

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: P973751

Luminaire Tested: FLR2-22-20HE-L830-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973751
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-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

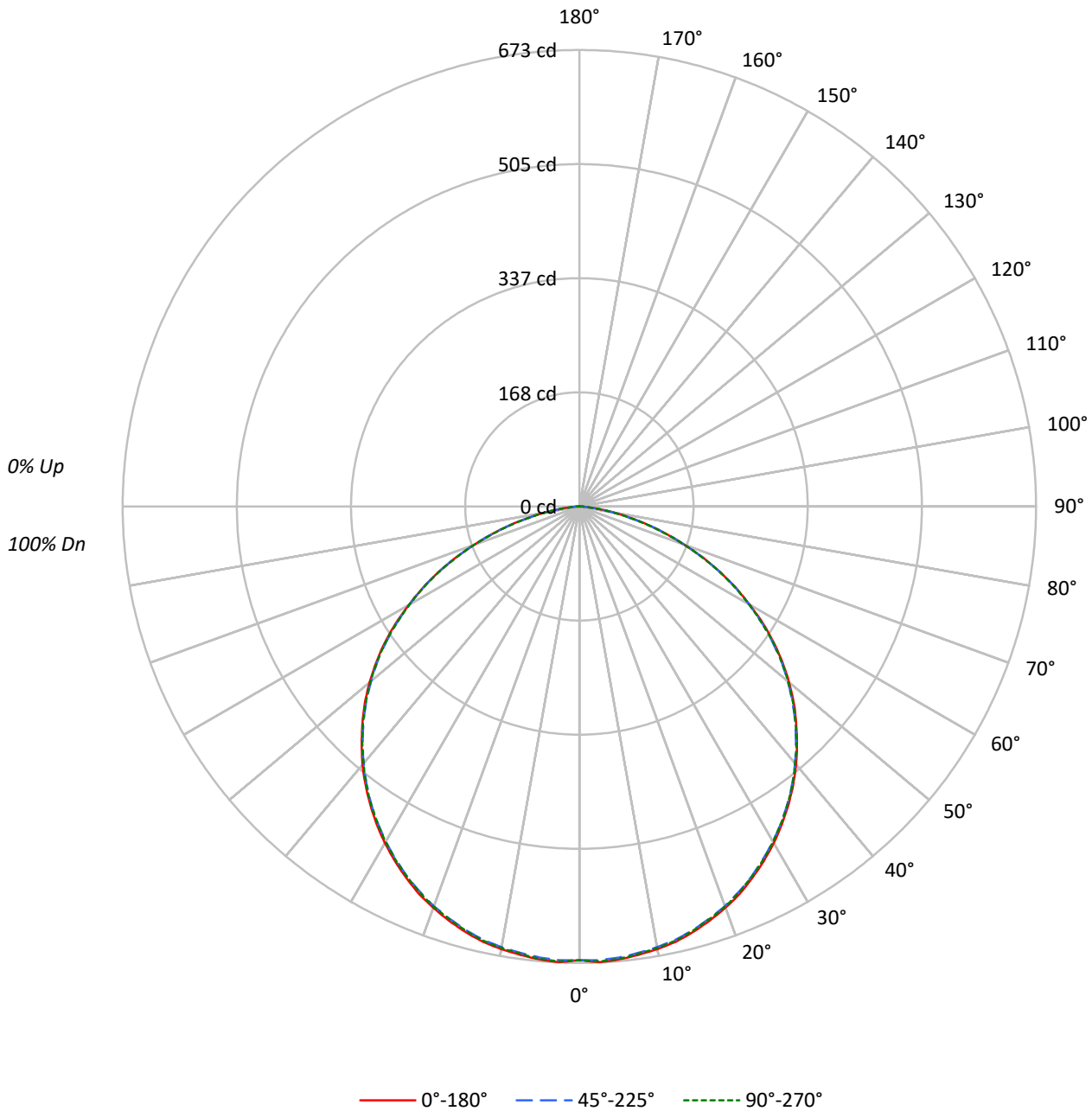
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1870.5 lumens
Efficiency: N/A
Efficacy: 126.4 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°	1800	1800	1800
5°	1811	1803	1809
10°	1811	1803	1806
15°	1809	1801	1804
20°	1803	1796	1798
25°	1793	1786	1787
30°	1780	1773	1774
35°	1764	1758	1759
40°	1746	1737	1738
45°	1720	1712	1715
50°	1690	1677	1681
55°	1642	1628	1634
60°	1561	1554	1554
65°	1457	1455	1449
70°	1290	1297	1293
75°	1087	1078	1070
80°	781	769	762
85°	408	408	395

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1720 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.3	3.4
10°-20°	182.1	9.7
20°-30°	276.8	14.8
30°-40°	334.6	17.9
40°-50°	347.3	18.6
50°-60°	310.5	16.6
60°-70°	225.7	12.1
70°-80°	111.0	5.9
80°-90°	19.2	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°	522.3	27.9
0°-40°	856.8	45.8
0°-60°	1514.5	81.0
0°-90°	1870.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1870.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	669	669	669	669	669	
5°	670	663	668	665	670	64
15°	650	642	647	645	647	183
25°	604	597	602	600	602	278
35°	537	533	535	535	535	336
45°	452	450	450	451	451	349
55°	350	348	347	348	348	312
65°	229	230	228	228	228	226
75°	104	105	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°	668.9	668.9	668.9	668.9	668.9
2.5°	672.6	664.7	669.7	666.8	671.4
5°	670.5	662.7	667.6	665.2	669.7
7.5°	666.8	659.0	663.9	661.4	665.2
10°	662.7	654.4	659.8	657.3	661.0
12.5°	657.3	649.5	654.4	652.3	655.7
15°	649.5	642.0	646.6	644.9	647.4
17.5°	640.0	632.5	637.1	635.8	637.9
20°	629.6	622.6	627.1	625.9	628.0
22.5°	618.1	610.6	614.8	613.9	615.6
25°	604.0	597.4	601.5	600.3	601.9
27.5°	589.1	582.9	586.2	586.2	587.1
30°	573.0	567.2	570.5	570.5	571.0
32.5°	555.7	551.1	553.2	553.6	553.6
35°	537.1	533.4	535.0	535.4	535.4
37.5°	517.7	513.9	515.2	516.0	516.0
40°	497.0	493.7	494.5	495.4	494.9
42.5°	474.7	472.2	472.6	473.5	473.5
45°	452.0	449.9	449.9	450.7	450.7
47.5°	428.8	426.8	425.9	426.8	426.8
50°	403.6	401.6	400.7	401.6	401.6
52.5°	377.2	375.1	375.1	375.1	375.5
55°	349.9	347.9	347.0	347.9	348.3
57.5°	321.0	320.2	318.9	319.4	318.1
60°	290.0	290.0	288.8	289.6	288.8
62.5°	259.9	260.7	259.5	259.5	258.6
65°	228.9	229.7	228.5	228.5	227.6
67.5°	197.1	198.3	196.7	196.7	195.8
70°	164.0	166.5	164.8	165.3	164.4
72.5°	134.3	135.5	133.9	133.9	133.0
75°	104.5	105.4	103.7	104.1	102.9
77.5°	75.2	76.4	74.8	75.2	74.8
80°	50.4	50.8	49.6	50.0	49.2
82.5°	29.3	29.7	29.3	28.9	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)