

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: P1219441

Luminaire Tested: FWLSC-D-24-UNV-150-35-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: P1219441
Test Lab: INNOVATION CENTER
Issue Date: 12/9/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FWLSC-D-24-UNV-150-35-OPL/84-IP6X
Description: FAILSAFE FWLDL LED FIXTURE WITH SCONE

Light Source:
Ballast/Driver: -

Summary

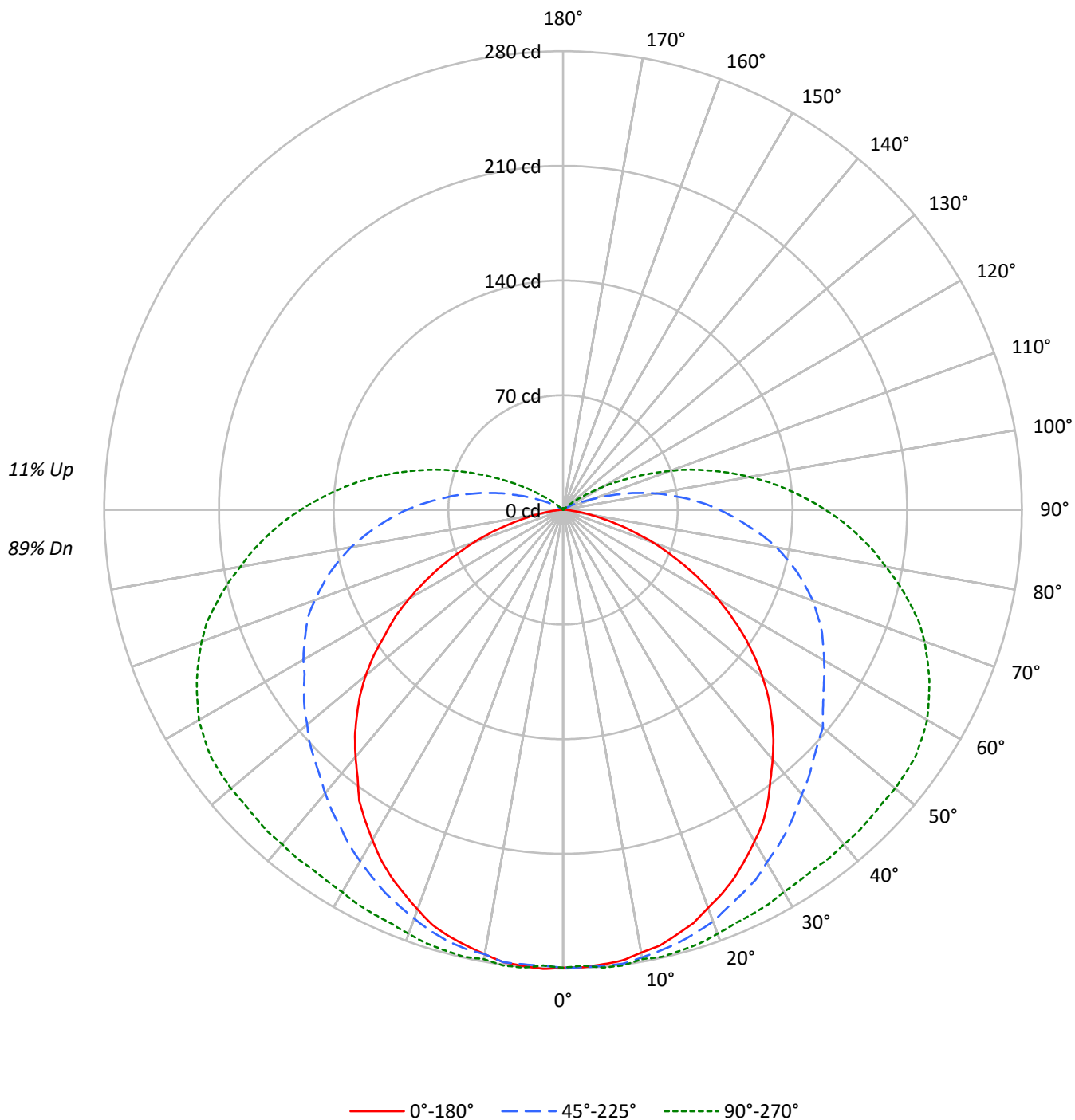
Lumens per Lamp: N/A
Luminaire Lumens: 1290.0 lumens
Efficiency: N/A
Efficacy: 48.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.47 / 1.5
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 2' x H: 0.21')
CIE Type: Semi-Direct

