

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: P973111

Luminaire Tested: FLR2-14-42HE-L930-CA080

Issue Date: 3/13/2025

**Test Information**

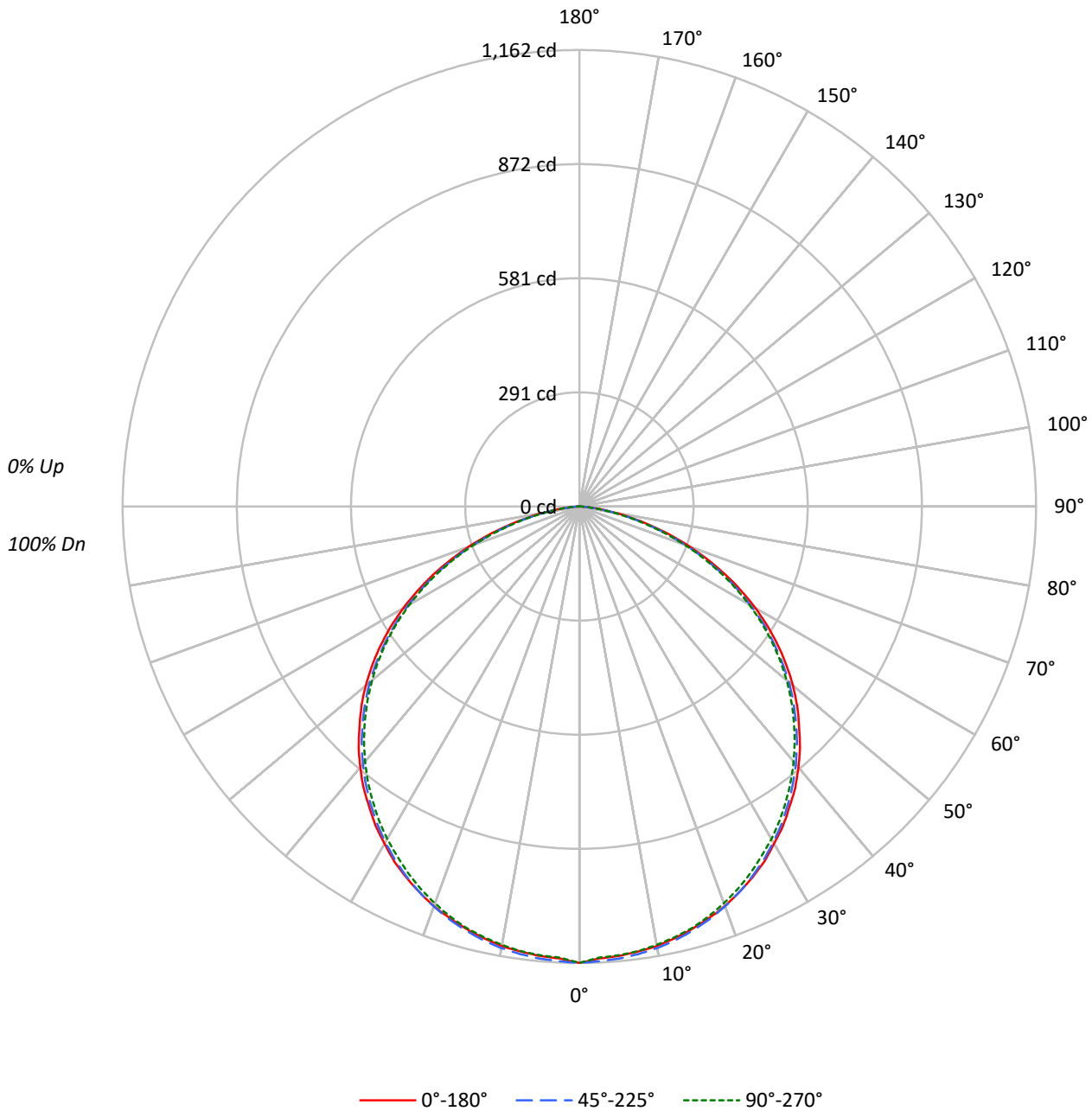
Test Method: LM-79-2019  
Report Number: P973111  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-42HE-L930-CA080  
Description: 1\*4 FLR-2.0 4200 Lumen High Efficacy at 3000CCT & 90 CRI with Clear Aryalic (0.080" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3252.4 lumens  
Efficiency: N/A  
Efficacy: 102.0 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				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	32	27	38	31	27	37	31	26	25

