

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: P559978

Luminaire Tested: FSR-12-2-LD4-1LO-50-UNV-93-94-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559978
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-93-94-EDD-90
Description: 1X2 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .187 CLEAR TEMPER
GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1022.0 lumens
Efficiency: N/A
Efficacy: 87.3 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

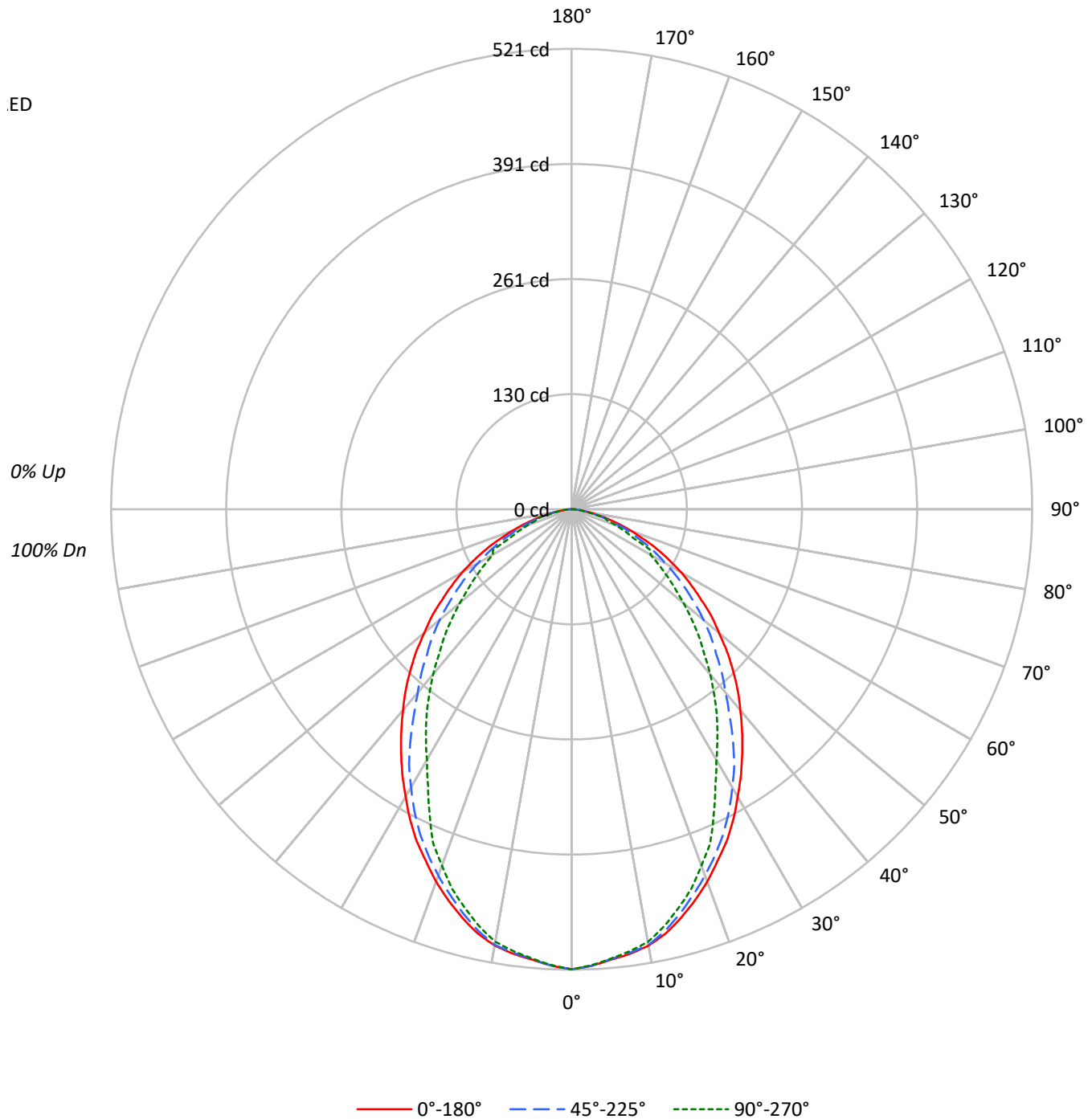
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P559978

