

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: P559072

Luminaire Tested: FSR-12-1-LD4-2HI-35-UNV-93-84-EDD-90

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559072
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-LD4-2HI-35-UNV-93-84-EDD-90
Description: 1X1 FSR TROFFER WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1618.0 lumens
Efficiency: N/A
Efficacy: 74.9 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

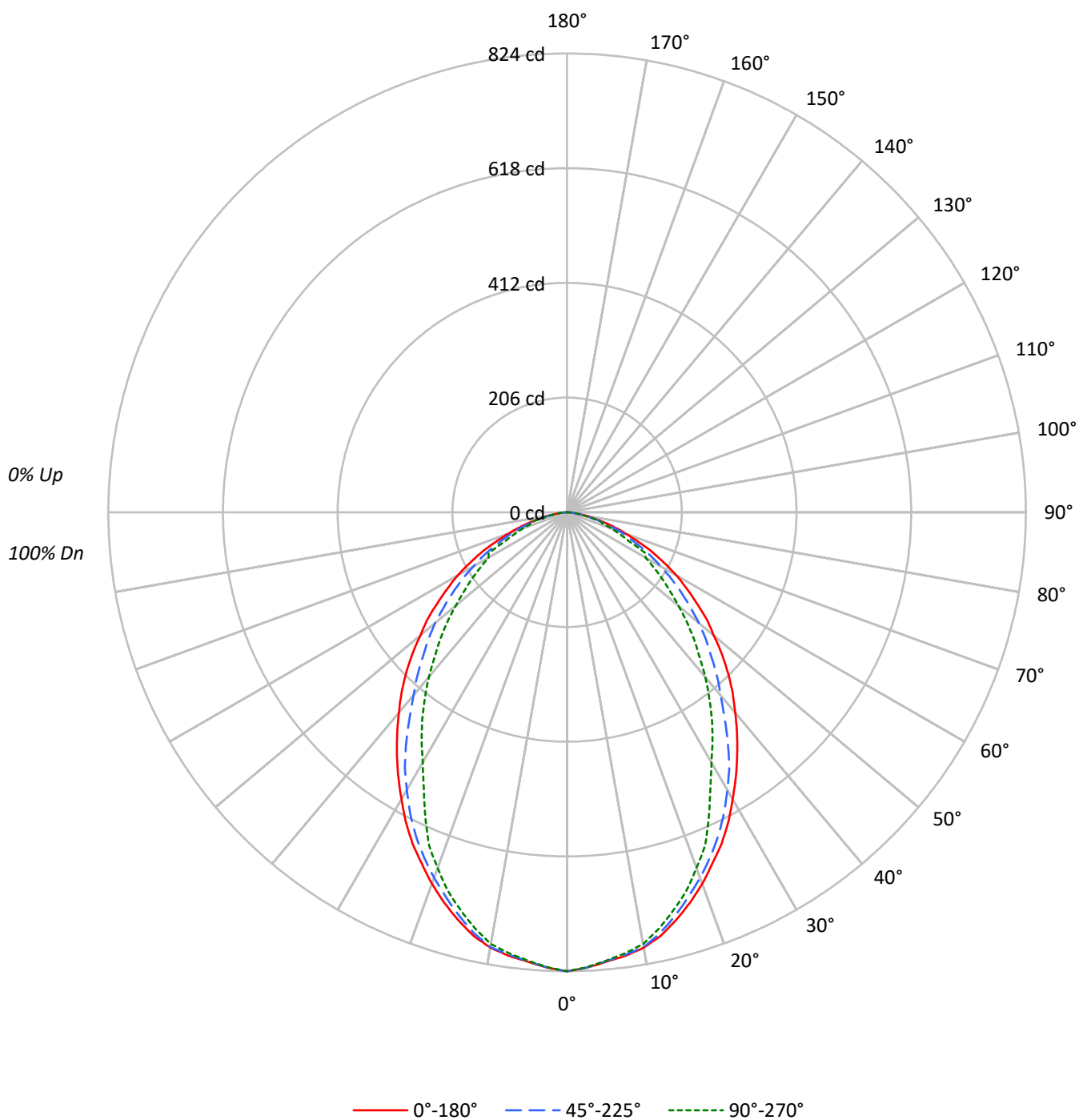
Input Watts (W): 21.6
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P559072

