

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: P973276

Luminaire Tested: FLR2-14-42HE-L850-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973276
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-CP250
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 5000CCT & 80CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

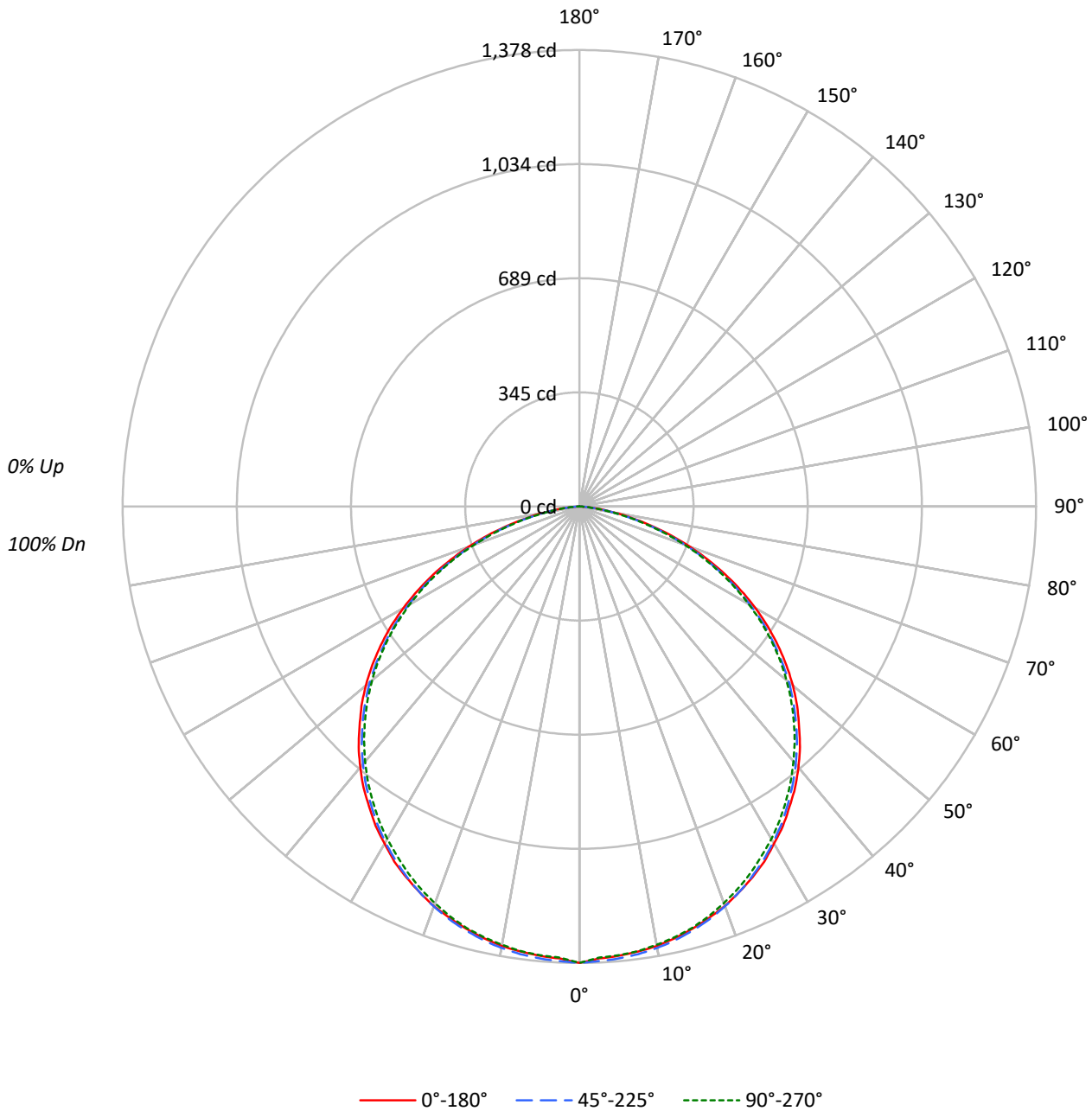
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3856.4 lumens
Efficiency: N/A
Efficacy: 120.9 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

