

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: P973757

Luminaire Tested: FLR2-22-20HE-L830-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973757
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: FLR2-22-20HE-L830-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

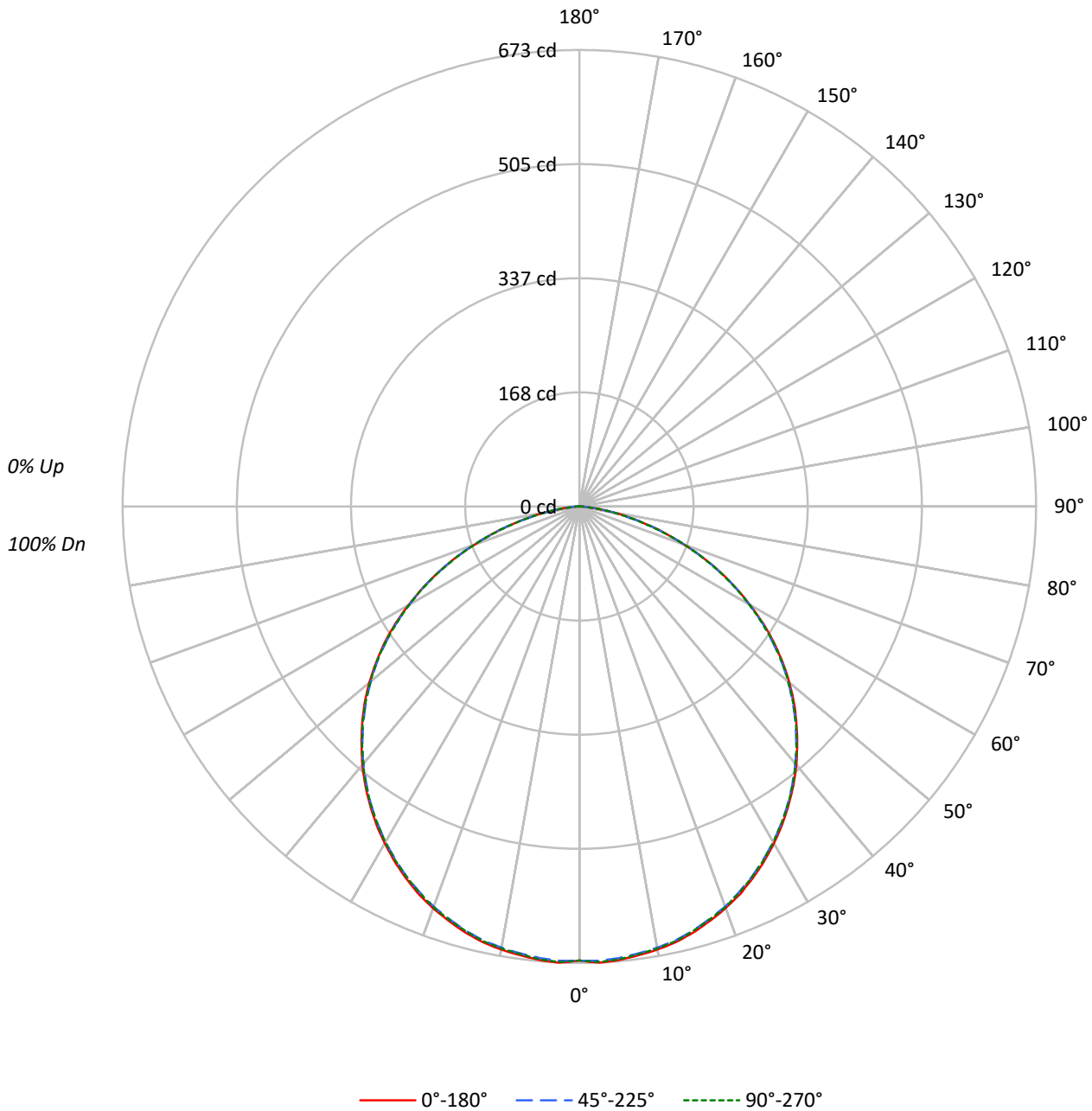
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1872.5 lumens
Efficiency: N/A
Efficacy: 126.5 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): 14.8
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	63	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	71	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	50	42	37	48	41	36	47	41	36	34					34															
8	61	47	39	33	59	47	39	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	40	32	27	39	32	27	38	31	27	37	31	26	25					25															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1802	1802	1802
5°	1813	1806	1811
10°	1813	1805	1808
15°	1811	1803	1806
20°	1805	1798	1800
25°	1795	1788	1789
30°	1782	1775	1776
35°	1766	1759	1761
40°	1748	1739	1741
45°	1722	1714	1717
50°	1692	1680	1683
55°	1643	1630	1636
60°	1562	1556	1556
65°	1459	1456	1451
70°	1292	1298	1295
75°	1088	1079	1071
80°	783	769	762
85°	408	408	395

