

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: P588818

Luminaire Tested: **FMR-24-2-LD4-1LO-35-UNV-93-94-EDD**

Issue Date: 12/8/2021



Test Information

Test Method: LM-79-08
Report Number: P588818
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-93-94-EDD
Description: 2X2 FMR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

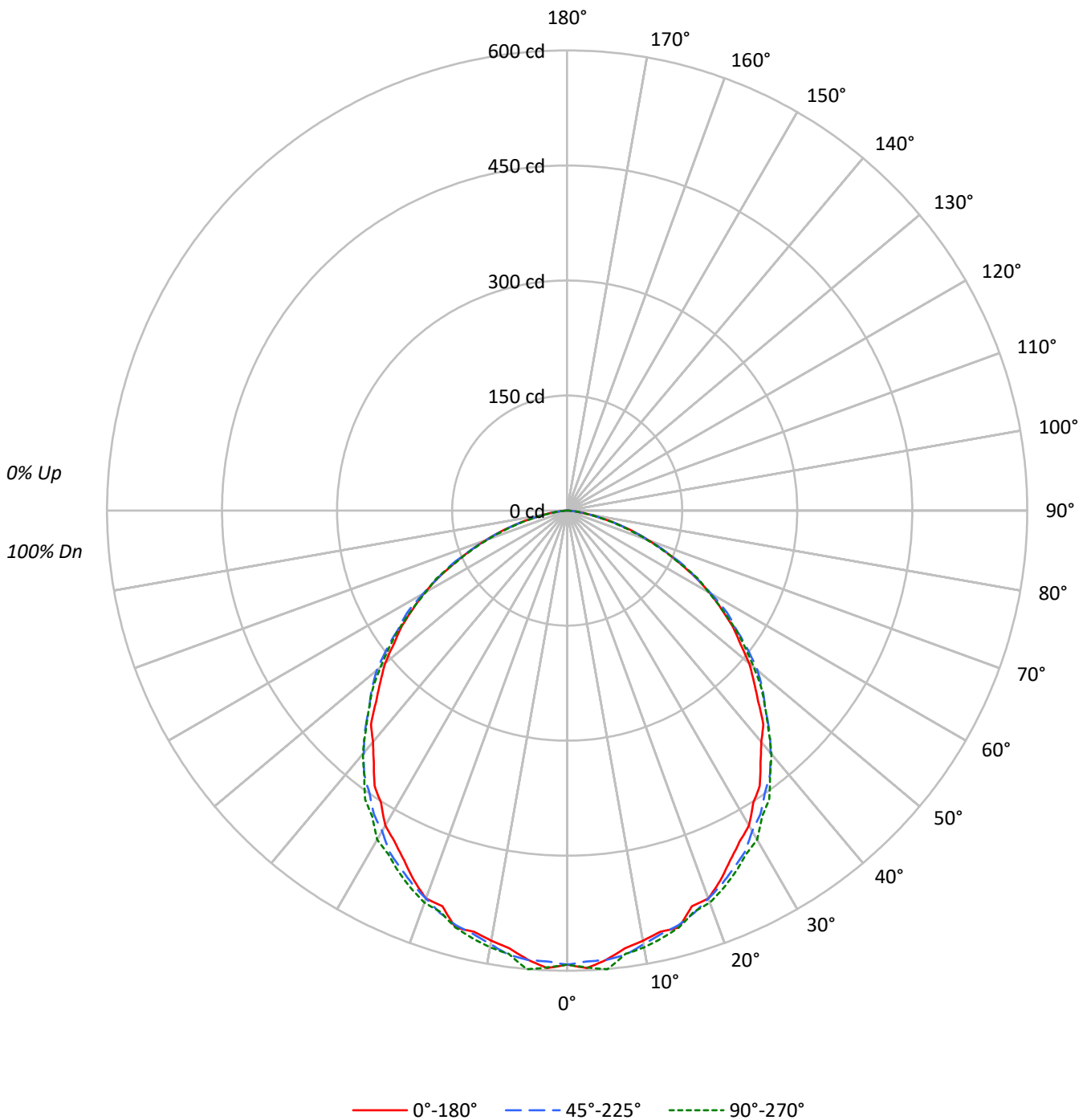
Lumens per Lamp: N/A
Luminaire Lumens: 1492.0 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
Input Voltage (V): NR
Input Current (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°	1593	1593	1593
5°	1588	1588	1622
10°	1556	1569	1580
15°	1568	1559	1568
20°	1542	1542	1558
25°	1494	1527	1543
30°	1473	1499	1539
35°	1439	1476	1509
40°	1383	1449	1456
45°	1341	1389	1391
50°	1297	1356	1330
55°	1236	1260	1251
60°	1156	1167	1146
65°	1030	1056	1023
70°	884	887	862
75°	700	699	672
80°	470	456	439
85°	256	253	235



