

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: P973657

Luminaire Tested: FLR2-22-20-L940-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973657
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-L940-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

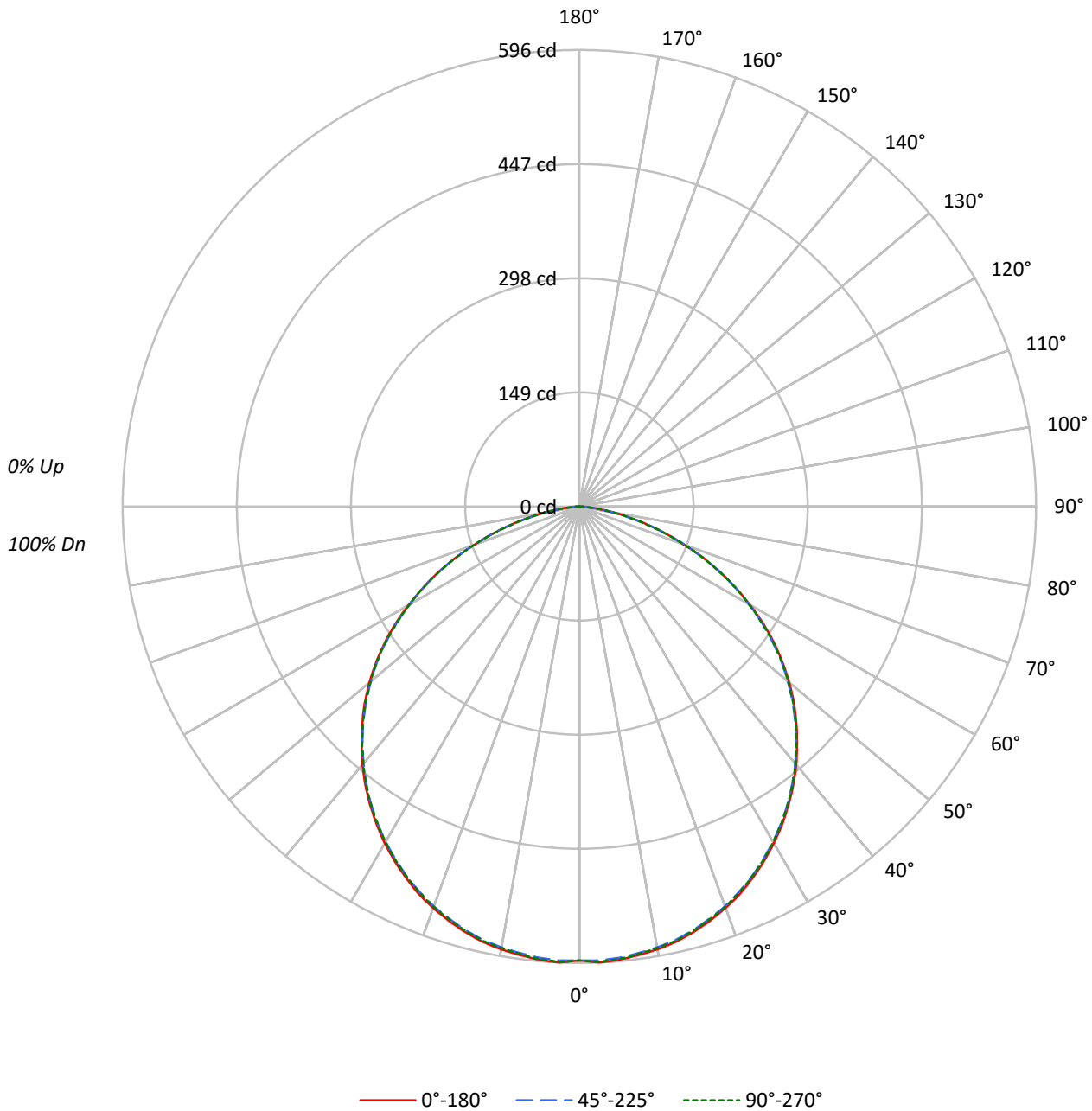
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1657.5 lumens
Efficiency: N/A
Efficacy: 109.8 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

