

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: P974604

Luminaire Tested: FLR2-24-20HE-L930-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974604
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-L930-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

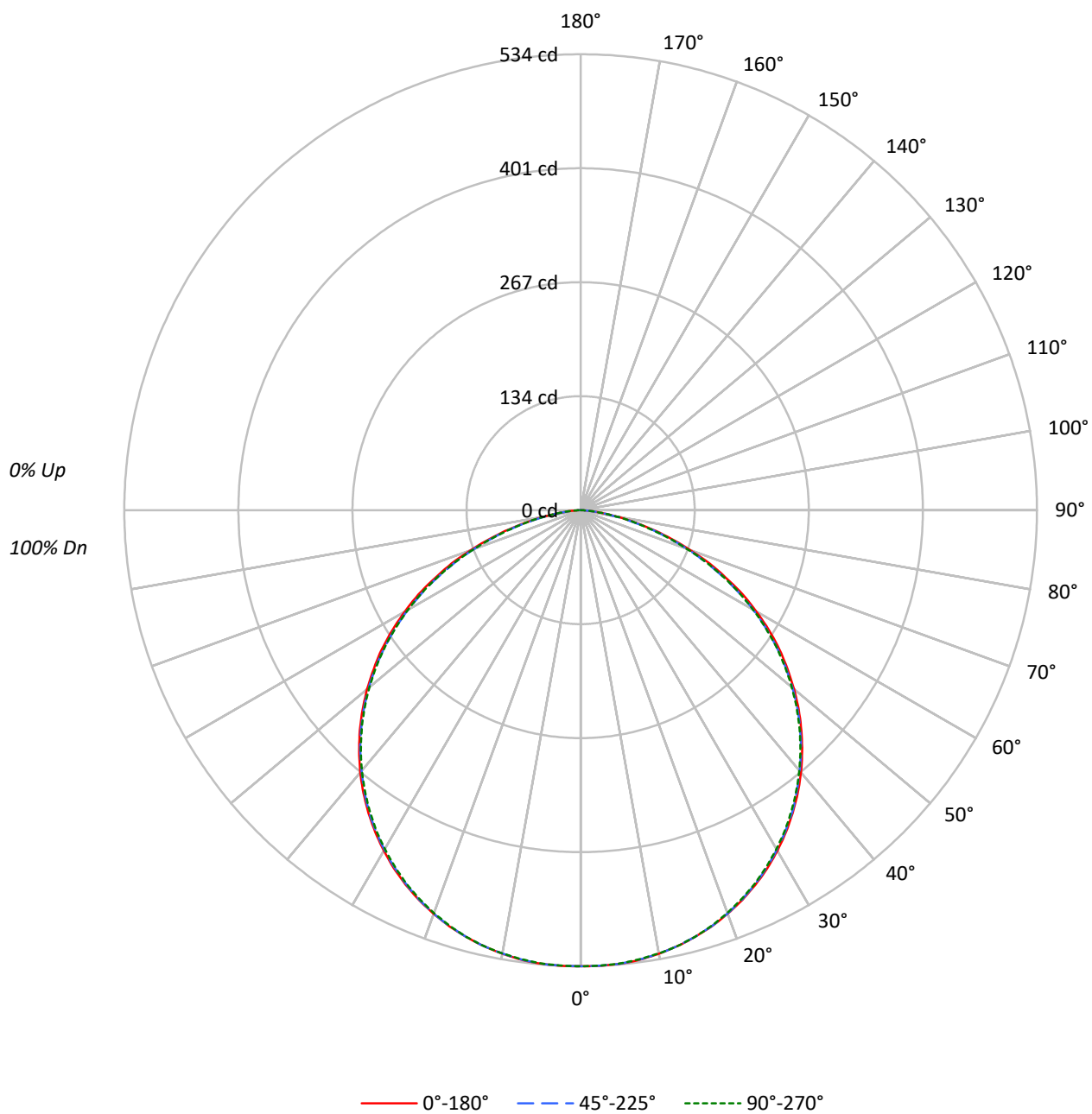
Lumens per Lamp: N/A
Luminaire Lumens: 1509.9 lumens
Efficiency: N/A
Efficacy: 101.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P974604

