

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: P558590

Luminaire Tested: FSR-12-1-LD4-1HI-50-UNV-80-97-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558590
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-LD4-1HI-50-UNV-80-97-EDD-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .375 CLEAR TEMPERED G ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 824.0 lumens
Efficiency: N/A
Efficacy: 76.3 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

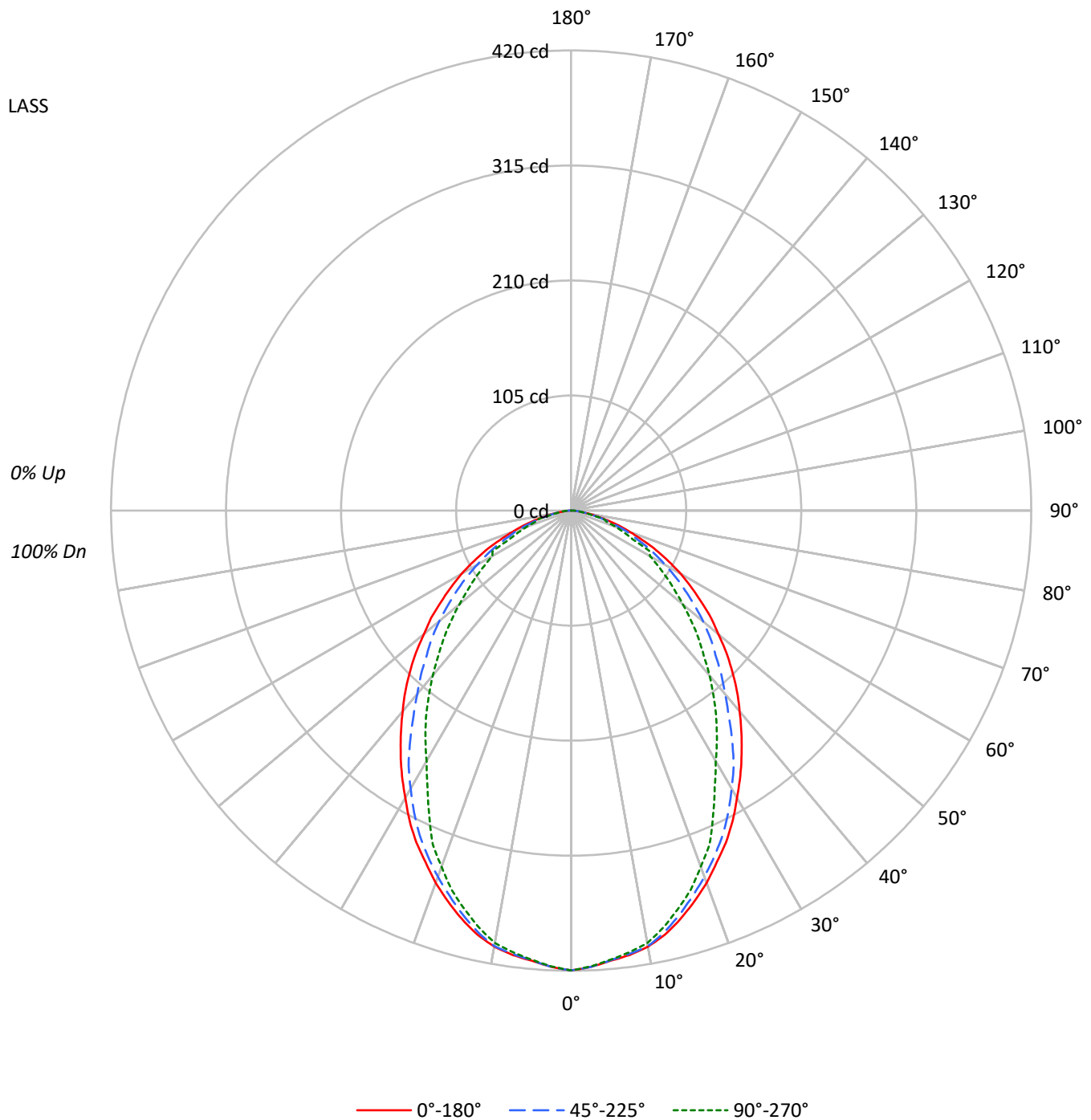
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P558590