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.7	3.7
10°-20°	157.8	10.6
20°-30°	236.4	15.8
30°-40°	280.2	18.8
40°-50°	280.8	18.8
50°-60°	238.3	16.0
60°-70°	160.7	10.8
70°-80°	70.6	4.7
80°-90°	11.5	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°	450.0	30.2
0°-40°	730.2	48.9
0°-60°	1249.3	83.7
0°-90°	1492.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1492.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	592	592	592	592	592	
5°	588	586	588	586	600	55
15°	563	556	560	563	563	157
25°	503	506	514	521	520	233
35°	438	439	449	460	460	272
45°	352	359	365	374	365	273
55°	263	262	268	267	267	234
65°	162	160	166	160	161	161
75°	67	66	67	62	65	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°	592.0	592.0	592.0	592.0	592.0
2.5°	597.1	592.6	588.4	593.3	596.3
5°	587.8	586.4	588.0	586.3	600.4
7.5°	575.7	581.0	584.0	582.1	583.0
10°	569.3	567.5	574.3	579.0	578.3
12.5°	562.4	565.2	565.5	570.7	571.1
15°	562.8	556.3	559.7	562.6	562.9
17.5°	540.9	548.0	550.3	557.0	548.7
20°	538.3	533.1	538.3	545.1	544.0
22.5°	521.8	516.1	527.1	533.1	532.8
25°	503.2	505.9	514.2	520.9	519.8
27.5°	486.8	490.0	501.8	511.0	505.1
30°	474.2	472.6	482.5	490.8	495.4
32.5°	451.7	457.5	469.1	477.3	472.9
35°	438.0	439.3	449.4	459.8	459.5
37.5°	414.0	420.1	434.4	437.3	434.6
40°	393.6	399.7	412.6	415.7	414.4
42.5°	378.6	379.7	390.7	394.3	388.6
45°	352.4	358.9	364.9	374.3	365.4
47.5°	330.0	333.1	345.9	348.5	343.8
50°	309.8	310.9	323.8	320.6	317.6
52.5°	284.3	288.8	296.1	295.5	291.9
55°	263.4	261.6	268.5	266.7	266.6
57.5°	238.2	241.3	247.0	244.1	239.4
60°	214.7	214.8	216.8	213.6	212.9
62.5°	188.5	189.4	189.9	185.8	192.4
65°	161.8	159.7	165.9	159.6	160.7
67.5°	137.3	138.3	137.7	133.8	135.3
70°	112.4	113.7	112.7	108.2	109.6
72.5°	89.6	87.9	89.0	83.3	85.9
75°	67.3	66.0	67.2	62.4	64.6
77.5°	45.9	46.9	46.2	43.6	45.1
80°	30.3	29.4	29.4	28.0	28.3
82.5°	17.7	16.8	16.6	16.1	16.8
85°	8.3	8.0	8.2	7.9	7.6
87.5°	3.0	3.1	3.1	2.9	2.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)