

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: P558771

Luminaire Tested: FSR-12-1-LD4-1LO-50-UNV-80-85-EDD

Issue Date: 7/20/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P558771  
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-12-1-LD4-1LO-50-UNV-80-85-EDD  
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRON  
SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

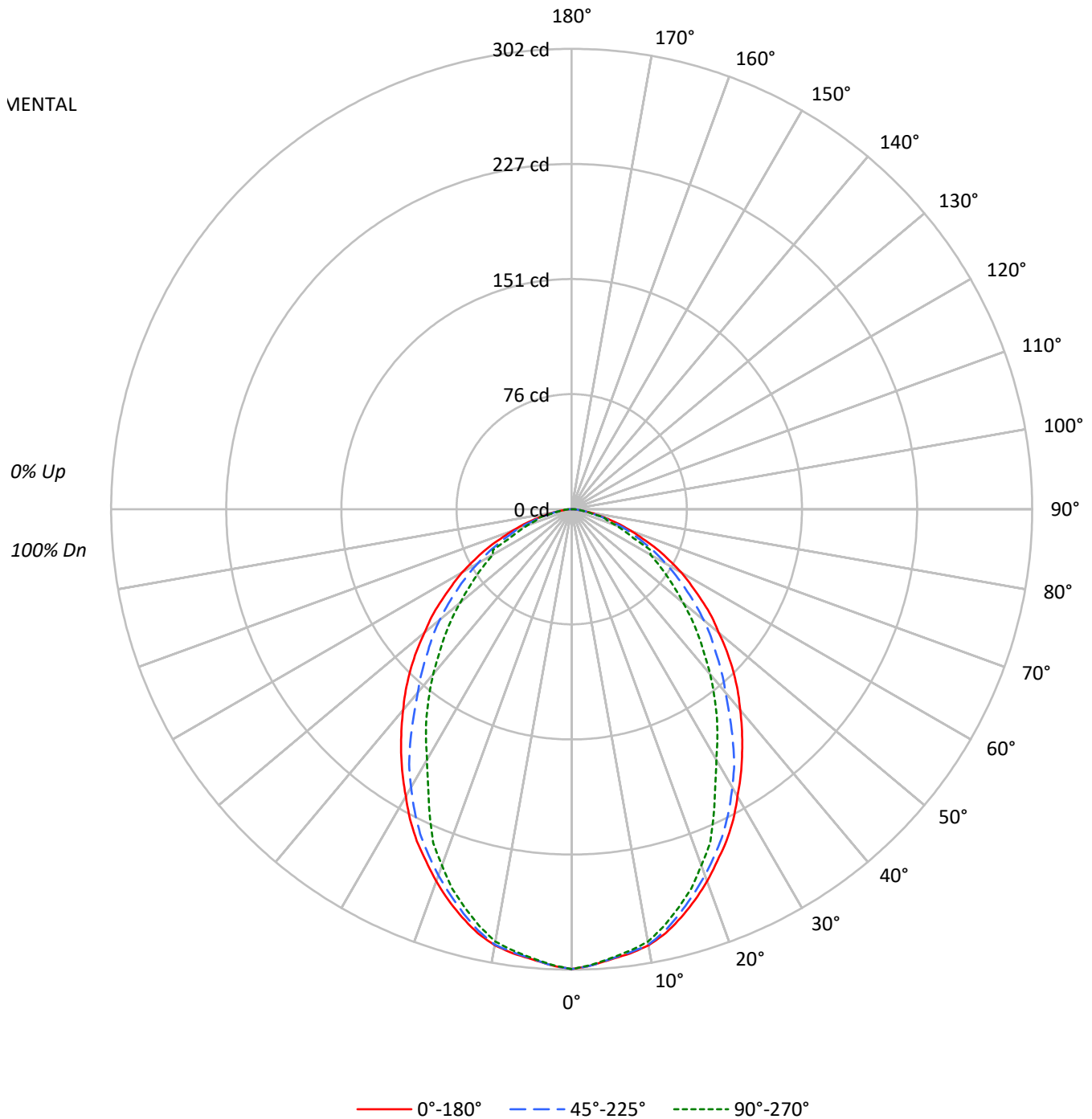
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 592.0 lumens  
Efficiency: N/A  
Efficacy: 102.1 lumens/watt  
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15  
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 5.8  
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	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	39	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°	3246	3246	3246
5°	3202	3198	3194
10°	3174	3171	3148
15°	3089	3058	3014
20°	2975	2927	2848
25°	2853	2791	2616
30°	2703	2618	2357
35°	2561	2419	2180
40°	2415	2205	1984
45°	2277	2038	1793
50°	2108	1892	1599
55°	1950	1713	1432
60°	1787	1531	1283
65°	1571	1340	1136
70°	1293	1174	966
75°	1031	898	944
80°	694	651	607
85°	432	519	605

