

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: P973242

Luminaire Tested: FLR2-14-70HE-L940-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973242
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: FLR2-14-70HE-L940-CP250
Description: 1*4 FLR-2.0 7000 Lumen High Efficacy at 4000CCT & 90 CRI Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

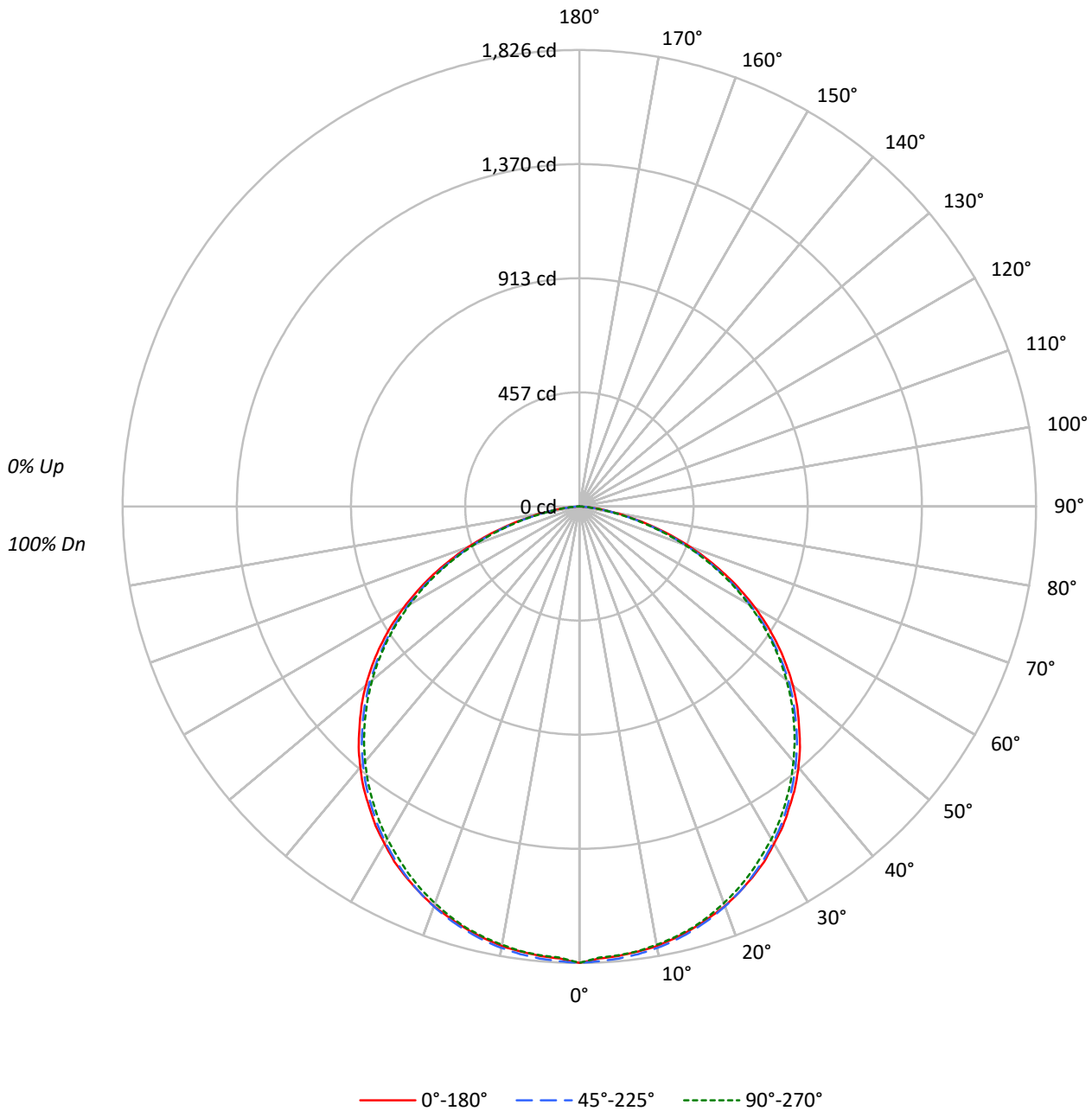
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5110.6 lumens
Efficiency: N/A
Efficacy: 97.3 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): 52.5
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										
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°	4913	4913	4913
5°	4875	4904	4869
10°	4880	4901	4865
15°	4872	4891	4862
20°	4872	4876	4837
25°	4861	4852	4807
30°	4840	4819	4772
35°	4814	4777	4730
40°	4787	4728	4680
45°	4728	4662	4614
50°	4667	4582	4528
55°	4549	4443	4400
60°	4373	4251	4214
65°	4096	3975	3932
70°	3692	3544	3515
75°	3096	2939	2907
80°	2249	2097	2038
85°	1189	1050	957

