

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: P558818

Luminaire Tested: FSR-12-1-LD4-1LO-50-UNV-93-85-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558818
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-93-85-EDD-90
Description: 1X1 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 516.0 lumens
Efficiency: N/A
Efficacy: 89.0 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

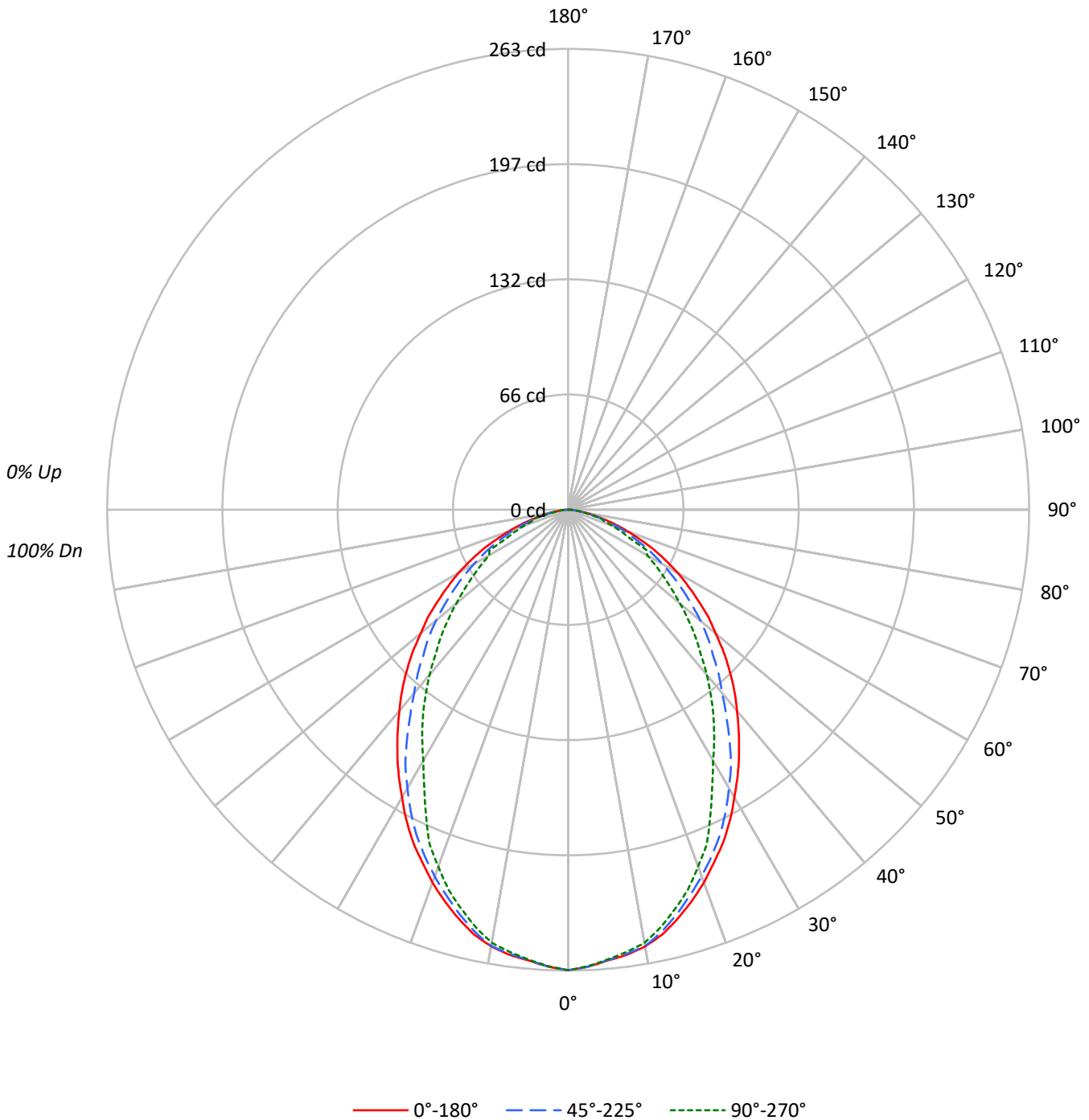
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	2829	2829	2829
5°	2791	2788	2784
10°	2766	2763	2743
15°	2692	2664	2628
20°	2593	2551	2482
25°	2487	2432	2280
30°	2357	2281	2055
35°	2233	2108	1900
40°	2105	1921	1730
45°	1985	1776	1563
50°	1837	1649	1395
55°	1700	1494	1248
60°	1556	1335	1119
65°	1370	1169	991
70°	1130	1023	840
75°	898	782	823
80°	601	564	527
85°	371	445	531

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1985 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.5	4.7
10°-20°	67.1	13.0
20°-30°	93.0	18.0
30°-40°	99.1	19.2
40°-50°	90.4	17.5
50°-60°	70.8	13.7
60°-70°	46.2	8.9
70°-80°	20.5	4.0
80°-90°	4.4	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°	184.6	35.8
0°-40°	283.7	55.0
0°-60°	445.0	86.2
0°-90°	516.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	516.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	263	263	263	263	263	
5°	258	258	258	258	258	25
15°	242	242	239	237	236	68
25°	209	208	205	198	192	96
35°	170	169	160	148	145	106
45°	130	128	117	107	103	100
55°	91	88	80	70	66	81
65°	54	51	46	47	39	53
75°	22	20	19	18	20	23
85°	3	3	4	4	4	4
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	262.8	262.8	262.8	262.8	262.8
2.5°	261.0	261.0	261.0	260.7	260.7
5°	258.3	258.0	258.0	257.7	257.7
7.5°	256.2	255.9	255.6	255.2	254.6
10°	253.1	253.1	252.8	251.3	251.0
12.5°	248.3	248.0	246.7	244.6	244.0
15°	241.6	241.6	239.1	236.7	235.8
17.5°	234.3	234.0	230.9	228.5	227.3
20°	226.4	225.8	222.7	218.8	216.7
22.5°	217.6	217.6	213.9	208.8	206.6
25°	209.4	208.1	204.8	197.5	192.0
27.5°	199.9	198.1	194.5	184.1	177.8
30°	189.6	188.7	183.5	170.2	165.3
32.5°	179.9	178.4	172.9	158.9	155.0
35°	169.9	168.6	160.4	148.3	144.6
37.5°	159.8	158.3	148.0	138.3	133.7
40°	149.8	148.0	136.7	127.9	123.1
42.5°	140.4	138.0	127.0	117.6	112.1
45°	130.4	127.6	116.7	107.0	102.7
47.5°	120.3	117.9	107.9	97.8	93.0
50°	109.7	107.6	98.5	88.4	83.3
52.5°	100.9	97.5	88.7	78.7	74.4
55°	90.6	87.8	79.6	70.2	66.5
57.5°	81.1	78.4	70.8	62.0	58.9
60°	72.3	68.4	62.0	54.4	52.0
62.5°	62.6	59.6	54.1	47.7	50.7
65°	53.8	50.7	45.9	46.8	38.9
67.5°	44.1	42.5	38.3	34.0	32.8
70°	35.9	34.0	32.5	28.0	26.7
72.5°	28.6	26.7	24.6	22.2	21.3
75°	21.6	20.1	18.8	17.9	19.8
77.5°	14.9	14.3	13.4	12.5	12.2
80°	9.7	9.4	9.1	8.8	8.5
82.5°	5.8	5.8	5.8	5.8	5.8
85°	3.0	3.3	3.6	4.0	4.3
87.5°	1.8	1.8	2.1	2.4	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)