

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: P559819

Luminaire Tested: FSR-12-2-LD4-1LO-35-UNV-81-94-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559819
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-35-UNV-81-94-EDD
Description: 1X2 FSR TROFFER WITH .156 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1085.0 lumens
Efficiency: N/A
Efficacy: 92.7 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

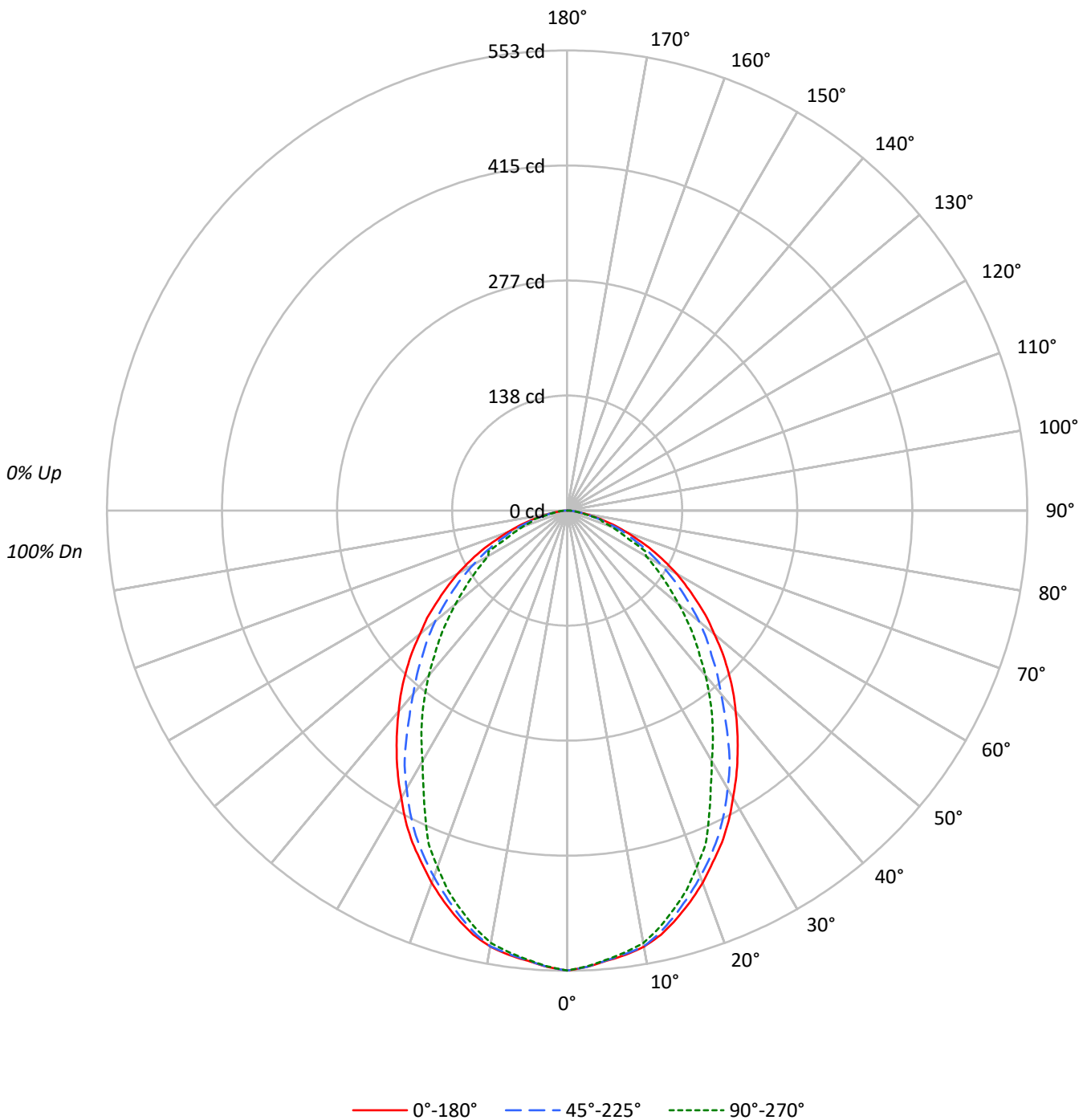
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



