

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: P973231

Luminaire Tested: FLR2-14-42HE-L940-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973231
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: FLR2-14-42HE-L940-CP125
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 4000CCT & 90 CRI with Clear Polycarbonate (0.125" thickness)

Light Source:
Ballast/Driver: -

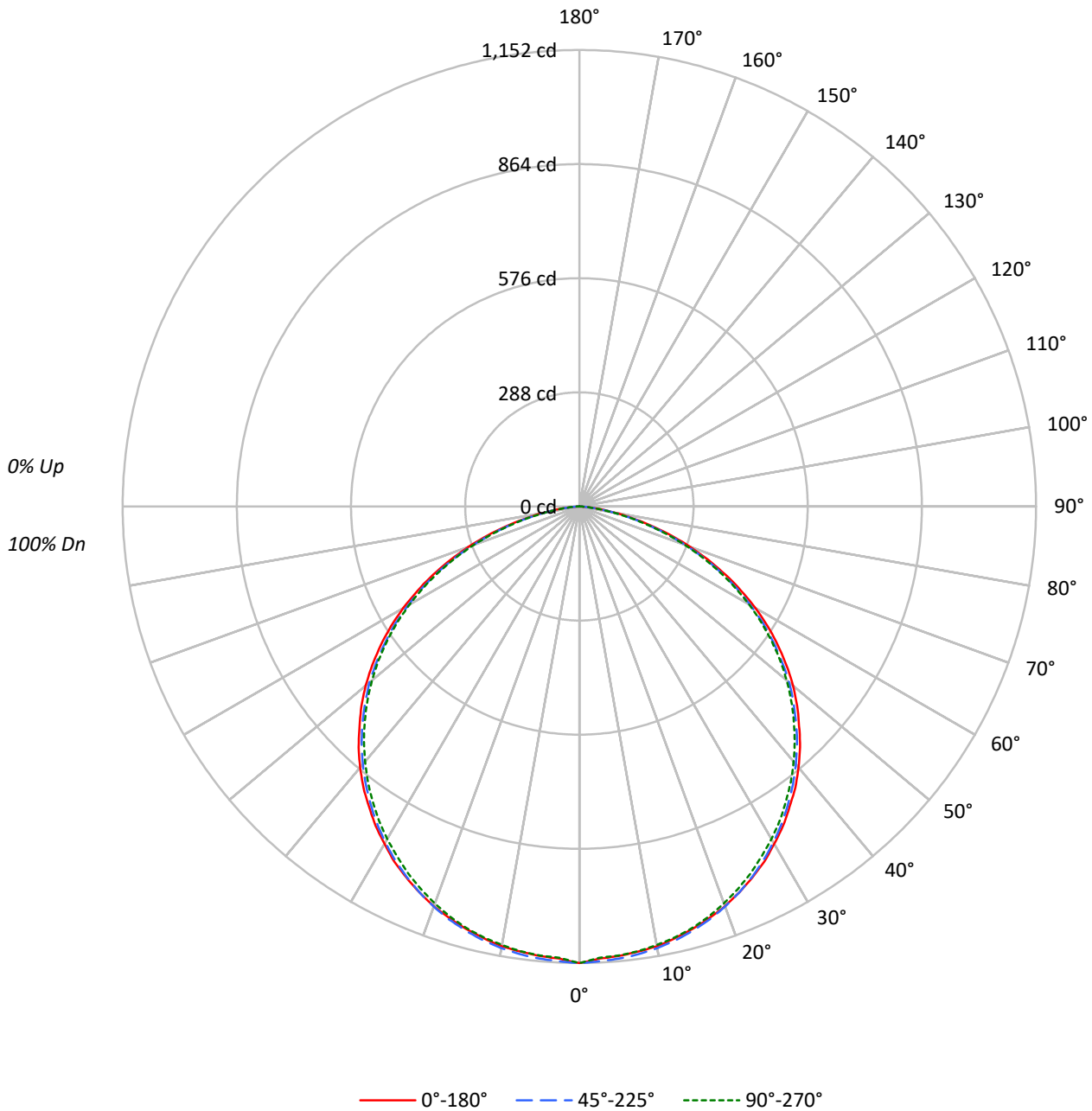
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3225.3 lumens
Efficiency: N/A
Efficacy: 101.1 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): 31.9
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

