

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: P973149

Luminaire Tested: FLR2-14-20HE-L835-CA125

Issue Date: 3/13/2025

**Test Information**

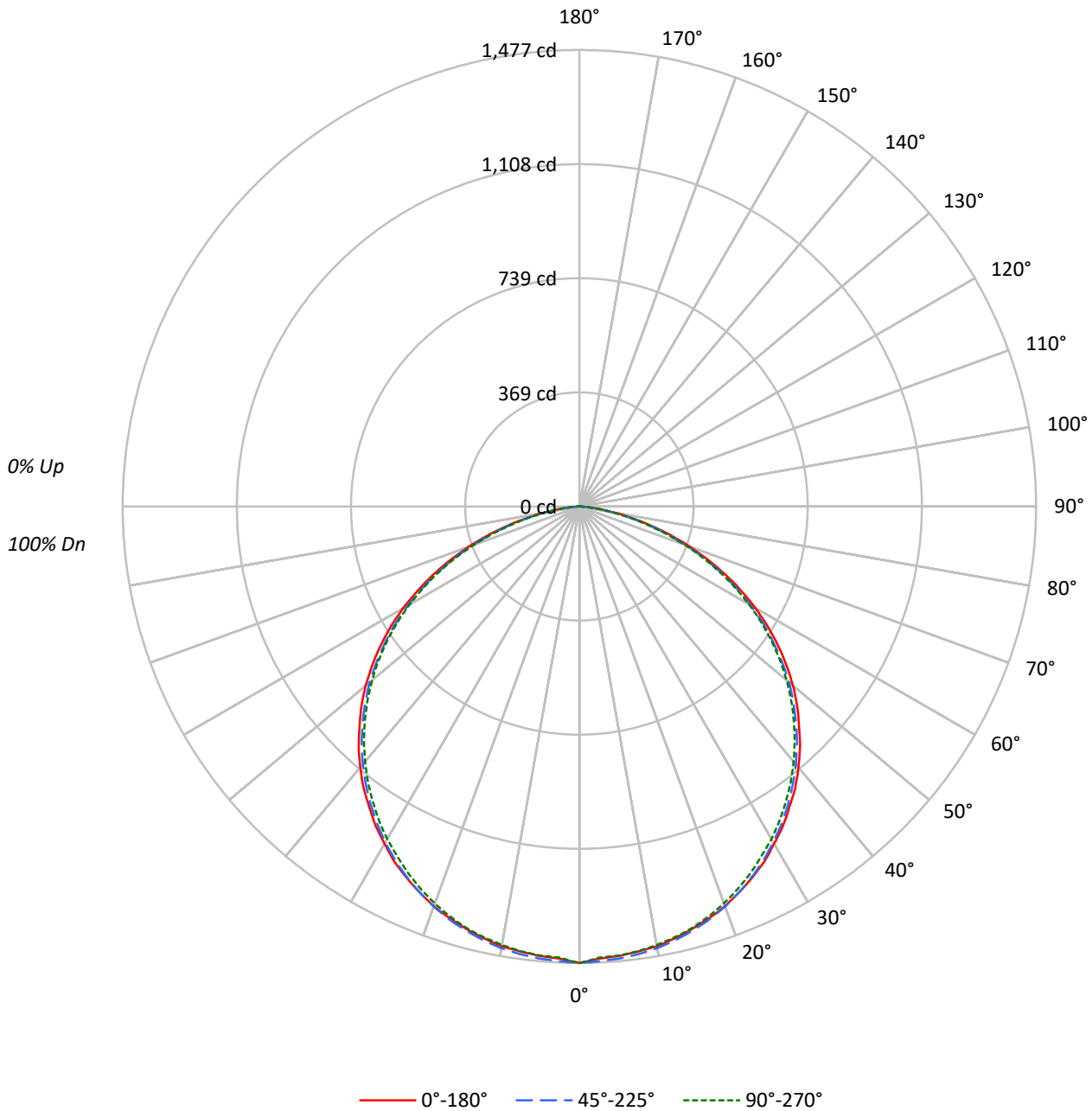
Test Method: LM-79-2019  
Report Number: P973149  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-20HE-L835-CA125  
Description: 1\*4 FLR-2.0 2000 Lumen High Efficacy at 3500CCT & 80CRI with Clear Aryalic (0.125" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4134.4 lumens  
Efficiency: N/A  
Efficacy: 279.4 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): 14.8  
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°	3975	3975	3975
5°	3944	3967	3939
10°	3948	3965	3936
15°	3942	3957	3933
20°	3941	3945	3913
25°	3932	3925	3889
30°	3915	3898	3860
35°	3894	3865	3826
40°	3873	3825	3786
45°	3825	3772	3732
50°	3775	3706	3663
55°	3680	3594	3560
60°	3538	3439	3409
65°	3313	3216	3181
70°	2987	2867	2843
75°	2505	2378	2352
80°	1819	1695	1649
85°	963	849	775

