

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: P1219436

Luminaire Tested: FWLSC-D-16-UNV-150-35-OPL/84-IP6X

Issue Date: 12/9/2025

Tested By:

Approved By:



Cooper Lighting Solutions laboratories have been accredited by National Voluntary Laboratory Accreditation Program (NVLAP) that it adheres to the requirements of ISO/IEC 17025:2005 and appropriate IESNA test methods. This report must not be used to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the Federal Government. Results contained in this report are valid for luminaire sample tested, as supplied by requestor. Information related to the luminaire tested has been supplied by requestor and can affect the validity of the test results. Report shall not be reproduced except in full without approval of Cooper Lighting Solutions Lighting Laboratory. Test performed at address noted above.

Test Information

Test Method: LM-79-2019
Report Number: P1219436
Test Lab: INNOVATION CENTER
Issue Date: 12/9/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FWLSC-D-16-UNV-150-35-OPL/84-IP6X
Description: FAILSAFE FWLDL LED FIXTURE WITH SCONE

Light Source:
Ballast/Driver: -

Summary

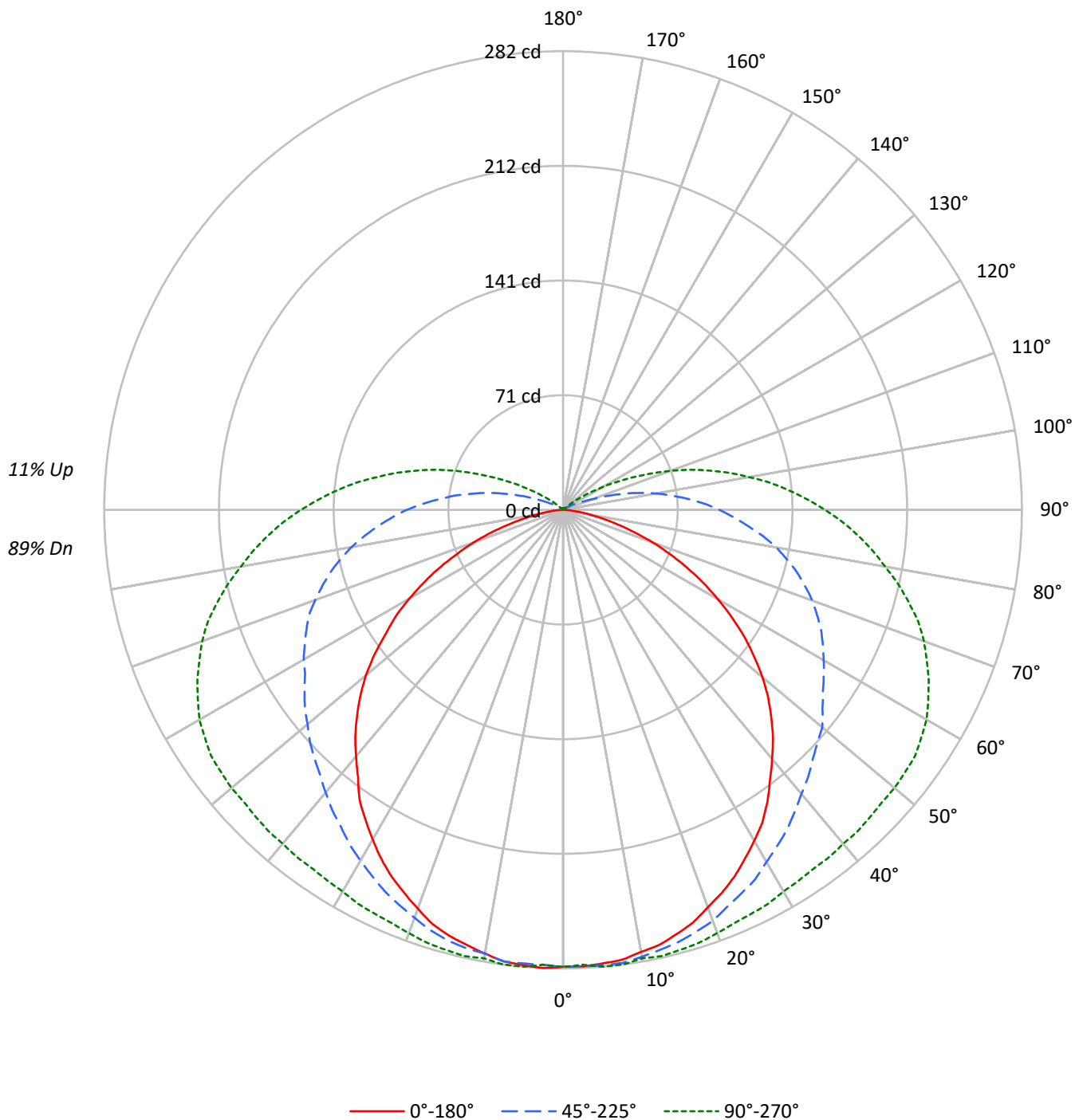
Lumens per Lamp: N/A
Luminaire Lumens: 1297.0 lumens
Efficiency: N/A
Efficacy: 48.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.47 / 1.5
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1.33' x H: 0.21')
CIE Type: Semi-Direct

