

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: P973131

Luminaire Tested: FLR2-14-42HE-L835-CP187

Issue Date: 3/13/2025

**Test Information**

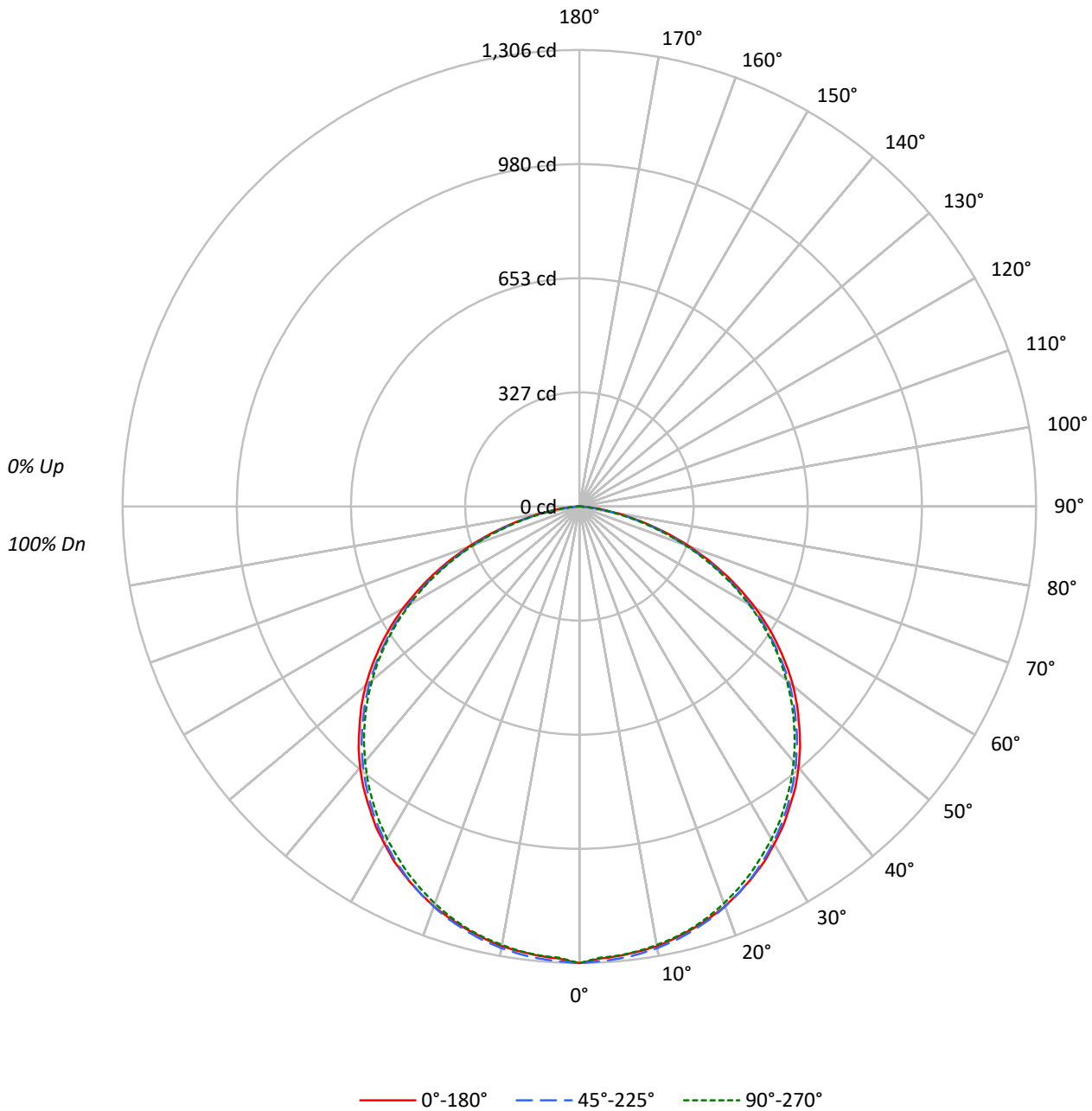
Test Method: LM-79-2019  
Report Number: P973131  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-42HE-L835-CP187  
Description: 1\*4 FLR-2.0 4200 Lumen High Efficacy at 3500CCT & 80CRI with Clear Polycarbonate (0.187" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3656.6 lumens  
Efficiency: N/A  
Efficacy: 114.6 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				20	
RC	80				70				50				30				10	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	
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°	3516	3516	3516
5°	3488	3509	3484
10°	3492	3506	3481
15°	3486	3500	3478
20°	3486	3489	3461
25°	3478	3471	3439
30°	3463	3448	3414
35°	3444	3418	3384
40°	3425	3383	3349
45°	3383	3336	3301
50°	3339	3278	3239
55°	3255	3179	3149
60°	3129	3041	3015
65°	2930	2844	2813
70°	2642	2536	2515
75°	2216	2102	2080
80°	1609	1500	1458
85°	852	750	685

