

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: P973171

Luminaire Tested: FLR2-14-42HE-L935-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973171
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-L935-CP250
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 3500CCT & 90 CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

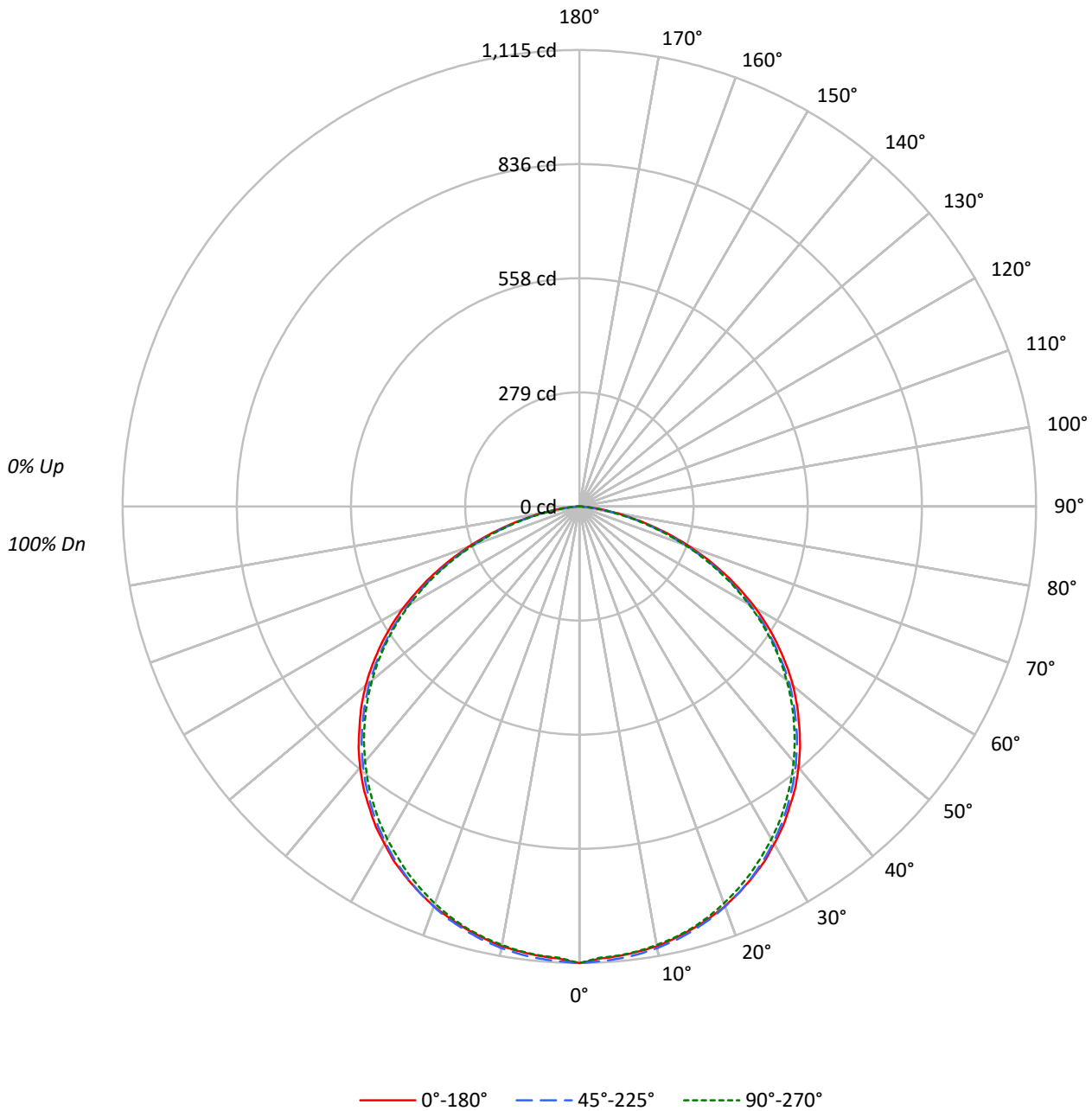
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3121.8 lumens
Efficiency: N/A
Efficacy: 97.9 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 (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°	3002	3002	3002
5°	2978	2995	2974
10°	2981	2994	2972
15°	2976	2988	2970
20°	2976	2979	2955
25°	2969	2964	2936
30°	2957	2944	2915
35°	2941	2918	2889
40°	2924	2888	2859
45°	2888	2848	2818
50°	2851	2799	2766
55°	2779	2714	2688
60°	2671	2596	2574
65°	2502	2428	2402
70°	2256	2165	2146
75°	1891	1796	1776
80°	1373	1280	1244
85°	726	642	584

