

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: P973104

Luminaire Tested: FLR2-14-20HE-L930-CP375

Issue Date: 3/13/2025

**Test Information**

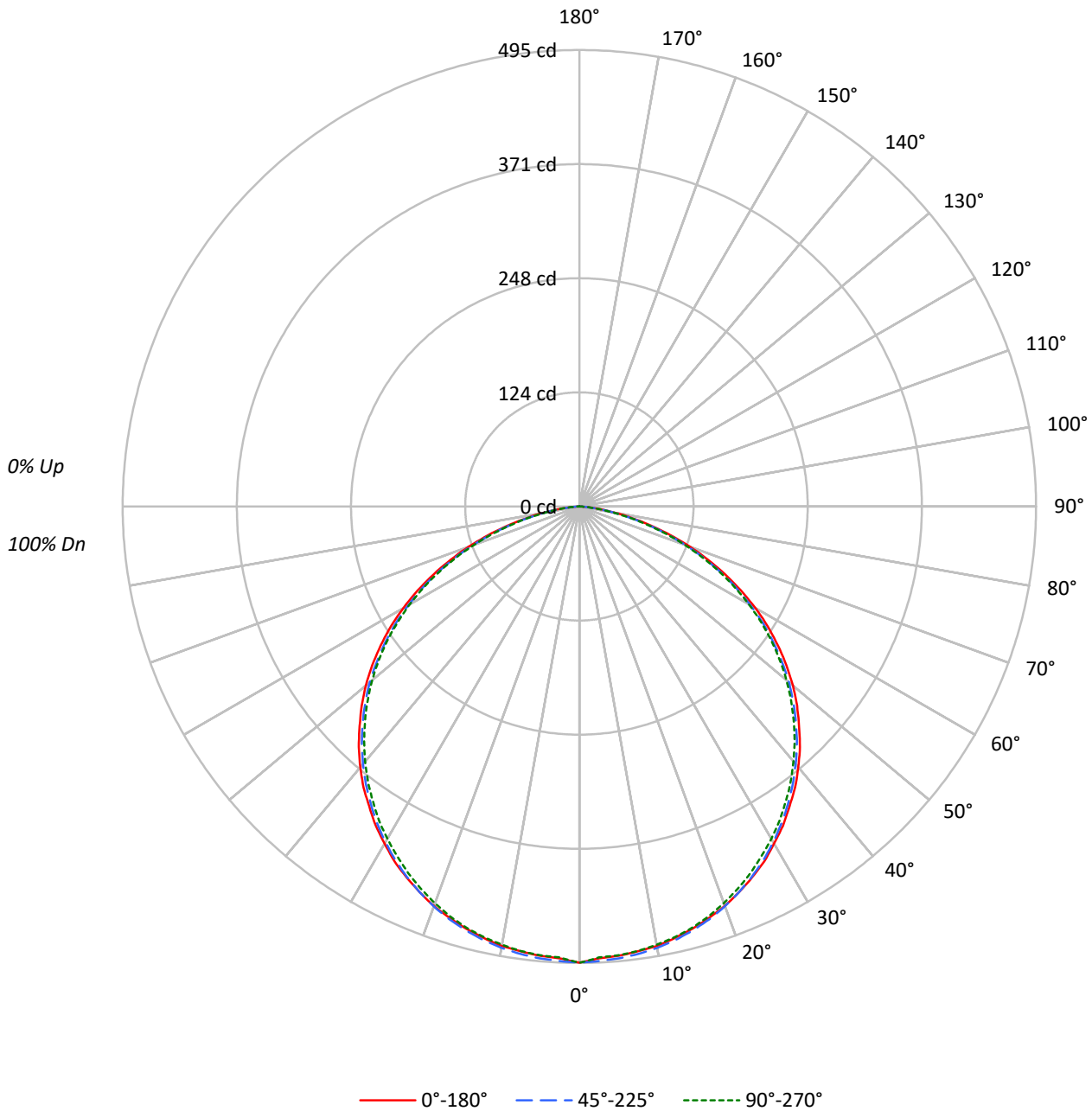
Test Method: LM-79-2019  
Report Number: P973104  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-20HE-L930-CP375  
Description: 1\*4 FLR-2.0 2000 Lumen High Efficacy at 3000CCT & 90 CRI with Clear Polycarbonate (0.375" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1385.0 lumens  
Efficiency: N/A  
Efficacy: 93.6 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

