

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: P559387

Luminaire Tested: FSR-12-1-LD4-2LO-50-UNV-82-94-EDD

Issue Date: 7/20/2021

Test Information

Test Method: LM-79-2019
Report Number: P559387
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-LD4-2LO-50-UNV-82-94-EDD
Description: 1X1 FSR TROFFER WITH .187 CLEAR PC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1125.0 lumens
Efficiency: N/A
Efficacy: 96.2 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

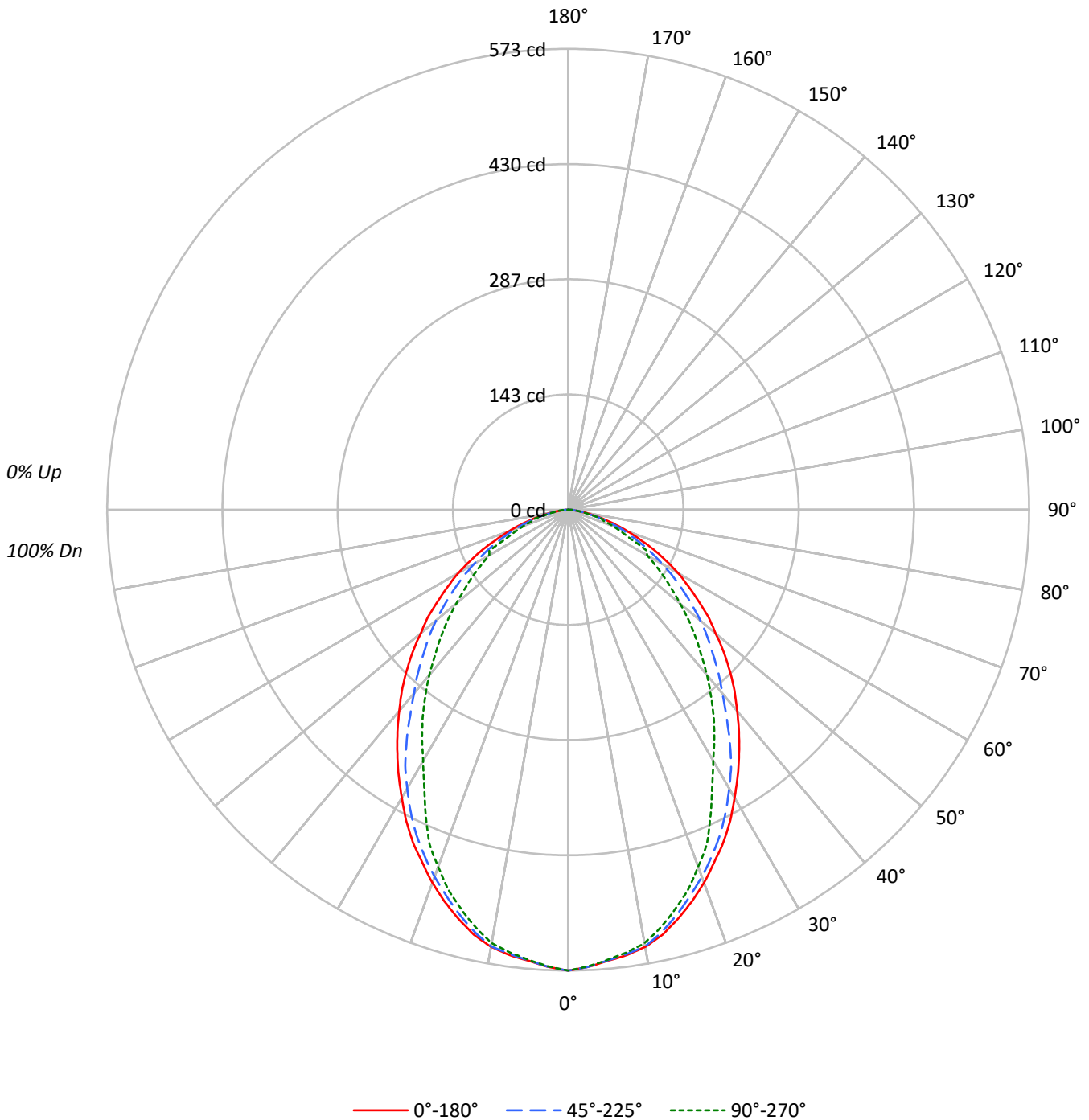
Input Watts (W): 11.7
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Luminous Intensity Polar Plot





