

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: P588802

Luminaire Tested: **FMR-24-2-LD4-1LO-35-UNV-81-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588802
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-LD4-1LO-35-UNV-81-94-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR
TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

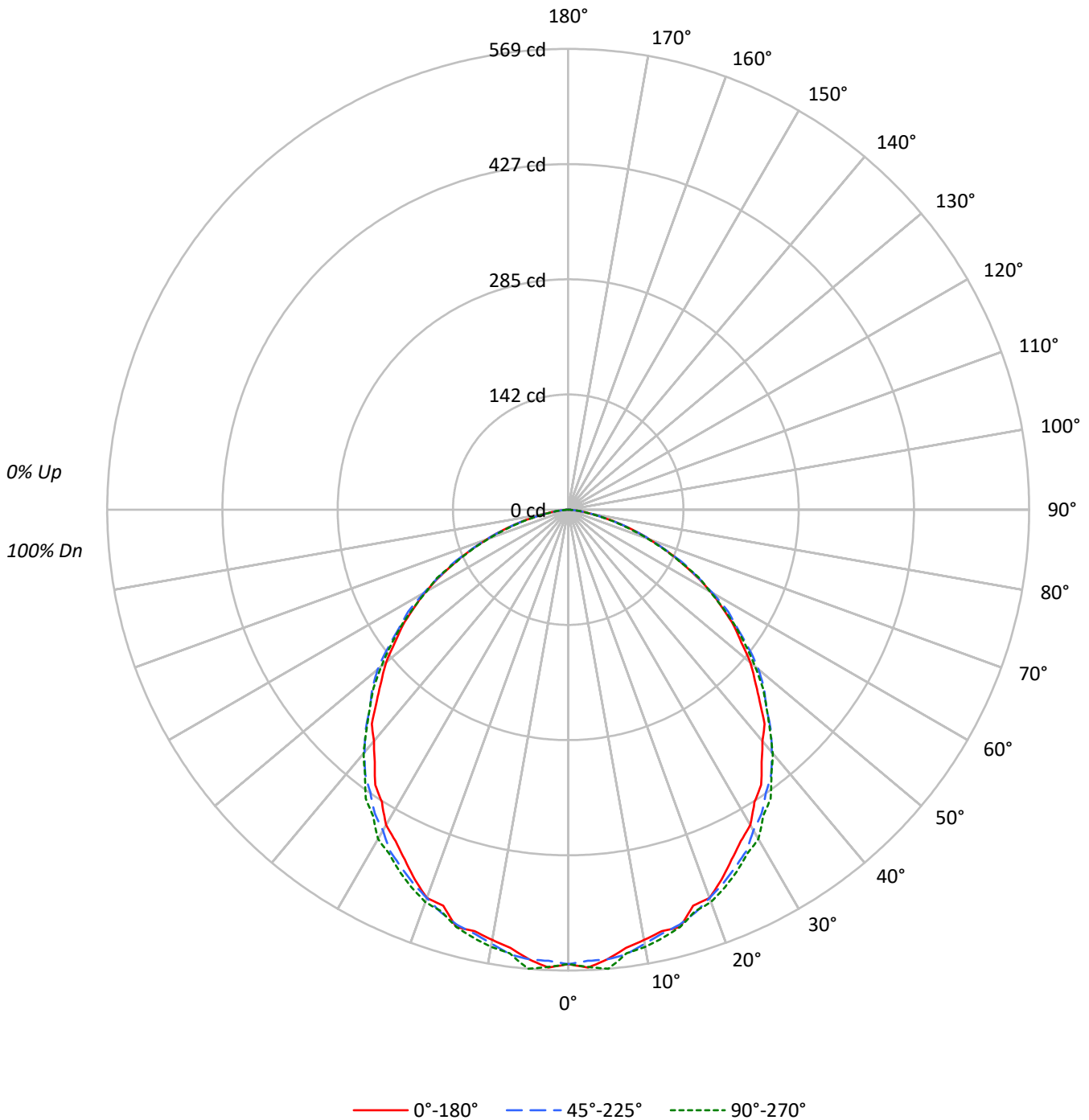
Lumens per Lamp: N/A
Luminaire Lumens: 1414.0 lumens
Efficiency: N/A
Efficacy: 120.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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°	1510	1510	1510
5°	1505	1505	1537
10°	1474	1487	1498
15°	1486	1478	1486
20°	1461	1461	1476
25°	1416	1447	1463
30°	1396	1421	1459
35°	1364	1399	1431
40°	1311	1374	1380
45°	1271	1316	1318
50°	1229	1285	1260
55°	1171	1194	1186
60°	1095	1106	1086
65°	977	1002	970
70°	838	840	817
75°	663	662	636
80°	445	432	415
85°	241	241	222



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.8	3.7
10°-20°	149.6	10.6
20°-30°	224.1	15.8
30°-40°	265.6	18.8
40°-50°	266.1	18.8
50°-60°	225.9	16.0
60°-70°	152.3	10.8
70°-80°	66.9	4.7
80°-90°	10.9	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°	426.4	30.2
0°-40°	692.0	48.9
0°-60°	1183.9	83.7
0°-90°	1414.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1414.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	561	561	561	561	561	
5°	557	556	557	556	569	53
15°	533	527	530	533	533	149
25°	477	480	487	494	493	220
35°	415	416	426	436	436	258
45°	334	340	346	355	346	258
55°	250	248	254	253	253	222
65°	153	151	157	151	152	153
75°	64	62	64	59	61	68
85°	8	8	8	8	7	11
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	561.0	561.0	561.0	561.0	561.0
2.5°	565.9	561.6	557.6	562.3	565.1
5°	557.1	555.8	557.3	555.6	569.0
7.5°	545.6	550.6	553.5	551.7	552.5
10°	539.5	537.8	544.2	548.7	548.1
12.5°	533.0	535.6	536.0	540.8	541.3
15°	533.4	527.2	530.5	533.2	533.4
17.5°	512.7	519.3	521.6	527.9	520.0
20°	510.1	505.3	510.1	516.6	515.5
22.5°	494.5	489.1	499.5	505.3	504.9
25°	476.9	479.5	487.3	493.7	492.7
27.5°	461.4	464.4	475.6	484.3	478.7
30°	449.4	447.9	457.3	465.1	469.5
32.5°	428.0	433.5	444.6	452.3	448.2
35°	415.1	416.3	425.9	435.8	435.5
37.5°	392.4	398.1	411.7	414.4	411.9
40°	373.1	378.8	391.0	394.0	392.8
42.5°	358.8	359.8	370.3	373.7	368.3
45°	333.9	340.2	345.8	354.7	346.3
47.5°	312.8	315.7	327.9	330.2	325.8
50°	293.6	294.6	306.9	303.9	301.0
52.5°	269.5	273.7	280.6	280.0	276.6
55°	249.6	248.0	254.5	252.7	252.7
57.5°	225.8	228.7	234.1	231.3	226.9
60°	203.5	203.6	205.5	202.4	201.8
62.5°	178.6	179.5	179.9	176.1	182.3
65°	153.4	151.3	157.3	151.3	152.3
67.5°	130.1	131.1	130.5	126.8	128.2
70°	106.5	107.8	106.8	102.6	103.9
72.5°	84.9	83.3	84.3	79.0	81.4
75°	63.8	62.5	63.7	59.2	61.2
77.5°	43.5	44.5	43.8	41.4	42.7
80°	28.7	27.9	27.9	26.5	26.8
82.5°	16.7	15.9	15.7	15.3	15.9
85°	7.8	7.6	7.8	7.5	7.2
87.5°	2.8	2.9	2.9	2.8	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)