

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: P974637

Luminaire Tested: FLR2-24-20HE-L930-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974637
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-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

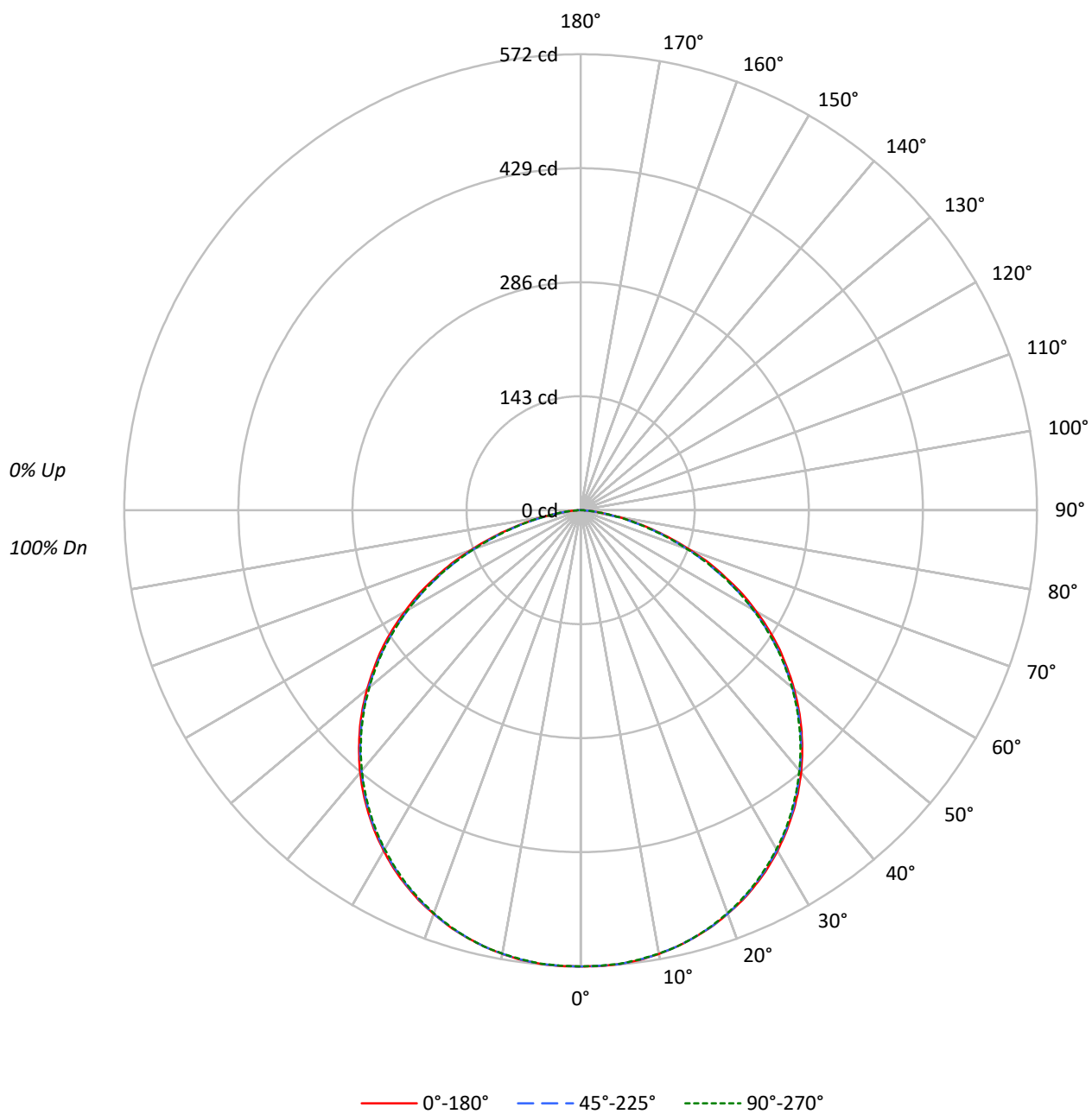
Lumens per Lamp: N/A
Luminaire Lumens: 1618.0 lumens
Efficiency: N/A
Efficacy: 108.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P974637

