

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: P1219440

Luminaire Tested: FWLSC-D-24-UNV-125-35-OPL/84-IP6X

Issue Date: 12/9/2025

Tested By:

Approved By:



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Test Information

Test Method: LM-79-2019
Report Number: P1219440
Test Lab: INNOVATION CENTER
Issue Date: 12/9/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FWLSC-D-24-UNV-125-35-OPL/84-IP6X
Description: FAILSAFE FWLDL LED FIXTURE WITH SCONE

Light Source:
Ballast/Driver: -

Summary

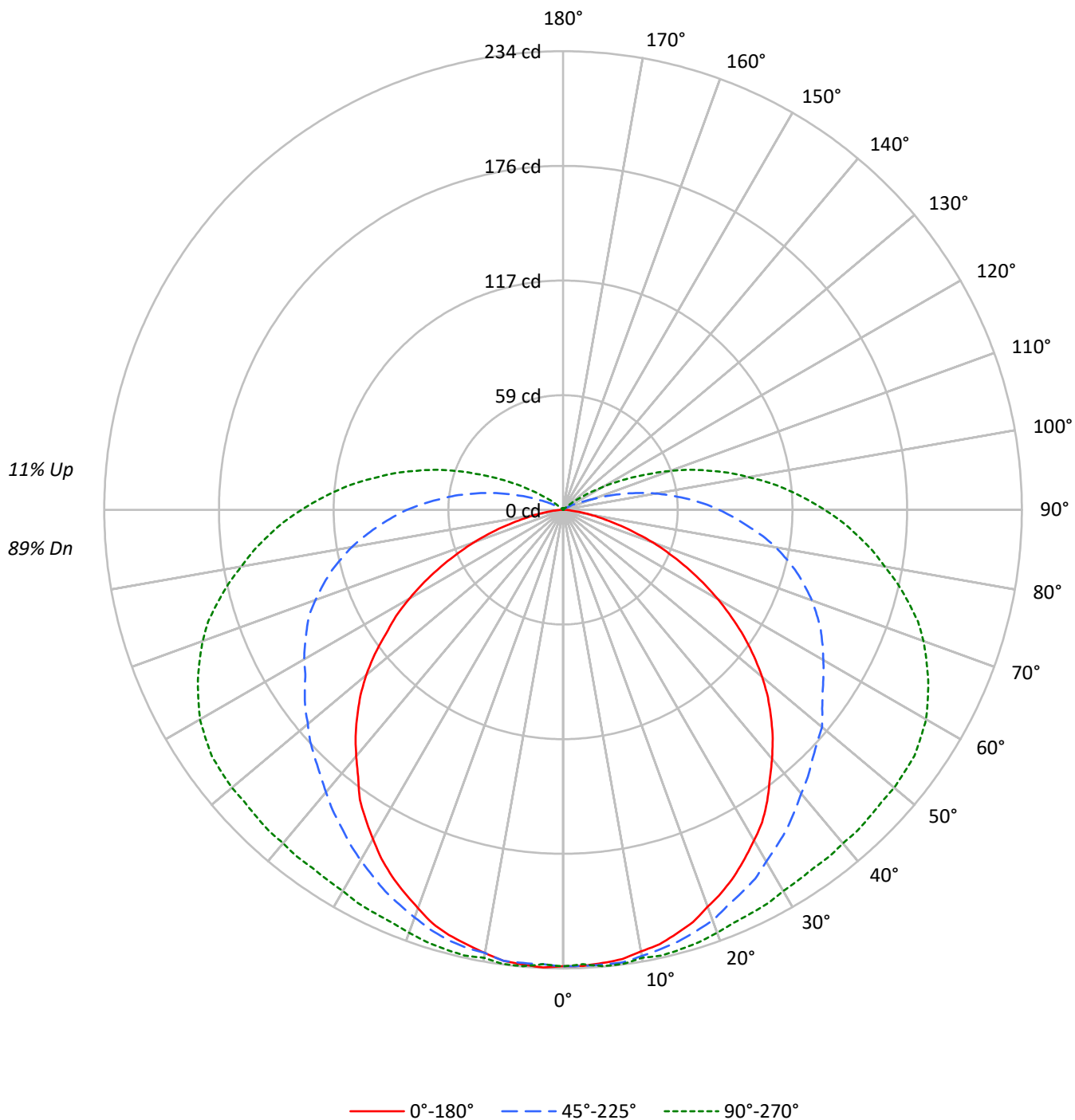
Lumens per Lamp: N/A
Luminaire Lumens: 1075.0 lumens
Efficiency: N/A
Efficacy: 49.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.47 / 1.5
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.21')
CIE Type: Semi-Direct

