

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: P973469

Luminaire Tested: FLR2-14-42-L850-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973469
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-CP375
Description: 1*4 FLR-2.0 4200 LUMEN at 5000 CCT & 80CRI with Clear Polycarbonate (0.375" thickness)

Light Source:
Ballast/Driver: -

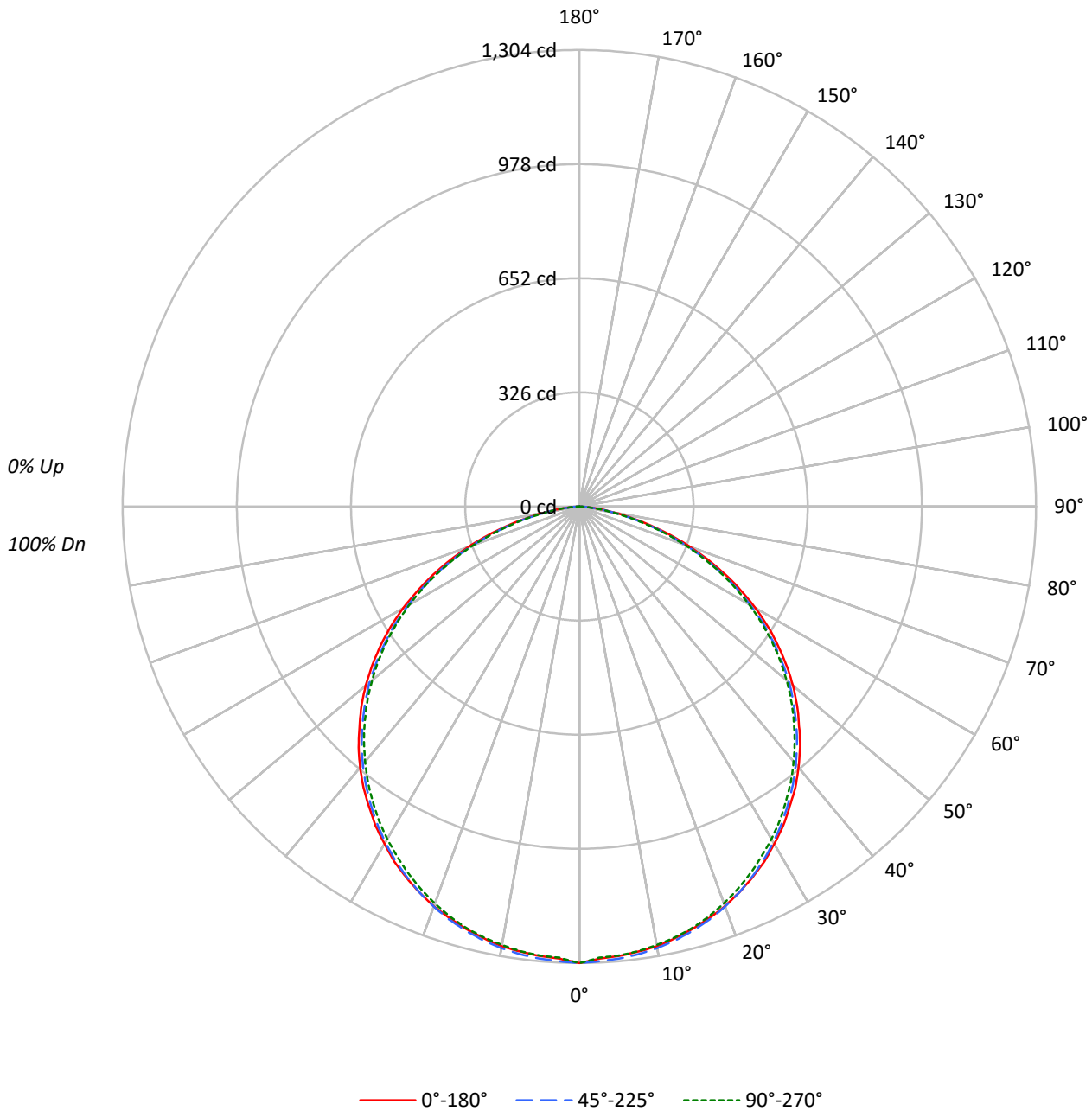
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3650.8 lumens
Efficiency: N/A
Efficacy: 115.2 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									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	32	27	38	31	27	37	31	26	25			25																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3510	3510	3510
5°	3483	3503	3478
10°	3486	3501	3476
15°	3480	3494	3473
20°	3480	3483	3456
25°	3472	3466	3434
30°	3457	3443	3409
35°	3439	3412	3379
40°	3419	3378	3344
45°	3378	3331	3296
50°	3334	3273	3234
55°	3250	3174	3143
60°	3124	3037	3010
65°	2925	2839	2809
70°	2638	2532	2511
75°	2211	2099	2077
80°	1607	1497	1455
85°	849	750	682

