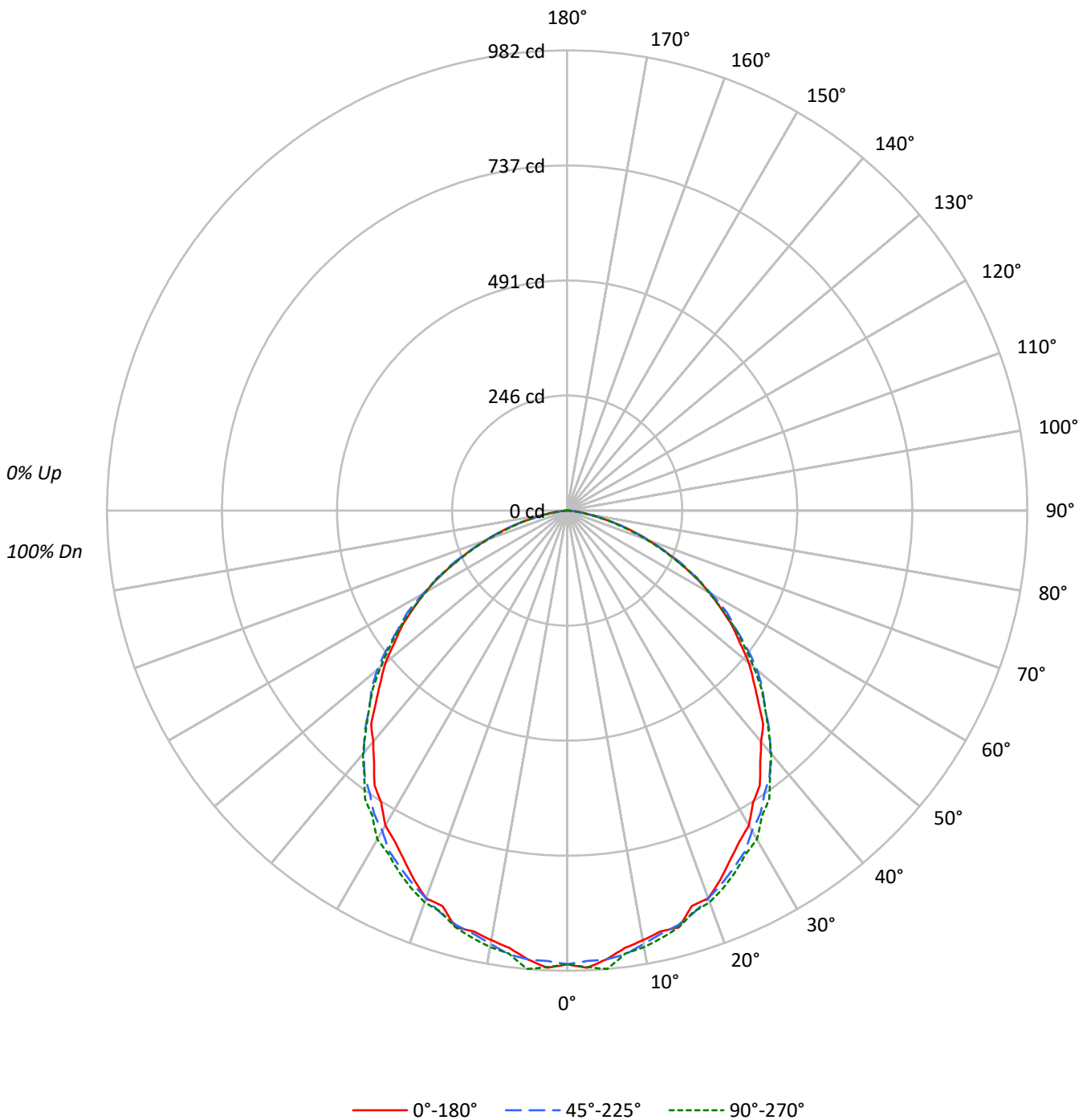
Lumens per Lamp: N/A
Luminaire Lumens: 2440.1 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	2605	2605	2605
5°	2597	2598	2652
10°	2544	2566	2584
15°	2564	2550	2564
20°	2521	2521	2548
25°	2443	2497	2524
30°	2410	2452	2517
35°	2353	2415	2469
40°	2262	2370	2381
45°	2193	2271	2274
50°	2121	2217	2174
55°	2021	2060	2046
60°	1890	1908	1875
65°	1685	1728	1673
70°	1446	1451	1411
75°	1145	1143	1098
80°	767	745	717
85°	417	414	386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.1	3.7
10°-20°	258.1	10.6
20°-30°	386.7	15.8
30°-40°	458.3	18.8
40°-50°	459.2	18.8
50°-60°	389.7	16.0
60°-70°	262.8	10.8
70°-80°	115.5	4.7
80°-90°	18.8	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°	735.9	30.2
0°-40°	1194.1	48.9
0°-60°	2043.0	83.7
0°-90°	2440.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2440.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	968	968	968	968	968	
5°	961	959	962	959	982	91
15°	920	910	915	920	920	256
25°	823	827	841	852	850	380
35°	716	718	735	752	752	445
45°	576	587	597	612	598	446
55°	431	428	439	436	436	383
65°	265	261	271	261	263	263
75°	110	108	110	102	106	118
85°	14	13	13	13	12	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	968.1	968.1	968.1	968.1	968.1
2.5°	976.5	969.1	962.3	970.3	975.1
5°	961.3	959.0	961.6	958.8	981.9
7.5°	941.5	950.1	955.1	952.0	953.4
10°	931.0	928.0	939.1	946.9	945.8
12.5°	919.8	924.3	924.9	933.3	934.0
15°	920.4	909.8	915.4	920.1	920.5
17.5°	884.6	896.1	900.0	910.9	897.4
20°	880.3	871.9	880.3	891.4	889.6
22.5°	853.4	844.0	862.0	871.9	871.3
25°	822.9	827.4	840.9	851.9	850.1
27.5°	796.1	801.4	820.6	835.8	826.0
30°	775.5	772.9	789.1	802.6	810.1
32.5°	738.6	748.1	767.1	780.5	773.4
35°	716.3	718.4	735.0	752.0	751.5
37.5°	677.1	687.0	710.4	715.1	710.8
40°	643.8	653.6	674.8	679.9	677.8
42.5°	619.1	620.9	639.0	644.9	635.5
45°	576.3	587.0	596.8	612.1	597.6
47.5°	539.8	544.8	565.8	569.9	562.3
50°	506.6	508.4	529.5	524.4	519.4
52.5°	465.0	472.4	484.3	483.3	477.4
55°	430.8	427.9	439.1	436.1	436.0
57.5°	389.6	394.6	403.9	399.1	391.5
60°	351.1	351.3	354.6	349.3	348.3
62.5°	308.3	309.8	310.5	303.9	314.6
65°	264.6	261.1	271.4	261.0	262.8
67.5°	224.5	226.3	225.3	218.8	221.3
70°	183.8	186.0	184.4	177.0	179.3
72.5°	146.5	143.8	145.5	136.3	140.5
75°	110.1	107.9	109.9	102.1	105.6
77.5°	75.0	76.8	75.5	71.4	73.8
80°	49.5	48.1	48.1	45.8	46.3
82.5°	28.9	27.5	27.1	26.4	27.5
85°	13.5	13.1	13.4	13.0	12.5
87.5°	4.9	5.0	5.0	4.8	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)