

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: P973665

Luminaire Tested: FLR2-22-20-L850-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973665
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-L850-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

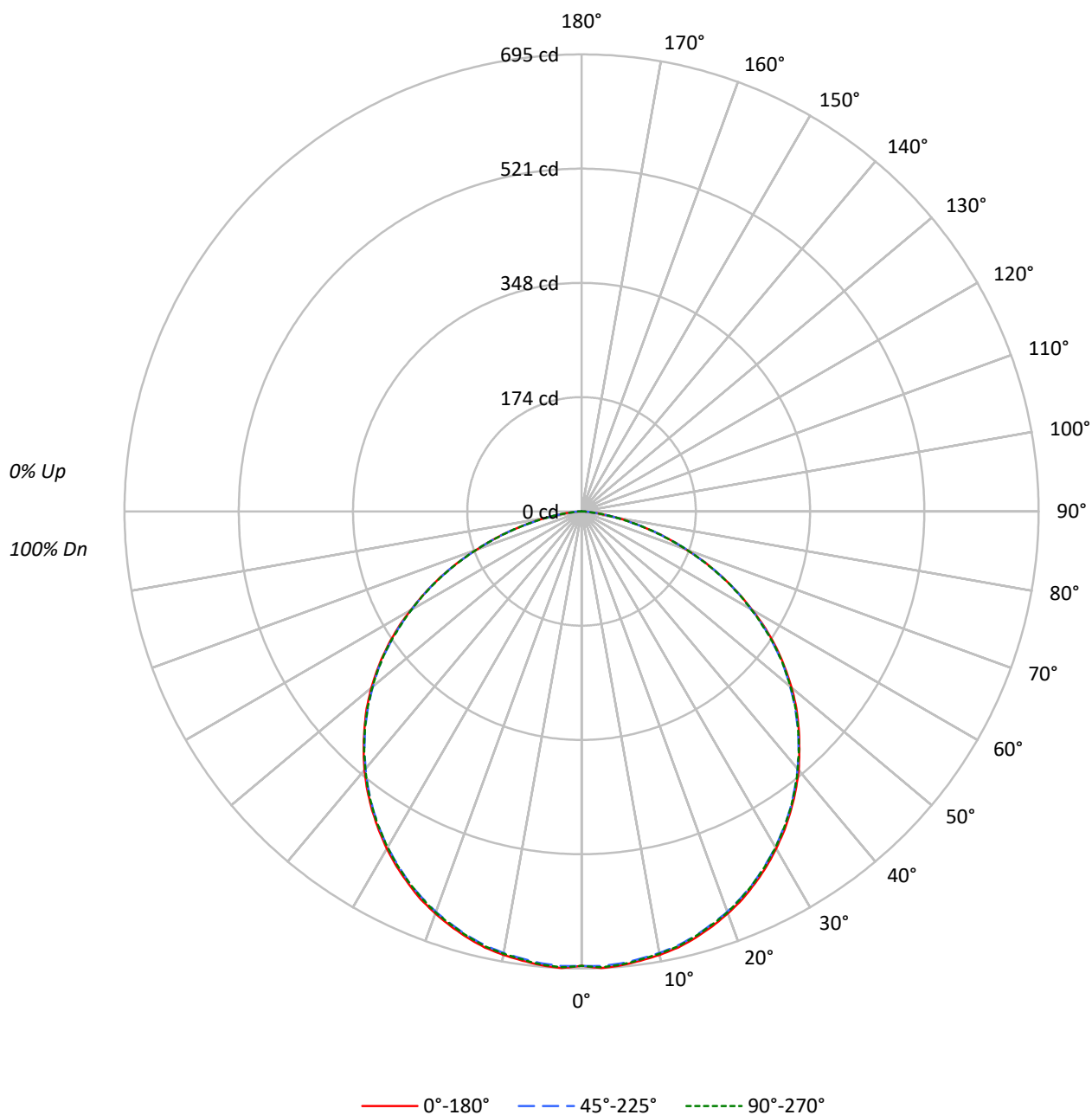
Lumens per Lamp: N/A
Luminaire Lumens: 1932.8 lumens
Efficiency: N/A
Efficacy: 128.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P973665

