

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: P973472

Luminaire Tested: FLR2-14-42-L850-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973472
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-CA080
Description: 1*4 FLR-2.0 4200 LUMEN at 5000 CCT & 80CRI with Clear Acrylic (0.080" thickness)

Light Source:
Ballast/Driver: -

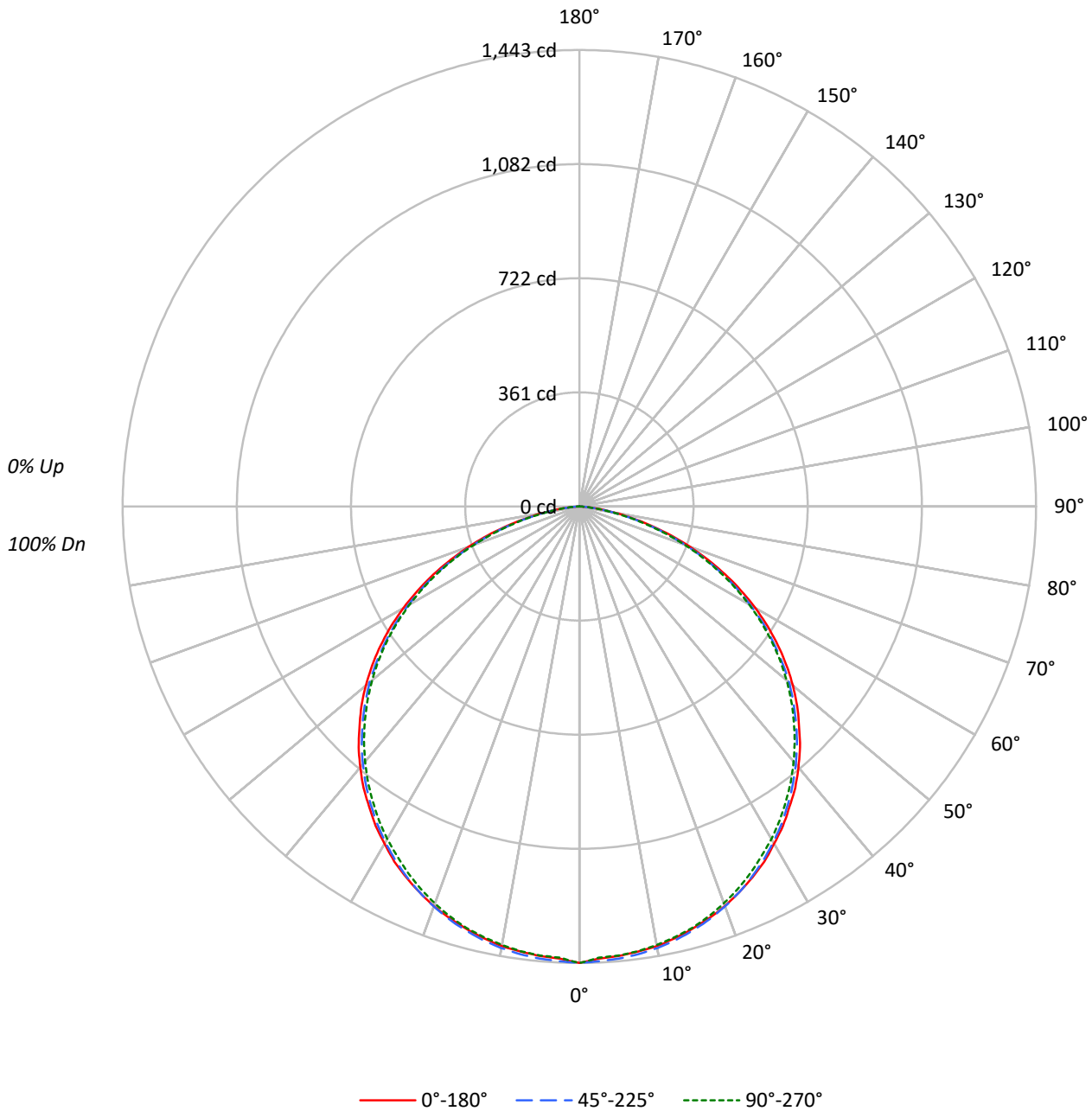
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4039.1 lumens
Efficiency: N/A
Efficacy: 127.4 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°	3883	3883	3883
5°	3853	3875	3848
10°	3857	3873	3845
15°	3851	3866	3842
20°	3851	3854	3823
25°	3842	3834	3799
30°	3825	3809	3771
35°	3805	3775	3738
40°	3783	3737	3699
45°	3737	3685	3646
50°	3688	3621	3579
55°	3596	3511	3478
60°	3456	3359	3330
65°	3237	3142	3107
70°	2918	2801	2777
75°	2446	2323	2298
80°	1777	1657	1610
85°	942	831	756