CATALOG NUMBER: FSR-12-2-LD4-1LO-50-UNV-93-94-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P559978

CATALOG NUMBER: FSR-12-2-LD4-1LO-50-UNV-93-94-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	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°	2802	2802	2802
5°	2764	2761	2757
10°	2740	2736	2717
15°	2666	2639	2602
20°	2568	2527	2458
25°	2463	2409	2259
30°	2334	2259	2035
35°	2210	2088	1882
40°	2085	1903	1712
45°	1965	1759	1548
50°	1819	1633	1381
55°	1682	1480	1237
60°	1541	1322	1108
65°	1356	1158	981
70°	1117	1013	834
75°	888	776	813
80°	598	561	524
85°	371	445	519

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1965 cd/sqm



TEST NUMBER: P559978

CATALOG NUMBER: FSR-12-2-LD4-1LO-50-UNV-93-94-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	48.5	4.7
10°-20°	133.0	13.0
20°-30°	184.1	18.0
30°-40°	196.3	19.2
40°-50°	179.1	17.5
50°-60°	140.3	13.7
60°-70°	91.5	8.9
70°-80°	40.5	4.0
80°-90°	8.7	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°	365.6	35.8
0°-40°	561.9	55.0
0°-60°	881.3	86.2
0°-90°	1022.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1022.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	521	521	521	521	521	
5°	512	511	511	510	510	49
15°	478	478	474	469	467	135
25°	415	412	406	391	380	190
35°	336	334	318	294	286	210
45°	258	253	231	212	203	199
55°	179	174	158	139	132	161
65°	106	100	91	93	77	105
75°	43	40	37	36	39	46
85°	6	7	7	8	8	8
90°	0	0	0	0	0	



TEST NUMBER: P559978

CATALOG NUMBER: FSR-12-2-LD4-1LO-50-UNV-93-94-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	520.6	520.6	520.6	520.6	520.6
2.5°	517.0	517.0	517.0	516.4	516.4
5°	511.6	511.0	511.0	510.4	510.4
7.5°	507.4	506.8	506.1	505.5	504.3
10°	501.3	501.3	500.7	497.7	497.1
12.5°	491.7	491.1	488.7	484.5	483.3
15°	478.5	478.5	473.6	468.8	467.0
17.5°	464.0	463.4	457.4	452.6	450.2
20°	448.4	447.2	441.2	433.3	429.1
22.5°	430.9	430.9	423.7	413.5	409.3
25°	414.7	412.3	405.6	391.2	380.4
27.5°	396.0	392.4	385.2	364.7	352.1
30°	375.5	373.7	363.5	337.0	327.4
32.5°	356.3	353.3	342.4	314.8	306.9
35°	336.4	334.0	317.8	293.7	286.5
37.5°	316.6	313.6	293.1	273.8	264.8
40°	296.7	293.1	270.8	253.4	243.7
42.5°	278.1	273.2	251.6	232.9	222.1
45°	258.2	252.8	231.1	211.8	203.4
47.5°	238.3	233.5	213.7	193.8	184.2
50°	217.3	213.1	195.0	175.1	164.9
52.5°	199.8	193.2	175.7	155.9	147.5
55°	179.3	173.9	157.7	139.0	131.8
57.5°	160.7	155.3	140.2	122.8	116.8
60°	143.2	135.4	122.8	107.7	102.9
62.5°	124.0	118.0	107.1	94.5	100.5
65°	106.5	100.5	90.9	92.7	77.0
67.5°	87.3	84.3	75.8	67.4	65.0
70°	71.0	67.4	64.4	55.4	53.0
72.5°	56.6	53.0	48.7	43.9	42.1
75°	42.7	39.7	37.3	35.5	39.1
77.5°	29.5	28.3	26.5	24.7	24.1
80°	19.3	18.7	18.1	17.5	16.9
82.5°	11.4	11.4	11.4	11.4	11.4
85°	6.0	6.6	7.2	7.8	8.4
87.5°	3.6	3.6	4.2	4.8	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)