

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: P973823

Luminaire Tested: FLR2-22-20HE-L835-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973823
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-L835-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

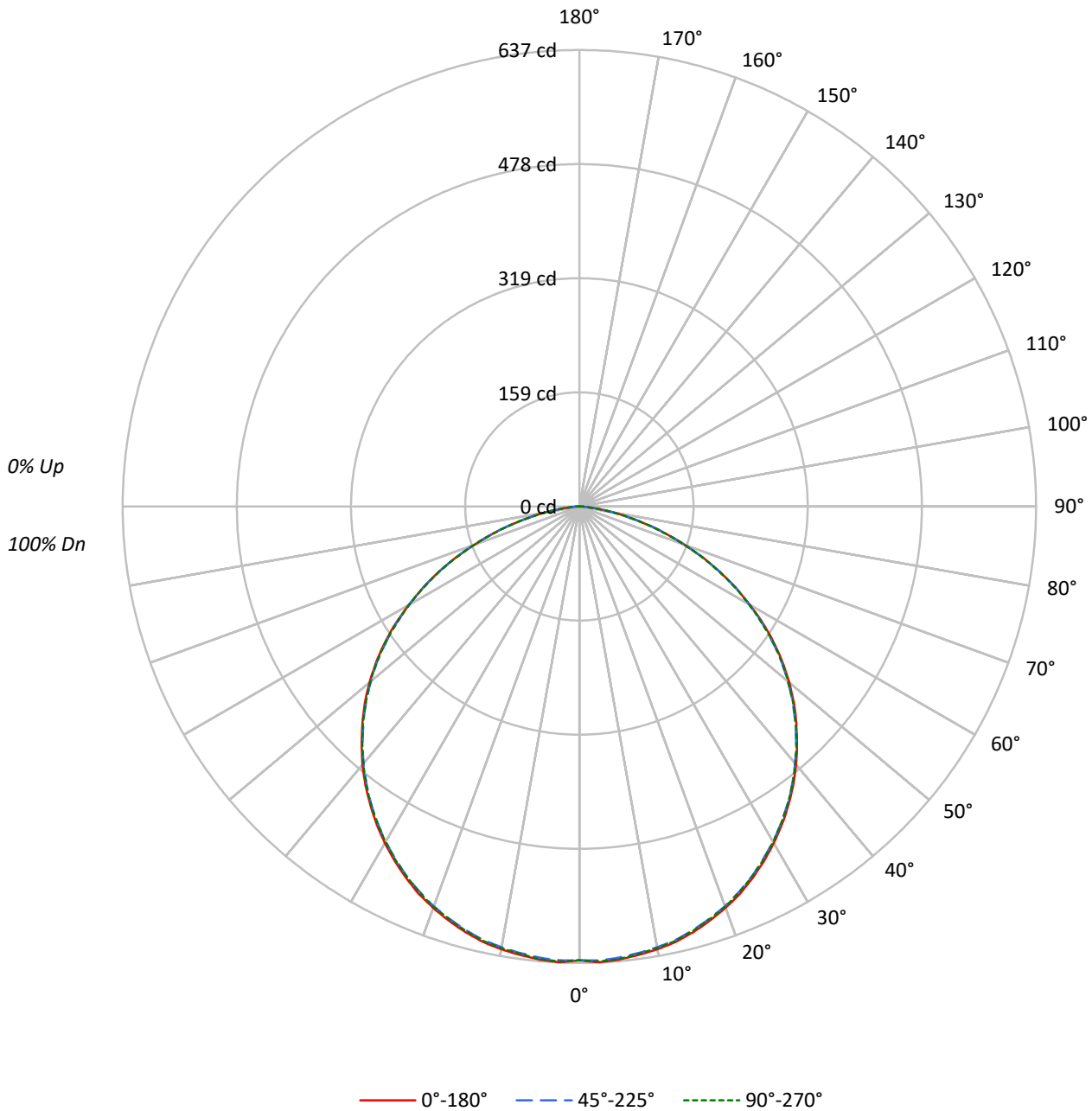
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1770.9 lumens
Efficiency: N/A
Efficacy: 119.7 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