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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°	3101	3101	3101
5°	3077	3095	3073
10°	3080	3093	3071
15°	3075	3087	3068
20°	3075	3077	3053
25°	3067	3062	3034
30°	3054	3041	3012
35°	3038	3015	2985
40°	3021	2984	2954
45°	2984	2943	2912
50°	2945	2892	2858
55°	2871	2804	2777
60°	2759	2682	2659
65°	2585	2509	2481
70°	2330	2237	2218
75°	1954	1855	1835
80°	1420	1323	1286
85°	750	664	605

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2984 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	109.2	3.4
10°-20°	313.5	9.7
20°-30°	476.2	14.8
30°-40°	576.1	17.9
40°-50°	598.7	18.6
50°-60°	536.0	16.6
60°-70°	391.0	12.1
70°-80°	192.5	6.0
80°-90°	32.2	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°	898.8	27.9
0°-40°	1474.9	45.7
0°-60°	2609.6	80.9
0°-90°	3225.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3225.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1152	1152	1152	1152	1152	
5°	1139	1151	1146	1157	1138	108
15°	1104	1114	1108	1118	1101	312
25°	1033	1038	1031	1036	1022	476
35°	925	927	918	922	909	579
45°	784	783	773	775	765	605
55°	612	607	598	596	592	546
65°	406	401	394	391	390	401
75°	188	185	178	176	176	200
85°	24	23	22	19	20	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1152.4	1152.4	1152.4	<i>1152.4</i>	1152.4
2.5°	<i>1142.4</i>	<i>1155.2</i>	<i>1149.0</i>	<i>1160.5</i>	<i>1140.0</i>
5°	1139.0	1151.4	1145.7	<i>1156.7</i>	1137.6
7.5°	1133.3	1146.2	1140.0	<i>1150.5</i>	1132.3
10°	1127.1	1138.5	1131.9	<i>1142.4</i>	1123.8
12.5°	1116.1	1127.6	1121.4	<i>1130.9</i>	1113.7
15°	1103.7	1113.7	1108.0	<i>1117.6</i>	1101.3
17.5°	1089.4	1099.0	1092.8	<i>1101.3</i>	1085.1
20°	1073.7	1081.3	1074.6	<i>1081.8</i>	1066.0
22.5°	1054.1	1061.3	1054.1	<i>1058.9</i>	1045.1
25°	1033.1	1038.4	1031.2	<i>1036.0</i>	1021.7
27.5°	1010.7	1013.6	1006.4	<i>1010.2</i>	995.4
30°	983.0	986.4	978.8	<i>983.5</i>	969.2
32.5°	956.3	958.2	949.7	<i>953.5</i>	940.6
35°	924.9	926.8	917.7	<i>921.5</i>	908.6
37.5°	894.8	894.3	884.8	<i>887.2</i>	876.2
40°	860.0	859.5	849.5	<i>851.4</i>	840.9
42.5°	824.2	822.3	812.8	<i>813.7</i>	804.2
45°	784.1	783.2	773.2	<i>774.6</i>	765.1
47.5°	745.5	742.7	732.6	<i>733.1</i>	725.0
50°	703.5	699.2	690.7	<i>689.7</i>	682.6
52.5°	658.7	653.9	644.4	<i>643.4</i>	638.2
55°	612.0	606.7	597.7	<i>596.2</i>	591.9
57.5°	563.8	557.1	550.0	<i>547.1</i>	543.8
60°	512.7	506.5	498.4	<i>495.6</i>	494.1
62.5°	459.8	453.6	447.4	<i>444.5</i>	442.6
65°	405.9	401.1	394.0	<i>391.1</i>	389.7
67.5°	351.1	346.8	340.1	<i>336.7</i>	336.3
70°	296.2	291.9	284.3	<i>282.4</i>	281.9
72.5°	241.3	237.5	230.4	<i>228.5</i>	228.5
75°	187.9	184.6	178.4	<i>176.5</i>	176.5
77.5°	137.4	134.5	129.7	<i>127.4</i>	127.4
80°	91.6	89.7	85.4	<i>83.5</i>	83.0
82.5°	52.9	52.0	48.2	<i>46.3</i>	47.2
85°	24.3	23.4	21.5	<i>19.1</i>	19.6
87.5°	6.2	5.7	4.3	<i>3.3</i>	4.3
90°	0.0	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)