

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: P973259

Luminaire Tested: FLR2-14-20HE-L850-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973259
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-L850-CP080
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 5000CCT & 80CRI with Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

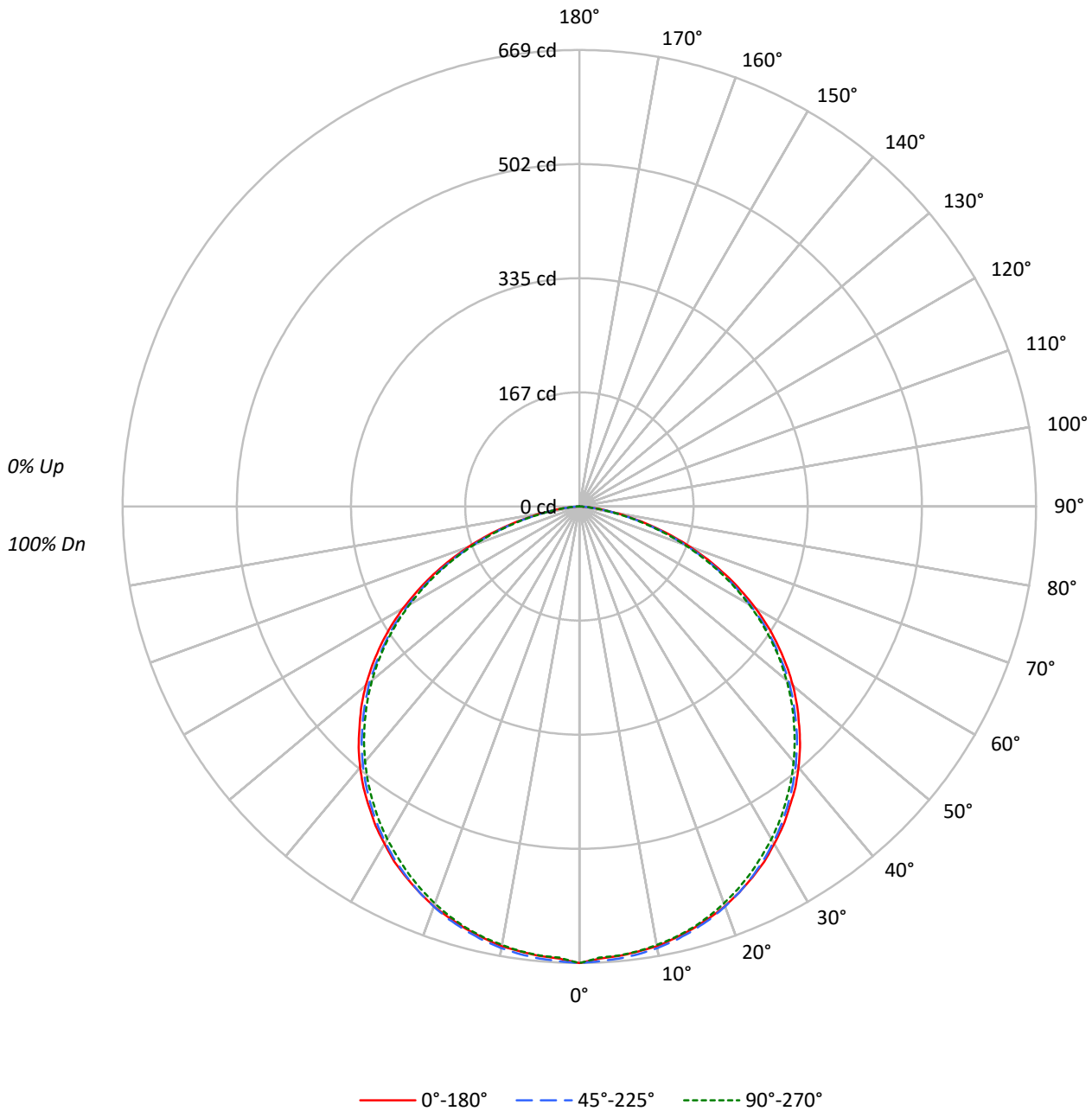
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1873.0 lumens
Efficiency: N/A
Efficacy: 126.6 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): 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: P973259
CATALOG NUMBER: FLR2-14-20HE-L850-CP080

