

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: P973273

Luminaire Tested: FLR2-14-80HE-L850-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973273
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-CP187
Description: 1*4 FLR-2.0 8000 Lumen High Efficacy at 5000CCT & 80CRI with Clear Polycarbonate (0.187" thickness)

Light Source:
Ballast/Driver: -

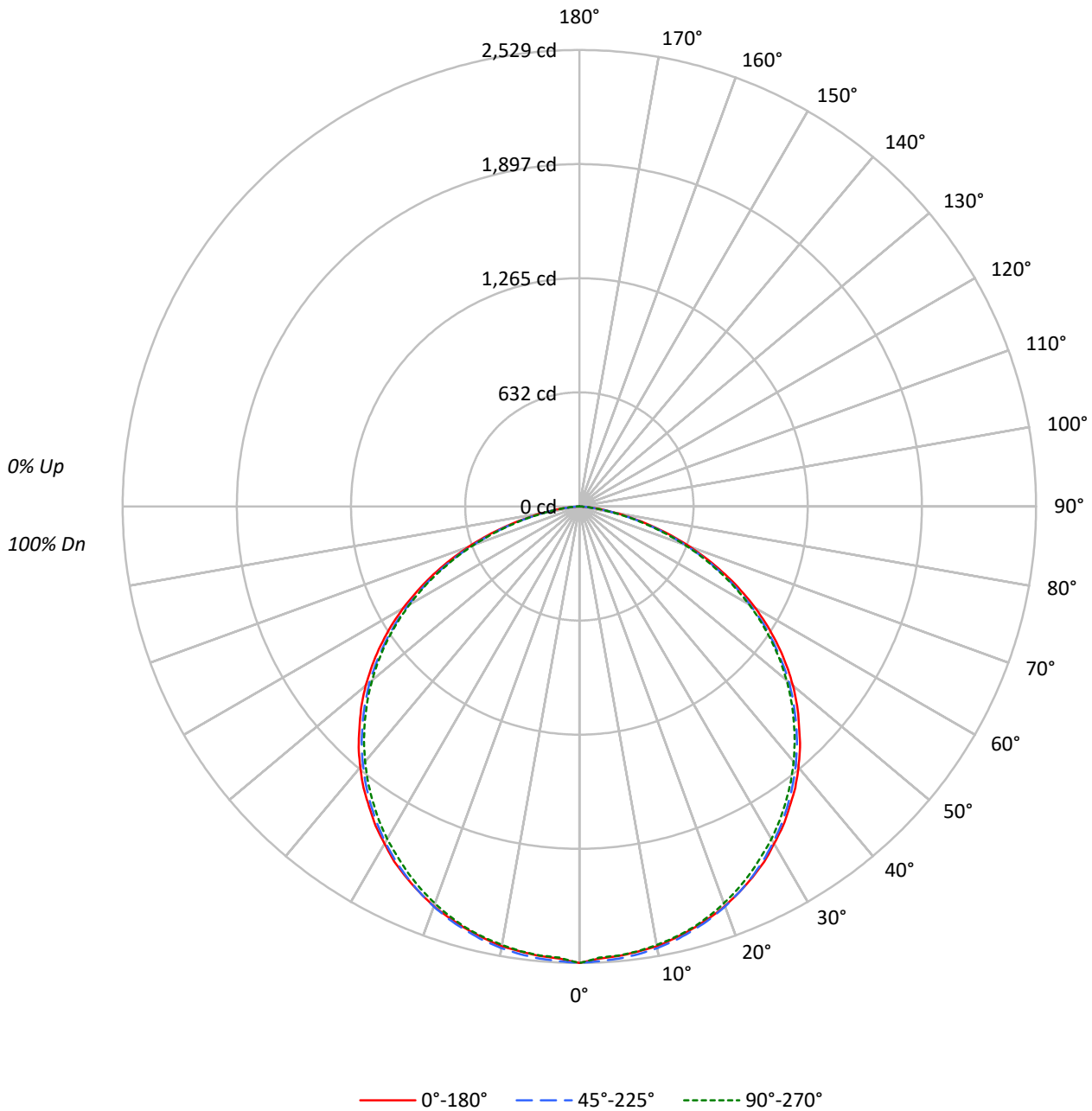
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7079.4 lumens
Efficiency: N/A
Efficacy: 114.4 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): 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	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	
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°	6807	6807	6807
5°	6753	6793	6745
10°	6760	6789	6740
15°	6749	6775	6735
20°	6749	6755	6701
25°	6733	6721	6658
30°	6705	6675	6610
35°	6669	6617	6552
40°	6631	6550	6484
45°	6550	6459	6391
50°	6465	6347	6272
55°	6302	6154	6095
60°	6057	5888	5837
65°	5673	5507	5446
70°	5115	4910	4868
75°	4289	4072	4028
80°	3115	2904	2824
85°	1649	1454	1325