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 2277 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	28.1	4.7
10°-20°	77.0	13.0
20°-30°	106.7	18.0
30°-40°	113.7	19.2
40°-50°	103.8	17.5
50°-60°	81.3	13.7
60°-70°	53.0	8.9
70°-80°	23.5	4.0
80°-90°	5.0	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°	211.8	35.8
0°-40°	325.5	55.0
0°-60°	510.5	86.2
0°-90°	592.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	592.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	302	302	302	302	302	
5°	296	296	296	296	296	28
15°	277	277	274	272	270	78
25°	240	239	235	227	220	110
35°	195	194	184	170	166	122
45°	150	146	134	123	118	115
55°	104	101	91	80	76	93
65°	62	58	53	54	45	61
75°	25	23	22	21	23	27
85°	4	4	4	4	5	5
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	301.6	301.6	301.6	301.6	301.6
2.5°	299.5	299.5	299.5	299.1	299.1
5°	296.3	296.0	296.0	295.6	295.6
7.5°	293.9	293.5	293.2	292.8	292.1
10°	290.4	290.4	290.1	288.3	288.0
12.5°	284.8	284.5	283.1	280.6	279.9
15°	277.2	277.2	274.4	271.6	270.5
17.5°	268.8	268.4	265.0	262.2	260.8
20°	259.7	259.0	255.5	251.0	248.6
22.5°	249.6	249.6	245.4	239.5	237.1
25°	240.2	238.8	235.0	226.6	220.3
27.5°	229.4	227.3	223.1	211.3	203.9
30°	217.5	216.5	210.6	195.2	189.6
32.5°	206.4	204.6	198.4	182.3	177.8
35°	194.9	193.5	184.1	170.1	165.9
37.5°	183.4	181.6	169.8	158.6	153.4
40°	171.9	169.8	156.9	146.8	141.2
42.5°	161.1	158.3	145.7	134.9	128.6
45°	149.6	146.4	133.9	122.7	117.8
47.5°	138.1	135.3	123.8	112.3	106.7
50°	125.9	123.4	113.0	101.4	95.5
52.5°	115.7	111.9	101.8	90.3	85.4
55°	103.9	100.8	91.3	80.5	76.3
57.5°	93.1	89.9	81.2	71.1	67.6
60°	83.0	78.4	71.1	62.4	59.6
62.5°	71.8	68.3	62.1	54.7	58.2
65°	61.7	58.2	52.6	53.7	44.6
67.5°	50.5	48.8	43.9	39.0	37.7
70°	41.1	39.0	37.3	32.1	30.7
72.5°	32.8	30.7	28.2	25.4	24.4
75°	24.8	23.0	21.6	20.6	22.7
77.5°	17.1	16.4	15.3	14.3	13.9
80°	11.2	10.8	10.5	10.1	9.8
82.5°	6.6	6.6	6.6	6.6	6.6
85°	3.5	3.8	4.2	4.5	4.9
87.5°	2.1	2.1	2.4	2.8	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)