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2888 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.7	3.4
10°-20°	303.4	9.7
20°-30°	460.9	14.8
30°-40°	557.6	17.9
40°-50°	579.5	18.6
50°-60°	518.8	16.6
60°-70°	378.4	12.1
70°-80°	186.4	6.0
80°-90°	31.2	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°	870.0	27.9
0°-40°	1427.6	45.7
0°-60°	2525.9	80.9
0°-90°	3121.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3121.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1115	1115	1115	1115	1115	
5°	1102	1114	1109	1120	1101	105
15°	1068	1078	1072	1082	1066	302
25°	1000	1005	998	1003	989	461
35°	895	897	888	892	880	561
45°	759	758	748	750	740	586
55°	592	587	578	577	573	529
65°	393	388	381	379	377	388
75°	182	179	173	171	171	194
85°	24	23	21	18	19	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1115.4	1115.4	1115.4	1115.4	1115.4
2.5°	1105.7	1118.2	1112.2	1123.3	1103.4
5°	1102.5	1114.5	1108.9	1119.6	1101.1
7.5°	1096.9	1109.4	1103.4	1113.6	1096.0
10°	1090.9	1102.0	1095.6	1105.7	1087.7
12.5°	1080.3	1091.4	1085.4	1094.6	1078.0
15°	1068.3	1078.0	1072.5	1081.7	1066.0
17.5°	1054.5	1063.7	1057.7	1066.0	1050.3
20°	1039.2	1046.6	1040.2	1047.1	1031.8
22.5°	1020.3	1027.2	1020.3	1024.9	1011.5
25°	1000.0	1005.1	998.1	1002.8	988.9
27.5°	978.3	981.1	974.1	977.8	963.5
30°	951.5	954.7	947.4	952.0	938.1
32.5°	925.7	927.5	919.2	922.9	910.4
35°	895.2	897.0	888.3	892.0	879.5
37.5°	866.1	865.6	856.4	858.7	848.1
40°	832.4	831.9	822.2	824.1	813.9
42.5°	797.8	795.9	786.7	787.6	778.4
45°	759.0	758.1	748.4	749.8	740.5
47.5°	721.6	718.8	709.1	709.6	701.7
50°	681.0	676.8	668.5	667.6	660.7
52.5°	637.6	633.0	623.7	622.8	617.7
55°	592.3	587.2	578.5	577.1	572.9
57.5°	545.7	539.2	532.3	529.5	526.3
60°	496.3	490.3	482.4	479.7	478.3
62.5°	445.1	439.1	433.0	430.3	428.4
65°	392.9	388.3	381.3	378.6	377.2
67.5°	339.8	335.6	329.2	325.9	325.5
70°	286.7	282.5	275.2	273.3	272.8
72.5°	233.6	229.9	223.0	221.1	221.1
75°	181.9	178.7	172.7	170.8	170.8
77.5°	133.0	130.2	125.6	123.3	123.3
80°	88.6	86.8	82.6	80.8	80.3
82.5°	51.2	50.3	46.6	44.8	45.7
85°	23.5	22.6	20.8	18.5	18.9
87.5°	6.0	5.5	4.2	3.2	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)