

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: P973907

Luminaire Tested: FLR2-22-20HE-L840-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973907
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-L840-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

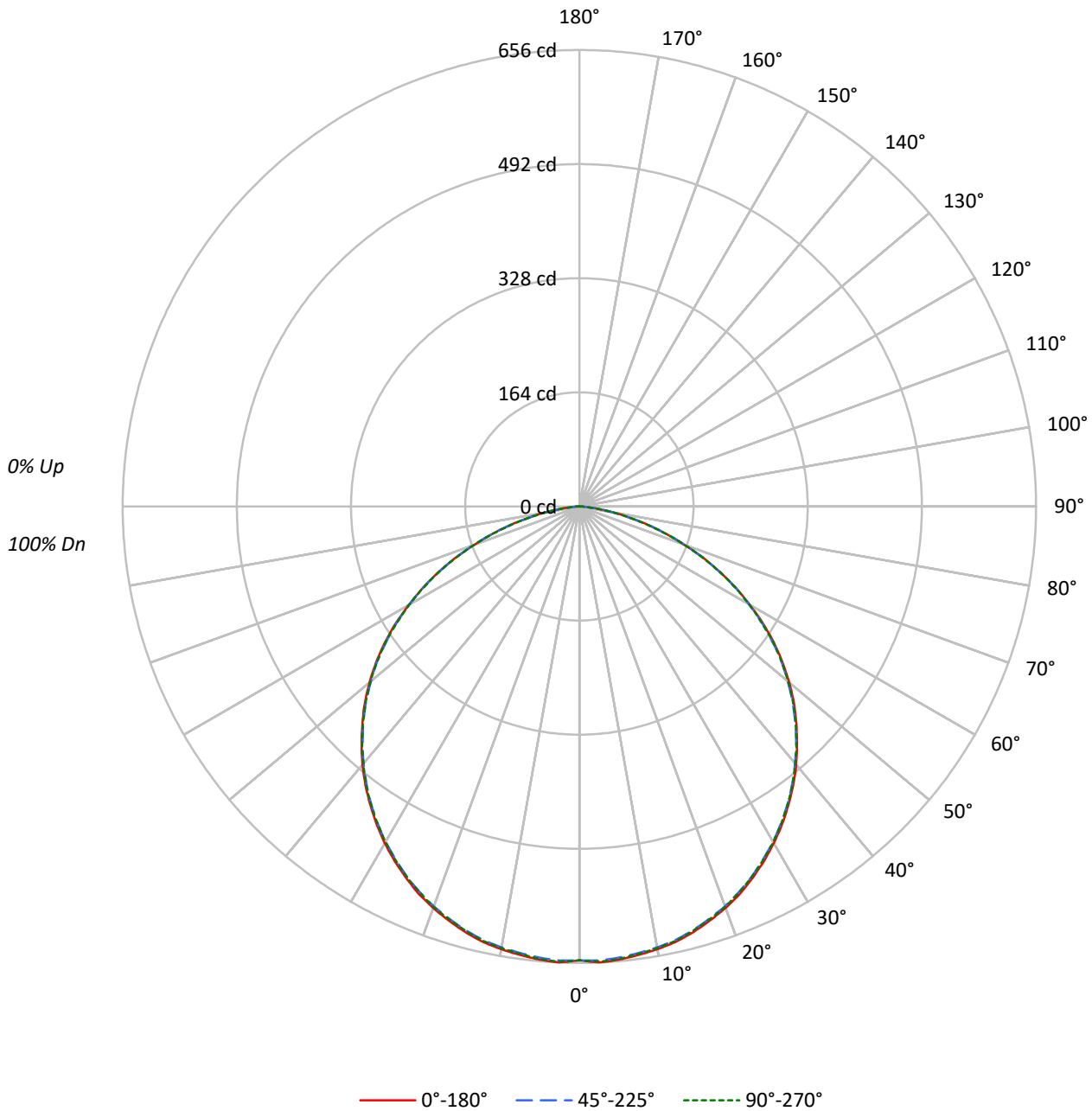
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1824.0 lumens
Efficiency: N/A
Efficacy: 123.2 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°	1755	1755	1755
5°	1766	1759	1764
10°	1766	1758	1761
15°	1764	1757	1759
20°	1758	1751	1754
25°	1749	1742	1743
30°	1736	1729	1730
35°	1720	1714	1715
40°	1703	1694	1695
45°	1677	1670	1673
50°	1648	1636	1639
55°	1601	1588	1593
60°	1522	1516	1516
65°	1421	1419	1414
70°	1258	1264	1261
75°	1059	1051	1043
80°	762	748	742
85°	398	398	386

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1677 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.8	3.4
10°-20°	177.6	9.7
20°-30°	269.9	14.8
30°-40°	326.2	17.9
40°-50°	338.6	18.6
50°-60°	302.7	16.6
60°-70°	220.1	12.1
70°-80°	108.2	5.9
80°-90°	18.8	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°	509.3	27.9
0°-40°	835.6	45.8
0°-60°	1476.9	81.0
0°-90°	1824.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1824.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	652	652	652	652	652	
5°	654	646	651	649	653	62
15°	633	626	630	629	631	179
25°	589	583	587	585	587	271
35°	524	520	522	522	522	328
45°	441	439	439	440	440	340
55°	341	339	338	339	340	304
65°	223	224	223	223	222	220
75°	102	103	101	102	100	108
85°	13	13	13	13	12	19
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	652.3	652.3	652.3	652.3	652.3
2.5°	655.9	648.2	653.1	650.2	654.7
5°	653.9	646.2	651.0	648.6	653.1
7.5°	650.2	642.6	647.4	645.0	648.6
10°	646.2	638.2	643.4	641.0	644.6
12.5°	641.0	633.3	638.2	636.1	639.4
15°	633.3	626.1	630.5	628.9	631.3
17.5°	624.1	616.8	621.2	620.0	622.0
20°	614.0	607.1	611.6	610.4	612.4
22.5°	602.7	595.5	599.5	598.7	600.3
25°	589.0	582.6	586.6	585.4	587.0
27.5°	574.5	568.5	571.7	571.7	572.5
30°	558.8	553.2	556.4	556.4	556.8
32.5°	541.9	537.4	539.5	539.9	539.9
35°	523.7	520.1	521.7	522.1	522.1
37.5°	504.8	501.2	502.4	503.2	503.2
40°	484.7	481.4	482.2	483.0	482.6
42.5°	462.9	460.5	460.9	461.7	461.7
45°	440.7	438.7	438.7	439.5	439.5
47.5°	418.2	416.2	415.4	416.2	416.2
50°	393.6	391.6	390.8	391.6	391.6
52.5°	367.8	365.8	365.8	365.8	366.2
55°	341.2	339.2	338.4	339.2	339.6
57.5°	313.0	312.2	311.0	311.4	310.2
60°	282.8	282.8	281.6	282.4	281.6
62.5°	253.4	254.2	253.0	253.0	252.2
65°	223.2	224.0	222.8	222.8	222.0
67.5°	192.2	193.4	191.8	191.8	191.0
70°	159.9	162.4	160.7	161.2	160.3
72.5°	130.9	132.1	130.5	130.5	129.7
75°	101.9	102.7	101.1	101.5	100.3
77.5°	73.3	74.5	72.9	73.3	72.9
80°	49.2	49.6	48.3	48.7	47.9
82.5°	28.6	29.0	28.6	28.2	27.8
85°	12.9	13.3	12.9	12.9	12.5
87.5°	3.2	3.2	3.2	3.2	3.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)