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

	0°	45°	90°
0°	3127	3127	3127
5°	3103	3121	3099
10°	3105	3119	3096
15°	3101	3113	3094
20°	3101	3103	3078
25°	3093	3088	3059
30°	3080	3067	3037
35°	3064	3040	3010
40°	3046	3009	2979
45°	3009	2967	2936
50°	2970	2916	2882
55°	2895	2828	2800
60°	2782	2705	2682
65°	2606	2530	2502
70°	2350	2256	2237
75°	1970	1870	1851
80°	1430	1334	1297
85°	756	667	608

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3009 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.1	3.4
10°-20°	316.1	9.7
20°-30°	480.2	14.8
30°-40°	580.9	17.9
40°-50°	603.7	18.6
50°-60°	540.5	16.6
60°-70°	394.3	12.1
70°-80°	194.1	6.0
80°-90°	32.5	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°	906.4	27.9
0°-40°	1487.3	45.7
0°-60°	2631.5	80.9
0°-90°	3252.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3252.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1162	1162	1162	1162	1162	
5°	1149	1161	1155	1166	1147	109
15°	1113	1123	1117	1127	1111	314
25°	1042	1047	1040	1045	1030	480
35°	933	934	925	929	916	584
45°	791	790	780	781	772	611
55°	617	612	603	601	597	551
65°	409	404	397	394	393	404
75°	190	186	180	178	178	202
85°	24	24	22	19	20	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1162.0	1162.0	1162.0	<i>1162.0</i>	1162.0
2.5°	<i>1151.9</i>	<i>1164.9</i>	<i>1158.7</i>	<i>1170.2</i>	<i>1149.5</i>
5°	1148.6	1161.1	1155.3	<i>1166.4</i>	1147.1
7.5°	1142.8	1155.8	1149.5	<i>1160.1</i>	1141.8
10°	1136.5	1148.1	1141.4	<i>1151.9</i>	1133.2
12.5°	1125.5	1137.0	1130.8	<i>1140.4</i>	1123.1
15°	1113.0	1123.1	1117.3	<i>1126.9</i>	1110.6
17.5°	1098.5	1108.2	1101.9	<i>1110.6</i>	1094.2
20°	1082.7	1090.4	1083.6	<i>1090.8</i>	1075.0
22.5°	1063.0	1070.2	1063.0	<i>1067.8</i>	1053.8
25°	1041.8	1047.1	1039.9	<i>1044.7</i>	1030.2
27.5°	1019.2	1022.1	1014.9	<i>1018.7</i>	1003.8
30°	991.3	994.7	987.0	<i>991.8</i>	977.3
32.5°	964.4	966.3	957.6	<i>961.5</i>	948.5
35°	932.6	934.5	925.4	<i>929.2</i>	916.3
37.5°	902.3	901.8	892.2	<i>894.6</i>	883.5
40°	867.2	866.7	856.6	<i>858.5</i>	848.0
42.5°	831.1	829.2	819.6	<i>820.5</i>	810.9
45°	790.7	789.8	779.7	<i>781.1</i>	771.5
47.5°	751.8	748.9	738.8	<i>739.3</i>	731.1
50°	709.4	705.1	696.5	<i>695.5</i>	688.3
52.5°	664.2	659.4	649.8	<i>648.8</i>	643.5
55°	617.1	611.8	602.7	<i>601.2</i>	596.9
57.5°	568.5	561.8	554.6	<i>551.7</i>	548.3
60°	517.0	510.8	502.6	<i>499.7</i>	498.3
62.5°	463.7	457.4	451.2	<i>448.3</i>	446.3
65°	409.3	404.5	397.3	<i>394.4</i>	393.0
67.5°	354.0	349.7	342.9	<i>339.6</i>	339.1
70°	298.7	294.4	286.7	<i>284.7</i>	284.3
72.5°	243.4	239.5	232.3	<i>230.4</i>	230.4
75°	189.5	186.1	179.9	<i>178.0</i>	178.0
77.5°	138.5	135.6	130.8	<i>128.4</i>	128.4
80°	92.3	90.4	86.1	<i>84.2</i>	83.7
82.5°	53.4	52.4	48.6	<i>46.7</i>	47.6
85°	24.5	23.6	21.6	<i>19.2</i>	19.7
87.5°	6.3	5.8	4.3	<i>3.4</i>	4.3
90°	0.0	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)