CATALOG NUMBER: FLR2-24-20HE-L930-CP187

Luminous Intensity Polar Plot



TEST NUMBER: P974604

CATALOG NUMBER: FLR2-24-20HE-L930-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		100
1	109	105	100	97	106	102	99	95	98	95	92	94	92	89	91	89	87	85		85
2	99	91	85	79	97	89	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	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51		51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44		44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	38		38
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34		34
8	61	47	39	33	59	47	38	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	39	33	29	27		27
10	53	40	32	27	52	39	32	27	38	31	27	38	31	26	37	31	26	25		25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	719	719	719
5°	720	720	720
10°	721	720	720
15°	721	721	721
20°	720	720	719
25°	719	717	716
30°	716	714	712
35°	711	709	706
40°	705	700	699
45°	695	691	689
50°	683	677	675
55°	666	657	656
60°	639	627	627
65°	598	583	585
70°	538	521	520
75°	451	434	431
80°	330	313	327
85°	187	171	174

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 695 cd/sqm

TEST NUMBER: P974604

CATALOG NUMBER: FLR2-24-20HE-L930-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.7	3.4
10°-20°	146.1	9.7
20°-30°	222.7	14.8
30°-40°	269.9	17.9
40°-50°	280.3	18.6
50°-60°	250.8	16.6
60°-70°	182.7	12.1
70°-80°	90.5	6.0
80°-90°	16.2	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°	419.5	27.8
0°-40°	689.4	45.7
0°-60°	1220.4	80.8
0°-90°	1509.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1509.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	534	534	534	534	534	
5°	533	534	533	533	533	51
15°	518	517	517	518	517	146
25°	484	484	483	483	482	223
35°	433	432	432	431	430	271
45°	366	365	363	363	362	282
55°	284	282	280	280	280	253
65°	188	186	183	184	184	186
75°	87	86	83	85	83	93
85°	12	11	11	11	11	17
90°	0	0	0	0	0	

TEST NUMBER: P974604

CATALOG NUMBER: FLR2-24-20HE-L930-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	534.2	534.2	534.2	534.2	534.2
2.5°	534.2	534.0	534.0	534.2	533.8
5°	533.3	533.5	533.3	533.3	532.9
7.5°	531.2	531.0	530.8	531.0	530.4
10°	527.5	527.5	527.3	527.5	527.1
12.5°	523.1	523.1	523.1	523.3	523.1
15°	517.5	517.3	517.3	517.7	517.3
17.5°	511.0	510.8	510.8	510.6	510.3
20°	503.0	503.0	502.8	502.6	502.0
22.5°	494.3	494.2	493.6	493.6	492.8
25°	484.2	483.6	483.2	483.0	482.5
27.5°	473.1	472.3	471.7	471.3	470.8
30°	460.6	459.8	459.3	458.7	458.3
32.5°	447.2	446.8	445.9	445.7	444.9
35°	432.8	432.2	431.7	430.9	430.1
37.5°	417.5	416.9	415.6	415.2	414.6
40°	401.2	400.4	398.7	398.7	398.1
42.5°	383.7	383.0	381.8	381.1	380.7
45°	365.5	364.8	363.4	362.7	362.3
47.5°	346.2	345.6	344.1	343.5	342.9
50°	326.1	325.3	323.6	323.2	322.6
52.5°	305.0	304.6	302.3	302.1	301.5
55°	284.1	282.0	280.0	280.0	279.7
57.5°	261.1	259.5	257.0	257.0	256.7
60°	237.3	236.0	233.1	233.5	233.1
62.5°	214.1	211.2	208.6	209.7	208.7
65°	187.7	186.1	183.2	184.0	183.8
67.5°	163.5	160.6	157.9	159.5	158.7
70°	136.7	135.1	132.5	134.0	132.1
72.5°	111.4	110.0	107.3	109.1	107.2
75°	86.8	85.5	83.4	84.9	83.0
77.5°	63.6	62.7	60.8	62.3	62.7
80°	42.6	41.4	40.4	41.8	42.2
82.5°	24.9	24.2	23.8	24.0	24.9
85°	12.1	11.1	11.1	11.3	11.3
87.5°	3.3	2.9	3.3	3.5	3.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)