

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: P973139

Luminaire Tested: FLR2-14-20HE-L835-CP375

Issue Date: 3/13/2025

**Test Information**

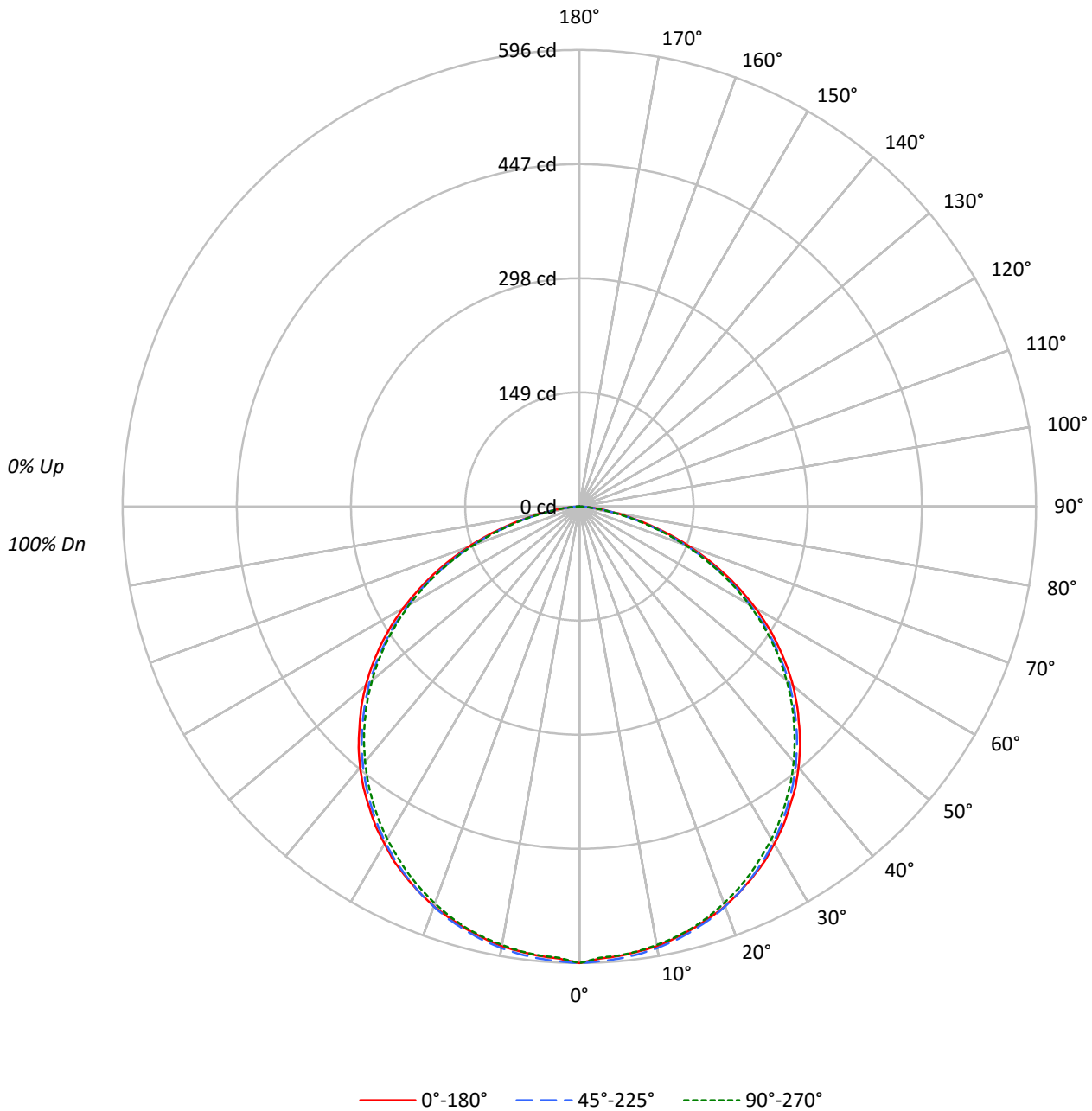
Test Method: LM-79-2019  
Report Number: P973139  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-20HE-L835-CP375  
Description: 1\*4 FLR-2.0 2000 Lumen High Efficacy at 3500CCT & 80CRI with Clear Polycarbonate (0.375" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1668.7 lumens  
Efficiency: N/A  
Efficacy: 112.7 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

