

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: P973296

Luminaire Tested: FLR2-14-42HE-L950-CP080

Issue Date: 3/13/2025

**Test Information**

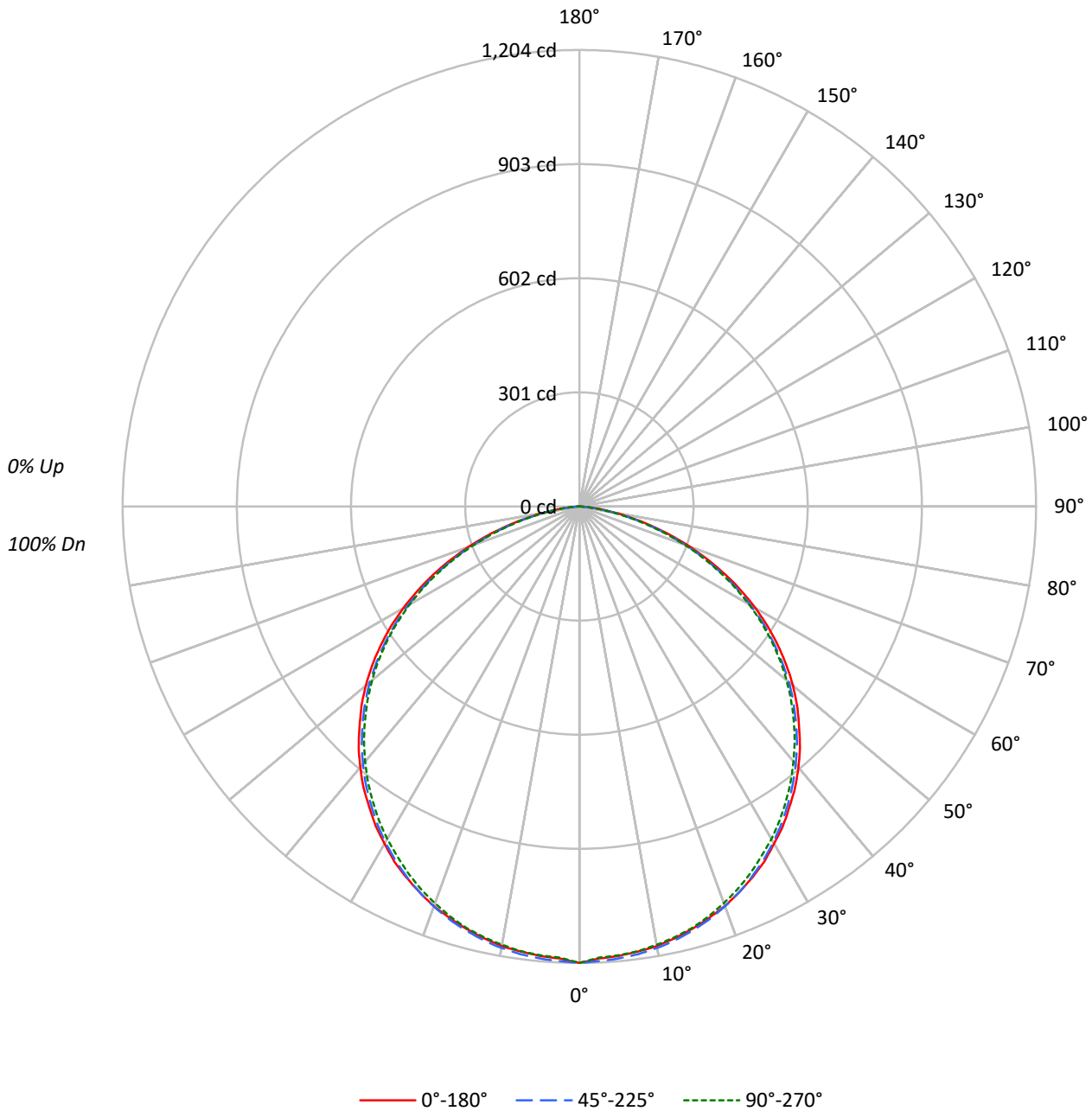
Test Method: LM-79-2019  
Report Number: P973296  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-42HE-L950-CP080  
Description: 1\*4 FLR-2.0 4200 Lumen High Efficacy at 5000CCT & 90 CRI with Clear Polycarbonate (0.080" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3369.6 lumens  
Efficiency: N/A  
Efficacy: 105.6 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): 31.9  
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°	3240	3240	3240
5°	3214	3233	3210
10°	3218	3231	3208
15°	3212	3225	3205
20°	3212	3215	3189
25°	3205	3199	3169
30°	3191	3177	3146
35°	3174	3150	3119
40°	3156	3118	3086
45°	3118	3074	3042
50°	3077	3021	2985
55°	2999	2929	2901
60°	2883	2802	2779
65°	2700	2621	2592
70°	2435	2337	2317
75°	2041	1938	1917
80°	1483	1382	1344
85°	784	692	630