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 3825 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.9	3.4
10°-20°	401.8	9.7
20°-30°	610.4	14.8
30°-40°	738.4	17.9
40°-50°	767.4	18.6
50°-60°	687.1	16.6
60°-70°	501.2	12.1
70°-80°	246.8	6.0
80°-90°	41.3	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°	1152.2	27.9
0°-40°	1890.6	45.7
0°-60°	3345.2	80.9
0°-90°	4134.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4134.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1477	1477	1477	1477	1477	
5°	1460	1476	1469	1483	1458	139
15°	1415	1428	1420	1433	1412	400
25°	1324	1331	1322	1328	1310	611
35°	1186	1188	1176	1181	1165	742
45°	1005	1004	991	993	981	776
55°	784	778	766	764	759	700
65°	520	514	505	501	500	514
75°	241	237	229	226	226	257
85°	31	30	28	24	25	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1477.2	1477.2	1477.2	1477.2	1477.2
2.5°	1464.3	1480.9	1472.9	1487.6	1461.3
5°	1460.1	1476.0	1468.6	1482.7	1458.2
7.5°	1452.7	1469.2	1461.3	1474.7	1451.5
10°	1444.8	1459.5	1450.9	1464.3	1440.5
12.5°	1430.7	1445.4	1437.4	1449.7	1427.7
15°	1414.8	1427.7	1420.3	1432.6	1411.8
17.5°	1396.5	1408.7	1400.8	1411.8	1391.0
20°	1376.3	1386.1	1377.5	1386.7	1366.5
22.5°	1351.2	1360.4	1351.2	1357.3	1339.6
25°	1324.3	1331.1	1321.9	1328.0	1309.7
27.5°	1295.6	1299.3	1290.1	1295.0	1276.0
30°	1260.1	1264.4	1254.6	1260.7	1242.4
32.5°	1225.9	1228.3	1217.3	1222.2	1205.7
35°	1185.5	1188.0	1176.4	1181.3	1164.8
37.5°	1147.0	1146.4	1134.2	1137.2	1123.2
40°	1102.4	1101.8	1088.9	1091.4	1077.9
42.5°	1056.5	1054.1	1041.9	1043.1	1030.9
45°	1005.2	1003.9	991.1	992.9	980.7
47.5°	955.6	952.0	939.1	939.7	929.4
50°	901.8	896.3	885.3	884.1	874.9
52.5°	844.4	838.3	826.0	824.8	818.1
55°	784.4	777.7	766.1	764.3	758.8
57.5°	722.7	714.1	705.0	701.3	697.0
60°	657.3	649.3	638.9	635.3	633.4
62.5°	589.4	581.5	573.5	569.8	567.4
65°	520.3	514.2	505.0	501.4	499.5
67.5°	450.0	444.5	435.9	431.7	431.0
70°	379.7	374.2	364.4	362.0	361.3
72.5°	309.4	304.5	295.3	292.9	292.9
75°	240.9	236.6	228.7	226.2	226.2
77.5°	176.1	172.4	166.3	163.2	163.2
80°	117.4	114.9	109.4	107.0	106.4
82.5°	67.9	66.6	61.8	59.3	60.5
85°	31.2	30.0	27.5	24.5	25.1
87.5°	7.9	7.3	5.5	4.3	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)