

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: P973179

Luminaire Tested: FLR2-14-20HE-L935-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973179
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-L935-CA080
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 3500CCT & 90 CRI with Clear Arylic (0.080" thickness)

Light Source:
Ballast/Driver: -

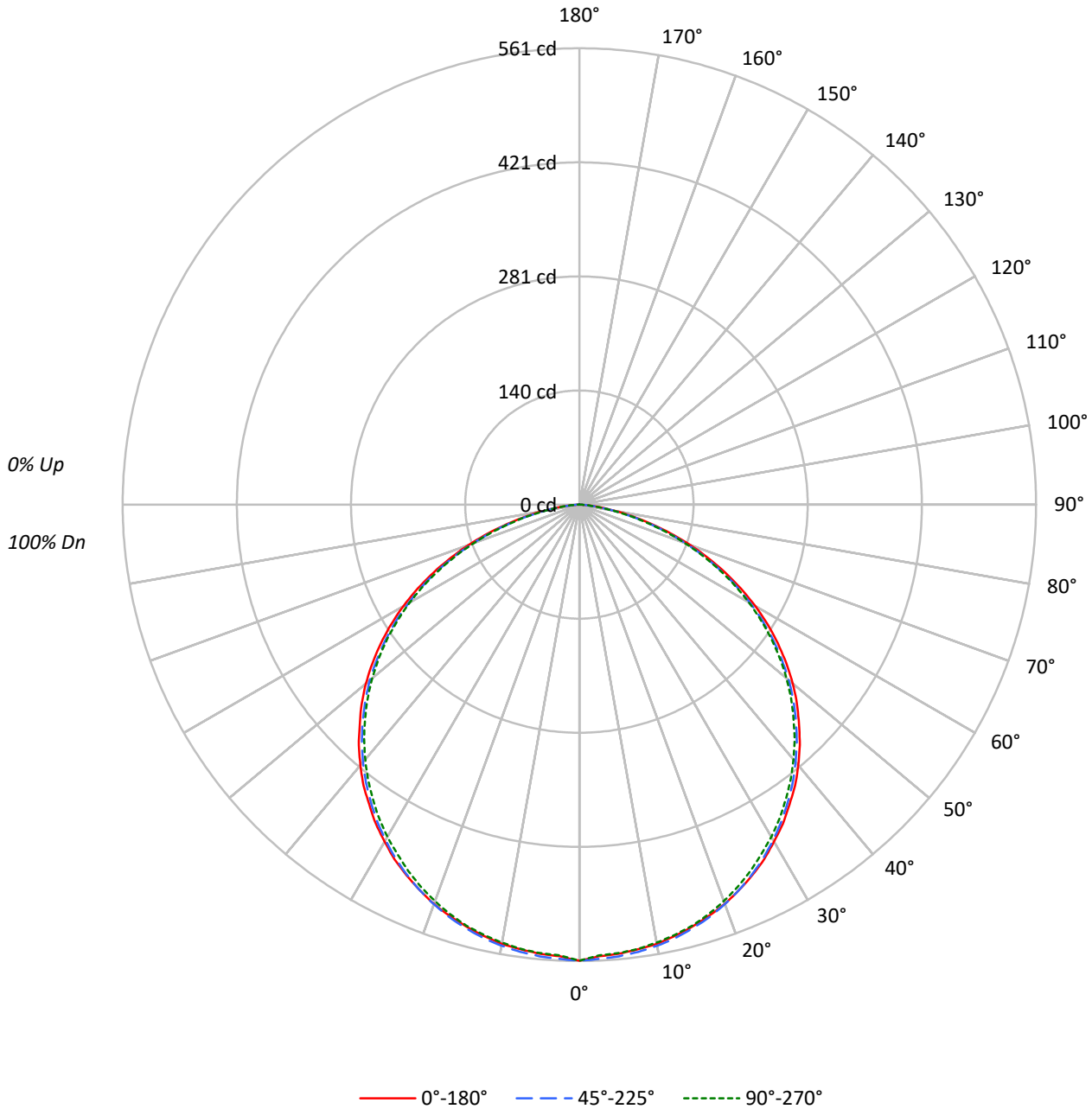
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1569.2 lumens
Efficiency: N/A
Efficacy: 106.0 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): 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									
RC	80									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	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	31	27	38	31	27	37	31	26	25				25															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1509	1509	1509
5°	1497	1506	1495
10°	1498	1505	1494
15°	1496	1502	1493
20°	1496	1497	1485
25°	1493	1490	1476
30°	1486	1480	1465
35°	1478	1467	1452
40°	1470	1452	1437
45°	1452	1432	1416
50°	1433	1407	1390
55°	1397	1364	1351
60°	1343	1305	1294
65°	1258	1221	1207
70°	1134	1088	1079
75°	950	902	893
80°	691	643	626
85°	364	321	293