CATALOG NUMBER: FSR-12-1-LD4-1HI-50-UNV-80-97-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P558590

CATALOG NUMBER: FSR-12-1-LD4-1HI-50-UNV-80-97-EDD-90

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°	4518	4518	4518
5°	4457	4452	4446
10°	4418	4412	4381
15°	4299	4256	4196
20°	4141	4074	3963
25°	3970	3885	3643
30°	3764	3643	3281
35°	3565	3367	3035
40°	3361	3069	2761
45°	3169	2836	2496
50°	2934	2632	2227
55°	2714	2385	1995
60°	2486	2131	1787
65°	2188	1867	1582
70°	1803	1633	1344
75°	1435	1252	1310
80°	961	905	843
85°	605	716	840

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3169 cd/sqm



TEST NUMBER: P558590

CATALOG NUMBER: FSR-12-1-LD4-1HI-50-UNV-80-97-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.1	4.7
10°-20°	107.2	13.0
20°-30°	148.5	18.0
30°-40°	158.3	19.2
40°-50°	144.4	17.5
50°-60°	113.1	13.7
60°-70°	73.7	8.9
70°-80°	32.7	4.0
80°-90°	7.0	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°	294.8	35.8
0°-40°	453.0	55.0
0°-60°	710.6	86.2
0°-90°	824.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	824.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	412	412	412	412	412	39
15°	386	386	382	378	376	108
25°	334	332	327	315	307	153
35°	271	269	256	237	231	170
45°	208	204	186	171	164	160
55°	145	140	127	112	106	130
65°	86	81	73	75	62	85
75°	34	32	30	29	32	37
85°	5	5	6	6	7	7
90°	0	0	0	0	0	



TEST NUMBER: P558590

CATALOG NUMBER: FSR-12-1-LD4-1HI-50-UNV-80-97-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	419.7	419.7	419.7	419.7	419.7
2.5°	416.8	416.8	416.8	416.3	416.3
5°	412.5	412.0	412.0	411.5	411.5
7.5°	409.1	408.6	408.1	407.6	406.6
10°	404.2	404.2	403.7	401.3	400.8
12.5°	396.4	396.0	394.0	390.6	389.6
15°	385.8	385.8	381.9	378.0	376.5
17.5°	374.1	373.6	368.8	364.9	363.0
20°	361.5	360.5	355.7	349.4	346.0
22.5°	347.4	347.4	341.6	333.4	330.0
25°	334.3	332.4	327.1	315.4	306.7
27.5°	319.3	316.4	310.6	294.1	283.9
30°	302.8	301.3	293.1	271.7	264.0
32.5°	287.3	284.8	276.1	253.8	247.5
35°	271.3	269.3	256.2	236.8	231.0
37.5°	255.2	252.8	236.3	220.8	213.5
40°	239.2	236.3	218.4	204.3	196.5
42.5°	224.2	220.3	202.8	187.8	179.1
45°	208.2	203.8	186.3	170.8	164.0
47.5°	192.2	188.3	172.3	156.2	148.5
50°	175.2	171.8	157.2	141.2	133.0
52.5°	161.1	155.8	141.7	125.7	118.9
55°	144.6	140.2	127.1	112.1	106.3
57.5°	129.6	125.2	113.1	99.0	94.1
60°	115.5	109.2	99.0	86.9	83.0
62.5°	100.0	95.1	86.4	76.2	81.0
65°	85.9	81.0	73.3	74.7	62.1
67.5°	70.4	67.9	61.1	54.3	52.4
70°	57.3	54.3	51.9	44.6	42.7
72.5°	45.6	42.7	39.3	35.4	34.0
75°	34.5	32.0	30.1	28.6	31.5
77.5°	23.8	22.8	21.4	19.9	19.4
80°	15.5	15.0	14.6	14.1	13.6
82.5°	9.2	9.2	9.2	9.2	9.2
85°	4.9	5.3	5.8	6.3	6.8
87.5°	2.9	2.9	3.4	3.9	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)