CATALOG NUMBER: FSR-12-1-LD4-2HI-35-UNV-93-84-EDD-90

Luminous Intensity Polar Plot





TEST NUMBER: P559072

CATALOG NUMBER: FSR-12-1-LD4-2HI-35-UNV-93-84-EDD-90

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20
RC	80					70					50					30					0
RW	70	50	30	10	70	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°	8872	8872	8872
5°	8751	8740	8730
10°	8675	8664	8602
15°	8441	8357	8240
20°	8131	8000	7782
25°	7797	7627	7152
30°	7390	7153	6442
35°	6999	6611	5959
40°	6600	6025	5422
45°	6223	5570	4903
50°	5761	5169	4372
55°	5328	4684	3917
60°	4883	4185	3507
65°	4294	3665	3107
70°	3537	3210	2637
75°	2816	2458	2574
80°	1891	1773	1655
85°	1173	1408	1643

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 6223 cd/sqm

TEST NUMBER: P559072

CATALOG NUMBER: FSR-12-1-LD4-2HI-35-UNV-93-84-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.7	4.7
10°-20°	210.6	13.0
20°-30°	291.5	18.0
30°-40°	310.8	19.2
40°-50°	283.6	17.5
50°-60°	222.1	13.7
60°-70°	144.8	8.9
70°-80°	64.2	4.0
80°-90°	13.8	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°	578.8	35.8
0°-40°	889.6	55.0
0°-60°	1395.3	86.2
0°-90°	1618.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1618.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	824	824	824	824	824	
5°	810	809	809	808	808	77
15°	758	758	750	742	739	213
25°	656	653	642	619	602	301
35°	533	529	503	465	454	333
45°	409	400	366	335	322	315
55°	284	275	250	220	209	255
65°	169	159	144	147	122	166
75°	68	63	59	56	62	73
85°	10	10	11	12	13	13
90°	0	0	0	0	0	

TEST NUMBER: P559072

CATALOG NUMBER: FSR-12-1-LD4-2HI-35-UNV-93-84-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	824.2	824.2	824.2	824.2	824.2
2.5°	818.5	818.5	818.5	817.5	817.5
5°	809.9	808.9	808.9	808.0	808.0
7.5°	803.2	802.3	801.3	800.4	798.5
10°	793.7	793.7	792.7	788.0	787.0
12.5°	778.5	777.5	773.7	767.0	765.1
15°	757.5	757.5	749.9	742.2	739.4
17.5°	734.6	733.7	724.1	716.5	712.7
20°	709.8	707.9	698.4	686.0	679.4
22.5°	682.2	682.2	670.8	654.6	647.9
25°	656.5	652.7	642.2	619.3	602.2
27.5°	627.0	621.2	609.8	577.4	557.4
30°	594.6	591.7	575.5	533.6	518.3
32.5°	564.1	559.3	542.2	498.3	485.9
35°	532.6	528.8	503.1	465.0	453.5
37.5°	501.2	496.4	464.0	433.5	419.2
40°	469.7	464.0	428.8	401.1	385.9
42.5°	440.2	432.6	398.3	368.7	351.6
45°	408.8	400.2	365.9	335.4	322.1
47.5°	377.3	369.7	338.3	306.8	291.6
50°	344.0	337.3	308.7	277.3	261.1
52.5°	316.3	305.9	278.2	246.8	233.4
55°	283.9	275.4	249.6	220.1	208.7
57.5°	254.4	245.8	222.0	194.4	184.8
60°	226.8	214.4	194.4	170.6	162.9
62.5°	196.3	186.8	169.6	149.6	159.1
65°	168.6	159.1	143.9	146.7	122.0
67.5°	138.2	133.4	120.1	106.7	102.9
70°	112.4	106.7	102.0	87.7	83.8
72.5°	89.6	83.8	77.2	69.6	66.7
75°	67.7	62.9	59.1	56.2	61.9
77.5°	46.7	44.8	41.9	39.1	38.1
80°	30.5	29.5	28.6	27.6	26.7
82.5°	18.1	18.1	18.1	18.1	18.1
85°	9.5	10.5	11.4	12.4	13.3
87.5°	5.7	5.7	6.7	7.6	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)