TEST NUMBER: P973139  
CATALOG NUMBER: FLR2-14-20HE-L835-CP375

### Luminous Intensity Polar Plot





TEST NUMBER: P973139  
 CATALOG NUMBER: FLR2-14-20HE-L835-CP375

**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°	1604	1604	1604
5°	1592	1601	1590
10°	1593	1600	1589
15°	1591	1597	1587
20°	1591	1592	1579
25°	1587	1584	1570
30°	1580	1574	1558
35°	1572	1560	1544
40°	1563	1544	1528
45°	1544	1522	1506
50°	1524	1496	1478
55°	1485	1451	1437
60°	1428	1388	1376
65°	1337	1298	1284
70°	1205	1157	1147
75°	1011	960	949
80°	735	685	665
85°	389	343	312

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1544 cd/sqm



TEST NUMBER: P973139  
 CATALOG NUMBER: FLR2-14-20HE-L835-CP375

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	56.5	3.4
10°-20°	162.2	9.7
20°-30°	246.4	14.8
30°-40°	298.0	17.9
40°-50°	309.7	18.6
50°-60°	277.3	16.6
60°-70°	202.3	12.1
70°-80°	99.6	6.0
80°-90°	16.7	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°	465.0	27.9
0°-40°	763.1	45.7
0°-60°	1350.1	80.9
0°-90°	1668.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1668.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	596	596	596	596	596	
5°	589	596	593	598	588	56
15°	571	576	573	578	570	161
25°	534	537	534	536	529	246
35°	478	480	475	477	470	300
45°	406	405	400	401	396	313
55°	317	314	309	308	306	283
65°	210	208	204	202	202	207
75°	97	96	92	91	91	104
85°	13	12	11	10	10	18
90°	0	0	0	0	0	



TEST NUMBER: P973139  
 CATALOG NUMBER: FLR2-14-20HE-L835-CP375

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	596.2	596.2	596.2	596.2	596.2
2.5°	591.0	597.7	594.5	600.4	589.8
5°	589.3	595.7	592.7	598.4	588.5
7.5°	586.3	593.0	589.8	595.2	585.8
10°	583.1	589.0	585.6	591.0	581.4
12.5°	577.4	583.4	580.2	585.1	576.2
15°	571.0	576.2	573.2	578.2	569.8
17.5°	563.6	568.6	565.3	569.8	561.4
20°	555.5	559.4	556.0	559.7	551.5
22.5°	545.4	549.1	545.4	547.8	540.7
25°	534.5	537.2	533.5	536.0	528.6
27.5°	522.9	524.4	520.7	522.7	515.0
30°	508.6	510.3	506.4	508.8	501.4
32.5°	494.8	495.8	491.3	493.3	486.6
35°	478.5	479.5	474.8	476.8	470.1
37.5°	462.9	462.7	457.8	459.0	453.3
40°	444.9	444.7	439.5	440.5	435.1
42.5°	426.4	425.4	420.5	421.0	416.1
45°	405.7	405.2	400.0	400.8	395.8
47.5°	385.7	384.2	379.0	379.3	375.1
50°	364.0	361.8	357.3	356.8	353.1
52.5°	340.8	338.3	333.4	332.9	330.2
55°	316.6	313.9	309.2	308.5	306.2
57.5°	291.7	288.2	284.5	283.0	281.3
60°	265.3	262.1	257.9	256.4	255.7
62.5°	237.9	234.7	231.5	230.0	229.0
65°	210.0	207.5	203.8	202.4	201.6
67.5°	181.6	179.4	175.9	174.2	174.0
70°	153.2	151.0	147.1	146.1	145.8
72.5°	124.9	122.9	119.2	118.2	118.2
75°	97.2	95.5	92.3	91.3	91.3
77.5°	71.1	69.6	67.1	65.9	65.9
80°	47.4	46.4	44.2	43.2	42.9
82.5°	27.4	26.9	24.9	23.9	24.4
85°	12.6	12.1	11.1	9.9	10.1
87.5°	3.2	3.0	2.2	1.7	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)