

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: P973460

Luminaire Tested: FLR2-14-42-L850-CP125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973460
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: FLR2-14-42-L850-CP125
Description: 1*4 FLR-2.0 4200 LUMEN at 5000 CCT & 80CRI with Clear Polycarbonate (0.125" thickness)

Light Source:
Ballast/Driver: -

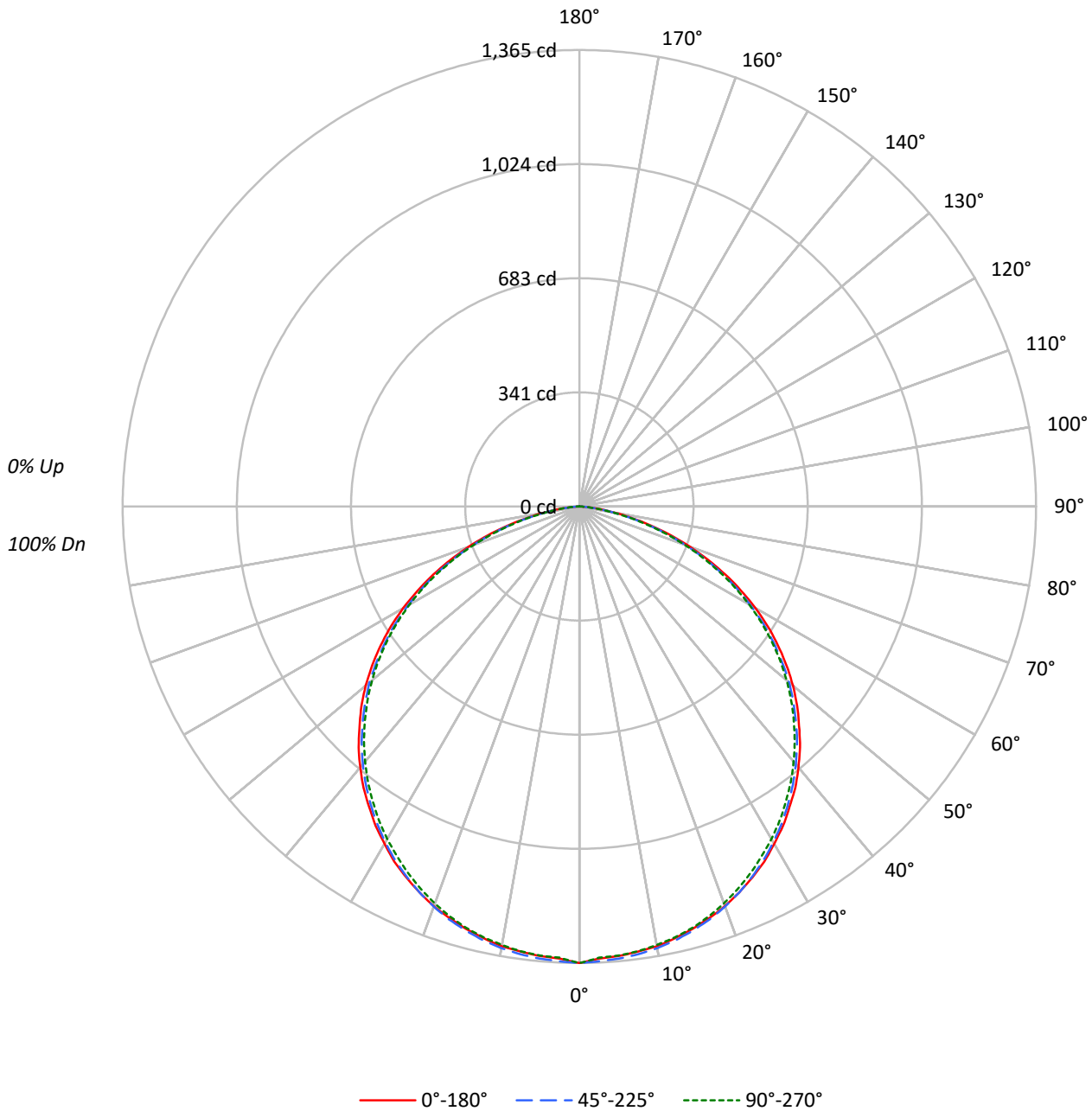
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3821.3 lumens
Efficiency: N/A
Efficacy: 120.5 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): 31.7
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									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°	3674	3674	3674
5°	3645	3667	3641
10°	3649	3664	3638
15°	3643	3657	3635
20°	3643	3646	3617
25°	3634	3628	3594
30°	3619	3603	3568
35°	3600	3572	3536
40°	3579	3536	3500
45°	3535	3486	3449
50°	3489	3426	3386
55°	3401	3322	3290
60°	3270	3178	3151
65°	3062	2972	2940
70°	2761	2650	2628
75°	2315	2198	2174
80°	1681	1568	1523
85°	889	784	716