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 6550 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	239.6	3.4
10°-20°	688.0	9.7
20°-30°	1045.3	14.8
30°-40°	1264.4	17.9
40°-50°	1314.1	18.6
50°-60°	1176.6	16.6
60°-70°	858.1	12.1
70°-80°	422.6	6.0
80°-90°	70.7	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°	1972.9	27.9
0°-40°	3237.3	45.7
0°-60°	5728.0	80.9
0°-90°	7079.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7079.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2529	2529	2529	2529	2529	
5°	2500	2527	2515	2539	2497	238
15°	2423	2445	2432	2453	2417	684
25°	2268	2279	2264	2274	2242	1045
35°	2030	2034	2014	2023	1994	1271
45°	1721	1719	1697	1700	1679	1329
55°	1343	1332	1312	1309	1299	1199
65°	891	880	865	858	855	880
75°	412	405	392	387	387	440
85°	53	51	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°	2529.4	2529.4	2529.4	2529.4	2529.4
2.5°	2507.4	2535.7	2522.1	2547.2	2502.2
5°	2500.1	2527.3	2514.7	2538.8	2496.9
7.5°	2487.5	2515.8	2502.2	2525.2	2485.4
10°	2473.9	2499.0	2484.4	2507.4	2466.6
12.5°	2449.8	2474.9	2461.3	2482.3	2444.6
15°	2422.6	2444.6	2432.0	2453.0	2417.4
17.5°	2391.2	2412.1	2398.5	2417.4	2381.8
20°	2356.6	2373.4	2358.7	2374.4	2339.9
22.5°	2313.7	2329.4	2313.7	2324.2	2293.8
25°	2267.7	2279.2	2263.5	2273.9	2242.5
27.5°	2218.4	2224.7	2209.0	2217.4	2184.9
30°	2157.7	2165.1	2148.3	2158.8	2127.4
32.5°	2099.1	2103.3	2084.4	2092.8	2064.5
35°	2030.0	2034.2	2014.3	2022.7	1994.4
37.5°	1964.0	1963.0	1942.1	1947.3	1923.2
40°	1887.6	1886.6	1864.6	1868.8	1845.7
42.5°	1809.1	1804.9	1784.0	1786.1	1765.1
45°	1721.2	1719.1	1697.1	1700.2	1679.3
47.5°	1636.4	1630.1	1608.1	1609.1	1591.3
50°	1544.2	1534.8	1516.0	1513.9	1498.2
52.5°	1445.8	1435.3	1414.4	1412.3	1400.8
55°	1343.2	1331.7	1311.8	1308.7	1299.2
57.5°	1237.5	1222.8	1207.1	1200.8	1193.5
60°	1125.4	1111.8	1094.0	1087.8	1084.6
62.5°	1009.2	995.6	982.0	975.7	971.6
65°	890.9	880.5	864.8	858.5	855.3
67.5°	770.5	761.1	746.5	739.1	738.1
70°	650.1	640.7	624.0	619.8	618.7
72.5°	529.7	521.4	505.7	501.5	501.5
75°	412.5	405.2	391.6	387.4	387.4
77.5°	301.5	295.2	284.8	279.5	279.5
80°	201.0	196.8	187.4	183.2	182.2
82.5°	116.2	114.1	105.7	101.6	103.6
85°	53.4	51.3	47.1	41.9	42.9
87.5°	13.6	12.6	9.4	7.3	9.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)