

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: P559957

Luminaire Tested: FSR-12-2-LD4-1LO-50-UNV-82-86-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559957
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-12-2-LD4-1LO-50-UNV-82-86-EDD
Description: 1X2 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SI
LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1054.0 lumens
Efficiency: N/A
Efficacy: 90.1 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1 / 1.15
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

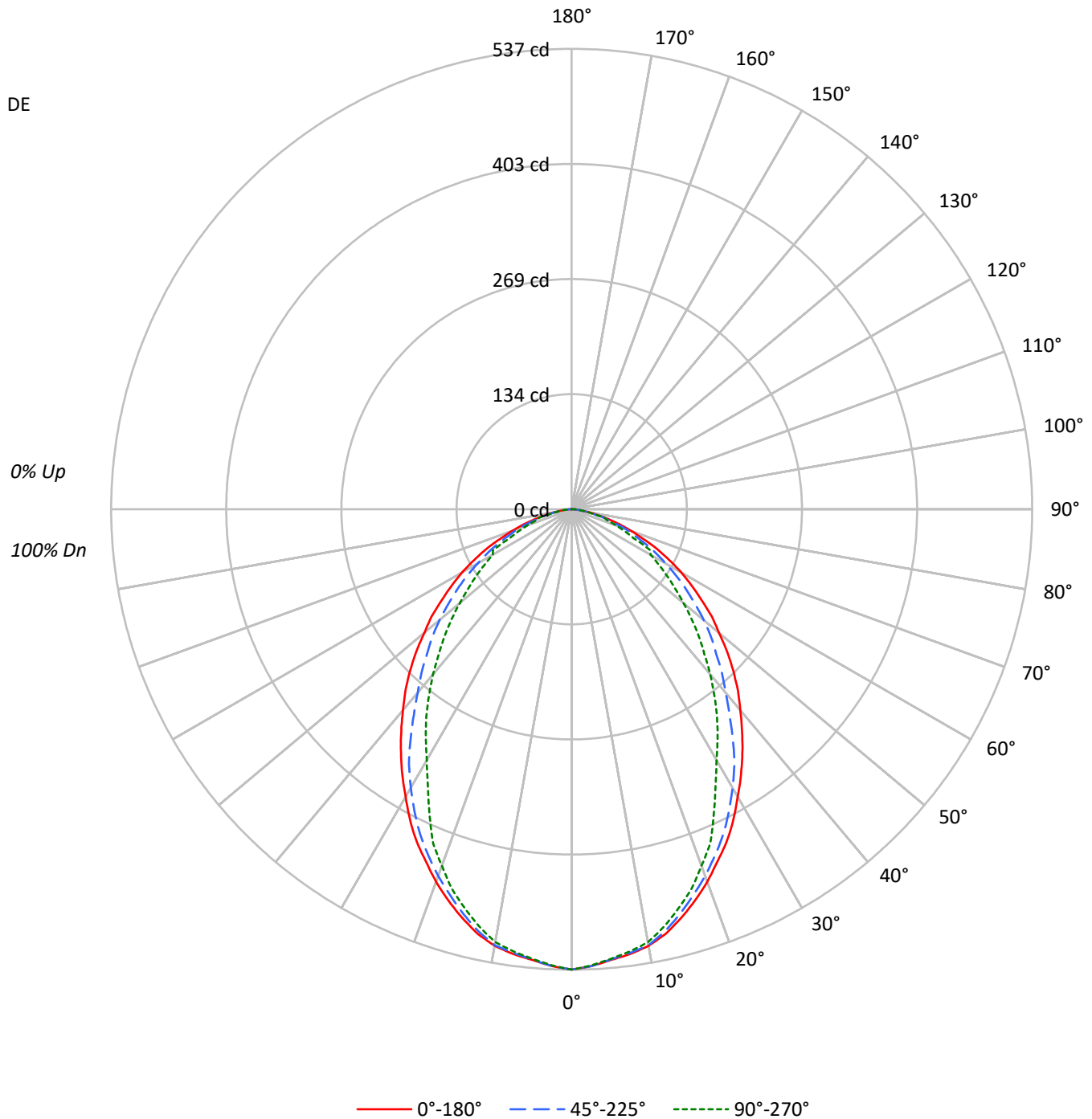
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P559957

CATALOG NUMBER: FSR-12-2-LD4-1LO-50-UNV-82-86-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P559957