TEST NUMBER: P973657
CATALOG NUMBER: FLR2-22-20-L940-CA080

Luminous Intensity Polar Plot





TEST NUMBER: P973657
 CATALOG NUMBER: FLR2-22-20-L940-CA080

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°	1595	1595	1595
5°	1605	1598	1603
10°	1605	1597	1600
15°	1603	1596	1598
20°	1598	1591	1594
25°	1589	1583	1584
30°	1578	1571	1572
35°	1563	1557	1558
40°	1547	1539	1541
45°	1524	1517	1520
50°	1497	1487	1490
55°	1455	1443	1448
60°	1383	1377	1377
65°	1291	1289	1284
70°	1143	1149	1146
75°	963	955	948
80°	693	680	676
85°	361	361	349

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1524 cd/sqm



TEST NUMBER: P973657
 CATALOG NUMBER: FLR2-22-20-L940-CA080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.1	3.4
10°-20°	161.4	9.7
20°-30°	245.3	14.8
30°-40°	296.5	17.9
40°-50°	307.7	18.6
50°-60°	275.1	16.6
60°-70°	200.0	12.1
70°-80°	98.4	5.9
80°-90°	17.0	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°	462.8	27.9
0°-40°	759.2	45.8
0°-60°	1342.0	81.0
0°-90°	1657.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1657.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	593	593	593	593	593	
5°	594	587	592	589	593	56
15°	576	569	573	572	574	162
25°	535	529	533	532	533	247
35°	476	473	474	474	474	298
45°	400	399	399	399	399	309
55°	310	308	308	308	309	276
65°	203	204	202	202	202	200
75°	93	93	92	92	91	98
85°	12	12	12	12	11	17
90°	0	0	0	0	0	



TEST NUMBER: P973657
 CATALOG NUMBER: FLR2-22-20-L940-CA080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	592.7	592.7	592.7	592.7	592.7
2.5°	596.0	589.0	593.4	590.9	594.9
5°	594.2	587.2	591.6	589.4	593.4
7.5°	590.9	583.9	588.3	586.1	589.4
10°	587.2	579.9	584.6	582.4	585.7
12.5°	582.4	575.5	579.9	578.1	581.0
15°	575.5	568.9	572.9	571.5	573.7
17.5°	567.1	560.5	564.5	563.4	565.2
20°	557.9	551.7	555.7	554.6	556.5
22.5°	547.7	541.1	544.7	544.0	545.5
25°	535.2	529.4	533.0	531.9	533.4
27.5°	522.0	516.5	519.5	519.5	520.2
30°	507.8	502.6	505.6	505.6	505.9
32.5°	492.4	488.4	490.2	490.6	490.6
35°	475.9	472.6	474.1	474.4	474.4
37.5°	458.7	455.4	456.5	457.2	457.2
40°	440.4	437.5	438.2	438.9	438.6
42.5°	420.6	418.4	418.8	419.5	419.5
45°	400.5	398.7	398.7	399.4	399.4
47.5°	380.0	378.2	377.4	378.2	378.2
50°	357.7	355.8	355.1	355.8	355.8
52.5°	334.2	332.4	332.4	332.4	332.8
55°	310.1	308.2	307.5	308.2	308.6
57.5°	284.4	283.7	282.6	283.0	281.9
60°	257.0	257.0	255.9	256.6	255.9
62.5°	230.3	231.0	229.9	229.9	229.2
65°	202.8	203.5	202.4	202.4	201.7
67.5°	174.6	175.7	174.3	174.3	173.5
70°	145.3	147.5	146.1	146.4	145.7
72.5°	119.0	120.1	118.6	118.6	117.9
75°	92.6	93.4	91.9	92.3	91.2
77.5°	66.6	67.7	66.3	66.6	66.3
80°	44.7	45.0	43.9	44.3	43.6
82.5°	26.0	26.4	26.0	25.6	25.3
85°	11.7	12.1	11.7	11.7	11.3
87.5°	2.9	2.9	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)