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1722 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.4	3.4
10°-20°	182.3	9.7
20°-30°	277.1	14.8
30°-40°	334.9	17.9
40°-50°	347.6	18.6
50°-60°	310.8	16.6
60°-70°	226.0	12.1
70°-80°	111.1	5.9
80°-90°	19.3	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°	522.8	27.9
0°-40°	857.8	45.8
0°-60°	1516.2	81.0
0°-90°	1872.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1872.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	670	670	670	670	670	
5°	671	663	668	666	670	64
15°	650	643	647	646	648	183
25°	605	598	602	601	603	279
35°	538	534	536	536	536	336
45°	452	450	450	451	451	349
55°	350	348	347	348	349	312
65°	229	230	229	229	228	226
75°	105	106	104	104	103	111
85°	13	14	13	13	13	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	669.6	669.6	669.6	669.6	669.6
2.5°	673.3	665.5	670.4	667.5	672.1
5°	671.3	663.4	668.4	665.9	670.4
7.5°	667.5	659.7	664.6	662.2	665.9
10°	663.4	655.1	660.5	658.0	661.7
12.5°	658.0	650.2	655.1	653.1	656.4
15°	650.2	642.7	647.3	645.6	648.1
17.5°	640.6	633.2	637.8	636.5	638.6
20°	630.3	623.3	627.8	626.6	628.7
22.5°	618.7	611.3	615.4	614.6	616.2
25°	604.7	598.0	602.2	600.9	602.6
27.5°	589.8	583.6	586.9	586.9	587.7
30°	573.6	567.9	571.2	571.2	571.6
32.5°	556.3	551.7	553.8	554.2	554.2
35°	537.7	533.9	535.6	536.0	536.0
37.5°	518.2	514.5	515.7	516.6	516.6
40°	497.5	494.2	495.1	495.9	495.5
42.5°	475.2	472.7	473.1	474.0	474.0
45°	452.5	450.4	450.4	451.2	451.2
47.5°	429.3	427.2	426.4	427.2	427.2
50°	404.1	402.0	401.2	402.0	402.0
52.5°	377.6	375.5	375.5	375.5	376.0
55°	350.3	348.2	347.4	348.2	348.7
57.5°	321.4	320.5	319.3	319.7	318.5
60°	290.3	290.3	289.1	289.9	289.1
62.5°	260.1	261.0	259.7	259.7	258.9
65°	229.1	230.0	228.7	228.7	227.9
67.5°	197.3	198.5	196.9	196.9	196.0
70°	164.2	166.7	165.0	165.4	164.6
72.5°	134.4	135.7	134.0	134.0	133.2
75°	104.6	105.5	103.8	104.2	103.0
77.5°	75.3	76.5	74.9	75.3	74.9
80°	50.5	50.9	49.6	50.0	49.2
82.5°	29.4	29.8	29.4	29.0	28.5
85°	13.2	13.6	13.2	13.2	12.8
87.5°	3.3	3.3	3.3	3.3	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)