

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: P973750

Luminaire Tested: FLR2-22-60HE-L830-CP375

Issue Date: 3/13/2025

**Test Information**

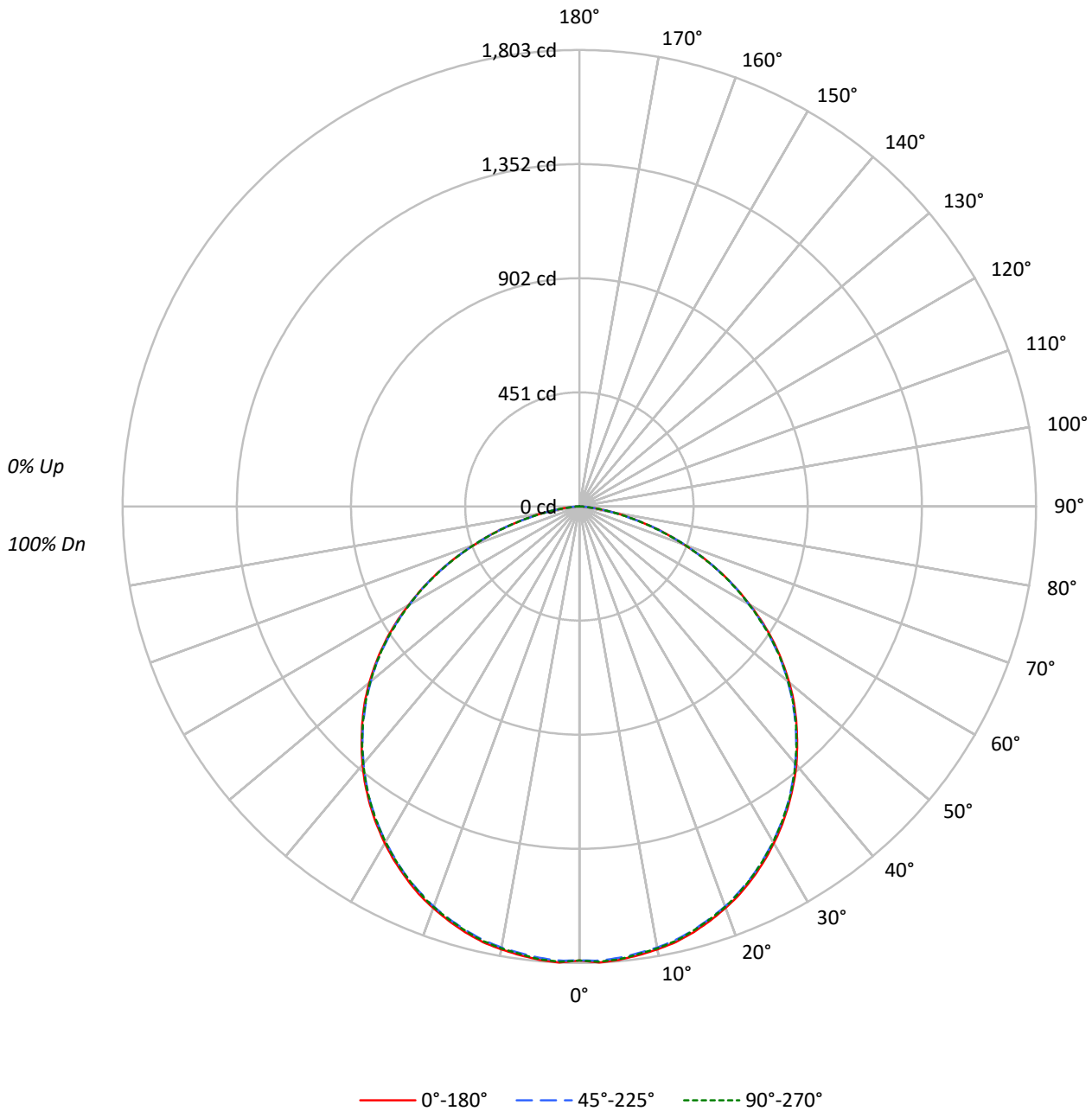
Test Method: LM-79-2019  
Report Number: P973750  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-22-60HE-L830-CP375  
Description: SHAPER SENSE CIRCLE  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5014.9 lumens  
Efficiency: N/A  
Efficacy: 105.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 47.4  
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