TEST NUMBER: P559819

CATALOG NUMBER: FSR-12-2-LD4-1LO-35-UNV-81-94-EDD

Luminous Intensity Polar Plot





TEST NUMBER: P559819

CATALOG NUMBER: FSR-12-2-LD4-1LO-35-UNV-81-94-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	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°	2975	2975	2975
5°	2934	2931	2927
10°	2908	2905	2884
15°	2830	2802	2763
20°	2726	2682	2609
25°	2614	2557	2398
30°	2478	2398	2160
35°	2347	2217	1998
40°	2213	2020	1818
45°	2086	1868	1644
50°	1932	1733	1466
55°	1787	1571	1313
60°	1637	1403	1176
65°	1440	1229	1042
70°	1186	1076	884
75°	944	823	863
80°	632	595	555
85°	395	475	550

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2086 cd/sqm

TEST NUMBER: P559819

CATALOG NUMBER: FSR-12-2-LD4-1LO-35-UNV-81-94-EDD

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.4	4.7
10°-20°	141.2	13.0
20°-30°	195.5	18.0
30°-40°	208.4	19.2
40°-50°	190.2	17.5
50°-60°	149.0	13.7
60°-70°	97.1	8.9
70°-80°	43.0	4.0
80°-90°	9.2	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°	388.1	35.8
0°-40°	596.5	55.0
0°-60°	935.7	86.2
0°-90°	1085.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1085.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	553	553	553	553	553	
5°	543	542	542	542	542	52
15°	508	508	503	498	496	143
25°	440	438	431	415	404	202
35°	357	355	337	312	304	223
45°	274	268	245	225	216	211
55°	190	185	167	148	140	171
65°	113	107	96	98	82	111
75°	45	42	40	38	42	49
85°	6	7	8	8	9	9
90°	0	0	0	0	0	



TEST NUMBER: P559819

CATALOG NUMBER: FSR-12-2-LD4-1LO-35-UNV-81-94-EDD

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	552.7	552.7	552.7	552.7	552.7
2.5°	548.9	548.9	548.9	548.2	548.2
5°	543.1	542.5	542.5	541.8	541.8
7.5°	538.6	538.0	537.3	536.7	535.4
10°	532.2	532.2	531.6	528.4	527.8
12.5°	522.0	521.4	518.8	514.3	513.1
15°	508.0	508.0	502.8	497.7	495.8
17.5°	492.6	492.0	485.6	480.5	477.9
20°	476.0	474.7	468.3	460.0	455.6
22.5°	457.5	457.5	449.8	439.0	434.5
25°	440.2	437.7	430.6	415.3	403.8
27.5°	420.4	416.6	408.9	387.2	373.8
30°	398.7	396.8	385.9	357.8	347.6
32.5°	378.3	375.1	363.6	334.2	325.9
35°	357.2	354.6	337.4	311.8	304.1
37.5°	336.1	332.9	311.2	290.7	281.1
40°	315.0	311.2	287.5	269.0	258.8
42.5°	295.2	290.1	267.1	247.3	235.8
45°	274.1	268.4	245.4	224.9	216.0
47.5°	253.0	247.9	226.8	205.7	195.5
50°	230.7	226.2	207.0	185.9	175.1
52.5°	212.1	205.1	186.6	165.5	156.5
55°	190.4	184.7	167.4	147.6	139.9
57.5°	170.6	164.8	148.9	130.3	124.0
60°	152.1	143.8	130.3	114.4	109.3
62.5°	131.6	125.2	113.7	100.3	106.7
65°	113.1	106.7	96.5	98.4	81.8
67.5°	92.6	89.5	80.5	71.6	69.0
70°	75.4	71.6	68.4	58.8	56.2
72.5°	60.1	56.2	51.8	46.6	44.7
75°	45.4	42.2	39.6	37.7	41.5
77.5°	31.3	30.0	28.1	26.2	25.6
80°	20.4	19.8	19.2	18.5	17.9
82.5°	12.1	12.1	12.1	12.1	12.1
85°	6.4	7.0	7.7	8.3	8.9
87.5°	3.8	3.8	4.5	5.1	5.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)