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3383 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.8	3.4
10°-20°	355.4	9.7
20°-30°	539.9	14.8
30°-40°	653.1	17.9
40°-50°	678.7	18.6
50°-60°	607.7	16.6
60°-70°	443.3	12.1
70°-80°	218.3	6.0
80°-90°	36.5	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°	1019.0	27.9
0°-40°	1672.1	45.7
0°-60°	2958.6	80.9
0°-90°	3656.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3656.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1306	1306	1306	1306	1306	
5°	1291	1305	1299	1311	1290	123
15°	1251	1263	1256	1267	1249	353
25°	1171	1177	1169	1174	1158	540
35°	1048	1051	1040	1045	1030	657
45°	889	888	877	878	867	686
55°	694	688	678	676	671	619
65°	460	455	447	443	442	455
75°	213	209	202	200	200	227
85°	28	26	24	22	22	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1306.5	1306.5	1306.5	1306.5	1306.5
2.5°	1295.1	1309.7	1302.7	1315.6	1292.4
5°	1291.3	1305.4	1298.9	1311.3	1289.7
7.5°	1284.8	1299.4	1292.4	1304.3	1283.7
10°	1277.8	1290.8	1283.2	1295.1	1274.0
12.5°	1265.4	1278.3	1271.3	1282.1	1262.7
15°	1251.3	1262.7	1256.2	1267.0	1248.6
17.5°	1235.1	1245.9	1238.9	1248.6	1230.2
20°	1217.2	1225.9	1218.3	1226.4	1208.6
22.5°	1195.1	1203.2	1195.1	1200.5	1184.8
25°	1171.3	1177.2	1169.1	1174.5	1158.3
27.5°	1145.9	1149.1	1141.0	1145.3	1128.5
30°	1114.5	1118.3	1109.6	1115.0	1098.8
32.5°	1084.2	1086.4	1076.6	1081.0	1066.4
35°	1048.5	1050.7	1040.4	1044.7	1030.1
37.5°	1014.4	1013.9	1003.1	1005.8	993.4
40°	975.0	974.4	963.1	965.2	953.3
42.5°	934.4	932.3	921.4	922.5	911.7
45°	889.0	887.9	876.6	878.2	867.4
47.5°	845.2	841.9	830.6	831.1	821.9
50°	797.6	792.7	783.0	781.9	773.8
52.5°	746.8	741.4	730.6	729.5	723.5
55°	693.8	687.8	677.6	675.9	671.1
57.5°	639.2	631.6	623.5	620.2	616.5
60°	581.3	574.3	565.1	561.8	560.2
62.5°	521.3	514.3	507.2	504.0	501.8
65°	460.2	454.8	446.7	443.4	441.8
67.5°	398.0	393.1	385.6	381.8	381.2
70°	335.8	330.9	322.3	320.1	319.6
72.5°	273.6	269.3	261.2	259.0	259.0
75°	213.1	209.3	202.2	200.1	200.1
77.5°	155.7	152.5	147.1	144.4	144.4
80°	103.8	101.7	96.8	94.6	94.1
82.5°	60.0	58.9	54.6	52.5	53.5
85°	27.6	26.5	24.3	21.6	22.2
87.5°	7.0	6.5	4.9	3.8	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)