

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: P973158

Luminaire Tested: FLR2-14-80HE-L935-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973158
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-L935-CP080
Description: 1*4 FLR-2.0 8000 Lumen High Efficacy at 3500CCT & 90 CRI with Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

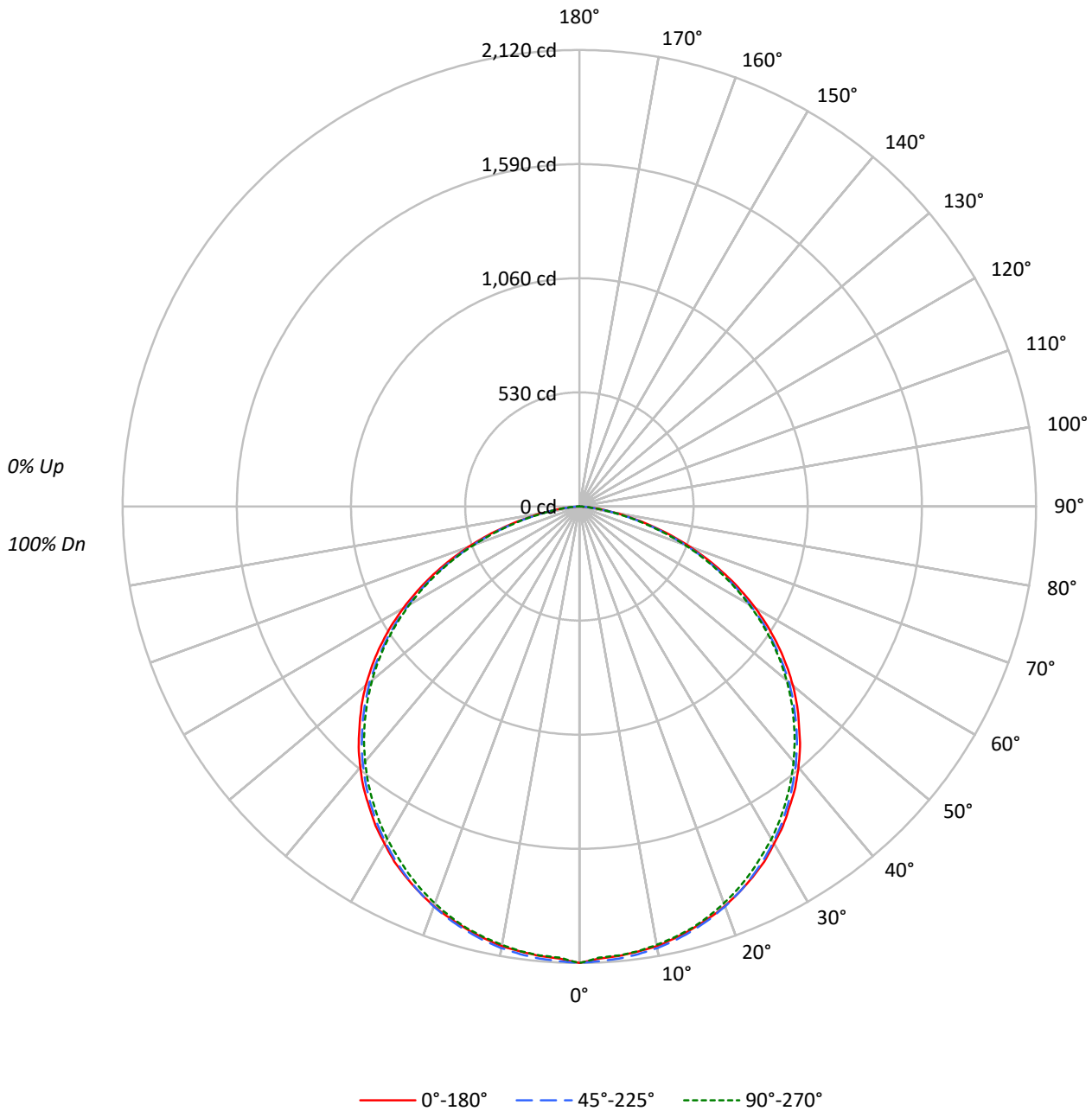
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5933.9 lumens
Efficiency: N/A
Efficacy: 95.9 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°	5705	5705	5705
5°	5660	5694	5653
10°	5666	5690	5649
15°	5657	5679	5645
20°	5657	5662	5617
25°	5643	5633	5581
30°	5620	5595	5541
35°	5590	5547	5492
40°	5558	5490	5435
45°	5490	5413	5357
50°	5419	5320	5257
55°	5282	5158	5109
60°	5077	4935	4893
65°	4755	4615	4565
70°	4287	4115	4080
75°	3594	3412	3376
80°	2611	2435	2366
85°	1383	1220	1112