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1452 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.1	3.4
10°-20°	152.5	9.7
20°-30°	231.7	14.8
30°-40°	280.3	17.9
40°-50°	291.3	18.6
50°-60°	260.8	16.6
60°-70°	190.2	12.1
70°-80°	93.7	6.0
80°-90°	15.7	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°	437.3	27.9
0°-40°	717.6	45.7
0°-60°	1269.7	80.9
0°-90°	1569.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1569.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	561	561	561	561	561	
5°	554	560	557	563	554	53
15°	537	542	539	544	536	152
25°	503	505	502	504	497	232
35°	450	451	446	448	442	282
45°	382	381	376	377	372	295
55°	298	295	291	290	288	266
65°	198	195	192	190	190	195
75°	91	90	87	86	86	97
85°	12	11	10	9	10	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	560.7	560.7	560.7	560.7	560.7
2.5°	555.8	562.1	559.0	564.6	554.6
5°	554.2	560.2	557.4	562.8	553.5
7.5°	551.4	557.6	554.6	559.7	550.9
10°	548.4	553.9	550.7	555.8	546.7
12.5°	543.0	548.6	545.6	550.2	541.9
15°	537.0	541.9	539.1	543.7	535.8
17.5°	530.0	534.7	531.7	535.8	527.9
20°	522.4	526.1	522.8	526.3	518.7
22.5°	512.9	516.3	512.9	515.2	508.5
25°	502.7	505.2	501.7	504.0	497.1
27.5°	491.7	493.1	489.7	491.5	484.3
30°	478.3	479.9	476.2	478.5	471.6
32.5°	465.3	466.2	462.0	463.9	457.6
35°	450.0	450.9	446.5	448.3	442.1
37.5°	435.4	435.1	430.5	431.6	426.3
40°	418.4	418.2	413.3	414.2	409.1
42.5°	401.0	400.1	395.4	395.9	391.3
45°	381.5	381.0	376.2	376.9	372.2
47.5°	362.7	361.3	356.5	356.7	352.7
50°	342.3	340.2	336.0	335.6	332.1
52.5°	320.5	318.2	313.5	313.1	310.5
55°	297.7	295.2	290.8	290.1	288.0
57.5°	274.3	271.1	267.6	266.2	264.6
60°	249.5	246.5	242.5	241.1	240.4
62.5°	223.7	220.7	217.7	216.3	215.4
65°	197.5	195.2	191.7	190.3	189.6
67.5°	170.8	168.7	165.5	163.8	163.6
70°	144.1	142.0	138.3	137.4	137.1
72.5°	117.4	115.6	112.1	111.2	111.2
75°	91.4	89.8	86.8	85.9	85.9
77.5°	66.8	65.4	63.1	62.0	62.0
80°	44.6	43.6	41.5	40.6	40.4
82.5°	25.8	25.3	23.4	22.5	23.0
85°	11.8	11.4	10.4	9.3	9.5
87.5°	3.0	2.8	2.1	1.6	2.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)