TEST NUMBER: P973823
CATALOG NUMBER: FLR2-22-20HE-L835-CP250

Luminous Intensity Polar Plot





TEST NUMBER: P973823
 CATALOG NUMBER: FLR2-22-20HE-L835-CP250

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°	1704	1704	1704
5°	1715	1707	1713
10°	1714	1707	1710
15°	1713	1705	1707
20°	1707	1700	1702
25°	1698	1691	1692
30°	1686	1679	1680
35°	1670	1664	1665
40°	1653	1645	1646
45°	1628	1621	1624
50°	1600	1588	1592
55°	1554	1542	1547
60°	1478	1471	1471
65°	1380	1377	1372
70°	1222	1228	1225
75°	1029	1021	1013
80°	739	727	721
85°	386	386	374

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1628 cd/sqm



TEST NUMBER: P973823
 CATALOG NUMBER: FLR2-22-20HE-L835-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	60.0	3.4
10°-20°	172.4	9.7
20°-30°	262.1	14.8
30°-40°	316.7	17.9
40°-50°	328.8	18.6
50°-60°	293.9	16.6
60°-70°	213.7	12.1
70°-80°	105.1	5.9
80°-90°	18.2	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°	494.5	27.9
0°-40°	811.2	45.8
0°-60°	1433.9	81.0
0°-90°	1770.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1770.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	633	633	633	633	633	
5°	635	627	632	630	634	60
15°	615	608	612	611	613	174
25°	572	566	570	568	570	264
35°	508	505	506	507	507	318
45°	428	426	426	427	427	330
55°	331	329	329	329	330	295
65°	217	218	216	216	216	214
75°	99	100	98	99	97	105
85°	12	13	12	12	12	18
90°	0	0	0	0	0	



TEST NUMBER: P973823
 CATALOG NUMBER: FLR2-22-20HE-L835-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	633.3	633.3	633.3	633.3	633.3
2.5°	636.8	629.3	634.0	631.3	635.6
5°	634.8	627.4	632.1	629.7	634.0
7.5°	631.3	623.9	628.6	626.2	629.7
10°	627.4	619.6	624.7	622.3	625.8
12.5°	622.3	614.9	619.6	617.6	620.7
15°	614.9	607.8	612.1	610.6	612.9
17.5°	605.9	598.8	603.1	602.0	603.9
20°	596.1	589.5	593.8	592.6	594.5
22.5°	585.2	578.1	582.0	581.2	582.8
25°	571.9	565.6	569.5	568.3	569.9
27.5°	557.8	551.9	555.0	555.0	555.8
30°	542.5	537.0	540.2	540.2	540.6
32.5°	526.1	521.8	523.7	524.1	524.1
35°	508.5	505.0	506.5	506.9	506.9
37.5°	490.1	486.6	487.8	488.5	488.5
40°	470.5	467.4	468.2	469.0	468.6
42.5°	449.4	447.1	447.5	448.2	448.2
45°	427.9	426.0	426.0	426.7	426.7
47.5°	406.0	404.1	403.3	404.1	404.1
50°	382.1	380.2	379.4	380.2	380.2
52.5°	357.1	355.2	355.2	355.2	355.5
55°	331.3	329.3	328.6	329.3	329.7
57.5°	303.9	303.1	302.0	302.4	301.2
60°	274.6	274.6	273.4	274.2	273.4
62.5°	246.0	246.8	245.6	245.6	244.9
65°	216.7	217.5	216.3	216.3	215.5
67.5°	186.6	187.7	186.2	186.2	185.4
70°	155.3	157.6	156.1	156.5	155.7
72.5°	127.1	128.3	126.7	126.7	125.9
75°	99.0	99.7	98.2	98.6	97.4
77.5°	71.2	72.4	70.8	71.2	70.8
80°	47.7	48.1	46.9	47.3	46.5
82.5°	27.8	28.2	27.8	27.4	27.0
85°	12.5	12.9	12.5	12.5	12.1
87.5°	3.1	3.1	3.1	3.1	3.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)