

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: P973173

Luminaire Tested: FLR2-14-80HE-L935-CP250

Issue Date: 3/13/2025

**Test Information**

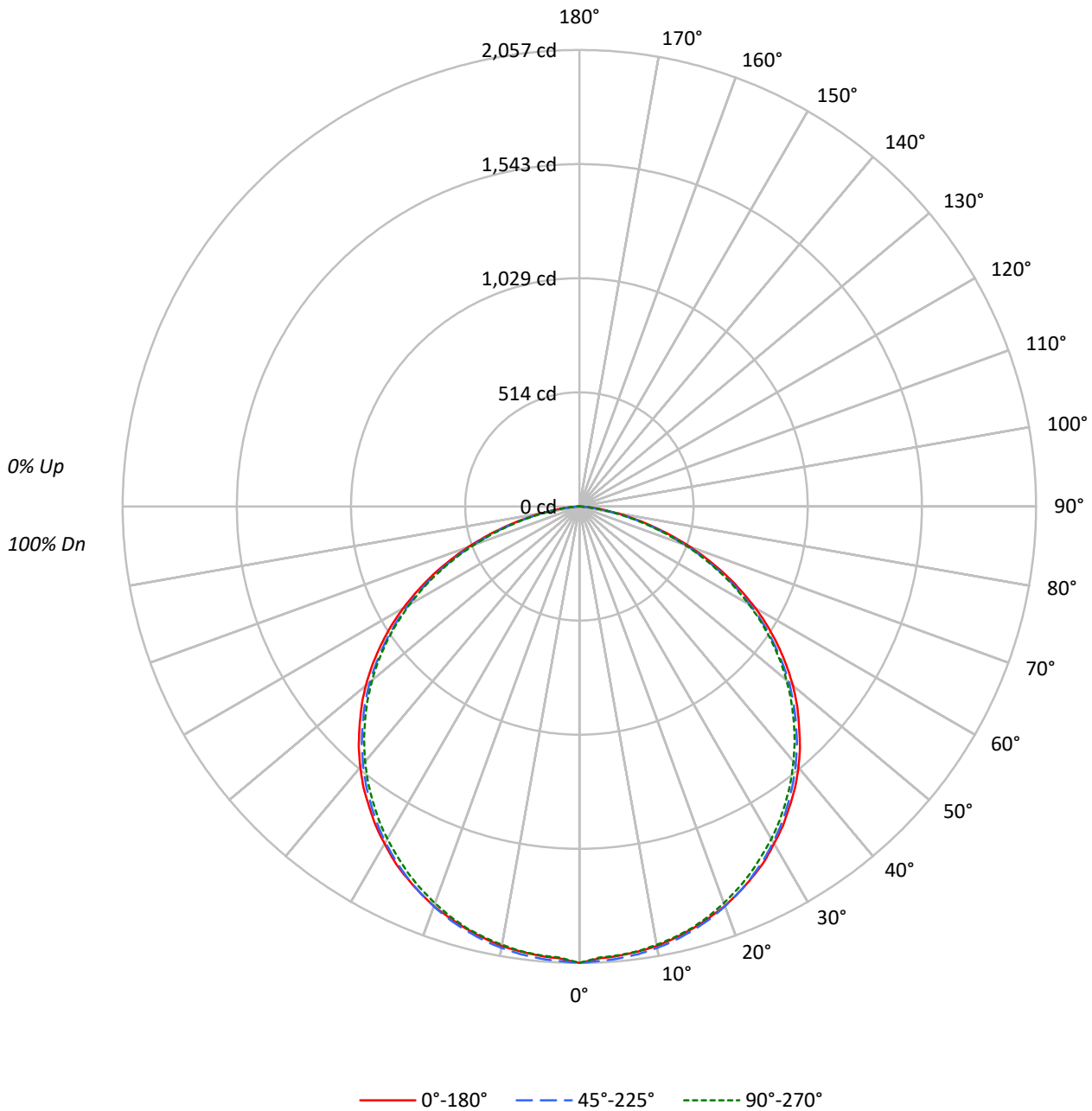
Test Method: LM-79-2019  
Report Number: P973173  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-80HE-L935-CP250  
Description: 1\*4 FLR-2.0 8000 Lumen High Efficacy at 3500CCT & 90 CRI with Clear Polycarbonate (0.250" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5756.3 lumens  
Efficiency: N/A  
Efficacy: 93.0 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): 61.9  
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°	5535	5535	5535
5°	5491	5523	5484
10°	5496	5520	5480
15°	5488	5509	5476
20°	5487	5492	5448
25°	5475	5464	5414
30°	5452	5428	5375
35°	5422	5380	5327
40°	5391	5326	5272
45°	5326	5251	5196
50°	5256	5160	5100
55°	5124	5004	4956
60°	4925	4788	4746
65°	4613	4477	4429
70°	4159	3992	3958
75°	3487	3310	3275
80°	2532	2362	2295
85°	1340	1183	1078

