

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: P974989

Luminaire Tested: FLR2-24-20HE-L850-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974989
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-3)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-24-20HE-L850-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

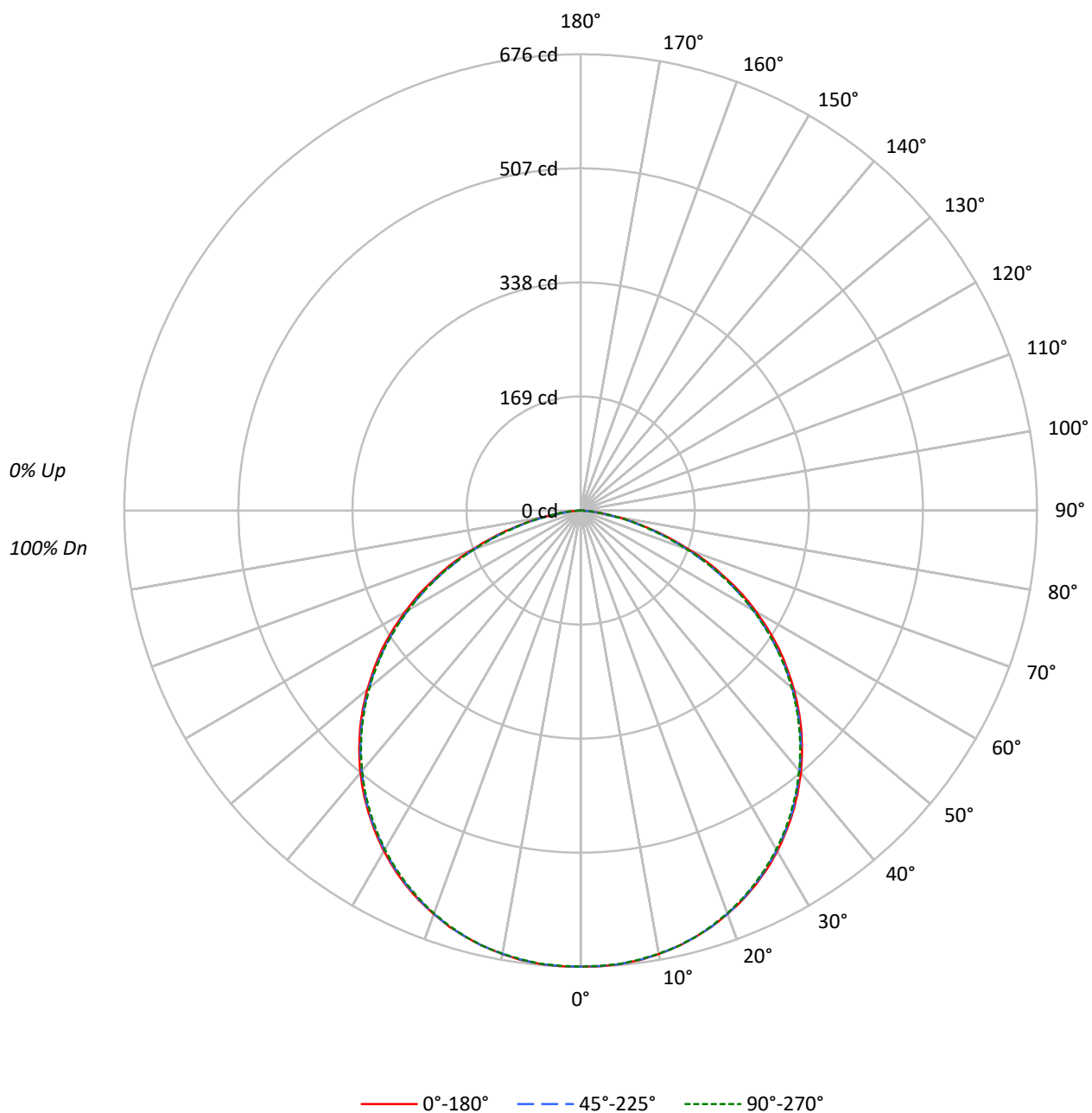
Lumens per Lamp: N/A
Luminaire Lumens: 1910.1 lumens
Efficiency: N/A
Efficacy: 128.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 14.9
Input Voltage (V):
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: P974989

