

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: P558576

Luminaire Tested: FSR-12-1-LD4-1HI-50-UNV-80-84-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P558576
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-80-84-EDD-90
Description: 1X1 FSR TROFFER WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .125 CLEAR PC ENVIRON
SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 862.0 lumens
Efficiency: N/A
Efficacy: 79.8 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

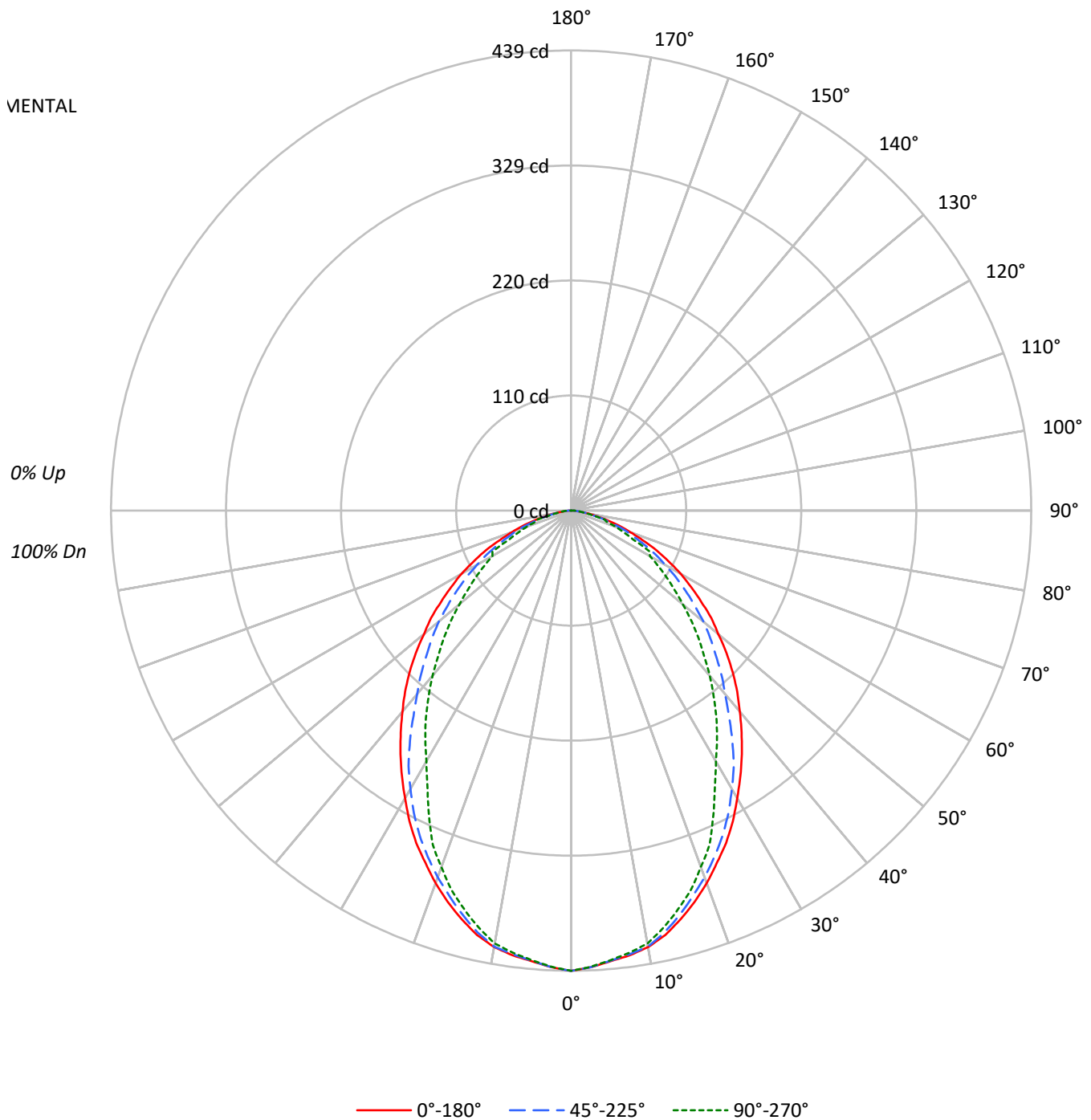
Input Watts (W): 10.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P558576