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3378 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	123.6	3.4
10°-20°	354.8	9.7
20°-30°	539.0	14.8
30°-40°	652.0	17.9
40°-50°	677.7	18.6
50°-60°	606.7	16.6
60°-70°	442.5	12.1
70°-80°	217.9	6.0
80°-90°	36.4	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°	1017.4	27.9
0°-40°	1669.4	45.7
0°-60°	2953.9	80.9
0°-90°	3650.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3650.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1304	1304	1304	1304	1304	
5°	1289	1303	1297	1309	1288	123
15°	1249	1261	1254	1265	1247	353
25°	1169	1175	1167	1173	1156	539
35°	1047	1049	1039	1043	1028	656
45°	888	886	875	877	866	685
55°	693	687	676	675	670	618
65°	459	454	446	443	441	454
75°	213	209	202	200	200	227
85°	28	26	24	22	22	40
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1304.4	1304.4	1304.4	1304.4	1304.4
2.5°	1293.0	1307.6	1300.6	1313.5	1290.3
5°	1289.3	1303.3	1296.8	1309.2	1287.6
7.5°	1282.8	1297.4	1290.3	1302.2	1281.7
10°	1275.8	1288.7	1281.2	1293.0	1272.0
12.5°	1263.3	1276.3	1269.3	1280.1	1260.6
15°	1249.3	1260.6	1254.2	1265.0	1246.6
17.5°	1233.1	1243.9	1236.9	1246.6	1228.2
20°	1215.3	1223.9	1216.4	1224.5	1206.7
22.5°	1193.2	1201.3	1193.2	1198.6	1182.9
25°	1169.4	1175.3	1167.2	1172.6	1156.4
27.5°	1144.0	1147.3	1139.2	1143.5	1126.7
30°	1112.7	1116.5	1107.9	1113.3	1097.1
32.5°	1082.5	1084.6	1074.9	1079.2	1064.7
35°	1046.8	1049.0	1038.7	1043.1	1028.5
37.5°	1012.8	1012.3	1001.5	1004.2	991.8
40°	973.4	972.9	961.5	963.7	951.8
42.5°	932.9	930.8	920.0	921.1	910.3
45°	887.6	886.5	875.2	876.8	866.0
47.5°	843.8	840.6	829.3	829.8	820.6
50°	796.3	791.5	781.8	780.7	772.6
52.5°	745.6	740.2	729.4	728.3	722.4
55°	692.7	686.7	676.5	674.9	670.0
57.5°	638.1	630.6	622.5	619.3	615.5
60°	580.4	573.4	564.2	560.9	559.3
62.5°	520.5	513.4	506.4	503.2	501.0
65°	459.4	454.0	445.9	442.7	441.1
67.5°	397.4	392.5	384.9	381.2	380.6
70°	335.3	330.4	321.8	319.6	319.1
72.5°	273.2	268.9	260.8	258.6	258.6
75°	212.7	208.9	201.9	199.8	199.8
77.5°	155.5	152.2	146.8	144.2	144.2
80°	103.7	101.5	96.6	94.5	93.9
82.5°	59.9	58.8	54.5	52.4	53.4
85°	27.5	26.5	24.3	21.6	22.1
87.5°	7.0	6.5	4.9	3.8	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)