TEST NUMBER: P973750  
CATALOG NUMBER: FLR2-22-60HE-L830-CP375

### Luminous Intensity Polar Plot



TEST NUMBER: P973750  
 CATALOG NUMBER: FLR2-22-60HE-L830-CP375

**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	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	63	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	71	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	50	42	37	48	41	36	47	41	36	34																												
8	61	47	39	33	59	47	39	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	40	32	27	39	32	27	38	31	27	37	31	26	25																												

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4826	4826	4826
5°	4856	4835	4850
10°	4855	4834	4843
15°	4851	4829	4835
20°	4834	4815	4821
25°	4808	4788	4792
30°	4774	4753	4757
35°	4730	4712	4716
40°	4681	4657	4661
45°	4612	4590	4599
50°	4531	4498	4507
55°	4402	4365	4381
60°	4185	4167	4167
65°	3907	3900	3886
70°	3460	3477	3468
75°	2913	2890	2868
80°	2094	2060	2042
85°	1093	1093	1059

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4612 cd/sqm



TEST NUMBER: P973750  
 CATALOG NUMBER: FLR2-22-60HE-L830-CP375

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.8	3.4
10°-20°	488.3	9.7
20°-30°	742.1	14.8
30°-40°	897.0	17.9
40°-50°	931.0	18.6
50°-60°	832.3	16.6
60°-70°	605.2	12.1
70°-80°	297.6	5.9
80°-90°	51.6	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°	1400.2	27.9
0°-40°	2297.2	45.8
0°-60°	4060.5	81.0
0°-90°	5014.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5014.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1793	1793	1793	1793	1793	
5°	1798	1777	1790	1783	1796	171
15°	1741	1721	1733	1729	1736	491
25°	1619	1602	1613	1609	1614	746
35°	1440	1430	1434	1436	1436	901
45°	1212	1206	1206	1208	1208	935
55°	938	933	930	933	934	836
65°	614	616	612	612	610	605
75°	280	282	278	279	276	297
85°	35	37	35	35	34	52
90°	0	0	0	0	0	



TEST NUMBER: P973750  
 CATALOG NUMBER: FLR2-22-60HE-L830-CP375

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1793.3	1793.3	1793.3	1793.3	1793.3
2.5°	1803.2	1782.2	1795.5	1787.7	1799.9
5°	1797.7	1776.6	1789.9	1783.3	1795.5
7.5°	1787.7	1766.7	1780.0	1773.3	1783.3
10°	1776.6	1754.5	1768.9	1762.2	1772.2
12.5°	1762.2	1741.2	1754.5	1749.0	1757.8
15°	1741.2	1721.3	1733.4	1729.0	1735.7
17.5°	1715.7	1695.8	1708.0	1704.6	1710.2
20°	1688.0	1669.2	1681.4	1678.1	1683.6
22.5°	1657.0	1637.1	1648.2	1645.9	1650.4
25°	1619.4	1601.6	1612.7	1609.4	1613.8
27.5°	1579.5	1562.9	1571.7	1571.7	1573.9
30°	1536.3	1520.8	1529.6	1529.6	1530.8
32.5°	1489.8	1477.6	1483.1	1484.2	1484.2
35°	1439.9	1430.0	1434.4	1435.5	1435.5
37.5°	1387.9	1377.9	1381.2	1383.4	1383.4
40°	1332.5	1323.6	1325.8	1328.1	1326.9
42.5°	1272.7	1266.0	1267.1	1269.3	1269.3
45°	1211.8	1206.2	1206.2	1208.4	1208.4
47.5°	1149.7	1144.2	1142.0	1144.2	1144.2
50°	1082.2	1076.6	1074.4	1076.6	1076.6
52.5°	1011.3	1005.7	1005.7	1005.7	1006.8
55°	938.2	932.6	930.4	932.6	933.7
57.5°	860.6	858.4	855.1	856.2	852.9
60°	777.6	777.6	774.2	776.5	774.2
62.5°	696.7	698.9	695.6	695.6	693.4
65°	613.6	615.8	612.5	612.5	610.3
67.5°	528.3	531.7	527.2	527.2	525.0
70°	439.7	446.4	441.9	443.1	440.8
72.5°	360.0	363.3	358.9	358.9	356.7
75°	280.2	282.4	278.0	279.1	275.8
77.5°	201.6	204.9	200.5	201.6	200.5
80°	135.1	136.2	132.9	134.0	131.8
82.5°	78.6	79.7	78.6	77.5	76.4
85°	35.4	36.6	35.4	35.4	34.3
87.5°	8.9	8.9	8.9	8.9	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)