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 5490 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.8	3.4
10°-20°	576.7	9.7
20°-30°	876.1	14.8
30°-40°	1059.8	17.9
40°-50°	1101.5	18.6
50°-60°	986.2	16.6
60°-70°	719.3	12.1
70°-80°	354.2	6.0
80°-90°	59.2	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°	1653.7	27.9
0°-40°	2713.5	45.7
0°-60°	4801.2	80.9
0°-90°	5933.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5933.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2120	2120	2120	2120	2120	
5°	2096	2118	2108	2128	2093	199
15°	2031	2049	2038	2056	2026	574
25°	1901	1910	1897	1906	1880	876
35°	1702	1705	1688	1695	1672	1066
45°	1443	1441	1422	1425	1408	1114
55°	1126	1116	1100	1097	1089	1005
65°	747	738	725	720	717	738
75°	346	340	328	325	325	369
85°	45	43	40	35	36	65
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2120.1	2120.1	2120.1	<i>2120.1</i>	2120.1
2.5°	<i>2101.7</i>	<i>2125.4</i>	<i>2114.0</i>	<i>2135.0</i>	<i>2097.3</i>
5°	2095.5	2118.4	2107.8	<i>2128.0</i>	2092.9
7.5°	2085.0	2108.7	2097.3	<i>2116.6</i>	2083.3
10°	2073.6	2094.7	2082.4	<i>2101.7</i>	2067.5
12.5°	2053.4	2074.5	2063.1	<i>2080.6</i>	2049.0
15°	2030.6	2049.0	2038.5	<i>2056.0</i>	2026.2
17.5°	2004.3	2021.8	2010.4	<i>2026.2</i>	1996.4
20°	1975.3	1989.4	1977.1	<i>1990.2</i>	1961.3
22.5°	1939.3	1952.5	1939.3	<i>1948.1</i>	1922.7
25°	1900.7	1910.4	1897.2	<i>1906.0</i>	1879.7
27.5°	1859.5	1864.7	1851.6	<i>1858.6</i>	1831.4
30°	1808.6	1814.7	1800.7	<i>1809.5</i>	1783.1
32.5°	1759.4	1763.0	1747.2	<i>1754.2</i>	1730.5
35°	1701.5	1705.0	1688.4	<i>1695.4</i>	1671.7
37.5°	1646.2	1645.4	1627.8	<i>1632.2</i>	1612.0
40°	1582.2	1581.3	1562.9	<i>1566.4</i>	1547.1
42.5°	1516.4	1512.9	1495.3	<i>1497.1</i>	1479.5
45°	1442.7	1440.9	1422.5	<i>1425.1</i>	1407.6
47.5°	1371.6	1366.3	1347.9	<i>1348.8</i>	1333.8
50°	1294.4	1286.5	1270.7	<i>1268.9</i>	1255.7
52.5°	1211.9	1203.1	1185.5	<i>1183.8</i>	1174.1
55°	1125.9	1116.2	1099.5	<i>1096.9</i>	1089.0
57.5°	1037.2	1025.0	1011.8	<i>1006.5</i>	1000.4
60°	943.3	931.9	917.0	<i>911.8</i>	909.1
62.5°	845.9	834.5	823.1	<i>817.9</i>	814.3
65°	746.8	738.0	724.8	<i>719.6</i>	716.9
67.5°	645.9	638.0	625.7	<i>619.5</i>	618.7
70°	544.9	537.0	523.0	<i>519.5</i>	518.6
72.5°	444.0	437.0	423.8	<i>420.3</i>	420.3
75°	345.7	339.6	328.2	<i>324.7</i>	324.7
77.5°	252.7	247.5	238.7	<i>234.3</i>	234.3
80°	168.5	165.0	157.1	<i>153.6</i>	152.7
82.5°	97.4	95.7	88.6	<i>85.1</i>	86.9
85°	44.8	43.0	39.5	<i>35.1</i>	36.0
87.5°	11.4	10.5	7.9	<i>6.1</i>	7.9
90°	0.0	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)