

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: P559803

Luminaire Tested: FSR-12-2-LD4-1LO-35-UNV-80-94-EDD

Issue Date: 7/20/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P559803  
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-80-94-EDD  
Description: 1X2 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS  
Light Source: -  
Ballast/Driver: -

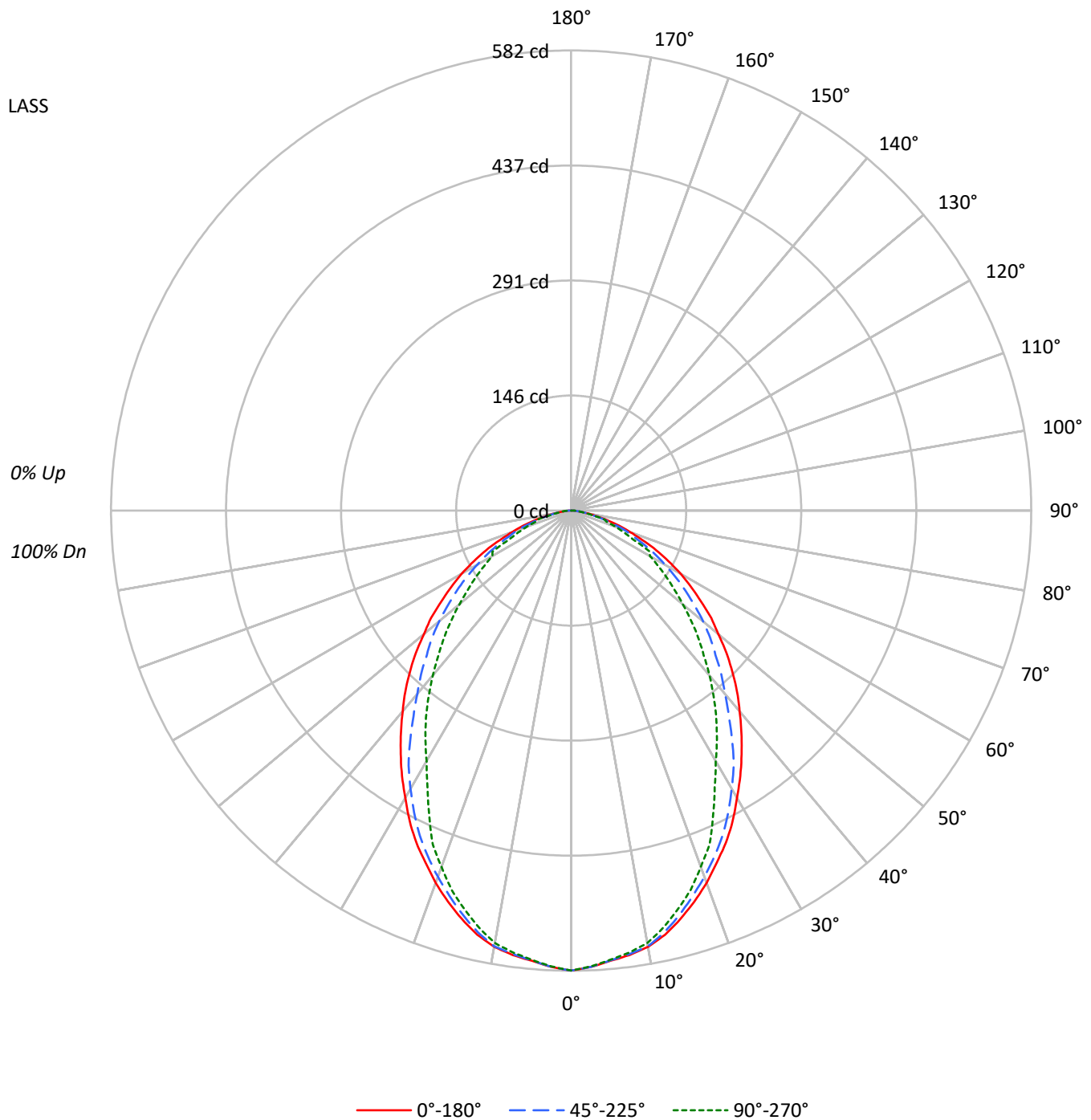
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1142.0 lumens  
Efficiency: N/A  
Efficacy: 97.6 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°	3131	3131	3131
5°	3088	3085	3081
10°	3061	3058	3036
15°	2979	2949	2908
20°	2869	2823	2746
25°	2752	2692	2524
30°	2608	2524	2273
35°	2470	2333	2103
40°	2329	2126	1914
45°	2196	1965	1730
50°	2033	1824	1543
55°	1880	1653	1382
60°	1723	1477	1238
65°	1515	1293	1096
70°	1249	1133	932
75°	992	867	909
80°	666	626	583
85°	414	500	580