Input Watts (W): 26.8
Input Voltage (V): 120
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: P1219436

CATALOG NUMBER: FWLSC-D-16-UNV-150-35-OPL/84-IP6X

Luminous Intensity Polar Plot



TEST NUMBER: P1219436

CATALOG NUMBER: FWLSC-D-16-UNV-150-35-OPL/84-IP6X

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.7	2.1
10°-20°	77.6	6.0
20°-30°	120.2	9.3
30°-40°	151.2	11.7
40°-50°	170.1	13.1
50°-60°	176.1	13.6
60°-70°	168.5	13.0
70°-80°	146.6	11.3
80°-90°	114.7	8.8
90°-100°	78.8	6.1
100°-110°	44.1	3.4
110°-120°	17.3	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°	224.5	17.3
0°-40°	375.7	29.0
0°-60°	721.8	55.7
0°-90°	1151.7	88.8
90°-120°	140.2	10.8
90°-150°	144.8	11.2
90°-180°	145.0	11.2
0°-180°	1297.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	281	281	281	281	281	
5°	280	281	282	280	281	27
15°	270	275	280	274	271	76
25°	249	260	274	259	249	115
35°	219	240	269	238	218	137
45°	181	217	267	216	179	140
55°	136	195	264	194	133	121
65°	84	175	248	174	83	83
75°	35	149	220	148	34	38
85°	5	114	182	114	5	7
90°	0	96	161	96	0	0
95°	0	77	139	76	0	0
105°	0	38	93	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	

TEST NUMBER: P1219436

CATALOG NUMBER: FWLSC-D-16-UNV-150-35-OPL/84-IP6X

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	281	281	281	281	281	281	281	281	281
2.5°	281	279	281	282	280	280	280	280	282
5°	280	279	281	284	282	281	280	279	281
7.5°	279	278	281	283	282	281	280	278	280
10°	276	276	279	282	280	279	277	276	277
12.5°	274	274	277	281	281	278	276	274	274
15°	270	270	275	280	280	278	274	271	271
17.5°	266	267	272	279	279	276	271	267	267
20°	260	262	269	276	277	273	267	262	261
22.5°	255	256	264	273	275	270	263	257	255
25°	249	251	260	271	274	268	259	251	249
27.5°	242	245	256	269	273	266	254	245	242
30°	235	238	250	265	271	262	249	238	234
32.5°	228	231	245	263	270	260	244	231	226
35°	219	223	240	261	269	258	238	223	218
37.5°	209	214	234	259	269	256	233	214	207
40°	200	205	228	257	268	254	227	205	198
42.5°	191	197	223	256	268	253	221	196	189
45°	181	188	217	254	267	251	216	187	179
47.5°	171	179	212	251	266	248	211	178	169
50°	160	169	208	249	266	246	205	169	158
52.5°	148	159	201	247	265	244	200	159	146
55°	136	150	195	245	264	242	194	149	133
57.5°	123	140	190	242	261	240	188	139	122
60°	110	131	185	238	258	236	184	130	109
62.5°	97	122	180	234	253	232	179	122	96
65°	84	114	175	228	248	226	174	113	83
67.5°	71	106	169	222	242	220	169	105	70
70°	59	96	163	215	236	213	162	95	58
72.5°	46	89	156	208	229	205	155	88	46
75°	35	82	149	199	220	198	148	81	34
77.5°	25	74	141	191	211	189	140	73	24
80°	17	66	133	182	201	181	132	66	16
82.5°	10	58	124	173	192	171	123	58	9
85°	5	50	114	163	182	162	114	50	5
87.5°	3	43	105	153	172	152	105	42	2
90°	0	35	96	143	161	142	96	34	0
92.5°	0	28	87	132	150	131	86	27	0
95°	0	21	77	122	139	121	76	21	0
97.5°	0	16	67	111	128	110	67	15	0
100°	0	11	58	99	116	99	57	11	0
102.5°	0	7	48	88	105	87	48	7	0
105°	0	4	38	77	93	77	39	5	0
107.5°	0	2	28	65	82	65	30	2	0
110°	0	0	19	53	70	54	23	0	0

