

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: P973261

Luminaire Tested: FLR2-14-42HE-L850-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973261
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-CP080
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 5000CCT & 80CRI with Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

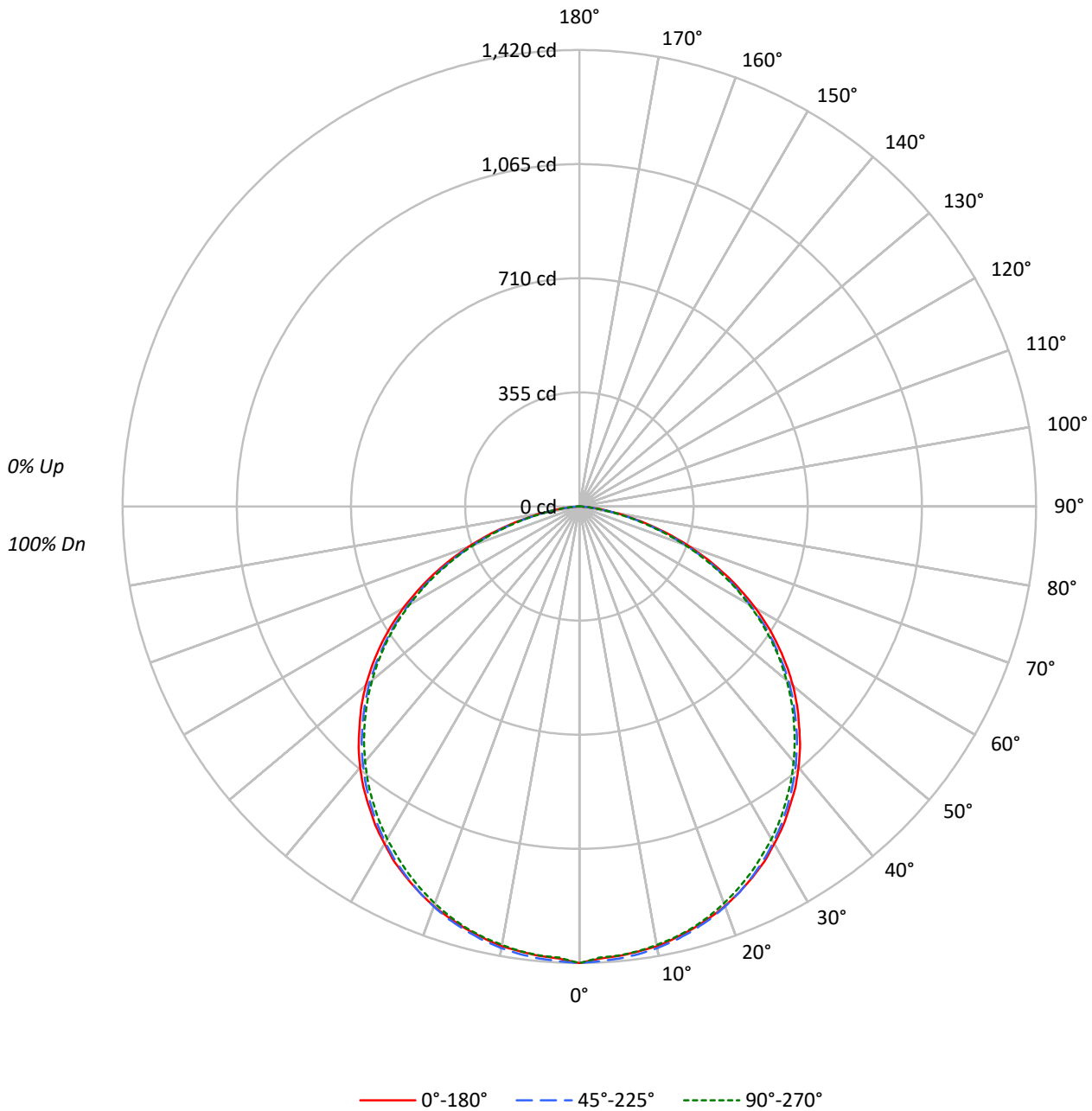
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3975.4 lumens
Efficiency: N/A
Efficacy: 124.6 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°	3822	3822	3822
5°	3792	3814	3787
10°	3796	3812	3785
15°	3790	3805	3782
20°	3790	3793	3763
25°	3781	3774	3739
30°	3765	3749	3712
35°	3745	3716	3679
40°	3724	3678	3641
45°	3678	3627	3589
50°	3630	3564	3522
55°	3539	3456	3423
60°	3401	3307	3278
65°	3186	3092	3058
70°	2873	2757	2733
75°	2408	2286	2261
80°	1750	1630	1585
85°	926	818	744