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3118 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	114.0	3.4
10°-20°	327.5	9.7
20°-30°	497.5	14.8
30°-40°	601.8	17.9
40°-50°	625.5	18.6
50°-60°	560.0	16.6
60°-70°	408.5	12.1
70°-80°	201.1	6.0
80°-90°	33.6	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°	939.0	27.9
0°-40°	1540.9	45.7
0°-60°	2726.4	80.9
0°-90°	3369.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3369.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1204	1204	1204	1204	1204	
5°	1190	1203	1197	1208	1188	113
15°	1153	1164	1158	1168	1151	326
25°	1079	1085	1077	1082	1067	498
35°	966	968	959	963	949	605
45°	819	818	808	809	799	633
55°	639	634	624	623	618	571
65°	424	419	412	409	407	419
75°	196	193	186	184	184	209
85°	25	24	22	20	20	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1203.9	1203.9	1203.9	1203.9	1203.9
2.5°	1193.5	1206.9	1200.4	1212.4	1191.0
5°	1190.0	1202.9	1196.9	1208.4	1188.5
7.5°	1184.0	1197.4	1191.0	1201.9	1183.0
10°	1177.5	1189.5	1182.5	1193.5	1174.0
12.5°	1166.0	1178.0	1171.5	1181.5	1163.6
15°	1153.1	1163.6	1157.6	1167.5	1150.6
17.5°	1138.1	1148.1	1141.6	1150.6	1133.7
20°	1121.7	1129.7	1122.7	1130.2	1113.7
22.5°	1101.3	1108.7	1101.3	1106.3	1091.8
25°	1079.3	1084.8	1077.3	1082.3	1067.4
27.5°	1055.9	1058.9	1051.4	1055.4	1040.0
30°	1027.0	1030.5	1022.5	1027.5	1012.6
32.5°	999.1	1001.1	992.1	996.1	982.7
35°	966.2	968.2	958.8	962.7	949.3
37.5°	934.8	934.3	924.4	926.9	915.4
40°	898.5	898.0	887.5	889.5	878.5
42.5°	861.1	859.1	849.1	850.1	840.2
45°	819.2	818.2	807.8	809.3	799.3
47.5°	778.9	775.9	765.4	765.9	757.4
50°	735.0	730.5	721.6	720.6	713.1
52.5°	688.2	683.2	673.2	672.2	666.7
55°	639.3	633.9	624.4	622.9	618.4
57.5°	589.0	582.0	574.6	571.6	568.1
60°	535.7	529.2	520.7	517.7	516.3
62.5°	480.4	473.9	467.4	464.4	462.4
65°	424.1	419.1	411.6	408.6	407.1
67.5°	366.8	362.3	355.3	351.8	351.3
70°	309.5	305.0	297.0	295.0	294.5
72.5°	252.1	248.2	240.7	238.7	238.7
75°	196.3	192.8	186.4	184.4	184.4
77.5°	143.5	140.5	135.5	133.0	133.0
80°	95.7	93.7	89.2	87.2	86.7
82.5°	55.3	54.3	50.3	48.3	49.3
85°	25.4	24.4	22.4	19.9	20.4
87.5°	6.5	6.0	4.5	3.5	4.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)