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4728 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.0	3.4
10°-20°	496.7	9.7
20°-30°	754.6	14.8
30°-40°	912.8	17.9
40°-50°	948.7	18.6
50°-60°	849.4	16.6
60°-70°	619.5	12.1
70°-80°	305.1	6.0
80°-90°	51.0	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°	1424.2	27.9
0°-40°	2337.0	45.7
0°-60°	4135.0	80.9
0°-90°	5110.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5110.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1826	1826	1826	1826	1826	
5°	1805	1824	1815	1833	1802	172
15°	1749	1765	1756	1771	1745	494
25°	1637	1645	1634	1642	1619	755
35°	1465	1468	1454	1460	1440	918
45°	1242	1241	1225	1227	1212	959
55°	970	961	947	945	938	865
65°	643	636	624	620	618	635
75°	298	292	283	280	280	317
85°	38	37	34	30	31	56
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1825.9	1825.9	1825.9	1825.9	1825.9
2.5°	1810.1	1830.5	1820.7	1838.8	1806.3
5°	1804.8	1824.4	1815.4	1832.8	1802.5
7.5°	1795.7	1816.1	1806.3	1822.9	1794.2
10°	1785.9	1804.0	1793.5	1810.1	1780.6
12.5°	1768.5	1786.6	1776.8	1791.9	1764.7
15°	1748.9	1764.7	1755.7	1770.8	1745.1
17.5°	1726.2	1741.3	1731.5	1745.1	1719.4
20°	1701.2	1713.3	1702.8	1714.1	1689.2
22.5°	1670.3	1681.6	1670.3	1677.8	1655.9
25°	1637.0	1645.3	1634.0	1641.5	1618.9
27.5°	1601.5	1606.0	1594.7	1600.7	1577.3
30°	1557.6	1562.9	1550.8	1558.4	1535.7
32.5°	1515.3	1518.3	1504.7	1510.8	1490.4
35°	1465.4	1468.5	1454.1	1460.2	1439.7
37.5°	1417.8	1417.1	1402.0	1405.7	1388.4
40°	1362.7	1361.9	1346.0	1349.1	1332.4
42.5°	1306.0	1303.0	1287.8	1289.3	1274.2
45°	1242.5	1241.0	1225.1	1227.4	1212.3
47.5°	1181.3	1176.7	1160.9	1161.6	1148.8
50°	1114.8	1108.0	1094.4	1092.8	1081.5
52.5°	1043.7	1036.2	1021.1	1019.5	1011.2
55°	969.7	961.3	947.0	944.7	937.9
57.5°	893.3	882.7	871.4	866.9	861.6
60°	812.5	802.6	789.8	785.2	783.0
62.5°	728.6	718.7	708.9	704.4	701.4
65°	643.2	635.6	624.3	619.7	617.5
67.5°	556.2	549.4	538.9	533.6	532.8
70°	469.3	462.5	450.4	447.4	446.7
72.5°	382.4	376.4	365.0	362.0	362.0
75°	297.8	292.5	282.7	279.6	279.6
77.5°	217.7	213.1	205.6	201.8	201.8
80°	145.1	142.1	135.3	132.3	131.5
82.5°	83.9	82.4	76.3	73.3	74.8
85°	38.5	37.0	34.0	30.2	31.0
87.5°	9.8	9.1	6.8	5.3	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)