

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: P973226

Luminaire Tested: FLR2-14-42HE-L940-CP080

Issue Date: 3/13/2025

**Test Information**

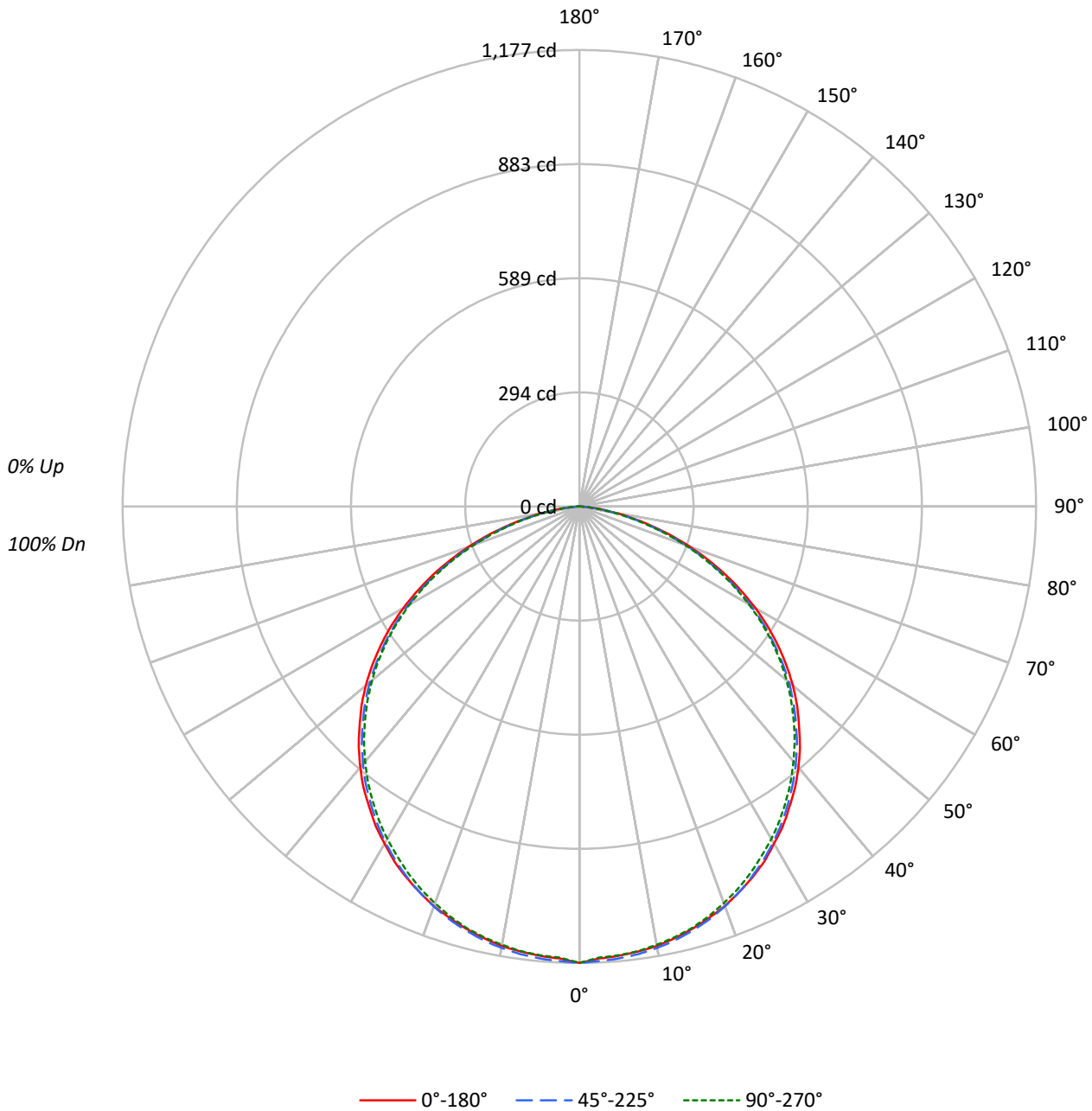
Test Method: LM-79-2019  
Report Number: P973226  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-42HE-L940-CP080  
Description: 1\*4 FLR-2.0 4200 Lumen High Efficacy at 4000CCT & 90 CRI with Clear Polycarbonate (0.080" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3293.9 lumens  
Efficiency: N/A  
Efficacy: 103.3 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°	3167	3167	3167
5°	3142	3160	3138
10°	3145	3158	3136
15°	3140	3153	3133
20°	3140	3143	3118
25°	3133	3127	3098
30°	3119	3106	3076
35°	3103	3079	3049
40°	3085	3047	3017
45°	3048	3005	2973
50°	3008	2953	2918
55°	2932	2864	2836
60°	2818	2739	2716
65°	2639	2562	2534
70°	2380	2284	2265
75°	1995	1894	1874
80°	1449	1351	1314
85°	766	676	618

