

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: P973271

Luminaire Tested: FLR2-14-42HE-L850-CP187

Issue Date: 3/13/2025

**Test Information**

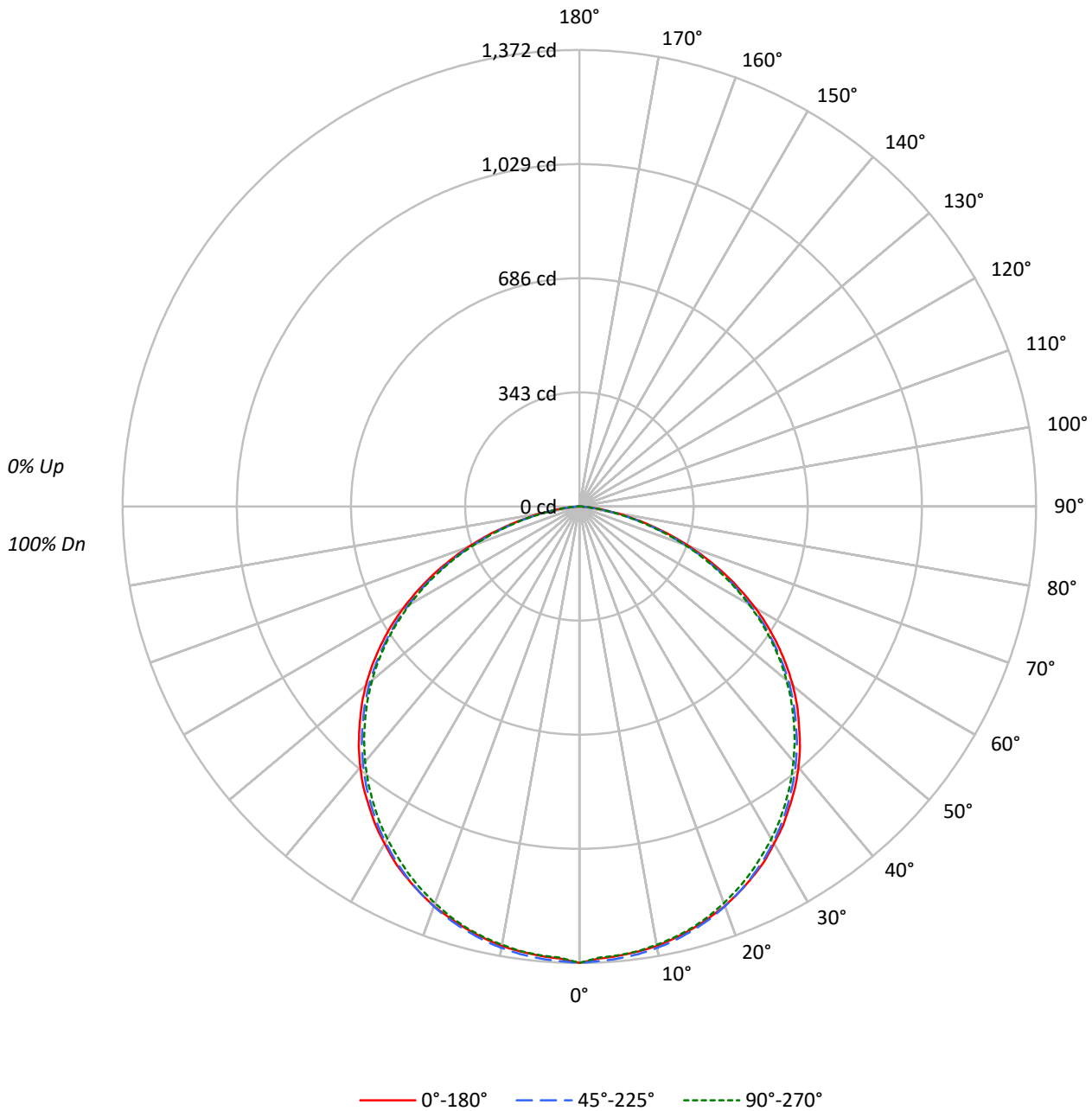
Test Method: LM-79-2019  
Report Number: P973271  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-42HE-L850-CP187  
Description: 1\*4 FLR-2.0 4200 Lumen High Efficacy at 5000CCT & 80CRI with Clear Polycarbonate (0.187" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3839.4 lumens  
Efficiency: N/A  
Efficacy: 120.4 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°	3691	3691	3691
5°	3663	3684	3658
10°	3666	3682	3655
15°	3660	3675	3652
20°	3660	3663	3634
25°	3651	3645	3611
30°	3636	3620	3585
35°	3617	3589	3553
40°	3596	3552	3516
45°	3552	3503	3466
50°	3506	3442	3401
55°	3418	3338	3306
60°	3285	3193	3166
65°	3077	2986	2954
70°	2774	2662	2640
75°	2326	2208	2184
80°	1689	1574	1531
85°	895	790	719

