

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: P973294

Luminaire Tested: FLR2-14-20HE-L950-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973294
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-L950-CP080
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 5000CCT & 90 CRI with Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

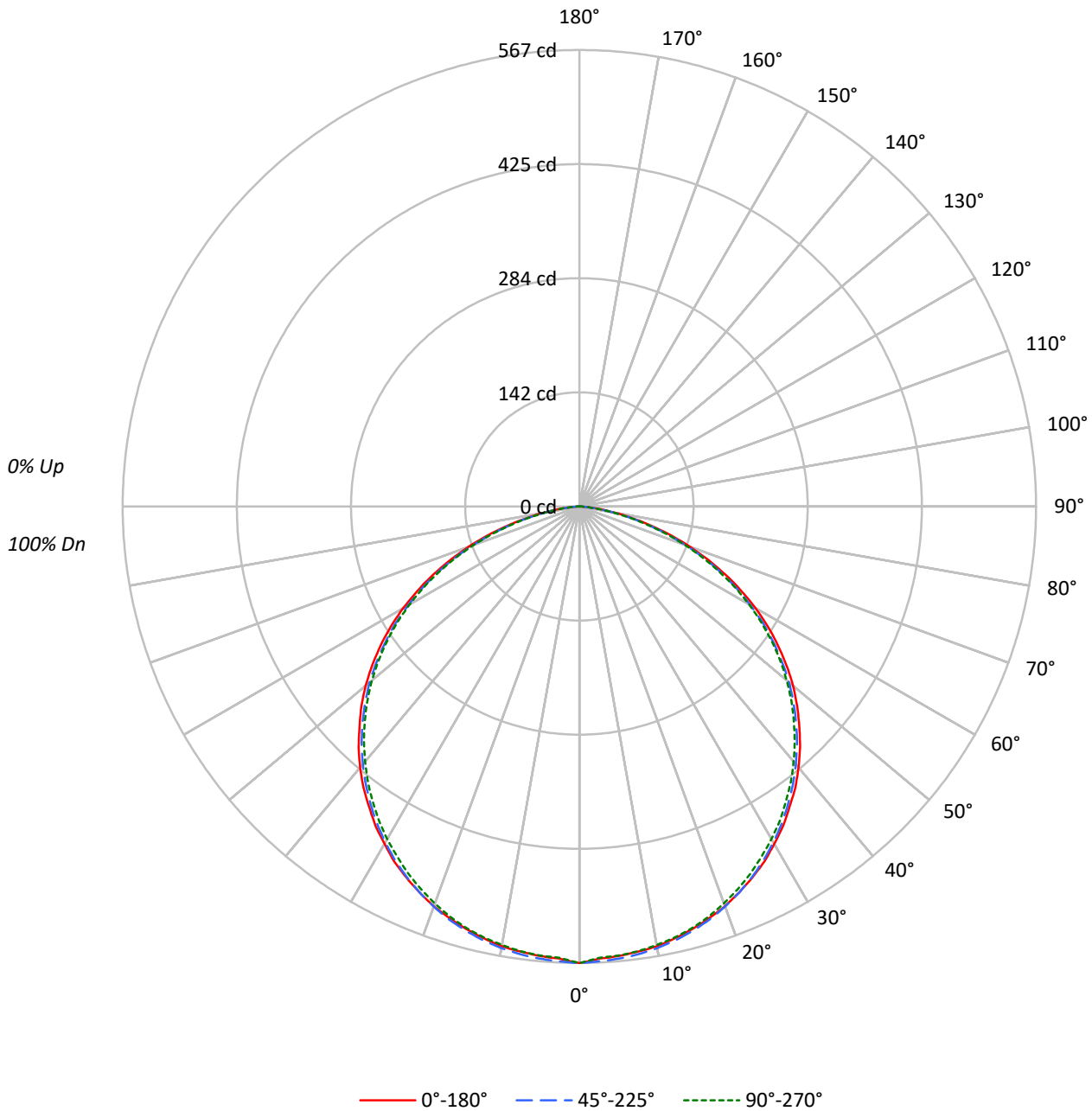
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1587.6 lumens
Efficiency: N/A
Efficacy: 107.3 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 (A_{in}): 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: P973294
CATALOG NUMBER: FLR2-14-20HE-L950-CP080