Input Watts (W): 26.4
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

TEST NUMBER: P1219441

CATALOG NUMBER: FWLSC-D-24-UNV-150-35-OPL/84-IP6X

Luminous Intensity Polar Plot



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.6	2.1
10°-20°	77.2	6.0
20°-30°	119.5	9.3
30°-40°	150.4	11.7
40°-50°	169.1	13.1
50°-60°	175.2	13.6
60°-70°	167.6	13.0
70°-80°	145.8	11.3
80°-90°	114.1	8.8
90°-100°	78.4	6.1
100°-110°	43.9	3.4
110°-120°	17.2	1.3
120°-130°	3.9	0.3
130°-140°	0.3	0.0
140°-150°	0.3	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-30°	223.3	17.3
0°-40°	373.6	29.0
0°-60°	717.9	55.7
0°-90°	1145.5	88.8
90°-120°	139.5	10.8
90°-150°	144.0	11.2
90°-180°	145.0	11.2
0°-180°	1290.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	280	280	280	280	280	
5°	278	280	280	278	280	26
15°	268	274	278	272	270	76
25°	248	259	272	258	248	114
35°	218	239	268	237	217	136
45°	180	216	266	215	178	139
55°	135	194	263	193	132	120
65°	84	174	247	173	83	83
75°	35	148	219	147	34	38
85°	5	113	181	113	5	7
90°	0	96	160	96	0	0
95°	0	77	138	76	0	0
105°	0	38	92	39	0	0
115°	1	9	47	11	0	1
125°	0	0	13	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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CATALOG NUMBER: FWLSC-D-24-UNV-150-35-OPL/84-IP6X

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	279.5	279.5	279.5	279.5	279.5	279.5	279.5	279.5	279.5
2.5°	279.5	277.5	279.5	280.5	278.5	278.5	278.5	278.5	280.5
5°	278.5	277.5	279.5	282.5	280.5	279.5	278.5	277.5	279.5
7.5°	277.5	276.5	279.5	281.5	280.5	279.5	278.5	276.5	278.5
10°	274.5	274.5	277.5	280.5	278.5	277.5	275.5	274.5	275.5
12.5°	272.5	272.5	275.5	279.5	279.5	276.5	274.5	272.5	272.5
15°	268.5	268.5	273.5	278.5	278.5	276.5	272.5	269.5	269.5
17.5°	264.6	265.6	270.5	277.5	277.5	274.5	269.5	265.6	265.6
20°	258.6	260.6	267.5	274.5	275.5	271.5	265.6	260.6	259.6
22.5°	253.6	254.6	262.6	271.5	273.5	268.5	261.6	255.6	253.6
25°	247.7	249.6	258.6	269.5	272.5	266.6	257.6	249.6	247.7
27.5°	240.7	243.7	254.6	267.5	271.5	264.6	252.6	243.7	240.7
30°	233.7	236.7	248.6	263.6	269.5	260.6	247.7	236.7	232.7
32.5°	226.8	229.8	243.7	261.6	268.5	258.6	242.7	229.8	224.8
35°	217.8	221.8	238.7	259.6	267.5	256.6	236.7	221.8	216.8
37.5°	207.9	212.8	232.7	257.6	267.5	254.6	231.7	212.8	205.9
40°	198.9	203.9	226.8	255.6	266.6	252.6	225.8	203.9	196.9
42.5°	190.0	195.9	221.8	254.6	266.6	251.6	219.8	194.9	188.0
45°	180.0	187.0	215.8	252.6	265.6	249.6	214.8	186.0	178.0
47.5°	170.1	178.0	210.9	249.6	264.6	246.7	209.9	177.0	168.1
50°	159.1	168.1	206.9	247.7	264.6	244.7	203.9	168.1	157.1
52.5°	147.2	158.1	199.9	245.7	263.6	242.7	198.9	158.1	145.2
55°	135.3	149.2	193.9	243.7	262.6	240.7	193.0	148.2	132.3
57.5°	122.3	139.2	189.0	240.7	259.6	238.7	187.0	138.2	121.3
60°	109.4	130.3	184.0	236.7	256.6	234.7	183.0	129.3	108.4
62.5°	96.5	121.3	179.0	232.7	251.6	230.7	178.0	121.3	95.5
65°	83.5	113.4	174.1	226.8	246.7	224.8	173.1	112.4	82.6
67.5°	70.6	105.4	168.1	220.8	240.7	218.8	168.1	104.4	69.6
70°	58.7	95.5	162.1	213.8	234.7	211.8	161.1	94.5	57.7
72.5°	45.8	88.5	155.2	206.9	227.8	203.9	154.2	87.5	45.8
75°	34.8	81.6	148.2	197.9	218.8	196.9	147.2	80.6	33.8
77.5°	24.9	73.6	140.2	190.0	209.9	188.0	139.2	72.6	23.9
80°	16.9	65.6	132.3	181.0	199.9	180.0	131.3	65.6	15.9
82.5°	9.9	57.7	123.3	172.1	191.0	170.1	122.3	57.7	9.0
85°	5.0	49.7	113.4	162.1	181.0	161.1	113.4	49.7	5.0
87.5°	3.0	42.8	104.4	152.2	171.1	151.2	104.4	41.8	2.0
90°	0.0	34.8	95.5	142.2	160.1	141.2	95.5	33.8	0.0
92.5°	0.0	27.8	86.5	131.3	149.2	130.3	85.5	26.9	0.0
95°	0.0	20.9	76.6	121.3	138.2	120.3	75.6	20.9	0.0
97.5°	0.0	15.9	66.6	110.4	127.3	109.4	66.6	14.9	0.0
100°	0.0	10.9	57.7	98.5	115.4	98.5	56.7	10.9	0.0
102.5°	0.0	7.0	47.7	87.5	104.4	86.5	47.7	7.0	0.0
105°	0.0	4.0	37.8	76.6	92.5	76.6	38.8	5.0	0.0
107.5°	0.0	2.0	27.8	64.6	81.6	64.6	29.8	2.0	0.0
110°	0.0	0.0	18.9	52.7	69.6	53.7	22.9	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°	1.0	0.0	12.9	40.8	57.7	43.8	15.9	0.0	0.0
115°	1.0	0.0	9.0	30.8	46.7	33.8	10.9	0.0	0.0
117.5°	1.0	0.0	7.0	22.9	36.8	24.9	8.0	1.0	1.0
120°	0.0	0.0	3.0	16.9	27.8	18.9	4.0	1.0	1.0
122.5°	0.0	0.0	0.0	11.9	19.9	12.9	1.0	1.0	0.0
125°	0.0	0.0	0.0	8.0	12.9	9.0	1.0	1.0	1.0
127.5°	0.0	0.0	0.0	3.0	9.0	4.0	1.0	1.0	1.0
130°	0.0	0.0	0.0	0.0	3.0	0.0	1.0	1.0	1.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
137.5°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
140°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
142.5°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
145°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.0	1.0
147.5°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.0	1.0
150°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.0	1.0
152.5°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	2.0	1.0
155°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	2.0	1.0
157.5°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
160°	0.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0
162.5°	1.0	0.0	1.0	1.0	1.0	0.0	1.0	1.0	1.0
165°	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0
167.5°	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0
170°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0
172.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0
175°	1.0	1.0	1.0	0.0	0.0	0.0	1.0	1.0	1.0
177.5°	1.0	1.0	1.0	0.0	0.0	0.0	1.0	1.0	1.0
180°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