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3552 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.9	3.4
10°-20°	373.1	9.7
20°-30°	566.9	14.8
30°-40°	685.7	17.9
40°-50°	712.7	18.6
50°-60°	638.1	16.6
60°-70°	465.4	12.1
70°-80°	229.2	6.0
80°-90°	38.3	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°	1070.0	27.9
0°-40°	1755.7	45.7
0°-60°	3106.5	80.9
0°-90°	3839.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3839.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1372	1372	1372	1372	1372	
5°	1356	1371	1364	1377	1354	129
15°	1314	1326	1319	1330	1311	371
25°	1230	1236	1228	1233	1216	567
35°	1101	1103	1092	1097	1082	689
45°	933	932	920	922	911	721
55°	728	722	711	710	705	650
65°	483	478	469	466	464	477
75°	224	220	212	210	210	238
85°	29	28	26	23	23	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1371.8	1371.8	1371.8	1371.8	1371.8
2.5°	1359.9	1375.2	1367.8	1381.4	1357.0
5°	1355.9	1370.6	1363.8	1376.9	1354.2
7.5°	1349.1	1364.4	1357.0	1369.5	1347.9
10°	1341.7	1355.3	1347.4	1359.9	1337.7
12.5°	1328.6	1342.3	1334.9	1346.2	1325.8
15°	1313.9	1325.8	1319.0	1330.3	1311.0
17.5°	1296.8	1308.2	1300.8	1311.0	1291.7
20°	1278.1	1287.2	1279.2	1287.7	1269.0
22.5°	1254.8	1263.3	1254.8	1260.5	1244.0
25°	1229.8	1236.1	1227.6	1233.2	1216.2
27.5°	1203.1	1206.5	1198.0	1202.6	1185.0
30°	1170.2	1174.2	1165.1	1170.8	1153.7
32.5°	1138.4	1140.7	1130.5	1135.0	1119.7
35°	1100.9	1103.2	1092.4	1097.0	1081.6
37.5°	1065.2	1064.6	1053.2	1056.1	1043.0
40°	1023.7	1023.2	1011.2	1013.5	1001.0
42.5°	981.1	978.9	967.5	968.6	957.3
45°	933.4	932.3	920.4	922.1	910.7
47.5°	887.5	884.0	872.1	872.7	863.0
50°	837.5	832.4	822.2	821.0	812.5
52.5°	784.1	778.4	767.1	765.9	759.7
55°	728.5	722.2	711.4	709.7	704.6
57.5°	671.1	663.2	654.7	651.3	647.3
60°	610.4	603.0	593.3	589.9	588.2
62.5°	547.3	540.0	532.6	529.2	526.9
65°	483.2	477.5	469.0	465.6	463.9
67.5°	417.9	412.8	404.8	400.9	400.3
70°	352.6	347.5	338.4	336.1	335.6
72.5°	287.3	282.8	274.2	272.0	272.0
75°	223.7	219.7	212.4	210.1	210.1
77.5°	163.5	160.1	154.4	151.6	151.6
80°	109.0	106.7	101.6	99.4	98.8
82.5°	63.0	61.9	57.3	55.1	56.2
85°	29.0	27.8	25.6	22.7	23.3
87.5°	7.4	6.8	5.1	4.0	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)