

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: P973114

Luminaire Tested: FLR2-14-20HE-L930-CA125

Issue Date: 3/13/2025

**Test Information**

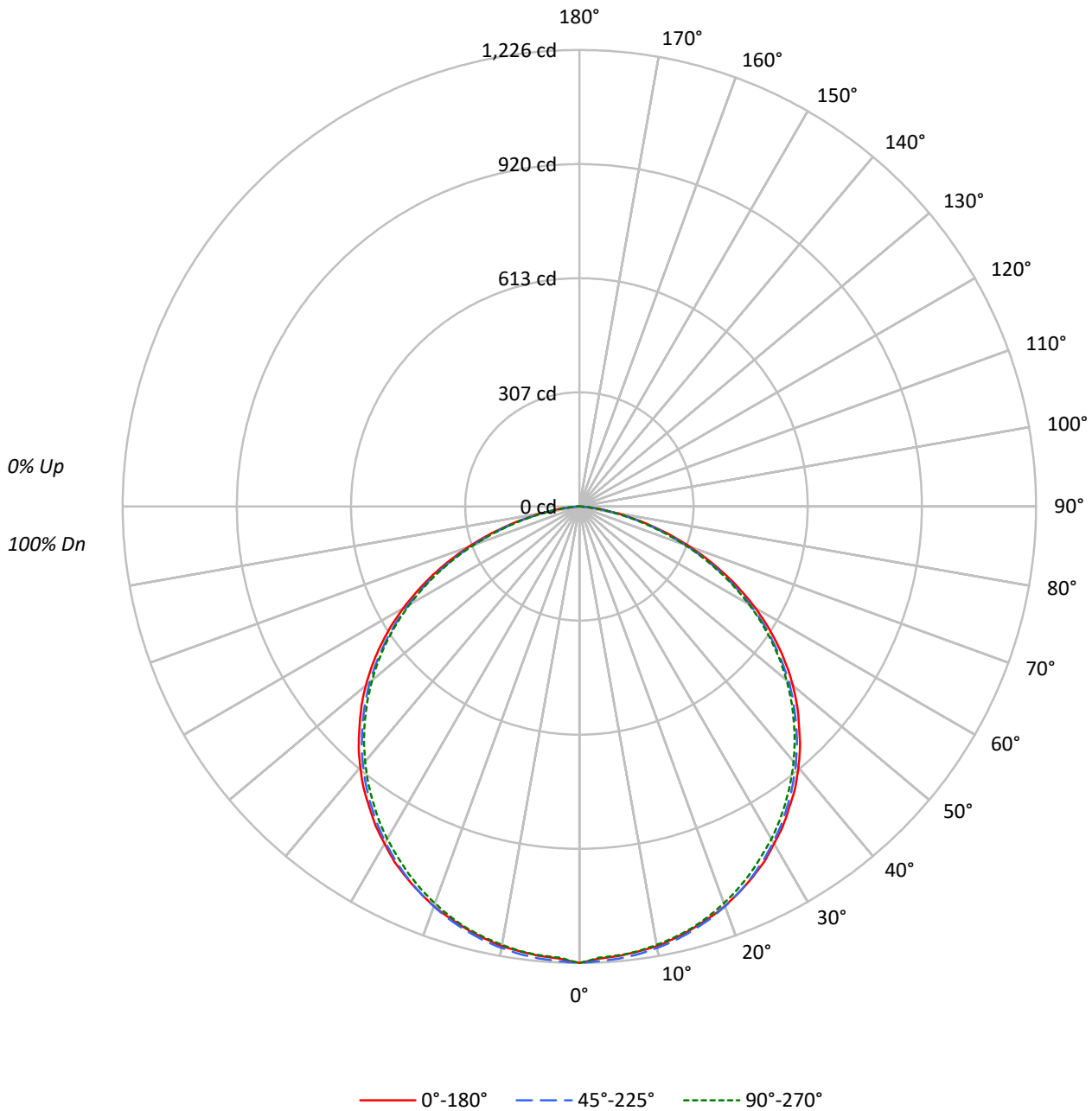
Test Method: LM-79-2019  
Report Number: P973114  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-20HE-L930-CA125  
Description: 1\*4 FLR-2.0 2000 Lumen High Efficacy at 3000CCT & 90 CRI with Clear Arylic (0.125" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3431.6 lumens  
Efficiency: N/A  
Efficacy: 231.9 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°	3299	3299	3299
5°	3274	3293	3269
10°	3277	3290	3267
15°	3271	3284	3265
20°	3271	3274	3248
25°	3264	3258	3227
30°	3250	3236	3204
35°	3233	3208	3176
40°	3214	3175	3143
45°	3175	3131	3098
50°	3134	3076	3040
55°	3055	2983	2955
60°	2936	2854	2829
65°	2750	2669	2640
70°	2479	2380	2360
75°	2078	1973	1953
80°	1509	1407	1368
85°	800	704	642