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3048 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	111.5	3.4
10°-20°	320.1	9.7
20°-30°	486.3	14.8
30°-40°	588.3	17.9
40°-50°	611.4	18.6
50°-60°	547.4	16.6
60°-70°	399.3	12.1
70°-80°	196.6	6.0
80°-90°	32.9	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°	917.9	27.9
0°-40°	1506.2	45.7
0°-60°	2665.1	80.9
0°-90°	3293.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3293.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1163	1176	1170	1181	1162	111
15°	1127	1137	1132	1141	1125	318
25°	1055	1060	1053	1058	1043	486
35°	944	946	937	941	928	591
45°	801	800	790	791	781	618
55°	625	620	610	609	604	558
65°	414	410	402	399	398	409
75°	192	188	182	180	180	205
85°	25	24	22	20	20	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1176.9	1176.9	1176.9	1176.9	1176.9
2.5°	1166.6	1179.8	1173.5	1185.1	1164.2
5°	1163.2	1175.9	1170.0	1181.2	1161.8
7.5°	1157.4	1170.5	1164.2	1174.9	1156.4
10°	1151.0	1162.7	1155.9	1166.6	1147.6
12.5°	1139.8	1151.5	1145.2	1154.9	1137.4
15°	1127.2	1137.4	1131.6	1141.3	1124.7
17.5°	1112.6	1122.3	1116.0	1124.7	1108.2
20°	1096.5	1104.3	1097.5	1104.8	1088.7
22.5°	1076.5	1083.8	1076.5	1081.4	1067.3
25°	1055.1	1060.4	1053.1	1058.0	1043.4
27.5°	1032.2	1035.1	1027.8	1031.7	1016.6
30°	1003.9	1007.4	999.6	1004.4	989.8
32.5°	976.7	978.6	969.8	973.7	960.6
35°	944.5	946.5	937.2	941.1	928.0
37.5°	913.8	913.3	903.6	906.0	894.8
40°	878.3	877.8	867.5	869.5	858.8
42.5°	841.7	839.8	830.0	831.0	821.3
45°	800.8	799.8	789.6	791.1	781.3
47.5°	761.4	758.4	748.2	748.7	740.4
50°	718.5	714.1	705.3	704.4	697.1
52.5°	672.7	667.8	658.1	657.1	651.8
55°	625.0	619.6	610.4	608.9	604.5
57.5°	575.8	568.9	561.6	558.7	555.3
60°	523.6	517.3	509.0	506.1	504.6
62.5°	469.6	463.2	456.9	454.0	452.0
65°	414.5	409.7	402.4	399.4	398.0
67.5°	358.5	354.1	347.3	343.9	343.4
70°	302.5	298.1	290.3	288.4	287.9
72.5°	246.5	242.6	235.3	233.3	233.3
75°	191.9	188.5	182.2	180.2	180.2
77.5°	140.3	137.4	132.5	130.1	130.1
80°	93.5	91.6	87.2	85.2	84.8
82.5°	54.1	53.1	49.2	47.2	48.2
85°	24.8	23.9	21.9	19.5	20.0
87.5°	6.3	5.8	4.4	3.4	4.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)