

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: P973621

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

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973621
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: FLR2-22-20-L840-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

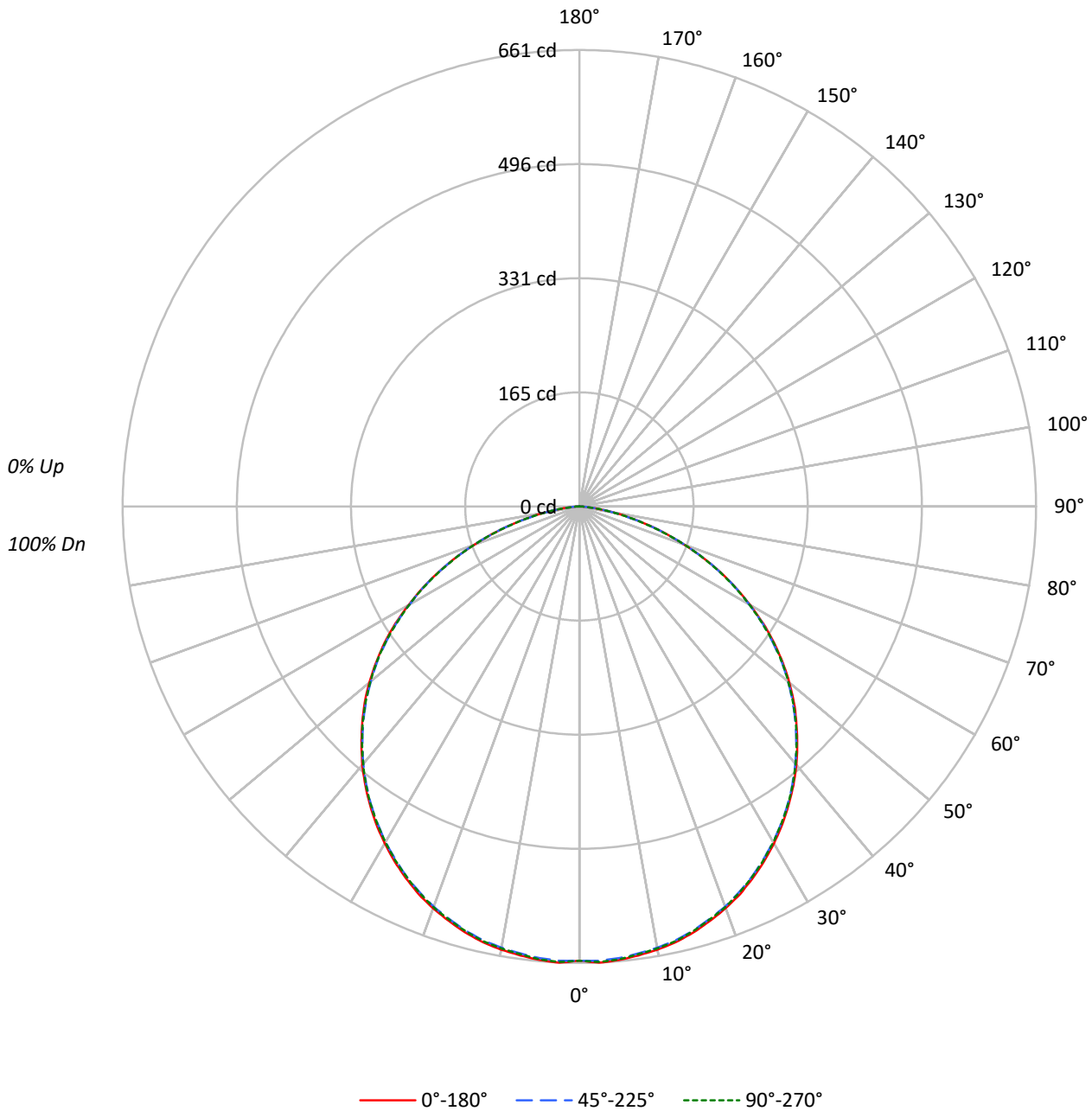
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1839.2 lumens
Efficiency: N/A
Efficacy: 121.8 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): 15.1
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				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	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°	1770	1770	1770
5°	1781	1773	1779
10°	1780	1773	1776
15°	1779	1771	1774
20°	1773	1766	1768
25°	1763	1756	1757
30°	1751	1743	1744
35°	1735	1728	1730
40°	1717	1708	1710
45°	1691	1684	1687
50°	1662	1649	1653
55°	1614	1601	1607
60°	1535	1528	1528
65°	1433	1430	1425
70°	1269	1275	1272
75°	1069	1061	1052
80°	769	755	748
85°	401	401	389

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1691 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	62.3	3.4
10°-20°	179.1	9.7
20°-30°	272.2	14.8
30°-40°	329.0	17.9
40°-50°	341.4	18.6
50°-60°	305.3	16.6
60°-70°	222.0	12.1
70°-80°	109.1	5.9
80°-90°	18.9	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°	513.5	27.9
0°-40°	842.5	45.8
0°-60°	1489.2	81.0
0°-90°	1839.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1839.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	658	658	658	658	658	
5°	659	652	656	654	658	63
15°	639	631	636	634	637	180
25°	594	587	592	590	592	274
35°	528	524	526	526	526	330
45°	444	442	442	443	443	343
55°	344	342	341	342	342	307
65°	225	226	225	225	224	222
75°	103	104	102	102	101	109
85°	13	13	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°	657.7	657.7	657.7	657.7	657.7
2.5°	661.3	653.6	658.5	655.7	660.1
5°	659.3	651.6	656.5	654.0	658.5
7.5°	655.7	647.9	652.8	650.4	654.0
10°	651.6	643.5	648.8	646.3	650.0
12.5°	646.3	638.6	643.5	641.4	644.7
15°	638.6	631.3	635.8	634.1	636.6
17.5°	629.3	621.9	626.4	625.2	627.2
20°	619.1	612.2	616.7	615.4	617.5
22.5°	607.7	600.4	604.5	603.7	605.3
25°	593.9	587.4	591.5	590.3	591.9
27.5°	579.3	573.2	576.4	576.4	577.3
30°	563.4	557.8	561.0	561.0	561.4
32.5°	546.4	541.9	543.9	544.4	544.4
35°	528.1	524.4	526.1	526.5	526.5
37.5°	509.0	505.4	506.6	507.4	507.4
40°	488.7	485.4	486.3	487.1	486.7
42.5°	466.8	464.3	464.7	465.5	465.5
45°	444.4	442.4	442.4	443.2	443.2
47.5°	421.7	419.6	418.8	419.6	419.6
50°	396.9	394.9	394.0	394.9	394.9
52.5°	370.9	368.9	368.9	368.9	369.3
55°	344.1	342.0	341.2	342.0	342.5
57.5°	315.6	314.8	313.6	314.0	312.8
60°	285.2	285.2	284.0	284.8	284.0
62.5°	255.5	256.3	255.1	255.1	254.3
65°	225.1	225.9	224.6	224.6	223.8
67.5°	193.8	195.0	193.4	193.4	192.6
70°	161.3	163.7	162.1	162.5	161.7
72.5°	132.0	133.2	131.6	131.6	130.8
75°	102.8	103.6	102.0	102.4	101.2
77.5°	73.9	75.2	73.5	73.9	73.5
80°	49.6	50.0	48.7	49.2	48.3
82.5°	28.8	29.2	28.8	28.4	28.0
85°	13.0	13.4	13.0	13.0	12.6
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)