CATALOG NUMBER: FSR-12-2-LD4-1LO-50-UNV-82-86-EDD

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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	106	102	99	108	104	100	97	100	97	94	96	94	91	92	90	89	87					87			
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75					75			
3	93	84	77	71	91	82	76	70	79	74	69	77	72	68	74	70	67	65					65			
4	86	75	67	61	84	74	66	61	72	65	60	69	64	59	67	62	58	56					56			
5	80	68	60	54	78	67	59	53	65	58	53	63	57	52	61	56	52	50					50			
6	74	62	53	48	72	61	53	47	59	52	47	57	51	47	56	50	46	44					44			
7	69	56	48	43	67	56	48	42	54	47	42	53	46	42	51	46	42	40					40			
8	65	52	44	38	63	51	44	38	50	43	38	49	42	38	48	42	38	36					36			
9	61	48	40	35	59	47	40	35	46	39	35	45	39	34	44	38	34	33					33			
10	57	44	37	32	56	44	37	32	43	36	32	42	36	32	41	36	32	30					30			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2890	2890	2890
5°	2850	2847	2843
10°	2825	2822	2802
15°	2749	2722	2684
20°	2648	2606	2534
25°	2540	2484	2330
30°	2407	2330	2099
35°	2280	2153	1941
40°	2150	1962	1766
45°	2027	1814	1597
50°	1876	1684	1424
55°	1736	1526	1275
60°	1590	1363	1142
65°	1400	1193	1011
70°	1152	1045	859
75°	917	801	838
80°	617	576	539
85°	383	457	537

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2027 cd/sqm



TEST NUMBER: P559957

CATALOG NUMBER: FSR-12-2-LD4-1LO-50-UNV-82-86-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.0	4.7
10°-20°	137.2	13.0
20°-30°	189.9	18.0
30°-40°	202.5	19.2
40°-50°	184.7	17.5
50°-60°	144.7	13.7
60°-70°	94.3	8.9
70°-80°	41.8	4.0
80°-90°	9.0	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°	377.0	35.8
0°-40°	579.5	55.0
0°-60°	908.9	86.2
0°-90°	1054.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1054.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	537	537	537	537	537	
5°	528	527	527	526	526	50
15°	493	493	488	484	482	139
25°	428	425	418	403	392	196
35°	347	344	328	303	295	217
45°	266	261	238	218	210	205
55°	185	179	163	143	136	166
65°	110	104	94	96	79	108
75°	44	41	38	37	40	47
85°	6	7	7	8	9	9
90°	0	0	0	0	0	



TEST NUMBER: P559957

CATALOG NUMBER: FSR-12-2-LD4-1LO-50-UNV-82-86-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	536.9	536.9	536.9	536.9	536.9
2.5°	533.2	533.2	533.2	532.5	532.5
5°	527.6	527.0	527.0	526.3	526.3
7.5°	523.2	522.6	522.0	521.4	520.1
10°	517.0	517.0	516.4	513.3	512.7
12.5°	507.1	506.5	504.0	499.7	498.4
15°	493.4	493.4	488.5	483.5	481.7
17.5°	478.5	477.9	471.7	466.8	464.3
20°	462.4	461.2	455.0	446.9	442.5
22.5°	444.4	444.4	437.0	426.4	422.1
25°	427.7	425.2	418.3	403.4	392.3
27.5°	408.4	404.7	397.2	376.1	363.1
30°	387.3	385.4	374.9	347.6	337.7
32.5°	367.4	364.3	353.2	324.6	316.5
35°	347.0	344.5	327.7	302.9	295.4
37.5°	326.5	323.4	302.3	282.4	273.1
40°	306.0	302.3	279.3	261.3	251.4
42.5°	286.8	281.8	259.4	240.2	229.0
45°	266.3	260.7	238.3	218.5	209.8
47.5°	245.8	240.8	220.3	199.9	189.9
50°	224.1	219.7	201.1	180.6	170.1
52.5°	206.1	199.2	181.2	160.8	152.1
55°	185.0	179.4	162.6	143.4	135.9
57.5°	165.7	160.1	144.6	126.6	120.4
60°	147.7	139.7	126.6	111.1	106.1
62.5°	127.9	121.7	110.5	97.4	103.7
65°	109.9	103.7	93.7	95.6	79.4
67.5°	90.0	86.9	78.2	69.5	67.0
70°	73.2	69.5	66.4	57.1	54.6
72.5°	58.3	54.6	50.3	45.3	43.4
75°	44.1	41.0	38.5	36.6	40.3
77.5°	30.4	29.2	27.3	25.4	24.8
80°	19.9	19.2	18.6	18.0	17.4
82.5°	11.8	11.8	11.8	11.8	11.8
85°	6.2	6.8	7.4	8.1	8.7
87.5°	3.7	3.7	4.3	5.0	5.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)