

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: P973169

Luminaire Tested: FLR2-14-20HE-L935-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973169
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-14-20HE-L935-CP250
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 3500CCT & 90 CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

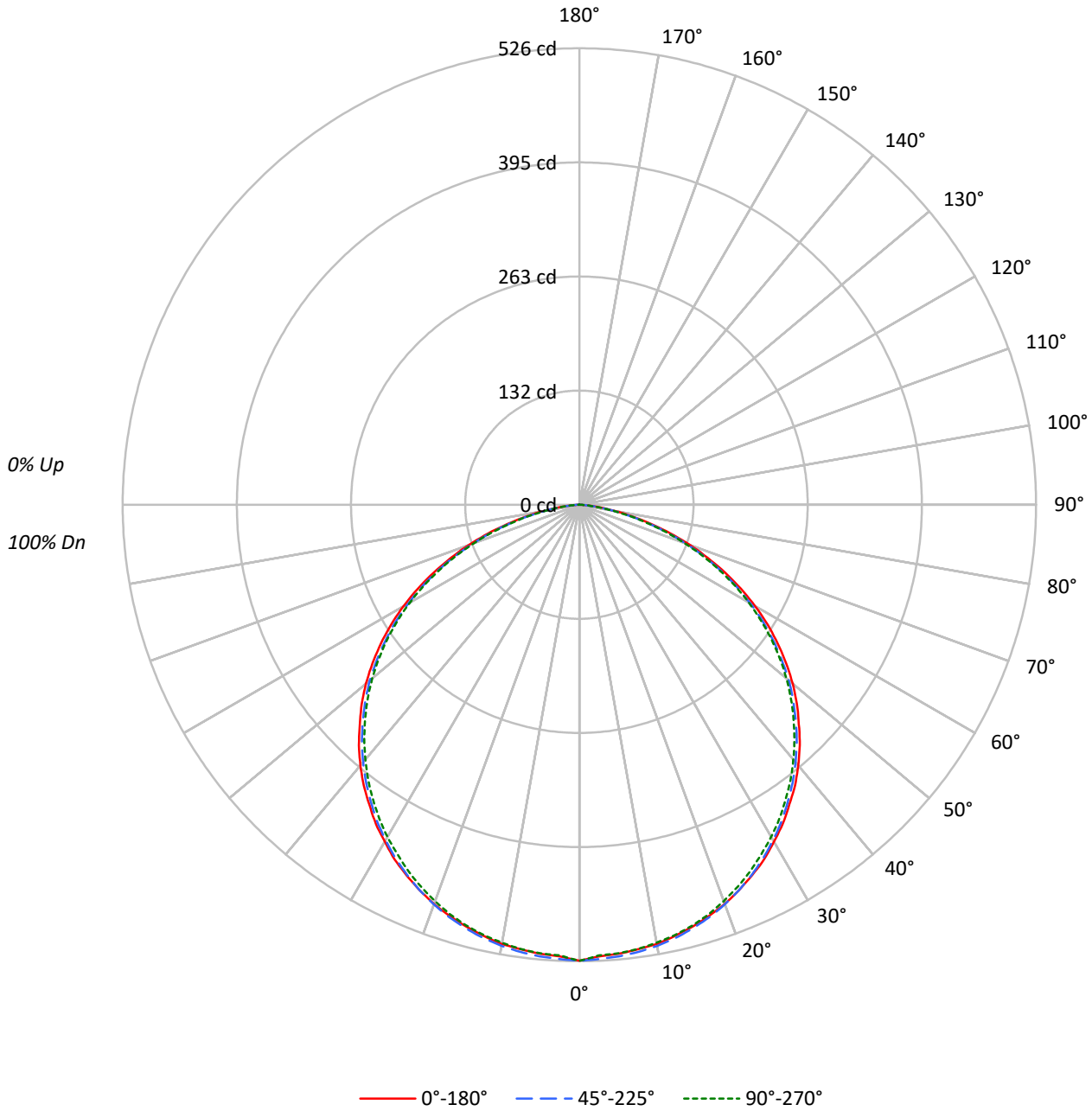
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1470.8 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 14.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor:
Total Harmonic Distortion (THDi):
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P973169
CATALOG NUMBER: FLR2-14-20HE-L935-CP250

