

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: P973286

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

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973286
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-L850-CA080
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 5000CCT & 80CRI with Clear Aryalic (0.080" thickness)

Light Source:
Ballast/Driver: -

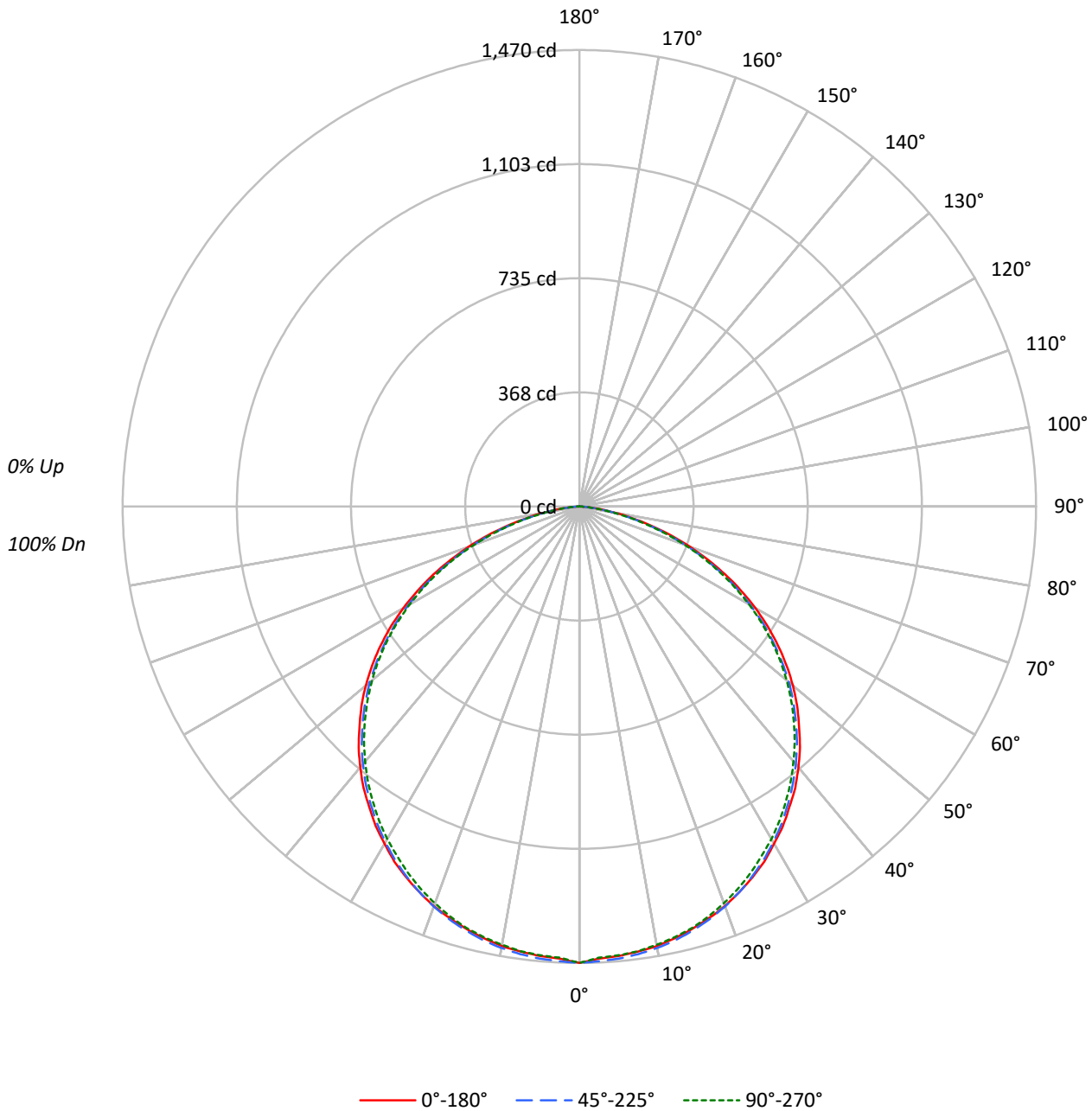
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4114.4 lumens
Efficiency: N/A
Efficacy: 129.0 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										
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°	3956	3956	3956
5°	3925	3948	3920
10°	3929	3945	3917
15°	3923	3938	3914
20°	3922	3926	3894
25°	3913	3906	3870
30°	3897	3880	3842
35°	3876	3846	3808
40°	3854	3807	3768
45°	3807	3753	3714
50°	3757	3689	3645
55°	3663	3577	3543
60°	3520	3422	3393
65°	3297	3200	3165
70°	2973	2853	2829
75°	2492	2366	2340
80°	1810	1688	1641
85°	957	846	769