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2196 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	54.2	4.7
10°-20°	148.6	13.0
20°-30°	205.7	18.0
30°-40°	219.4	19.2
40°-50°	200.1	17.5
50°-60°	156.8	13.7
60°-70°	102.2	8.9
70°-80°	45.3	4.0
80°-90°	9.7	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°	408.5	35.8
0°-40°	627.9	55.0
0°-60°	984.8	86.2
0°-90°	1142.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1142.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	582	582	582	582	582	
5°	572	571	571	570	570	54
15°	535	535	529	524	522	150
25°	463	461	453	437	425	213
35°	376	373	355	328	320	235
45°	288	282	258	237	227	222
55°	200	194	176	155	147	180
65°	119	112	102	104	86	117
75°	48	44	42	40	44	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°	581.7	581.7	581.7	581.7	581.7
2.5°	577.7	577.7	577.7	577.0	577.0
5°	571.6	571.0	571.0	570.3	570.3
7.5°	566.9	566.3	565.6	564.9	563.6
10°	560.2	560.2	559.5	556.2	555.5
12.5°	549.4	548.8	546.1	541.4	540.0
15°	534.6	534.6	529.3	523.9	521.9
17.5°	518.5	517.8	511.1	505.7	503.0
20°	501.0	499.7	492.9	484.2	479.5
22.5°	481.5	481.5	473.4	462.0	457.3
25°	463.4	460.7	453.3	437.1	425.0
27.5°	442.5	438.5	430.4	407.5	393.4
30°	419.6	417.6	406.2	376.6	365.8
32.5°	398.1	394.8	382.7	351.7	343.0
35°	375.9	373.2	355.1	328.2	320.1
37.5°	353.7	350.4	327.5	306.0	295.9
40°	331.5	327.5	302.6	283.1	272.4
42.5°	310.7	305.3	281.1	260.3	248.2
45°	288.5	282.5	258.2	236.7	227.3
47.5°	266.3	260.9	238.7	216.5	205.8
50°	242.8	238.1	217.9	195.7	184.3
52.5°	223.3	215.9	196.4	174.2	164.8
55°	200.4	194.4	176.2	155.3	147.3
57.5°	179.6	173.5	156.7	137.2	130.5
60°	160.1	151.3	137.2	120.4	115.0
62.5°	138.5	131.8	119.7	105.6	112.3
65°	119.0	112.3	101.5	103.6	86.1
67.5°	97.5	94.2	84.7	75.3	72.6
70°	79.4	75.3	72.0	61.9	59.2
72.5°	63.2	59.2	54.5	49.1	47.1
75°	47.7	44.4	41.7	39.7	43.7
77.5°	33.0	31.6	29.6	27.6	26.9
80°	21.5	20.8	20.2	19.5	18.8
82.5°	12.8	12.8	12.8	12.8	12.8
85°	6.7	7.4	8.1	8.7	9.4
87.5°	4.0	4.0	4.7	5.4	6.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)