

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: P589082

Luminaire Tested: **FMR-24-2-LD4-2LO-35-UNV-80-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P589082
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-LD4-2LO-35-UNV-80-94-EDD
Description: 2X2 FMR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

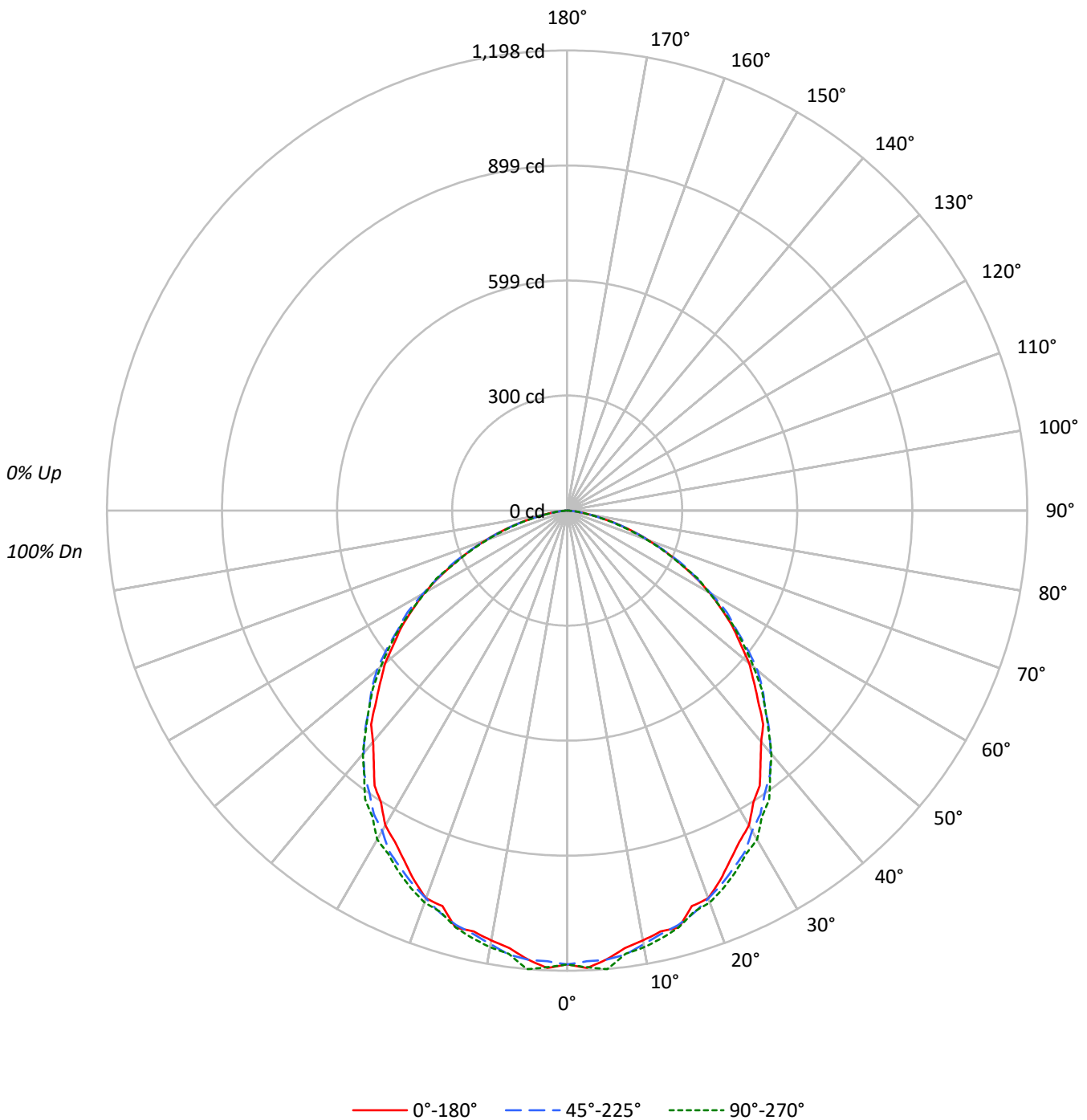
Lumens per Lamp: N/A
Luminaire Lumens: 2978.0 lumens
Efficiency: N/A
Efficacy: 127.3 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	3180	3180	3180
5°	3169	3170	3237
10°	3105	3132	3154
15°	3129	3112	3130
20°	3076	3076	3109
25°	2982	3047	3081
30°	2941	2993	3072
35°	2872	2947	3013
40°	2760	2893	2906
45°	2676	2772	2776
50°	2588	2706	2654
55°	2466	2515	2496
60°	2306	2329	2287
65°	2057	2109	2042
70°	1765	1770	1721
75°	1397	1394	1340
80°	936	910	874
85°	509	503	472