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3175 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.1	3.4
10°-20°	333.5	9.7
20°-30°	506.7	14.8
30°-40°	612.9	17.9
40°-50°	637.0	18.6
50°-60°	570.3	16.6
60°-70°	416.0	12.1
70°-80°	204.8	6.0
80°-90°	34.3	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°	956.3	27.9
0°-40°	1569.2	45.7
0°-60°	2776.5	80.9
0°-90°	3431.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3431.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1226	1226	1226	1226	1226	
5°	1212	1225	1219	1231	1210	115
15°	1174	1185	1179	1189	1172	332
25°	1099	1105	1097	1102	1087	507
35°	984	986	976	980	967	616
45°	834	833	823	824	814	644
55°	651	646	636	634	630	581
65°	432	427	419	416	415	427
75°	200	196	190	188	188	213
85°	26	25	23	20	21	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1226.1	1226.1	1226.1	1226.1	1226.1
2.5°	1215.4	1229.1	1222.5	1234.7	1212.9
5°	1211.9	1225.0	1219.0	1230.6	1210.3
7.5°	1205.8	1219.5	1212.9	1224.0	1204.8
10°	1199.2	1211.3	1204.2	1215.4	1195.6
12.5°	1187.5	1199.7	1193.1	1203.2	1185.0
15°	1174.3	1185.0	1178.9	1189.0	1171.8
17.5°	1159.1	1169.2	1162.6	1171.8	1154.5
20°	1142.3	1150.5	1143.3	1151.0	1134.2
22.5°	1121.5	1129.1	1121.5	1126.6	1111.9
25°	1099.2	1104.8	1097.2	1102.2	1087.0
27.5°	1075.3	1078.4	1070.8	1074.8	1059.1
30°	1045.9	1049.5	1041.3	1046.4	1031.2
32.5°	1017.5	1019.5	1010.4	1014.4	1000.7
35°	984.0	986.0	976.4	980.4	966.7
37.5°	952.0	951.5	941.4	943.9	932.2
40°	915.0	914.5	903.8	905.8	894.7
42.5°	876.9	874.9	864.7	865.8	855.6
45°	834.3	833.3	822.6	824.1	814.0
47.5°	793.2	790.1	779.5	780.0	771.4
50°	748.5	744.0	734.8	733.8	726.2
52.5°	700.8	695.8	685.6	684.6	679.0
55°	651.1	645.5	635.9	634.3	629.8
57.5°	599.8	592.7	585.1	582.1	578.5
60°	545.5	538.9	530.3	527.3	525.7
62.5°	489.2	482.6	476.0	473.0	470.9
65°	431.9	426.8	419.2	416.1	414.6
67.5°	373.5	368.9	361.8	358.3	357.8
70°	315.1	310.6	302.5	300.4	299.9
72.5°	256.8	252.7	245.1	243.1	243.1
75°	199.9	196.4	189.8	187.8	187.8
77.5°	146.2	143.1	138.0	135.5	135.5
80°	97.4	95.4	90.8	88.8	88.3
82.5°	56.3	55.3	51.3	49.2	50.2
85°	25.9	24.9	22.8	20.3	20.8
87.5°	6.6	6.1	4.6	3.6	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)