Luminous Intensity Polar Plot





TEST NUMBER: P973259
 CATALOG NUMBER: FLR2-14-20HE-L850-CP080

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	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°	1801	1801	1801
5°	1787	1797	1784
10°	1788	1796	1783
15°	1785	1792	1782
20°	1786	1787	1773
25°	1781	1778	1762
30°	1774	1766	1749
35°	1764	1751	1733
40°	1754	1733	1715
45°	1733	1709	1691
50°	1710	1679	1659
55°	1667	1628	1612
60°	1603	1558	1544
65°	1501	1457	1441
70°	1353	1299	1288
75°	1134	1077	1066
80°	824	769	747
85°	435	386	352

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1733 cd/sqm



TEST NUMBER: P973259
 CATALOG NUMBER: FLR2-14-20HE-L850-CP080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.4	3.4
10°-20°	182.0	9.7
20°-30°	276.5	14.8
30°-40°	334.5	17.9
40°-50°	347.7	18.6
50°-60°	311.3	16.6
60°-70°	227.0	12.1
70°-80°	111.8	6.0
80°-90°	18.7	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°	522.0	27.9
0°-40°	856.5	45.7
0°-60°	1515.4	80.9
0°-90°	1873.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1873.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	669	669	669	669	669	
5°	661	669	665	672	661	63
15°	641	647	643	649	640	181
25°	600	603	599	602	593	277
35°	537	538	533	535	528	336
45°	455	455	449	450	444	352
55°	355	352	347	346	344	317
65°	236	233	229	227	226	233
75°	109	107	104	102	102	116
85°	14	14	12	11	11	20
90°	0	0	0	0	0	



TEST NUMBER: P973259
 CATALOG NUMBER: FLR2-14-20HE-L850-CP080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	669.2	669.2	669.2	669.2	669.2
2.5°	663.4	670.8	667.2	673.9	662.0
5°	661.4	668.6	665.3	671.7	660.6
7.5°	658.1	665.6	662.0	668.1	657.5
10°	654.5	661.1	657.3	663.4	652.6
12.5°	648.1	654.8	651.2	656.7	646.7
15°	640.9	646.7	643.4	649.0	639.5
17.5°	632.6	638.2	634.6	639.5	630.1
20°	623.5	627.9	624.0	628.2	619.0
22.5°	612.1	616.3	612.1	614.9	606.9
25°	599.9	603.0	598.8	601.6	593.3
27.5°	586.9	588.6	584.4	586.6	578.1
30°	570.9	572.8	568.4	571.1	562.8
32.5°	555.3	556.4	551.5	553.7	546.2
35°	537.1	538.2	532.9	535.1	527.6
37.5°	519.6	519.3	513.8	515.2	508.8
40°	499.4	499.1	493.3	494.4	488.3
42.5°	478.6	477.5	472.0	472.5	467.0
45°	455.4	454.8	449.0	449.8	444.3
47.5°	432.9	431.3	425.4	425.7	421.0
50°	408.5	406.0	401.1	400.5	396.4
52.5°	382.5	379.7	374.2	373.6	370.6
55°	355.4	352.3	347.1	346.2	343.7
57.5°	327.4	323.5	319.4	317.7	315.8
60°	297.8	294.2	289.4	287.8	286.9
62.5°	267.0	263.4	259.8	258.1	257.0
65°	235.7	232.9	228.8	227.1	226.3
67.5°	203.9	201.4	197.5	195.5	195.3
70°	172.0	169.5	165.1	164.0	163.7
72.5°	140.2	137.9	133.8	132.7	132.7
75°	109.1	107.2	103.6	102.5	102.5
77.5°	79.8	78.1	75.3	74.0	74.0
80°	53.2	52.1	49.6	48.5	48.2
82.5°	30.7	30.2	28.0	26.9	27.4
85°	14.1	13.6	12.5	11.1	11.4
87.5°	3.6	3.3	2.5	1.9	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)