

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: P558770

Luminaire Tested: FSR-12-1-LD4-1LO-50-UNV-80-85-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558770
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-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 515.0 lumens
Efficiency: N/A
Efficacy: 88.8 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

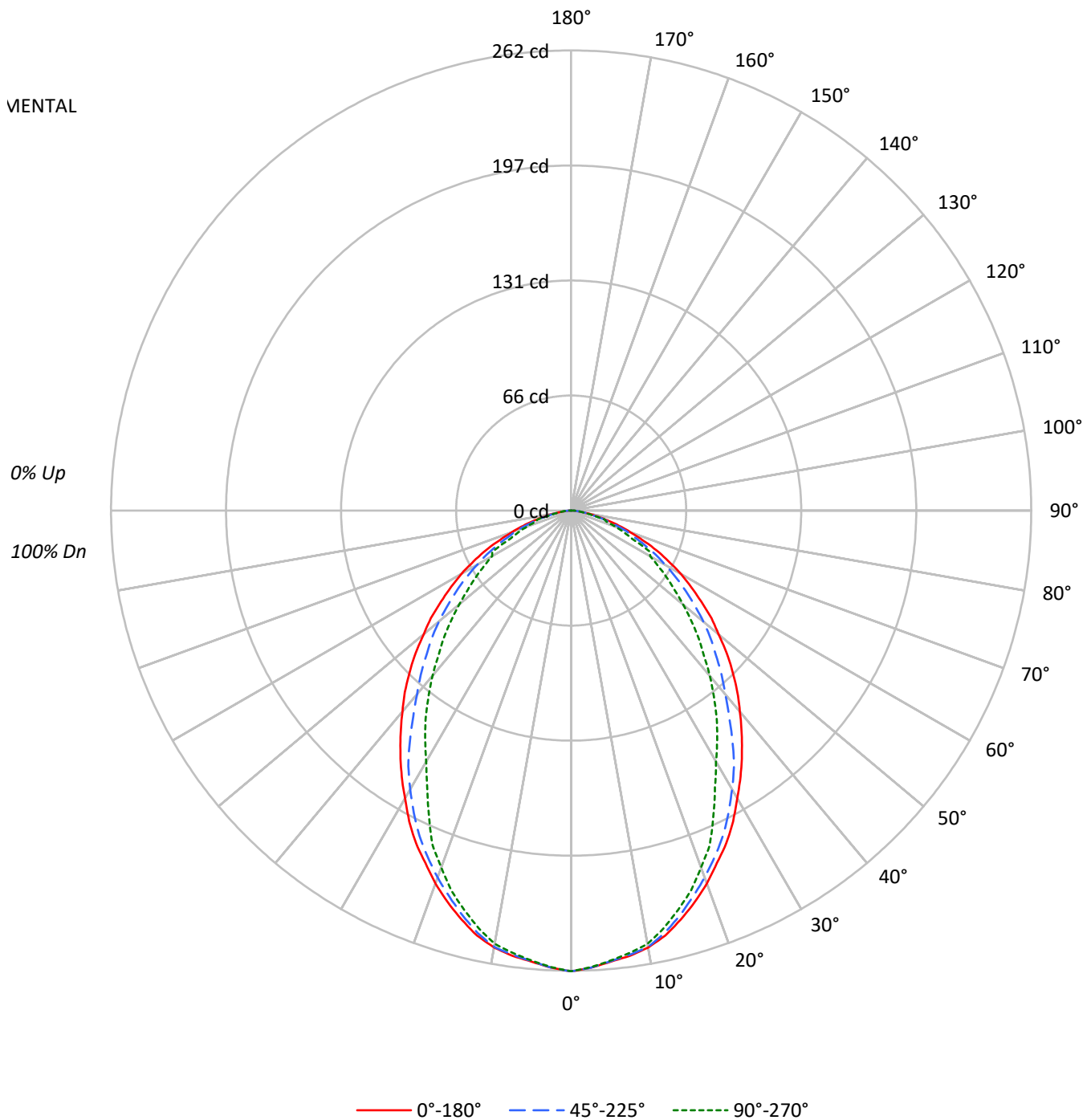
Input Watts (W): 5.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	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°	2823	2823	2823
5°	2786	2782	2779
10°	2761	2758	2738
15°	2687	2660	2622
20°	2588	2546	2477
25°	2482	2428	2277
30°	2352	2277	2051
35°	2227	2104	1897
40°	2101	1918	1725
45°	1980	1773	1560
50°	1834	1646	1392
55°	1696	1492	1246
60°	1554	1333	1117
65°	1368	1167	988
70°	1127	1023	840
75°	894	782	819
80°	601	564	527
85°	371	445	519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1980 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.4	4.7
10°-20°	67.0	13.0
20°-30°	92.8	18.0
30°-40°	98.9	19.2
40°-50°	90.3	17.5
50°-60°	70.7	13.7
60°-70°	46.1	8.9
70°-80°	20.4	4.0
80°-90°	4.4	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°	184.2	35.8
0°-40°	283.1	55.0
0°-60°	444.1	86.2
0°-90°	515.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	515.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	262	262	262	262	262	
5°	258	258	258	257	257	24
15°	241	241	239	236	235	68
25°	209	208	204	197	192	96
35°	170	168	160	148	144	106
45°	130	127	116	107	102	100
55°	90	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°	262.3	262.3	262.3	262.3	262.3
2.5°	260.5	260.5	260.5	260.2	260.2
5°	257.8	257.5	257.5	257.2	257.2
7.5°	255.7	255.4	255.1	254.8	254.1
10°	252.6	252.6	252.3	250.8	250.5
12.5°	247.8	247.5	246.3	244.1	243.5
15°	241.1	241.1	238.7	236.3	235.3
17.5°	233.8	233.5	230.5	228.1	226.9
20°	225.9	225.3	222.3	218.4	216.2
22.5°	217.1	217.1	213.5	208.4	206.2
25°	209.0	207.7	204.4	197.1	191.7
27.5°	199.6	197.7	194.1	183.8	177.4
30°	189.2	188.3	183.2	169.8	165.0
32.5°	179.5	178.0	172.6	158.6	154.7
35°	169.5	168.3	160.1	148.0	144.4
37.5°	159.5	158.0	147.7	138.0	133.4
40°	149.5	147.7	136.5	127.7	122.8
42.5°	140.1	137.7	126.8	117.4	111.9
45°	130.1	127.4	116.5	106.8	102.5
47.5°	120.1	117.7	107.7	97.7	92.8
50°	109.5	107.4	98.3	88.3	83.1
52.5°	100.7	97.4	88.6	78.5	74.3
55°	90.4	87.6	79.5	70.1	66.4
57.5°	81.0	78.2	70.7	61.9	58.8
60°	72.2	68.2	61.9	54.3	51.9
62.5°	62.5	59.4	54.0	47.6	50.6
65°	53.7	50.6	45.8	46.7	38.8
67.5°	44.0	42.5	38.2	34.0	32.8
70°	35.8	34.0	32.5	27.9	26.7
72.5°	28.5	26.7	24.6	22.1	21.2
75°	21.5	20.0	18.8	17.9	19.7
77.5°	14.9	14.3	13.3	12.4	12.1
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	3.9	4.2
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)