

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P559805

Luminaire Tested: FSR-12-2-LD4-1LO-35-UNV-80-96-EDD

Issue Date: 7/20/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P559805  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/20/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FSR-12-2-LD4-1LO-35-UNV-80-96-EDD  
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .250 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

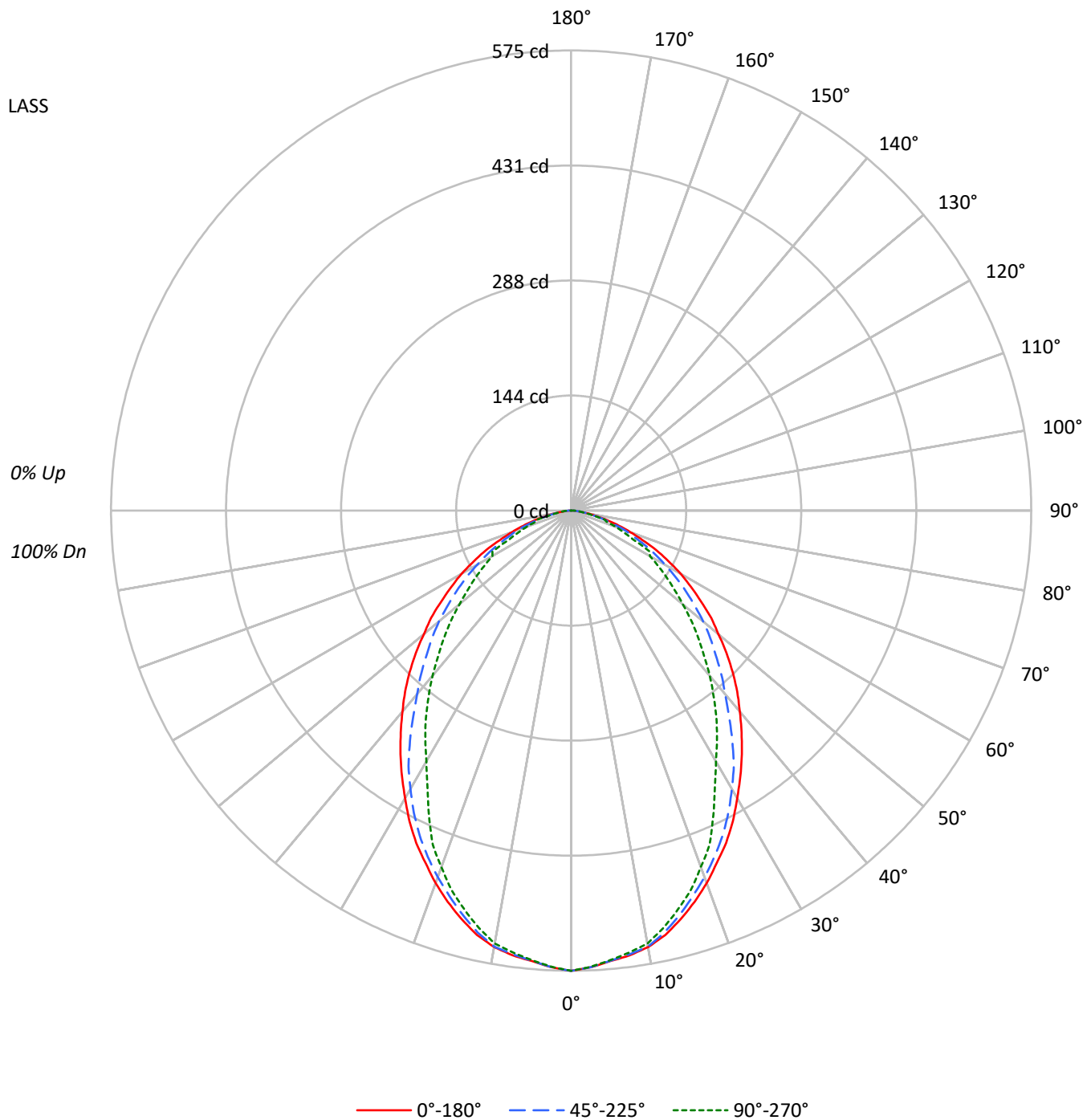
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1129.0 lumens  
Efficiency: N/A  
Efficacy: 96.5 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 11.7  
Input Voltage (V):  
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: 24 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	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3095	3095	3095
5°	3053	3050	3046
10°	3027	3023	3001
15°	2945	2915	2874
20°	2837	2791	2715
25°	2720	2661	2495
30°	2578	2496	2248
35°	2442	2306	2079
40°	2303	2102	1892
45°	2171	1943	1710
50°	2009	1804	1526
55°	1859	1635	1366
60°	1703	1460	1224
65°	1499	1279	1084
70°	1235	1119	921
75°	981	857	898
80°	660	617	576
85°	408	494	574