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	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	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						100														
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71						71														
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60						60														
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44						44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39						39														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30						30														
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27						27														
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25						25														

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1331	1331	1331
5°	1321	1329	1320
10°	1323	1328	1319
15°	1321	1326	1317
20°	1320	1322	1311
25°	1317	1315	1303
30°	1312	1306	1293
35°	1305	1295	1282
40°	1297	1281	1268
45°	1281	1263	1250
50°	1265	1242	1227
55°	1233	1204	1193
60°	1185	1152	1142
65°	1110	1077	1065
70°	1001	961	952
75°	839	796	788
80°	609	569	552
85°	321	284	259

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1281 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	46.9	3.4
10°-20°	134.6	9.7
20°-30°	204.5	14.8
30°-40°	247.4	17.9
40°-50°	257.1	18.6
50°-60°	230.2	16.6
60°-70°	167.9	12.1
70°-80°	82.7	6.0
80°-90°	13.8	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°	386.0	27.9
0°-40°	633.3	45.7
0°-60°	1120.6	80.9
0°-90°	1385.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1385.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	495	495	495	495	495	
5°	489	494	492	497	488	47
15°	474	478	476	480	473	134
25°	444	446	443	445	439	205
35°	397	398	394	396	390	249
45°	337	336	332	333	328	260
55°	263	260	257	256	254	235
65°	174	172	169	168	167	172
75°	81	79	77	76	76	86
85°	10	10	9	8	8	15
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	494.8	494.8	494.8	494.8	494.8
2.5°	490.5	496.1	493.4	498.3	489.5
5°	489.1	494.4	492.0	496.7	488.5
7.5°	486.6	492.2	489.5	494.0	486.2
10°	484.0	488.9	486.0	490.5	482.6
12.5°	479.3	484.2	481.5	485.6	478.3
15°	474.0	478.3	475.8	479.9	472.9
17.5°	467.8	471.9	469.2	472.9	466.0
20°	461.0	464.3	461.5	464.5	457.8
22.5°	452.6	455.7	452.6	454.7	448.8
25°	443.6	445.9	442.8	444.9	438.7
27.5°	434.0	435.2	432.2	433.8	427.5
30°	422.1	423.6	420.3	422.3	416.2
32.5°	410.7	411.5	407.8	409.4	403.9
35°	397.1	398.0	394.1	395.7	390.2
37.5°	384.2	384.0	379.9	381.0	376.3
40°	369.3	369.1	364.8	365.6	361.1
42.5°	353.9	353.1	349.0	349.4	345.3
45°	336.7	336.3	332.0	332.6	328.5
47.5°	320.1	318.9	314.6	314.8	311.3
50°	302.1	300.3	296.6	296.2	293.1
52.5°	282.9	280.8	276.7	276.3	274.0
55°	262.8	260.5	256.6	256.0	254.2
57.5°	242.1	239.2	236.2	234.9	233.5
60°	220.2	217.5	214.0	212.8	212.2
62.5°	197.4	194.8	192.1	190.9	190.1
65°	174.3	172.3	169.2	168.0	167.3
67.5°	150.7	148.9	146.0	144.6	144.4
70°	127.2	125.3	122.1	121.3	121.0
72.5°	103.6	102.0	98.9	98.1	98.1
75°	80.7	79.3	76.6	75.8	75.8
77.5°	59.0	57.8	55.7	54.7	54.7
80°	39.3	38.5	36.7	35.8	35.6
82.5°	22.7	22.3	20.7	19.9	20.3
85°	10.4	10.0	9.2	8.2	8.4
87.5°	2.7	2.5	1.8	1.4	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)