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3535 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.3	3.4
10°-20°	371.4	9.7
20°-30°	564.2	14.8
30°-40°	682.5	17.9
40°-50°	709.3	18.6
50°-60°	635.1	16.6
60°-70°	463.2	12.1
70°-80°	228.1	6.0
80°-90°	38.1	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°	1064.9	27.9
0°-40°	1747.4	45.7
0°-60°	3091.9	80.9
0°-90°	3821.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3821.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1365	1365	1365	1365	1365	
5°	1350	1364	1357	1370	1348	128
15°	1308	1320	1313	1324	1305	369
25°	1224	1230	1222	1227	1210	564
35°	1096	1098	1087	1092	1076	686
45°	929	928	916	918	906	717
55°	725	719	708	706	701	647
65°	481	475	467	463	462	475
75°	223	219	211	209	209	237
85°	29	28	25	23	23	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1365.3	1365.3	1365.3	1365.3	1365.3
2.5°	1353.4	1368.7	1361.4	1374.9	1350.6
5°	1349.5	1364.2	1357.4	1370.4	1347.8
7.5°	1342.7	1358.0	1350.6	1363.1	1341.6
10°	1335.4	1348.9	1341.0	1353.4	1331.4
12.5°	1322.4	1335.9	1328.6	1339.9	1319.5
15°	1307.7	1319.5	1312.8	1324.1	1304.8
17.5°	1290.7	1302.0	1294.7	1304.8	1285.6
20°	1272.1	1281.1	1273.2	1281.7	1263.0
22.5°	1248.9	1257.4	1248.9	1254.5	1238.2
25°	1224.0	1230.2	1221.8	1227.4	1210.5
27.5°	1197.5	1200.9	1192.4	1196.9	1179.4
30°	1164.7	1168.7	1159.6	1165.3	1148.3
32.5°	1133.0	1135.3	1125.1	1129.7	1114.4
35°	1095.8	1098.0	1087.3	1091.8	1076.5
37.5°	1060.2	1059.6	1048.3	1051.1	1038.1
40°	1018.9	1018.3	1006.5	1008.7	996.3
42.5°	976.5	974.3	963.0	964.1	952.8
45°	929.0	927.9	916.0	917.7	906.4
47.5°	883.3	879.9	868.0	868.6	859.0
50°	833.5	828.5	818.3	817.2	808.7
52.5°	780.4	774.8	763.5	762.3	756.1
55°	725.0	718.8	708.1	706.4	701.3
57.5°	668.0	660.1	651.6	648.2	644.2
60°	607.5	600.1	590.5	587.2	585.5
62.5°	544.8	537.4	530.1	526.7	524.4
65°	480.9	475.3	466.8	463.4	461.7
67.5°	415.9	410.8	402.9	399.0	398.4
70°	350.9	345.8	336.8	334.5	334.0
72.5°	285.9	281.4	272.9	270.7	270.7
75°	222.7	218.7	211.4	209.1	209.1
77.5°	162.8	159.4	153.7	150.9	150.9
80°	108.5	106.2	101.2	98.9	98.3
82.5°	62.7	61.6	57.1	54.8	55.9
85°	28.8	27.7	25.4	22.6	23.2
87.5°	7.3	6.8	5.1	4.0	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)