Input Watts (W): 21.6
Input Voltage (V): 122
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: >0.9
Total Harmonic Distortion (THDi): <20
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	22.2	2.1
10°-20°	64.3	6.0
20°-30°	99.6	9.3
30°-40°	125.3	11.7
40°-50°	140.9	13.1
50°-60°	146.0	13.6
60°-70°	139.7	13.0
70°-80°	121.5	11.3
80°-90°	95.1	8.8
90°-100°	65.3	6.1
100°-110°	36.6	3.4
110°-120°	14.3	1.3
120°-130°	3.2	0.3
130°-140°	0.3	0.0
140°-150°	0.3	0.0
150°-160°	0.2	0.0
160°-170°	0.2	0.0
170°-180°	0.0	0.0
0°-30°	186.1	17.3
0°-40°	311.4	29.0
0°-60°	598.3	55.7
0°-90°	954.5	88.8
90°-120°	116.2	10.8
90°-150°	120.0	11.2
90°-180°	120.0	11.2
0°-180°	1075.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	233	233	233	233	233	
5°	232	233	234	232	233	22
15°	224	228	232	227	225	63
25°	206	216	227	215	206	95
35°	182	199	223	197	181	113
45°	150	180	221	179	148	116
55°	113	162	219	161	110	100
65°	70	145	206	144	69	69
75°	29	124	182	123	28	31
85°	4	94	151	94	4	6
90°	0	80	133	80	0	0
95°	0	64	115	63	0	0
105°	0	32	77	32	0	0
115°	1	8	39	9	0	1
125°	0	0	11	1	1	0
135°	0	0	0	1	1	0
145°	0	0	0	1	1	0
155°	0	0	0	1	1	0
165°	1	1	0	1	1	0
175°	1	1	0	1	1	0
180°	1	1	1	1	1	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	232.9	232.9	232.9	232.9	232.9	232.9	232.9	232.9	232.9
2.5°	232.9	231.2	232.9	233.7	232.1	232.1	232.1	232.1	233.7
5°	232.1	231.2	232.9	235.4	233.7	232.9	232.1	231.2	232.9
7.5°	231.2	230.4	232.9	234.6	233.7	232.9	232.1	230.4	232.1
10°	228.8	228.8	231.2	233.7	232.1	231.2	229.6	228.8	229.6
12.5°	227.1	227.1	229.6	232.9	232.9	230.4	228.8	227.1	227.1
15°	223.8	223.8	227.9	232.1	232.1	230.4	227.1	224.6	224.6
17.5°	220.5	221.3	225.4	231.2	231.2	228.8	224.6	221.3	221.3
20°	215.5	217.2	223.0	228.8	229.6	226.3	221.3	217.2	216.3
22.5°	211.4	212.2	218.8	226.3	227.9	223.8	218.0	213.0	211.4
25°	206.4	208.0	215.5	224.6	227.1	222.1	214.7	208.0	206.4
27.5°	200.6	203.1	212.2	223.0	226.3	220.5	210.5	203.1	200.6
30°	194.8	197.3	207.2	219.6	224.6	217.2	206.4	197.3	193.9
32.5°	189.0	191.5	203.1	218.0	223.8	215.5	202.2	191.5	187.3
35°	181.5	184.8	198.9	216.3	223.0	213.8	197.3	184.8	180.7
37.5°	173.2	177.4	193.9	214.7	223.0	212.2	193.1	177.4	171.6
40°	165.8	169.9	189.0	213.0	222.1	210.5	188.1	169.9	164.1
42.5°	158.3	163.3	184.8	212.2	222.1	209.7	183.2	162.5	156.6
45°	150.0	155.8	179.9	210.5	221.3	208.0	179.0	155.0	148.4
47.5°	141.7	148.4	175.7	208.0	220.5	205.5	174.9	147.5	140.1
50°	132.6	140.1	172.4	206.4	220.5	203.9	169.9	140.1	131.0
52.5°	122.7	131.8	166.6	204.7	219.6	202.2	165.8	131.8	121.0
55°	112.7	124.3	161.6	203.1	218.8	200.6	160.8	123.5	110.2
57.5°	101.9	116.0	157.5	200.6	216.3	198.9	155.8	115.2	101.1
60°	91.2	108.6	153.3	197.3	213.8	195.6	152.5	107.7	90.3
62.5°	80.4	101.1	149.2	193.9	209.7	192.3	148.4	101.1	79.6
65°	69.6	94.5	145.0	189.0	205.5	187.3	144.2	93.7	68.8
67.5°	58.8	87.9	140.1	184.0	200.6	182.3	140.1	87.0	58.0
70°	48.9	79.6	135.1	178.2	195.6	176.5	134.3	78.7	48.1
72.5°	38.1	73.8	129.3	172.4	189.8	169.9	128.5	72.9	38.1
75°	29.0	68.0	123.5	164.9	182.3	164.1	122.7	67.1	28.2
77.5°	20.7	61.3	116.9	158.3	174.9	156.6	116.0	60.5	19.9
80°	14.1	54.7	110.2	150.8	166.6	150.0	109.4	54.7	13.3
82.5°	8.3	48.1	102.8	143.4	159.1	141.7	101.9	48.1	7.5
85°	4.1	41.4	94.5	135.1	150.8	134.3	94.5	41.4	4.1
87.5°	2.5	35.6	87.0	126.8	142.6	126.0	87.0	34.8	1.7
90°	0.0	29.0	79.6	118.5	133.4	117.7	79.6	28.2	0.0
92.5°	0.0	23.2	72.1	109.4	124.3	108.6	71.3	22.4	0.0
95°	0.0	17.4	63.8	101.1	115.2	100.3	63.0	17.4	0.0
97.5°	0.0	13.3	55.5	92.0	106.1	91.2	55.5	12.4	0.0
100°	0.0	9.1	48.1	82.1	96.1	82.1	47.2	9.1	0.0
102.5°	0.0	5.8	39.8	72.9	87.0	72.1	39.8	5.8	0.0
105°	0.0	3.3	31.5	63.8	77.1	63.8	32.3	4.1	0.0
107.5°	0.0	1.7	23.2	53.9	68.0	53.9	24.9	1.7	0.0
110°	0.0	0.0	15.7	43.9	58.0	44.8	19.1	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	0.8	0.0	10.8	34.0	48.1	36.5	13.3	0.0	0.0
115°	0.8	0.0	7.5	25.7	39.0	28.2	9.1	0.0	0.0
117.5°	0.8	0.0	5.8	19.1	30.7	20.7	6.6	0.8	0.8
120°	0.0	0.0	2.5	14.1	23.2	15.7	3.3	0.8	0.8
122.5°	0.0	0.0	0.0	9.9	16.6	10.8	0.8	0.8	0.0
125°	0.0	0.0	0.0	6.6	10.8	7.5	0.8	0.8	0.8
127.5°	0.0	0.0	0.0	2.5	7.5	3.3	0.8	0.8	0.8
130°	0.0	0.0	0.0	0.0	2.5	0.0	0.8	0.8	0.8
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8
137.5°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8
140°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8
142.5°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8
145°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	1.7	0.8
147.5°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	1.7	0.8
150°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	1.7	0.8
152.5°	0.0	0.0	0.0	0.0	0.8	0.8	0.8	1.7	0.8
155°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	1.7	0.8
157.5°	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8	0.8
160°	0.0	0.0	0.8	0.8	0.0	0.8	0.8	0.8	0.8
162.5°	0.8	0.0	0.8	0.8	0.8	0.0	0.8	0.8	0.8
165°	0.8	0.8	0.8	0.8	0.0	0.0	0.8	0.8	0.8
167.5°	0.8	0.8	0.8	0.8	0.0	0.0	0.8	0.8	0.8
170°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.8	0.8
172.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.8	0.8
175°	0.8	0.8	0.8	0.0	0.0	0.0	0.8	0.8	0.8
177.5°	0.8	0.8	0.8	0.0	0.0	0.0	0.8	0.8	0.8
180°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8

