

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: P973739

Luminaire Tested: FLR2-22-20HE-L830-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973739
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-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

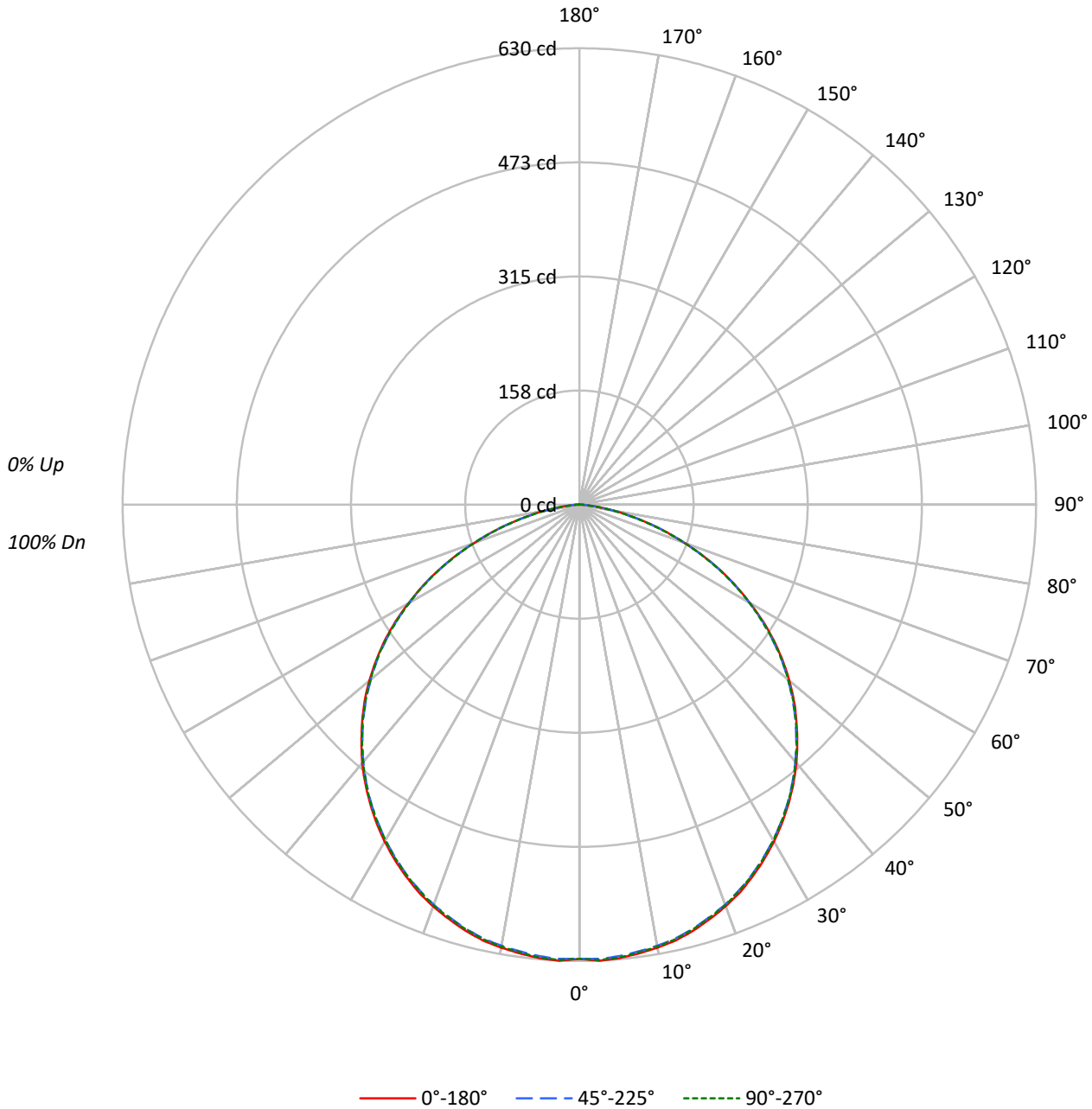
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1753.2 lumens
Efficiency: N/A
Efficacy: 118.5 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°	1687	1687	1687
5°	1698	1690	1696
10°	1697	1690	1693
15°	1696	1688	1690
20°	1690	1683	1686
25°	1681	1674	1675
30°	1669	1662	1663
35°	1654	1647	1649
40°	1636	1628	1630
45°	1612	1605	1608
50°	1584	1572	1576
55°	1539	1526	1531
60°	1463	1457	1457
65°	1366	1363	1359
70°	1209	1216	1212
75°	1019	1011	1002
80°	731	721	714
85°	383	383	371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1612 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.4	3.4
10°-20°	170.7	9.7
20°-30°	259.4	14.8
30°-40°	313.6	17.9
40°-50°	325.5	18.6
50°-60°	291.0	16.6
60°-70°	211.6	12.1
70°-80°	104.0	5.9
80°-90°	18.0	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°	489.5	27.9
0°-40°	803.1	45.8
0°-60°	1419.6	81.0
0°-90°	1753.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1753.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	628	621	626	623	628	60
15°	609	602	606	604	607	172
25°	566	560	564	563	564	261
35°	503	500	502	502	502	315
45°	424	422	422	422	422	327
55°	328	326	325	326	326	292
65°	214	215	214	214	213	212
75°	98	99	97	98	96	104
85°	12	13	12	12	12	18
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	626.9	626.9	626.9	626.9	626.9
2.5°	630.4	623.1	627.7	625.0	629.3
5°	628.5	621.1	625.8	623.4	627.7
7.5°	625.0	617.6	622.3	620.0	623.4
10°	621.1	613.4	618.4	616.1	619.6
12.5°	616.1	608.7	613.4	611.4	614.5
15°	608.7	601.8	606.0	604.5	606.8
17.5°	599.8	592.9	597.1	595.9	597.9
20°	590.1	583.6	587.8	586.7	588.6
22.5°	579.3	572.3	576.2	575.4	577.0
25°	566.1	559.9	563.8	562.6	564.2
27.5°	552.2	546.4	549.5	549.5	550.3
30°	537.1	531.7	534.8	534.8	535.2
32.5°	520.8	516.6	518.5	518.9	518.9
35°	503.4	499.9	501.5	501.9	501.9
37.5°	485.2	481.7	482.9	483.7	483.7
40°	465.8	462.7	463.5	464.3	463.9
42.5°	444.9	442.6	443.0	443.8	443.8
45°	423.6	421.7	421.7	422.5	422.5
47.5°	401.9	400.0	399.2	400.0	400.0
50°	378.3	376.4	375.6	376.4	376.4
52.5°	353.5	351.6	351.6	351.6	352.0
55°	328.0	326.0	325.3	326.0	326.4
57.5°	300.9	300.1	298.9	299.3	298.2
60°	271.8	271.8	270.7	271.4	270.7
62.5°	243.6	244.3	243.2	243.2	242.4
65°	214.5	215.3	214.1	214.1	213.4
67.5°	184.7	185.9	184.3	184.3	183.5
70°	153.7	156.1	154.5	154.9	154.1
72.5°	125.9	127.0	125.5	125.5	124.7
75°	98.0	98.7	97.2	97.6	96.4
77.5°	70.5	71.6	70.1	70.5	70.1
80°	47.2	47.6	46.5	46.9	46.1
82.5°	27.5	27.9	27.5	27.1	26.7
85°	12.4	12.8	12.4	12.4	12.0
87.5°	3.1	3.1	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)