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.1	3.7
10°-20°	315.0	10.6
20°-30°	471.9	15.8
30°-40°	559.3	18.8
40°-50°	560.4	18.8
50°-60°	475.7	16.0
60°-70°	320.7	10.8
70°-80°	140.9	4.7
80°-90°	22.9	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°	898.1	30.2
0°-40°	1457.4	48.9
0°-60°	2493.5	83.7
0°-90°	2978.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2978.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1182	1182	1182	1182	1182	
5°	1173	1170	1174	1170	1198	111
15°	1123	1110	1117	1123	1124	313
25°	1004	1010	1026	1040	1038	464
35°	874	877	897	918	917	543
45°	703	716	728	747	729	544
55°	526	522	536	532	532	468
65°	323	319	331	319	321	321
75°	134	132	134	125	129	144
85°	16	16	16	16	15	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1181.6	1181.6	1181.6	1181.6	1181.6
2.5°	1191.8	1182.8	1174.4	1184.2	1190.1
5°	1173.2	1170.5	1173.7	1170.2	1198.4
7.5°	1149.1	1159.6	1165.7	1161.9	1163.6
10°	1136.3	1132.6	1146.2	1155.7	1154.3
12.5°	1122.6	1128.0	1128.8	1139.0	1139.9
15°	1123.3	1110.3	1117.2	1123.0	1123.5
17.5°	1079.7	1093.7	1098.4	1111.7	1095.2
20°	1074.3	1064.1	1074.3	1087.9	1085.8
22.5°	1041.5	1030.1	1052.1	1064.1	1063.4
25°	1004.3	1009.8	1026.3	1039.7	1037.6
27.5°	971.7	978.1	1001.6	1020.0	1008.1
30°	946.5	943.3	963.1	979.6	988.8
32.5°	901.5	913.1	936.3	952.6	943.9
35°	874.2	876.8	897.1	917.8	917.2
37.5°	826.4	838.5	867.0	872.8	867.5
40°	785.7	797.7	823.5	829.8	827.2
42.5°	755.6	757.8	779.9	787.1	775.6
45°	703.3	716.4	728.3	747.1	729.4
47.5°	658.8	664.9	690.5	695.5	686.2
50°	618.3	620.5	646.3	640.0	633.9
52.5°	567.5	576.5	591.0	589.8	582.6
55°	525.7	522.2	536.0	532.3	532.1
57.5°	475.5	481.6	492.9	487.1	477.8
60°	428.5	428.7	432.8	426.3	425.0
62.5°	376.2	378.0	379.0	370.9	384.0
65°	323.0	318.7	331.2	318.6	320.7
67.5°	274.0	276.1	274.9	267.0	270.0
70°	224.3	227.0	225.0	216.0	218.8
72.5°	178.8	175.4	177.6	166.3	171.5
75°	134.4	131.7	134.1	124.6	128.9
77.5°	91.5	93.7	92.1	87.1	90.0
80°	60.4	58.7	58.7	55.8	56.4
82.5°	35.2	33.6	33.1	32.2	33.6
85°	16.5	16.0	16.3	15.9	15.3
87.5°	5.9	6.1	6.1	5.8	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)