Luminous Intensity Polar Plot





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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°	1526	1526	1526
5°	1514	1523	1512
10°	1516	1522	1511
15°	1514	1519	1510
20°	1513	1515	1503
25°	1510	1507	1493
30°	1504	1497	1482
35°	1495	1484	1469
40°	1487	1469	1454
45°	1469	1448	1433
50°	1450	1423	1407
55°	1413	1380	1367
60°	1358	1320	1309
65°	1272	1235	1221
70°	1147	1101	1092
75°	962	913	904
80°	699	651	634
85°	371	327	296

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1469 cd/sqm



TEST NUMBER: P973294
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.7	3.4
10°-20°	154.3	9.7
20°-30°	234.4	14.8
30°-40°	283.5	17.9
40°-50°	294.7	18.6
50°-60°	263.8	16.6
60°-70°	192.4	12.1
70°-80°	94.8	6.0
80°-90°	15.8	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°	442.4	27.9
0°-40°	726.0	45.7
0°-60°	1284.5	80.9
0°-90°	1587.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1587.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	567	567	567	567	567	
5°	561	567	564	569	560	53
15°	543	548	545	550	542	153
25°	508	511	508	510	503	234
35°	455	456	452	454	447	285
45°	386	386	381	381	377	298
55°	301	299	294	294	291	269
65°	200	197	194	192	192	197
75°	92	91	88	87	87	99
85°	12	12	11	9	10	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	567.2	567.2	567.2	567.2	567.2
2.5°	562.3	568.6	565.6	571.2	561.1
5°	560.6	566.7	563.9	569.3	559.9
7.5°	557.8	564.2	561.1	566.3	557.3
10°	554.8	560.4	557.1	562.3	553.1
12.5°	549.4	555.0	551.9	556.6	548.2
15°	543.3	548.2	545.4	550.1	542.1
17.5°	536.2	540.9	537.9	542.1	534.1
20°	528.5	532.2	528.9	532.5	524.7
22.5°	518.8	522.4	518.8	521.2	514.4
25°	508.5	511.1	507.6	509.9	502.9
27.5°	497.5	498.9	495.4	497.2	490.0
30°	483.9	485.5	481.8	484.1	477.1
32.5°	470.7	471.7	467.4	469.3	463.0
35°	455.2	456.2	451.7	453.6	447.2
37.5°	440.4	440.2	435.5	436.7	431.3
40°	423.3	423.1	418.1	419.1	413.9
42.5°	405.7	404.7	400.1	400.5	395.8
45°	386.0	385.5	380.6	381.3	376.6
47.5°	366.9	365.5	360.6	360.8	356.9
50°	346.3	344.2	339.9	339.5	336.0
52.5°	324.2	321.9	317.2	316.7	314.1
55°	301.2	298.6	294.2	293.5	291.4
57.5°	277.5	274.2	270.7	269.3	267.6
60°	252.4	249.3	245.3	243.9	243.2
62.5°	226.3	223.3	220.2	218.8	217.9
65°	199.8	197.4	193.9	192.5	191.8
67.5°	172.8	170.7	167.4	165.7	165.5
70°	145.8	143.7	139.9	139.0	138.8
72.5°	118.8	116.9	113.4	112.5	112.5
75°	92.5	90.9	87.8	86.9	86.9
77.5°	67.6	66.2	63.9	62.7	62.7
80°	45.1	44.1	42.0	41.1	40.9
82.5°	26.1	25.6	23.7	22.8	23.2
85°	12.0	11.5	10.6	9.4	9.6
87.5°	3.1	2.8	2.1	1.6	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)