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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	12.6	14.1	13.1	14.6	15.2	17.7	19.2	18.2	19.8	20.3
	3H	13.9	15.4	14.5	15.9	16.5	20.8	22.2	21.4	22.8	23.4
	4H	14.3	15.7	14.9	16.2	16.9	22.4	23.7	22.9	24.3	24.9
	6H	14.5	15.8	15.1	16.4	17.0	24.0	25.2	24.5	25.8	26.4
	8H	14.6	15.8	15.1	16.4	17.0	24.7	26.0	25.3	26.5	27.2
	12H	14.6	15.7	15.1	16.3	17.0	25.6	26.7	26.1	27.3	28.0
4H	2H	14.3	15.6	14.8	16.2	16.8	18.0	19.4	18.6	19.9	20.5
	3H	15.9	17.1	16.5	17.7	18.4	21.4	22.6	22.0	23.2	23.8
	4H	16.5	17.6	17.1	18.2	18.9	23.1	24.2	23.7	24.8	25.5
	6H	16.9	17.8	17.5	18.4	19.1	24.9	25.9	25.5	26.5	27.2
	8H	16.9	17.8	17.5	18.5	19.2	25.8	26.7	26.4	27.3	28.1
	12H	17.0	17.8	17.6	18.5	19.2	26.8	27.6	27.4	28.3	29.0
8H	4H	18.0	18.9	18.6	19.6	20.3	23.3	24.2	23.9	24.8	25.5
	6H	18.7	19.4	19.3	20.1	20.8	25.3	26.1	25.9	26.7	27.4
	8H	18.9	19.6	19.5	20.2	21.0	26.3	27.0	27.0	27.7	28.4
	12H	19.0	19.6	19.6	20.3	21.1	27.5	28.1	28.1	28.8	29.5
12H	4H	18.5	19.3	19.1	20.0	20.7	23.3	24.1	23.9	24.8	25.5
	6H	19.3	20.0	20.0	20.7	21.4	25.3	26.0	26.0	26.7	27.4
	8H	19.7	20.3	20.3	21.0	21.7	26.4	27.1	27.1	27.7	28.5

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