TEST NUMBER: P1219436

CATALOG NUMBER: FWLSC-D-16-UNV-150-35-OPL/84-IP6X

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
112.5°	1	0	13	41	58	44	16	0	0
115°	1	0	9	31	47	34	11	0	0
117.5°	1	0	7	23	37	25	8	1	1
120°	0	0	3	17	28	19	4	1	1
122.5°	0	0	0	12	20	13	1	1	0
125°	0	0	0	8	13	9	1	1	1
127.5°	0	0	0	3	9	4	1	1	1
130°	0	0	0	0	3	0	1	1	1
132.5°	0	0	0	0	0	0	1	1	1
135°	0	0	0	0	0	0	1	1	1
137.5°	0	0	0	0	0	1	1	1	1
140°	0	0	0	0	0	1	1	1	1
142.5°	0	0	0	0	0	1	1	1	1
145°	0	0	0	0	0	1	1	2	1
147.5°	0	0	0	0	0	1	1	2	1
150°	0	0	0	0	1	1	1	2	1
152.5°	0	0	0	0	1	1	1	2	1
155°	0	0	0	0	0	1	1	2	1
157.5°	0	0	0	0	0	1	1	1	1
160°	0	0	1	1	0	1	1	1	1
162.5°	1	0	1	1	1	0	1	1	1
165°	1	1	1	1	0	0	1	1	1
167.5°	1	1	1	1	0	0	1	1	1
170°	1	1	1	0	0	0	0	1	1
172.5°	1	1	1	0	0	0	0	1	1
175°	1	1	1	0	0	0	1	1	1
177.5°	1	1	1	0	0	0	1	1	1
180°	1	1	1	1	1	1	1	1	1

TEST NUMBER: P1219436

CATALOG NUMBER: FWLSC-D-16-UNV-150-35-OPL/84-IP6X

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	14.0	15.5	14.5	16.0	16.6	19.0	20.5	19.5	21.0	21.6
	3H	15.3	16.8	15.9	17.3	17.9	22.0	23.4	22.6	24.0	24.6
	4H	15.7	17.1	16.3	17.6	18.3	23.5	24.9	24.1	25.4	26.1
	6H	15.9	17.2	16.5	17.8	18.4	25.0	26.3	25.6	26.9	27.5
	8H	16.0	17.2	16.5	17.8	18.4	25.8	27.0	26.4	27.6	28.2
	12H	16.0	17.1	16.5	17.7	18.4	26.5	27.7	27.1	28.3	29.0
4H	2H	15.6	17.0	16.2	17.5	18.2	19.3	20.6	19.8	21.2	21.8
	3H	17.3	18.5	17.9	19.1	19.7	22.6	23.8	23.2	24.4	25.0
	4H	17.9	18.9	18.5	19.5	20.2	24.3	25.4	24.9	26.0	26.6
	6H	18.2	19.2	18.8	19.8	20.5	26.0	27.0	26.6	27.6	28.3
	8H	18.3	19.2	18.9	19.8	20.5	26.9	27.8	27.5	28.4	29.1
	12H	18.3	19.2	19.0	19.8	20.5	27.8	28.6	28.4	29.3	30.0
8H	4H	19.3	20.3	20.0	20.9	21.6	24.5	25.4	25.1	26.0	26.7
	6H	20.0	20.8	20.6	21.4	22.1	26.4	27.2	27.0	27.8	28.5
	8H	20.2	20.9	20.8	21.6	22.3	27.4	28.1	28.0	28.8	29.5
	12H	20.3	21.0	21.0	21.6	22.4	28.5	29.1	29.1	29.8	30.6
12H	4H	19.8	20.6	20.4	21.3	22.0	24.5	25.3	25.1	26.0	26.7
	6H	20.6	21.3	21.3	22.0	22.8	26.4	27.1	27.1	27.8	28.5
	8H	21.0	21.6	21.6	22.3	23.1	27.5	28.1	28.2	28.8	29.6

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



(END OF REPORT)