CATALOG NUMBER: FLR2-24-20HE-L850-CP187

Luminous Intensity Polar Plot



TEST NUMBER: P974989

CATALOG NUMBER: FLR2-24-20HE-L850-CP187

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	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	38	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	39	33	29	27		
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	909	909	909
5°	911	911	910
10°	912	911	911
15°	912	912	912
20°	911	911	909
25°	909	908	906
30°	905	903	901
35°	899	897	894
40°	891	886	885
45°	880	875	872
50°	863	857	854
55°	843	831	830
60°	808	794	794
65°	756	738	740
70°	680	659	657
75°	571	548	546
80°	417	397	413
85°	236	218	221

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 880 cd/sqm

TEST NUMBER: P974989

CATALOG NUMBER: FLR2-24-20HE-L850-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.1	3.4
10°-20°	184.8	9.7
20°-30°	281.8	14.8
30°-40°	341.4	17.9
40°-50°	354.6	18.6
50°-60°	317.2	16.6
60°-70°	231.2	12.1
70°-80°	114.5	6.0
80°-90°	20.5	1.1
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°	530.7	27.8
0°-40°	872.1	45.7
0°-60°	1543.9	80.8
0°-90°	1910.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1910.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	676	676	676	676	676	
5°	675	675	675	675	674	64
15°	655	654	654	655	654	185
25°	612	612	611	611	610	282
35°	548	547	546	545	544	342
45°	462	462	460	459	458	356
55°	359	357	354	354	354	320
65°	237	236	232	233	232	235
75°	110	108	106	107	105	117
85°	15	14	14	14	14	21
90°	0	0	0	0	0	

TEST NUMBER: P974989

CATALOG NUMBER: FLR2-24-20HE-L850-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	675.8	675.8	675.8	675.8	675.8
2.5°	675.8	675.6	675.6	675.8	675.3
5°	674.6	674.8	674.6	674.6	674.1
7.5°	671.9	671.7	671.5	671.7	671.0
10°	667.3	667.3	667.1	667.3	666.8
12.5°	661.8	661.8	661.8	662.0	661.8
15°	654.7	654.5	654.5	655.0	654.5
17.5°	646.5	646.2	646.2	646.0	645.5
20°	636.3	636.3	636.0	635.8	635.1
22.5°	625.4	625.1	624.4	624.4	623.4
25°	612.5	611.8	611.3	611.1	610.3
27.5°	598.5	597.5	596.8	596.3	595.6
30°	582.7	581.7	581.0	580.3	579.8
32.5°	565.7	565.2	564.0	563.8	562.8
35°	547.5	546.8	546.1	545.1	544.1
37.5°	528.1	527.4	525.7	525.2	524.5
40°	507.5	506.6	504.4	504.4	503.7
42.5°	485.5	484.5	483.0	482.1	481.6
45°	462.4	461.5	459.8	458.8	458.3
47.5°	437.9	437.2	435.3	434.5	433.8
50°	412.5	411.5	409.3	408.8	408.1
52.5°	385.8	385.3	382.4	382.2	381.4
55°	359.4	356.7	354.3	354.3	353.8
57.5°	330.3	328.3	325.2	325.2	324.7
60°	300.2	298.5	294.9	295.4	294.9
62.5°	270.9	267.2	263.8	265.3	264.1
65°	237.4	235.5	231.8	232.8	232.5
67.5°	206.8	203.2	199.8	201.8	200.8
70°	172.9	171.0	167.6	169.5	167.1
72.5°	140.9	139.2	135.8	138.0	135.6
75°	109.8	108.2	105.5	107.4	105.0
77.5°	80.5	79.3	76.9	78.8	79.3
80°	53.8	52.4	51.2	52.9	53.3
82.5°	31.5	30.6	30.1	30.3	31.5
85°	15.3	14.1	14.1	14.3	14.3
87.5°	4.1	3.6	4.1	4.4	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)