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2171 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.5	4.7
10°-20°	146.9	13.0
20°-30°	203.4	18.0
30°-40°	216.9	19.2
40°-50°	197.9	17.5
50°-60°	155.0	13.7
60°-70°	101.0	8.9
70°-80°	44.8	4.0
80°-90°	9.6	0.9
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°	403.9	35.8
0°-40°	620.7	55.0
0°-60°	973.6	86.2
0°-90°	1129.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1129.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	575	575	575	575	575	
5°	565	564	564	564	564	54
15°	529	529	523	518	516	149
25°	458	455	448	432	420	210
35°	372	369	351	324	316	232
45°	285	279	255	234	225	220
55°	198	192	174	154	146	178
65°	118	111	100	102	85	116
75°	47	44	41	39	43	51
85°	7	7	8	9	9	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	575.1	575.1	575.1	575.1	575.1
2.5°	571.1	571.1	571.1	570.4	570.4
5°	565.1	564.5	564.5	563.8	563.8
7.5°	560.5	559.8	559.1	558.5	557.1
10°	553.8	553.8	553.2	549.8	549.2
12.5°	543.2	542.5	539.9	535.2	533.9
15°	528.6	528.6	523.2	517.9	515.9
17.5°	512.6	511.9	505.3	500.0	497.3
20°	495.3	494.0	487.3	478.7	474.0
22.5°	476.0	476.0	468.1	456.8	452.1
25°	458.1	455.4	448.1	432.2	420.2
27.5°	437.5	433.5	425.5	402.9	388.9
30°	414.9	412.9	401.6	372.3	361.7
32.5°	393.6	390.3	378.3	347.7	339.1
35°	371.7	369.0	351.0	324.4	316.5
37.5°	349.7	346.4	323.8	302.5	292.5
40°	327.8	323.8	299.2	279.9	269.3
42.5°	307.2	301.8	277.9	257.3	245.3
45°	285.2	279.2	255.3	234.0	224.7
47.5°	263.3	258.0	236.0	214.1	203.4
50°	240.0	235.4	215.4	193.5	182.2
52.5°	220.7	213.4	194.1	172.2	162.9
55°	198.1	192.1	174.2	153.6	145.6
57.5°	177.5	171.5	154.9	135.6	129.0
60°	158.2	149.6	135.6	119.0	113.7
62.5°	137.0	130.3	118.3	104.4	111.0
65°	117.7	111.0	100.4	102.4	85.1
67.5°	96.4	93.1	83.8	74.5	71.8
70°	78.5	74.5	71.1	61.2	58.5
72.5°	62.5	58.5	53.9	48.5	46.5
75°	47.2	43.9	41.2	39.2	43.2
77.5°	32.6	31.2	29.3	27.3	26.6
80°	21.3	20.6	19.9	19.3	18.6
82.5°	12.6	12.6	12.6	12.6	12.6
85°	6.6	7.3	8.0	8.6	9.3
87.5°	4.0	4.0	4.7	5.3	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)