CATALOG NUMBER: FSR-12-1-LD4-1HI-50-UNV-80-84-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P558576

CATALOG NUMBER: FSR-12-1-LD4-1HI-50-UNV-80-84-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	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°	4726	4726	4726
5°	4662	4657	4652
10°	4621	4616	4583
15°	4498	4452	4389
20°	4332	4262	4145
25°	4154	4063	3810
30°	3938	3811	3432
35°	3729	3522	3175
40°	3517	3209	2889
45°	3315	2967	2612
50°	3069	2755	2329
55°	2839	2496	2087
60°	2601	2230	1869
65°	2287	1954	1656
70°	1885	1709	1407
75°	1497	1310	1372
80°	1004	942	880
85°	630	753	877

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3315 cd/sqm



TEST NUMBER: P558576

CATALOG NUMBER: FSR-12-1-LD4-1HI-50-UNV-80-84-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.9	4.7
10°-20°	112.2	13.0
20°-30°	155.3	18.0
30°-40°	165.6	19.2
40°-50°	151.1	17.5
50°-60°	118.4	13.7
60°-70°	77.2	9.0
70°-80°	34.2	4.0
80°-90°	7.3	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°	308.3	35.8
0°-40°	473.9	55.0
0°-60°	743.4	86.2
0°-90°	862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	862.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	439	439	439	439	439	
5°	432	431	431	430	430	41
15°	404	404	400	395	394	113
25°	350	348	342	330	321	161
35°	284	282	268	248	242	177
45°	218	213	195	179	172	168
55°	151	147	133	117	111	136
65°	90	85	77	78	65	89
75°	36	34	32	30	33	39
85°	5	6	6	7	7	7
90°	0	0	0	0	0	



TEST NUMBER: P558576

CATALOG NUMBER: FSR-12-1-LD4-1HI-50-UNV-80-84-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	439.1	439.1	439.1	439.1	439.1
2.5°	436.0	436.0	436.0	435.5	435.5
5°	431.5	431.0	431.0	430.5	430.5
7.5°	427.9	427.4	426.9	426.4	425.4
10°	422.8	422.8	422.3	419.8	419.3
12.5°	414.7	414.2	412.2	408.6	407.6
15°	403.6	403.6	399.5	395.4	393.9
17.5°	391.4	390.9	385.8	381.7	379.7
20°	378.2	377.2	372.1	365.5	361.9
22.5°	363.5	363.5	357.4	348.7	345.2
25°	349.8	347.7	342.1	330.0	320.8
27.5°	334.0	331.0	324.9	307.6	297.0
30°	316.8	315.2	306.6	284.3	276.1
32.5°	300.5	298.0	288.8	265.5	258.9
35°	283.8	281.7	268.0	247.7	241.6
37.5°	267.0	264.5	247.2	231.0	223.4
40°	250.3	247.2	228.4	213.7	205.6
42.5°	234.5	230.5	212.2	196.4	187.3
45°	217.8	213.2	194.9	178.7	171.6
47.5°	201.0	197.0	180.2	163.5	155.3
50°	183.3	179.7	164.5	147.7	139.1
52.5°	168.5	162.9	148.2	131.5	124.4
55°	151.3	146.7	133.0	117.3	111.2
57.5°	135.5	131.0	118.3	103.6	98.5
60°	120.8	114.2	103.6	90.9	86.8
62.5°	104.6	99.5	90.4	79.7	84.8
65°	89.8	84.8	76.7	78.2	65.0
67.5°	73.6	71.1	64.0	56.9	54.8
70°	59.9	56.9	54.3	46.7	44.7
72.5°	47.7	44.7	41.1	37.1	35.5
75°	36.0	33.5	31.5	29.9	33.0
77.5°	24.9	23.9	22.3	20.8	20.3
80°	16.2	15.7	15.2	14.7	14.2
82.5°	9.6	9.6	9.6	9.6	9.6
85°	5.1	5.6	6.1	6.6	7.1
87.5°	3.0	3.0	3.6	4.1	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)