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 5326 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	194.8	3.4
10°-20°	559.4	9.7
20°-30°	849.9	14.8
30°-40°	1028.1	17.9
40°-50°	1068.5	18.6
50°-60°	956.7	16.6
60°-70°	697.8	12.1
70°-80°	343.6	6.0
80°-90°	57.5	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°	1604.2	27.9
0°-40°	2632.3	45.7
0°-60°	4657.5	80.9
0°-90°	5756.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5756.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2057	2057	2057	2057	2057	
5°	2033	2055	2045	2064	2030	193
15°	1970	1988	1978	1994	1966	556
25°	1844	1853	1840	1849	1823	850
35°	1651	1654	1638	1645	1622	1034
45°	1400	1398	1380	1382	1365	1081
55°	1092	1083	1067	1064	1056	975
65°	724	716	703	698	696	716
75°	335	329	318	315	315	358
85°	43	42	38	34	35	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2056.7	2056.7	2056.7	2056.7	2056.7
2.5°	2038.8	2061.8	2050.7	2071.1	2034.5
5°	2032.8	2055.0	2044.7	2064.3	2030.3
7.5°	2022.6	2045.6	2034.5	2053.3	2020.9
10°	2011.5	2032.0	2020.1	2038.8	2005.6
12.5°	1992.0	2012.4	2001.3	2018.4	1987.7
15°	1969.8	1987.7	1977.5	1994.5	1965.6
17.5°	1944.3	1961.3	1950.3	1965.6	1936.6
20°	1916.2	1929.8	1917.9	1930.7	1902.6
22.5°	1881.3	1894.1	1881.3	1889.8	1865.1
25°	1843.8	1853.2	1840.4	1849.0	1823.4
27.5°	1803.8	1808.9	1796.2	1803.0	1776.6
30°	1754.5	1760.4	1746.8	1755.3	1729.8
32.5°	1706.8	1710.2	1694.9	1701.7	1678.7
35°	1650.6	1654.0	1637.8	1644.7	1621.7
37.5°	1597.0	1596.1	1579.1	1583.4	1563.8
40°	1534.8	1534.0	1516.1	1519.5	1500.8
42.5°	1471.0	1467.6	1450.6	1452.3	1435.2
45°	1399.5	1397.8	1379.9	1382.5	1365.4
47.5°	1330.5	1325.4	1307.5	1308.4	1293.9
50°	1255.6	1248.0	1232.6	1230.9	1218.2
52.5°	1175.6	1167.1	1150.1	1148.4	1139.0
55°	1092.2	1082.8	1066.6	1064.1	1056.4
57.5°	1006.2	994.3	981.5	976.4	970.4
60°	915.1	904.0	889.6	884.5	881.9
62.5°	820.6	809.6	798.5	793.4	790.0
65°	724.4	715.9	703.1	698.0	695.5
67.5°	626.5	618.9	607.0	601.0	600.1
70°	528.6	521.0	507.4	504.0	503.1
72.5°	430.7	423.9	411.2	407.8	407.8
75°	335.4	329.4	318.4	315.0	315.0
77.5°	245.2	240.1	231.5	227.3	227.3
80°	163.4	160.0	152.4	149.0	148.1
82.5°	94.5	92.8	86.0	82.6	84.3
85°	43.4	41.7	38.3	34.1	34.9
87.5°	11.1	10.2	7.7	6.0	7.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)