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CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room Dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	11.9	13.5	12.5	14.0	14.6	17.1	18.6	17.6	19.1	19.7
	3H	13.3	14.7	13.9	15.3	15.9	20.2	21.6	20.7	22.2	22.8
	4H	13.7	15.1	14.3	15.6	16.2	21.7	23.1	22.3	23.6	24.3
	6H	13.9	15.2	14.5	15.7	16.4	23.3	24.6	23.9	25.1	25.8
	8H	13.9	15.1	14.5	15.7	16.4	24.1	25.3	24.7	25.9	26.6
	12H	13.9	15.1	14.5	15.7	16.4	24.9	26.1	25.5	26.7	27.4
4H	2H	13.6	15.0	14.2	15.5	16.2	17.4	18.7	17.9	19.3	19.9
	3H	15.3	16.5	15.9	17.1	17.7	20.8	21.9	21.3	22.5	23.2
	4H	15.9	17.0	16.5	17.6	18.2	22.5	23.6	23.1	24.2	24.9
	6H	16.2	17.2	16.8	17.8	18.5	24.3	25.2	24.9	25.9	26.6
	8H	16.3	17.2	16.9	17.8	18.5	25.2	26.1	25.8	26.7	27.4
	12H	16.3	17.2	17.0	17.8	18.5	26.1	27.0	26.8	27.6	28.3
8H	4H	17.4	18.3	18.0	18.9	19.6	22.7	23.6	23.3	24.2	24.9
	6H	18.0	18.8	18.7	19.5	20.2	24.6	25.4	25.3	26.1	26.8
	8H	18.2	18.9	18.9	19.6	20.3	25.7	26.4	26.3	27.1	27.8
	12H	18.3	19.0	19.0	19.7	20.4	26.8	27.5	27.5	28.1	28.9
12H	4H	17.9	18.7	18.5	19.3	20.0	22.7	23.5	23.3	24.2	24.9
	6H	18.7	19.4	19.4	20.0	20.8	24.7	25.4	25.3	26.0	26.8
	8H	19.0	19.7	19.7	20.3	21.1	25.8	26.4	26.4	27.1	27.9

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