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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°	6169	6169	6169
5°	6084	6078	6070
10°	6032	6025	5981
15°	5869	5810	5729
20°	5654	5562	5411
25°	5422	5303	4973
30°	5138	4973	4479
35°	4866	4596	4143
40°	4589	4189	3770
45°	4326	3873	3408
50°	4006	3594	3039
55°	3704	3258	2723
60°	3395	2908	2439
65°	2988	2547	2160
70°	2461	2231	1835
75°	1955	1709	1792
80°	1314	1234	1147
85°	815	976	1149

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4326 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.3	4.7
10°-20°	146.4	13.0
20°-30°	202.7	18.0
30°-40°	216.1	19.2
40°-50°	197.2	17.5
50°-60°	154.5	13.7
60°-70°	100.7	8.9
70°-80°	44.6	4.0
80°-90°	9.6	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°	402.4	35.8
0°-40°	618.5	55.0
0°-60°	970.1	86.2
0°-90°	1125.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1125.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	573	573	573	573	573	
5°	563	562	562	562	562	53
15°	527	527	521	516	514	148
25°	456	454	446	431	419	210
35°	370	368	350	323	315	232
45°	284	278	254	233	224	219
55°	197	192	174	153	145	177
65°	117	111	100	102	85	116
75°	47	44	41	39	43	50
85°	7	7	8	9	9	9
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	573.1	573.1	573.1	573.1	573.1
2.5°	569.1	569.1	569.1	568.4	568.4
5°	563.1	562.5	562.5	561.8	561.8
7.5°	558.5	557.8	557.2	556.5	555.2
10°	551.9	551.9	551.2	547.9	547.2
12.5°	541.3	540.6	537.9	533.3	532.0
15°	526.7	526.7	521.4	516.1	514.1
17.5°	510.8	510.1	503.5	498.2	495.5
20°	493.6	492.2	485.6	477.0	472.4
22.5°	474.3	474.3	466.4	455.1	450.5
25°	456.5	453.8	446.5	430.6	418.7
27.5°	435.9	431.9	424.0	401.5	387.6
30°	413.4	411.4	400.1	371.0	360.4
32.5°	392.2	388.9	377.0	346.5	337.9
35°	370.3	367.7	349.8	323.3	315.3
37.5°	348.5	345.2	322.6	301.4	291.5
40°	326.6	322.6	298.1	278.9	268.3
42.5°	306.1	300.8	276.9	256.4	244.5
45°	284.2	278.2	254.4	233.2	223.9
47.5°	262.3	257.0	235.2	213.3	202.7
50°	239.2	234.5	214.6	192.8	181.5
52.5°	219.9	212.7	193.4	171.6	162.3
55°	197.4	191.5	173.6	153.0	145.1
57.5°	176.9	170.9	154.4	135.1	128.5
60°	157.7	149.1	135.1	118.6	113.3
62.5°	136.5	129.8	117.9	104.0	110.6
65°	117.3	110.6	100.0	102.0	84.8
67.5°	96.1	92.7	83.5	74.2	71.5
70°	78.2	74.2	70.9	60.9	58.3
72.5°	62.3	58.3	53.7	48.4	46.4
75°	47.0	43.7	41.1	39.1	43.1
77.5°	32.5	31.1	29.1	27.2	26.5
80°	21.2	20.5	19.9	19.2	18.5
82.5°	12.6	12.6	12.6	12.6	12.6
85°	6.6	7.3	7.9	8.6	9.3
87.5°	4.0	4.0	4.6	5.3	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)