

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: P588789

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

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588789
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-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

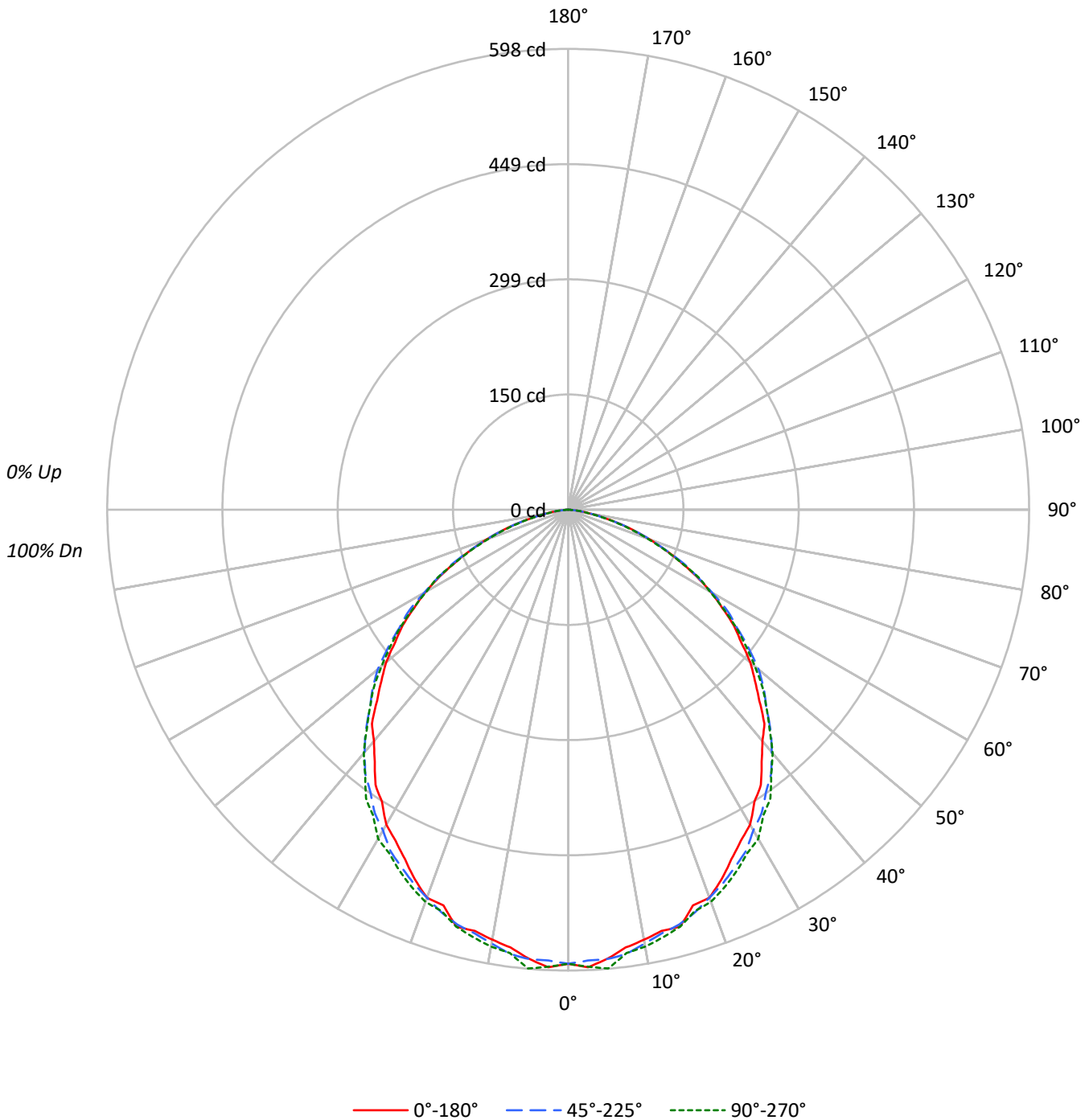
Lumens per Lamp: N/A
Luminaire Lumens: 1485.0 lumens
Efficiency: N/A
Efficacy: 126.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	1586	1586	1586
5°	1580	1581	1614
10°	1548	1562	1573
15°	1560	1552	1561
20°	1534	1534	1550
25°	1487	1520	1536
30°	1467	1492	1532
35°	1432	1469	1503
40°	1376	1443	1449
45°	1335	1382	1384
50°	1291	1349	1323
55°	1230	1254	1245
60°	1150	1161	1140
65°	1026	1052	1018
70°	880	883	858
75°	697	696	669
80°	466	454	435
85°	253	250	235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.4	3.7
10°-20°	157.1	10.6
20°-30°	235.3	15.8
30°-40°	278.9	18.8
40°-50°	279.4	18.8
50°-60°	237.2	16.0
60°-70°	159.9	10.8
70°-80°	70.3	4.7
80°-90°	11.4	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°	447.8	30.2
0°-40°	726.8	48.9
0°-60°	1243.4	83.7
0°-90°	1485.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1485.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	589	589	589	589	589	
5°	585	584	585	584	598	55
15°	560	554	557	560	560	156
25°	501	504	512	518	517	232
35°	436	437	447	458	457	271
45°	351	357	363	372	364	271
55°	262	260	267	265	265	233
65°	161	159	165	159	160	160
75°	67	66	67	62	64	72
85°	8	8	8	8	8	12
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	589.2	589.2	589.2	589.2	589.2
2.5°	594.3	589.8	585.6	590.5	593.5
5°	585.0	583.7	585.3	583.5	597.6
7.5°	573.0	578.3	581.3	579.4	580.2
10°	566.6	564.8	571.6	576.3	575.6
12.5°	559.8	562.5	562.9	568.0	568.4
15°	560.1	553.7	557.1	560.0	560.2
17.5°	538.4	545.4	547.7	554.4	546.2
20°	535.7	530.6	535.7	542.5	541.4
22.5°	519.4	513.7	524.6	530.6	530.3
25°	500.8	503.5	511.8	518.5	517.4
27.5°	484.5	487.7	499.4	508.6	502.7
30°	472.0	470.4	480.3	488.5	493.1
32.5°	449.5	455.3	466.9	475.0	470.7
35°	435.9	437.2	447.3	457.7	457.4
37.5°	412.1	418.1	432.3	435.2	432.6
40°	391.8	397.8	410.7	413.8	412.5
42.5°	376.8	377.9	388.9	392.5	386.8
45°	350.7	357.3	363.2	372.5	363.7
47.5°	328.5	331.5	344.3	346.8	342.2
50°	308.3	309.4	322.3	319.1	316.1
52.5°	283.0	287.5	294.7	294.1	290.5
55°	262.2	260.4	267.3	265.4	265.4
57.5°	237.1	240.2	245.8	242.9	238.3
60°	213.7	213.8	215.8	212.6	211.9
62.5°	187.6	188.5	189.0	184.9	191.5
65°	161.1	158.9	165.2	158.8	159.9
67.5°	136.6	137.7	137.1	133.1	134.7
70°	111.8	113.2	112.2	107.7	109.1
72.5°	89.2	87.5	88.6	82.9	85.5
75°	67.0	65.7	66.9	62.2	64.3
77.5°	45.6	46.7	46.0	43.4	44.9
80°	30.1	29.3	29.3	27.8	28.1
82.5°	17.6	16.7	16.5	16.1	16.7
85°	8.2	8.0	8.1	7.9	7.6
87.5°	3.0	3.0	3.0	2.9	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)