

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: P973278

Luminaire Tested: FLR2-14-80HE-L850-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973278
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: FLR2-14-80HE-L850-CP250
Description: 1*4 FLR-2.0 8000 Lumen High Efficacy at 5000CCT & 80CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

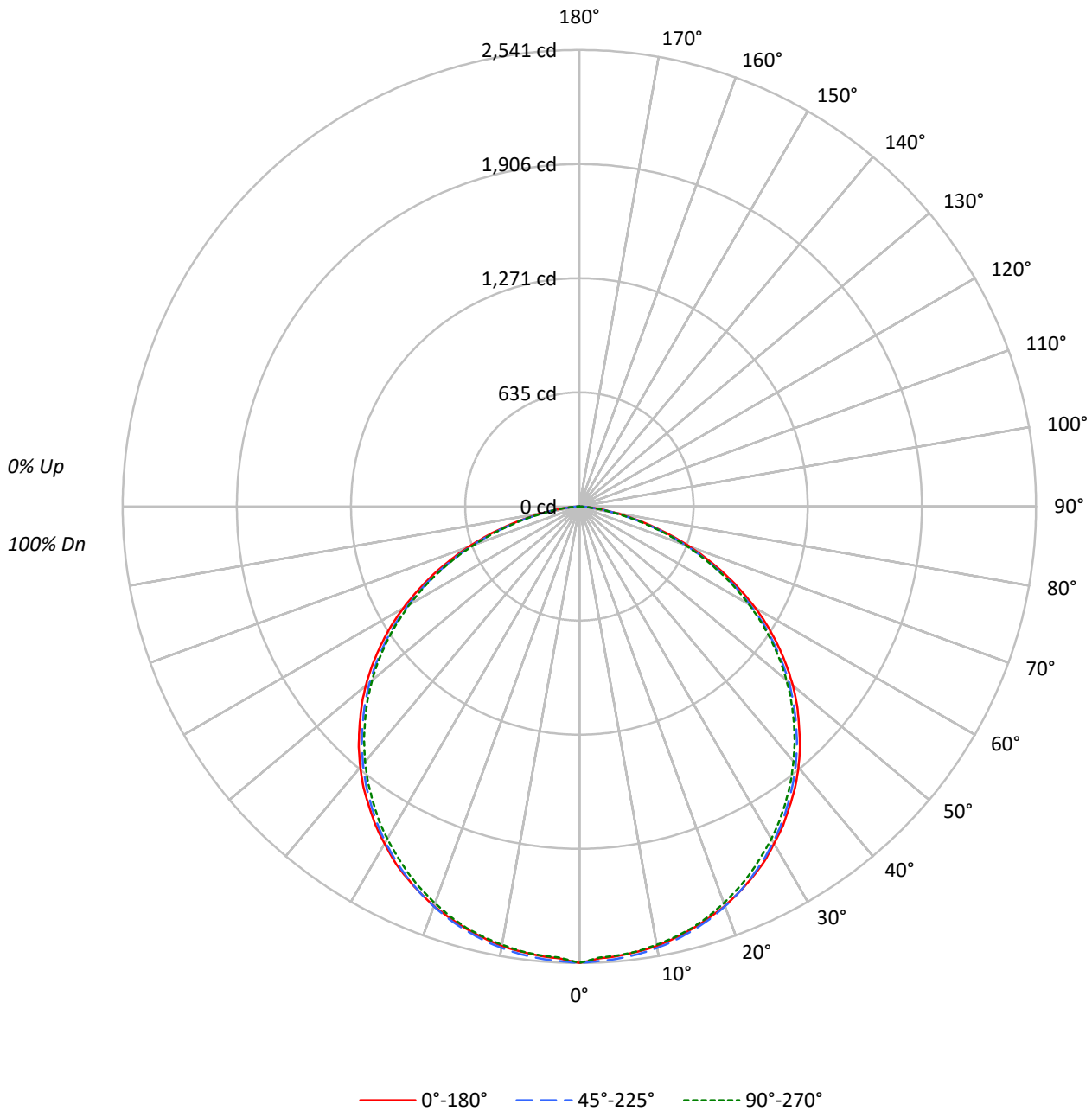
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7110.8 lumens
Efficiency: N/A
Efficacy: 114.9 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): 61.9
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°	6837	6837	6837
5°	6783	6823	6775
10°	6790	6819	6770
15°	6779	6805	6764
20°	6779	6785	6731
25°	6763	6750	6688
30°	6734	6705	6640
35°	6698	6646	6581
40°	6660	6579	6512
45°	6579	6487	6419
50°	6494	6375	6300
55°	6330	6182	6123
60°	6084	5914	5863
65°	5698	5531	5470
70°	5138	4931	4890
75°	4308	4089	4046
80°	3129	2916	2836
85°	1655	1460	1331

