

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: P973237

Luminaire Tested: FLR2-14-70HE-L940-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973237
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-CP187
Description: 1*4 FLR-2.0 7000 Lumen High Efficacy at 4000CCT & 90 CRI Clear Polycarbonate (0.187" thickness)

Light Source:
Ballast/Driver: -

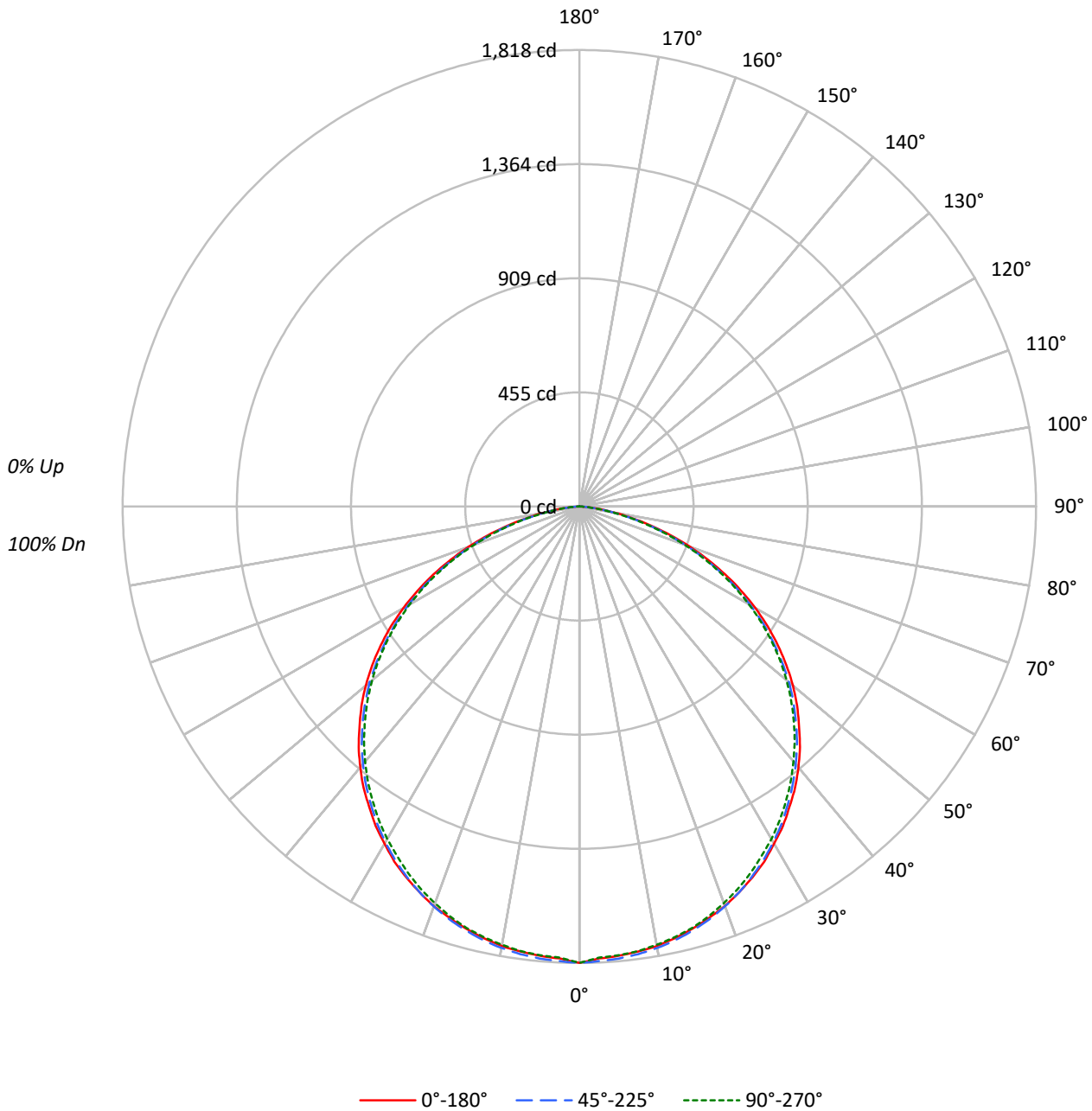
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5088.1 lumens
Efficiency: N/A
Efficacy: 96.9 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): 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					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				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°	4892	4892	4892
5°	4854	4882	4848
10°	4858	4879	4844
15°	4851	4869	4840
20°	4850	4855	4816
25°	4839	4830	4785
30°	4819	4798	4751
35°	4793	4756	4709
40°	4766	4708	4660
45°	4708	4642	4593
50°	4647	4561	4508
55°	4529	4423	4381
60°	4353	4232	4195
65°	4077	3957	3914
70°	3677	3529	3499
75°	3083	2926	2895
80°	2239	2087	2029
85°	1186	1047	954