Luminous Intensity Polar Plot





TEST NUMBER: P973169
 CATALOG NUMBER: FLR2-14-20HE-L935-CP250

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	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	27	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1414	1414	1414
5°	1403	1411	1401
10°	1405	1411	1400
15°	1402	1408	1399
20°	1402	1403	1392
25°	1399	1396	1383
30°	1393	1387	1373
35°	1386	1375	1361
40°	1378	1361	1347
45°	1361	1342	1328
50°	1343	1319	1303
55°	1309	1278	1266
60°	1258	1223	1213
65°	1179	1144	1131
70°	1063	1020	1011
75°	891	845	837
80°	648	603	586
85°	343	303	275

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1361 cd/sqm



TEST NUMBER: P973169
 CATALOG NUMBER: FLR2-14-20HE-L935-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.8	3.4
10°-20°	142.9	9.7
20°-30°	217.2	14.8
30°-40°	262.7	17.9
40°-50°	273.0	18.6
50°-60°	244.5	16.6
60°-70°	178.3	12.1
70°-80°	87.8	6.0
80°-90°	14.7	1.0
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°	409.9	27.9
0°-40°	672.6	45.7
0°-60°	1190.1	80.9
0°-90°	1470.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1470.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	526	526	526	526	526	
5°	519	525	522	528	519	49
15°	503	508	505	510	502	142
25°	471	474	470	472	466	217
35°	422	423	418	420	414	264
45°	358	357	353	353	349	276
55°	279	277	272	272	270	249
65°	185	183	180	178	178	183
75°	86	84	81	80	80	91
85°	11	11	10	9	9	16
90°	0	0	0	0	0	



TEST NUMBER: P973169
 CATALOG NUMBER: FLR2-14-20HE-L935-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	525.5	525.5	525.5	525.5	525.5
2.5°	520.9	526.8	524.0	529.2	519.8
5°	519.4	525.1	522.5	527.5	518.8
7.5°	516.8	522.7	519.8	524.6	516.4
10°	514.0	519.2	516.2	520.9	512.5
12.5°	509.0	514.2	511.4	515.7	507.9
15°	503.3	507.9	505.3	509.6	502.2
17.5°	496.8	501.1	498.3	502.2	494.8
20°	489.6	493.1	490.1	493.3	486.1
22.5°	480.7	484.0	480.7	482.9	476.6
25°	471.1	473.5	470.3	472.4	465.9
27.5°	460.9	462.2	458.9	460.7	453.9
30°	448.3	449.8	446.3	448.5	442.0
32.5°	436.1	437.0	433.1	434.8	428.9
35°	421.8	422.6	418.5	420.2	414.4
37.5°	408.0	407.8	403.5	404.6	399.6
40°	392.2	392.0	387.4	388.3	383.5
42.5°	375.9	375.0	370.6	371.1	366.7
45°	357.6	357.2	352.6	353.2	348.9
47.5°	340.0	338.7	334.1	334.3	330.6
50°	320.8	318.9	315.0	314.5	311.3
52.5°	300.4	298.2	293.9	293.4	291.0
55°	279.1	276.7	272.5	271.9	269.9
57.5°	257.1	254.1	250.8	249.5	248.0
60°	233.8	231.0	227.3	226.0	225.3
62.5°	209.7	206.9	204.0	202.7	201.8
65°	185.1	182.9	179.7	178.4	177.7
67.5°	160.1	158.1	155.1	153.6	153.3
70°	135.1	133.1	129.6	128.8	128.5
72.5°	110.1	108.3	105.1	104.2	104.2
75°	85.7	84.2	81.3	80.5	80.5
77.5°	62.6	61.3	59.2	58.1	58.1
80°	41.8	40.9	38.9	38.1	37.8
82.5°	24.1	23.7	22.0	21.1	21.5
85°	11.1	10.7	9.8	8.7	8.9
87.5°	2.8	2.6	2.0	1.5	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)