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3737 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.7	3.4
10°-20°	392.5	9.7
20°-30°	596.4	14.8
30°-40°	721.4	17.9
40°-50°	749.8	18.6
50°-60°	671.3	16.6
60°-70°	489.6	12.1
70°-80°	241.1	6.0
80°-90°	40.3	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°	1125.6	27.9
0°-40°	1847.0	45.7
0°-60°	3268.0	80.9
0°-90°	4039.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4039.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1443	1443	1443	1443	1443	
5°	1426	1442	1435	1448	1425	136
15°	1382	1395	1388	1400	1379	390
25°	1294	1300	1291	1297	1279	596
35°	1158	1161	1149	1154	1138	725
45°	982	981	968	970	958	758
55°	766	760	748	747	741	684
65°	508	502	493	490	488	502
75°	235	231	223	221	221	251
85°	30	29	27	24	24	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1443.1	1443.1	1443.1	1443.1	1443.1
2.5°	1430.6	1446.7	1438.9	1453.3	1427.6
5°	1426.4	1441.9	1434.7	1448.5	1424.6
7.5°	1419.2	1435.3	1427.6	1440.7	1418.0
10°	1411.4	1425.8	1417.4	1430.6	1407.3
12.5°	1397.7	1412.0	1404.3	1416.2	1394.7
15°	1382.2	1394.7	1387.6	1399.5	1379.2
17.5°	1364.3	1376.2	1368.4	1379.2	1358.9
20°	1344.6	1354.1	1345.7	1354.7	1335.0
22.5°	1320.1	1329.0	1320.1	1326.0	1308.7
25°	1293.8	1300.3	1291.4	1297.4	1279.4
27.5°	1265.7	1269.3	1260.3	1265.1	1246.6
30°	1231.1	1235.2	1225.7	1231.7	1213.7
32.5°	1197.6	1200.0	1189.2	1194.0	1177.9
35°	1158.2	1160.6	1149.2	1154.0	1137.9
37.5°	1120.6	1120.0	1108.0	1111.0	1097.3
40°	1077.0	1076.4	1063.8	1066.2	1053.1
42.5°	1032.2	1029.8	1017.8	1019.0	1007.1
45°	982.0	980.8	968.2	970.0	958.1
47.5°	933.6	930.0	917.5	918.1	907.9
50°	881.0	875.7	864.9	863.7	854.8
52.5°	824.9	818.9	807.0	805.8	799.2
55°	766.4	759.8	748.4	746.6	741.3
57.5°	706.0	697.7	688.7	685.1	680.9
60°	642.1	634.3	624.2	620.6	618.8
62.5°	575.8	568.0	560.3	556.7	554.3
65°	508.3	502.3	493.4	489.8	488.0
67.5°	439.6	434.2	425.9	421.7	421.1
70°	370.9	365.6	356.0	353.6	353.0
72.5°	302.2	297.5	288.5	286.1	286.1
75°	235.3	231.2	223.4	221.0	221.0
77.5°	172.0	168.4	162.5	159.5	159.5
80°	114.7	112.3	106.9	104.5	103.9
82.5°	66.3	65.1	60.3	57.9	59.1
85°	30.5	29.3	26.9	23.9	24.5
87.5°	7.8	7.2	5.4	4.2	5.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)