CATALOG NUMBER: FLR2-24-20HE-L930-CA080

Luminous Intensity Polar Plot



TEST NUMBER: P974637

CATALOG NUMBER: FLR2-24-20HE-L930-CA080

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°	770	770	770
5°	772	772	771
10°	772	772	772
15°	773	772	772
20°	772	771	770
25°	770	769	768
30°	767	765	763
35°	762	760	757
40°	755	751	749
45°	745	741	739
50°	731	726	724
55°	714	704	703
60°	684	672	672
65°	640	625	627
70°	576	558	557
75°	484	465	462
80°	353	336	350
85°	199	184	187

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 745 cd/sqm

TEST NUMBER: P974637

CATALOG NUMBER: FLR2-24-20HE-L930-CA080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.3	3.4
10°-20°	156.5	9.7
20°-30°	238.7	14.8
30°-40°	289.2	17.9
40°-50°	300.4	18.6
50°-60°	268.7	16.6
60°-70°	195.8	12.1
70°-80°	97.0	6.0
80°-90°	17.3	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°	449.6	27.8
0°-40°	738.8	45.7
0°-60°	1307.9	80.8
0°-90°	1618.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1618.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	572	572	572	572	572	
5°	572	572	572	572	571	54
15°	555	554	554	555	554	157
25°	519	518	518	518	517	239
35°	464	463	463	462	461	290
45°	392	391	390	389	388	302
55°	304	302	300	300	300	271
65°	201	200	196	197	197	199
75°	93	92	89	91	89	99
85°	13	12	12	12	12	18
90°	0	0	0	0	0	

TEST NUMBER: P974637

CATALOG NUMBER: FLR2-24-20HE-L930-CA080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	572.5	572.5	572.5	572.5	572.5
2.5°	572.5	572.3	572.3	572.5	572.1
5°	571.5	571.7	571.5	571.5	571.0
7.5°	569.2	569.0	568.8	569.0	568.4
10°	565.3	565.3	565.1	565.3	564.9
12.5°	560.6	560.6	560.6	560.8	560.6
15°	554.6	554.4	554.4	554.8	554.4
17.5°	547.6	547.4	547.4	547.2	546.8
20°	539.0	539.0	538.8	538.6	538.0
22.5°	529.8	529.6	528.9	528.9	528.1
25°	518.9	518.3	517.8	517.6	517.0
27.5°	507.0	506.1	505.5	505.1	504.5
30°	493.6	492.8	492.2	491.6	491.1
32.5°	479.2	478.8	477.8	477.6	476.8
35°	463.8	463.2	462.6	461.8	460.9
37.5°	447.4	446.8	445.3	444.9	444.3
40°	429.9	429.1	427.3	427.3	426.6
42.5°	411.2	410.4	409.2	408.4	408.0
45°	391.7	390.9	389.5	388.6	388.2
47.5°	371.0	370.4	368.7	368.1	367.5
50°	349.4	348.6	346.7	346.3	345.7
52.5°	326.8	326.4	323.9	323.7	323.1
55°	304.4	302.2	300.1	300.1	299.7
57.5°	279.8	278.1	275.5	275.5	275.0
60°	254.3	252.9	249.8	250.2	249.8
62.5°	229.4	226.4	223.5	224.7	223.7
65°	201.1	199.5	196.4	197.2	197.0
67.5°	175.2	172.1	169.3	170.9	170.1
70°	146.5	144.8	141.9	143.6	141.5
72.5°	119.3	117.9	115.0	116.9	114.8
75°	93.1	91.6	89.4	91.0	88.9
77.5°	68.2	67.2	65.1	66.8	67.2
80°	45.6	44.4	43.3	44.8	45.2
82.5°	26.7	25.9	25.5	25.7	26.7
85°	12.9	11.9	11.9	12.1	12.1
87.5°	3.5	3.1	3.5	3.7	3.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)