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 4708 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.2	3.4
10°-20°	494.5	9.7
20°-30°	751.2	14.8
30°-40°	908.7	17.9
40°-50°	944.5	18.6
50°-60°	845.6	16.6
60°-70°	616.8	12.1
70°-80°	303.7	6.0
80°-90°	50.8	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°	1417.9	27.9
0°-40°	2326.7	45.7
0°-60°	4116.8	80.9
0°-90°	5088.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5088.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1818	1818	1818	1818	1818	
5°	1797	1816	1807	1825	1795	171
15°	1741	1757	1748	1763	1737	492
25°	1630	1638	1627	1634	1612	751
35°	1459	1462	1448	1454	1433	914
45°	1237	1236	1220	1222	1207	955
55°	965	957	943	941	934	862
65°	640	633	622	617	615	633
75°	296	291	281	278	278	316
85°	38	37	34	30	31	55
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1817.9	1817.9	1817.9	1817.9	1817.9
2.5°	1802.1	1822.4	1812.6	1830.7	1798.3
5°	1796.8	1816.4	1807.4	1824.7	1794.6
7.5°	1787.8	1808.1	1798.3	1814.9	1786.3
10°	1778.0	1796.1	1785.5	1802.1	1772.8
12.5°	1760.7	1778.8	1769.0	1784.0	1757.0
15°	1741.1	1757.0	1747.9	1763.0	1737.4
17.5°	1718.6	1733.6	1723.8	1737.4	1711.8
20°	1693.7	1705.8	1695.2	1706.5	1681.7
22.5°	1662.9	1674.2	1662.9	1670.4	1648.6
25°	1629.8	1638.1	1626.8	1634.3	1611.7
27.5°	1594.4	1598.9	1587.7	1593.7	1570.3
30°	1550.8	1556.0	1544.0	1551.5	1529.0
32.5°	1508.6	1511.7	1498.1	1504.1	1483.8
35°	1459.0	1462.0	1447.7	1453.7	1433.4
37.5°	1411.6	1410.8	1395.8	1399.5	1382.2
40°	1356.7	1355.9	1340.1	1343.1	1326.6
42.5°	1300.2	1297.2	1282.2	1283.7	1268.6
45°	1237.0	1235.5	1219.7	1222.0	1206.9
47.5°	1176.1	1171.6	1155.7	1156.5	1143.7
50°	1109.9	1103.1	1089.5	1088.0	1076.7
52.5°	1039.1	1031.6	1016.5	1015.0	1006.8
55°	965.4	957.1	942.8	940.6	933.8
57.5°	889.4	878.9	867.6	863.0	857.8
60°	808.9	799.1	786.3	781.8	779.5
62.5°	725.4	715.6	705.8	701.3	698.3
65°	640.3	632.8	621.5	617.0	614.7
67.5°	553.8	547.0	536.5	531.2	530.5
70°	467.3	460.5	448.5	445.4	444.7
72.5°	380.7	374.7	363.4	360.4	360.4
75°	296.5	291.2	281.4	278.4	278.4
77.5°	216.7	212.2	204.7	200.9	200.9
80°	144.5	141.5	134.7	131.7	130.9
82.5°	83.5	82.0	76.0	73.0	74.5
85°	38.4	36.9	33.9	30.1	30.9
87.5°	9.8	9.0	6.8	5.3	6.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)