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3807 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.2	3.4
10°-20°	399.9	9.7
20°-30°	607.5	14.8
30°-40°	734.9	17.9
40°-50°	763.7	18.6
50°-60°	683.8	16.6
60°-70°	498.7	12.1
70°-80°	245.6	6.0
80°-90°	41.1	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°	1146.6	27.9
0°-40°	1881.5	45.7
0°-60°	3329.0	80.9
0°-90°	4114.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4114.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1470	1470	1470	1470	1470	
5°	1453	1469	1462	1476	1451	138
15°	1408	1421	1414	1426	1405	398
25°	1318	1325	1316	1322	1303	608
35°	1180	1182	1171	1176	1159	739
45°	1000	999	986	988	976	772
55°	781	774	762	761	755	697
65°	518	512	503	499	497	511
75°	240	236	228	225	225	256
85°	31	30	27	24	25	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1470.0	1470.0	1470.0	1470.0	1470.0
2.5°	1457.3	1473.7	1465.8	1480.4	1454.2
5°	1453.0	1468.8	1461.5	1475.5	1451.2
7.5°	1445.7	1462.1	1454.2	1467.6	1444.5
10°	1437.8	1452.4	1443.9	1457.3	1433.5
12.5°	1423.8	1438.4	1430.5	1442.7	1420.8
15°	1408.0	1420.8	1413.5	1425.6	1404.9
17.5°	1389.7	1401.9	1394.0	1404.9	1384.2
20°	1369.6	1379.4	1370.9	1380.0	1359.9
22.5°	1344.7	1353.8	1344.7	1350.8	1333.1
25°	1317.9	1324.6	1315.5	1321.6	1303.3
27.5°	1289.3	1293.0	1283.9	1288.7	1269.9
30°	1254.0	1258.3	1248.6	1254.6	1236.4
32.5°	1220.0	1222.4	1211.4	1216.3	1199.9
35°	1179.8	1182.2	1170.7	1175.5	1159.1
37.5°	1141.5	1140.9	1128.7	1131.7	1117.7
40°	1097.1	1096.4	1083.7	1086.1	1072.7
42.5°	1051.4	1049.0	1036.8	1038.0	1025.9
45°	1000.3	999.1	986.3	988.1	976.0
47.5°	951.0	947.4	934.6	935.2	924.9
50°	897.5	892.0	881.1	879.8	870.7
52.5°	840.3	834.2	822.0	820.8	814.1
55°	780.7	774.0	762.4	760.6	755.1
57.5°	719.2	710.7	701.6	697.9	693.6
60°	654.1	646.2	635.8	632.2	630.4
62.5°	586.6	578.6	570.7	567.1	564.7
65°	517.8	511.7	502.6	498.9	497.1
67.5°	447.8	442.4	433.8	429.6	429.0
70°	377.9	372.4	362.6	360.2	359.6
72.5°	307.9	303.0	293.9	291.5	291.5
75°	239.7	235.5	227.6	225.1	225.1
77.5°	175.2	171.6	165.5	162.5	162.5
80°	116.8	114.4	108.9	106.5	105.9
82.5°	67.5	66.3	61.5	59.0	60.2
85°	31.0	29.8	27.4	24.3	24.9
87.5°	7.9	7.3	5.5	4.3	5.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)