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6579 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	240.7	3.4
10°-20°	691.1	9.7
20°-30°	1049.9	14.8
30°-40°	1270.0	17.9
40°-50°	1319.9	18.6
50°-60°	1181.8	16.6
60°-70°	862.0	12.1
70°-80°	424.5	6.0
80°-90°	71.0	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°	1981.6	27.9
0°-40°	3251.6	45.7
0°-60°	5753.4	80.9
0°-90°	7110.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7110.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2541	2541	2541	2541	2541	
5°	2511	2538	2526	2550	2508	239
15°	2433	2455	2443	2464	2428	687
25°	2278	2289	2274	2284	2252	1050
35°	2039	2043	2023	2032	2003	1277
45°	1729	1727	1705	1708	1687	1335
55°	1349	1338	1318	1314	1305	1204
65°	895	884	869	862	859	884
75°	414	407	393	389	389	442
85°	54	52	47	42	43	77
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2540.6	2540.6	2540.6	2540.6	2540.6
2.5°	2518.5	2546.9	2533.2	2558.5	2513.2
5°	2511.1	2538.5	2525.9	2550.1	2508.0
7.5°	2498.5	2526.9	2513.2	2536.4	2496.4
10°	2484.9	2510.1	2495.4	2518.5	2477.5
12.5°	2460.7	2485.9	2472.2	2493.3	2455.4
15°	2433.3	2455.4	2442.8	2463.8	2428.1
17.5°	2401.8	2422.8	2409.1	2428.1	2392.3
20°	2367.1	2383.9	2369.2	2385.0	2350.3
22.5°	2324.0	2339.7	2324.0	2334.5	2304.0
25°	2277.7	2289.3	2273.5	2284.0	2252.5
27.5°	2228.3	2234.6	2218.8	2227.2	2194.6
30°	2167.3	2174.6	2157.8	2168.3	2136.8
32.5°	2108.4	2112.6	2093.7	2102.1	2073.7
35°	2039.0	2043.2	2023.2	2031.6	2003.2
37.5°	1972.7	1971.7	1950.7	1955.9	1931.7
40°	1896.0	1894.9	1872.8	1877.0	1853.9
42.5°	1817.1	1812.9	1791.9	1794.0	1772.9
45°	1728.8	1726.7	1704.6	1707.7	1686.7
47.5°	1643.6	1637.3	1615.2	1616.3	1598.4
50°	1551.1	1541.6	1522.7	1520.6	1504.8
52.5°	1452.2	1441.7	1420.7	1418.6	1407.0
55°	1349.2	1337.6	1317.6	1314.5	1305.0
57.5°	1243.0	1228.2	1212.5	1206.1	1198.8
60°	1130.4	1116.8	1098.9	1092.6	1089.4
62.5°	1013.7	1000.0	986.4	980.1	975.9
65°	894.9	884.4	868.6	862.3	859.1
67.5°	774.0	764.5	749.8	742.4	741.4
70°	653.0	643.6	626.7	622.5	621.5
72.5°	532.1	523.7	507.9	503.7	503.7
75°	414.3	407.0	393.3	389.1	389.1
77.5°	302.9	296.5	286.0	280.8	280.8
80°	201.9	197.7	188.2	184.0	183.0
82.5°	116.7	114.6	106.2	102.0	104.1
85°	53.6	51.5	47.3	42.1	43.1
87.5°	13.7	12.6	9.5	7.4	9.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)