TEST NUMBER: P973276
CATALOG NUMBER: FLR2-14-42HE-L850-CP250

Luminous Intensity Polar Plot





TEST NUMBER: P973276
 CATALOG NUMBER: FLR2-14-42HE-L850-CP250

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°	3708	3708	3708
5°	3679	3700	3674
10°	3682	3698	3671
15°	3677	3691	3668
20°	3676	3680	3650
25°	3668	3661	3627
30°	3652	3636	3601
35°	3633	3605	3569
40°	3612	3568	3532
45°	3568	3518	3481
50°	3522	3457	3417
55°	3433	3353	3320
60°	3300	3208	3180
65°	3090	3000	2967
70°	2787	2674	2651
75°	2336	2218	2194
80°	1697	1582	1537
85°	898	794	722

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3568 cd/sqm



TEST NUMBER: P973276
 CATALOG NUMBER: FLR2-14-42HE-L850-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.5	3.4
10°-20°	374.8	9.7
20°-30°	569.4	14.8
30°-40°	688.8	17.9
40°-50°	715.9	18.6
50°-60°	640.9	16.6
60°-70°	467.5	12.1
70°-80°	230.2	6.0
80°-90°	38.5	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°	1074.7	27.9
0°-40°	1763.5	45.7
0°-60°	3120.3	80.9
0°-90°	3856.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3856.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1378	1378	1378	1378	1378	
5°	1362	1377	1370	1383	1360	130
15°	1320	1332	1325	1336	1317	373
25°	1235	1242	1233	1239	1222	569
35°	1106	1108	1097	1102	1086	693
45°	938	936	924	926	915	724
55°	732	725	715	713	708	653
65°	485	480	471	468	466	479
75°	225	221	213	211	211	240
85°	29	28	26	23	23	42
90°	0	0	0	0	0	



TEST NUMBER: P973276
 CATALOG NUMBER: FLR2-14-42HE-L850-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1377.9	1377.9	1377.9	1377.9	1377.9
2.5°	1365.9	1381.3	1373.9	1387.5	1363.0
5°	1361.9	1376.7	1369.9	1383.0	1360.2
7.5°	1355.0	1370.4	1363.0	1375.6	1353.9
10°	1347.6	1361.3	1353.3	1365.9	1343.6
12.5°	1334.5	1348.2	1340.8	1352.2	1331.7
15°	1319.7	1331.7	1324.8	1336.2	1316.8
17.5°	1302.6	1314.0	1306.6	1316.8	1297.4
20°	1283.8	1292.9	1284.9	1293.4	1274.6
22.5°	1260.4	1268.9	1260.4	1266.1	1249.5
25°	1235.3	1241.5	1233.0	1238.7	1221.6
27.5°	1208.5	1211.9	1203.3	1207.9	1190.2
30°	1175.4	1179.4	1170.3	1176.0	1158.9
32.5°	1143.5	1145.7	1135.5	1140.0	1124.6
35°	1105.8	1108.1	1097.3	1101.8	1086.4
37.5°	1069.9	1069.3	1057.9	1060.8	1047.6
40°	1028.3	1027.7	1015.7	1018.0	1005.4
42.5°	985.5	983.2	971.8	972.9	961.5
45°	937.6	936.4	924.5	926.2	914.8
47.5°	891.4	888.0	876.0	876.6	866.9
50°	841.2	836.1	825.8	824.7	816.1
52.5°	787.6	781.9	770.5	769.3	763.1
55°	731.7	725.4	714.6	712.9	707.7
57.5°	674.1	666.1	657.6	654.1	650.1
60°	613.1	605.7	596.0	592.5	590.8
62.5°	549.8	542.4	534.9	531.5	529.2
65°	485.3	479.6	471.1	467.6	465.9
67.5°	419.7	414.6	406.6	402.6	402.1
70°	354.2	349.0	339.9	337.6	337.0
72.5°	288.6	284.0	275.5	273.2	273.2
75°	224.7	220.7	213.3	211.0	211.0
77.5°	164.2	160.8	155.1	152.3	152.3
80°	109.5	107.2	102.1	99.8	99.2
82.5°	63.3	62.2	57.6	55.3	56.5
85°	29.1	27.9	25.7	22.8	23.4
87.5°	7.4	6.8	5.1	4.0	5.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)