CATALOG NUMBER: FLR2-22-20-L850-CP080

Luminous Intensity Polar Plot



TEST NUMBER: P973665

CATALOG NUMBER: FLR2-22-20-L850-CP080

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	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°	1860	1860	1860
5°	1872	1864	1869
10°	1871	1863	1866
15°	1870	1861	1863
20°	1863	1856	1858
25°	1853	1846	1847
30°	1840	1832	1833
35°	1823	1816	1818
40°	1804	1795	1796
45°	1777	1769	1772
50°	1746	1734	1737
55°	1696	1682	1688
60°	1613	1606	1606
65°	1506	1503	1498
70°	1334	1340	1337
75°	1123	1115	1105
80°	807	793	787
85°	423	423	408

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1777 cd/sqm

TEST NUMBER: P973665

CATALOG NUMBER: FLR2-22-20-L850-CP080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.4	3.4
10°-20°	188.2	9.7
20°-30°	286.0	14.8
30°-40°	345.7	17.9
40°-50°	358.8	18.6
50°-60°	320.8	16.6
60°-70°	233.2	12.1
70°-80°	114.7	5.9
80°-90°	19.9	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°	539.7	27.9
0°-40°	885.4	45.8
0°-60°	1565.0	81.0
0°-90°	1932.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1932.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	691	691	691	691	691	
5°	693	685	690	687	692	66
15°	671	663	668	666	669	189
25°	624	617	622	620	622	288
35°	555	551	553	553	553	347
45°	467	465	465	466	466	360
55°	362	359	359	359	360	322
65°	236	237	236	236	235	233
75°	108	109	107	108	106	115
85°	14	14	14	14	13	20
90°	0	0	0	0	0	

TEST NUMBER: P973665

CATALOG NUMBER: FLR2-22-20-L850-CP080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	691.1	691.1	691.1	691.1	691.1
2.5°	695.0	686.9	692.0	689.0	693.7
5°	692.9	684.7	689.9	687.3	692.0
7.5°	689.0	680.9	686.0	683.5	687.3
10°	684.7	676.2	681.8	679.2	683.0
12.5°	679.2	671.1	676.2	674.1	677.5
15°	671.1	663.4	668.1	666.4	668.9
17.5°	661.3	653.6	658.3	657.0	659.1
20°	650.6	643.3	648.0	646.7	648.9
22.5°	638.6	631.0	635.2	634.4	636.1
25°	624.1	617.3	621.6	620.3	622.0
27.5°	608.8	602.3	605.8	605.8	606.6
30°	592.1	586.1	589.5	589.5	590.0
32.5°	574.2	569.5	571.6	572.0	572.0
35°	555.0	551.1	552.8	553.3	553.3
37.5°	534.9	531.1	532.3	533.2	533.2
40°	513.6	510.1	511.0	511.8	511.4
42.5°	490.5	487.9	488.4	489.2	489.2
45°	467.0	464.9	464.9	465.7	465.7
47.5°	443.1	441.0	440.1	441.0	441.0
50°	417.1	414.9	414.1	414.9	414.9
52.5°	389.8	387.6	387.6	387.6	388.0
55°	361.6	359.4	358.6	359.4	359.9
57.5°	331.7	330.8	329.6	330.0	328.7
60°	299.7	299.7	298.4	299.3	298.4
62.5°	268.5	269.4	268.1	268.1	267.2
65°	236.5	237.4	236.1	236.1	235.2
67.5°	203.6	204.9	203.2	203.2	202.3
70°	169.5	172.0	170.3	170.8	169.9
72.5°	138.7	140.0	138.3	138.3	137.5
75°	108.0	108.9	107.2	107.6	106.3
77.5°	77.7	79.0	77.3	77.7	77.3
80°	52.1	52.5	51.2	51.7	50.8
82.5°	30.3	30.7	30.3	29.9	29.5
85°	13.7	14.1	13.7	13.7	13.2
87.5°	3.4	3.4	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)