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3678 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.5	3.4
10°-20°	386.4	9.7
20°-30°	587.0	14.8
30°-40°	710.0	17.9
40°-50°	737.9	18.6
50°-60°	660.7	16.6
60°-70°	481.9	12.1
70°-80°	237.3	6.0
80°-90°	39.7	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°	1107.9	27.9
0°-40°	1817.9	45.7
0°-60°	3216.5	80.9
0°-90°	3975.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3975.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1420	1420	1420	1420	1420	
5°	1404	1419	1412	1426	1402	134
15°	1360	1373	1366	1377	1358	384
25°	1273	1280	1271	1277	1259	587
35°	1140	1142	1131	1136	1120	714
45°	966	965	953	955	943	746
55°	754	748	737	735	730	673
65°	500	494	486	482	480	494
75°	232	228	220	218	218	247
85°	30	29	26	24	24	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1420.4	1420.4	1420.4	1420.4	1420.4
2.5°	1408.0	1423.9	1416.2	1430.3	1405.1
5°	1403.9	1419.2	1412.1	1425.6	1402.1
7.5°	1396.8	1412.7	1405.1	1418.0	1395.7
10°	1389.2	1403.3	1395.1	1408.0	1385.1
12.5°	1375.7	1389.8	1382.1	1393.9	1372.7
15°	1360.4	1372.7	1365.7	1377.4	1357.5
17.5°	1342.8	1354.5	1346.9	1357.5	1337.5
20°	1323.4	1332.8	1324.5	1333.3	1313.9
22.5°	1299.2	1308.1	1299.2	1305.1	1288.1
25°	1273.4	1279.8	1271.0	1276.9	1259.3
27.5°	1245.8	1249.3	1240.5	1245.2	1226.9
30°	1211.7	1215.8	1206.4	1212.2	1194.6
32.5°	1178.7	1181.1	1170.5	1175.2	1159.3
35°	1139.9	1142.3	1131.1	1135.8	1119.9
37.5°	1102.9	1102.3	1090.5	1093.5	1080.0
40°	1060.0	1059.4	1047.0	1049.4	1036.5
42.5°	1015.9	1013.5	1001.8	1002.9	991.2
45°	966.5	965.3	953.0	954.7	943.0
47.5°	918.9	915.4	903.0	903.6	893.6
50°	867.1	861.9	851.3	850.1	841.3
52.5°	811.9	806.0	794.2	793.1	786.6
55°	754.3	747.8	736.6	734.9	729.6
57.5°	694.9	686.7	677.8	674.3	670.2
60°	632.0	624.3	614.4	610.8	609.1
62.5°	566.7	559.1	551.4	547.9	545.6
65°	500.3	494.4	485.6	482.1	480.3
67.5°	432.7	427.4	419.2	415.1	414.5
70°	365.1	359.8	350.4	348.0	347.4
72.5°	297.5	292.8	284.0	281.6	281.6
75°	231.6	227.5	219.9	217.5	217.5
77.5°	169.3	165.8	159.9	157.0	157.0
80°	112.9	110.5	105.2	102.9	102.3
82.5°	65.3	64.1	59.4	57.0	58.2
85°	30.0	28.8	26.5	23.5	24.1
87.5°	7.6	7.1	5.3	4.1	5.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)