

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: P974912

Luminaire Tested: FLR2-24-20HE-L940-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974912
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-L940-CP187
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

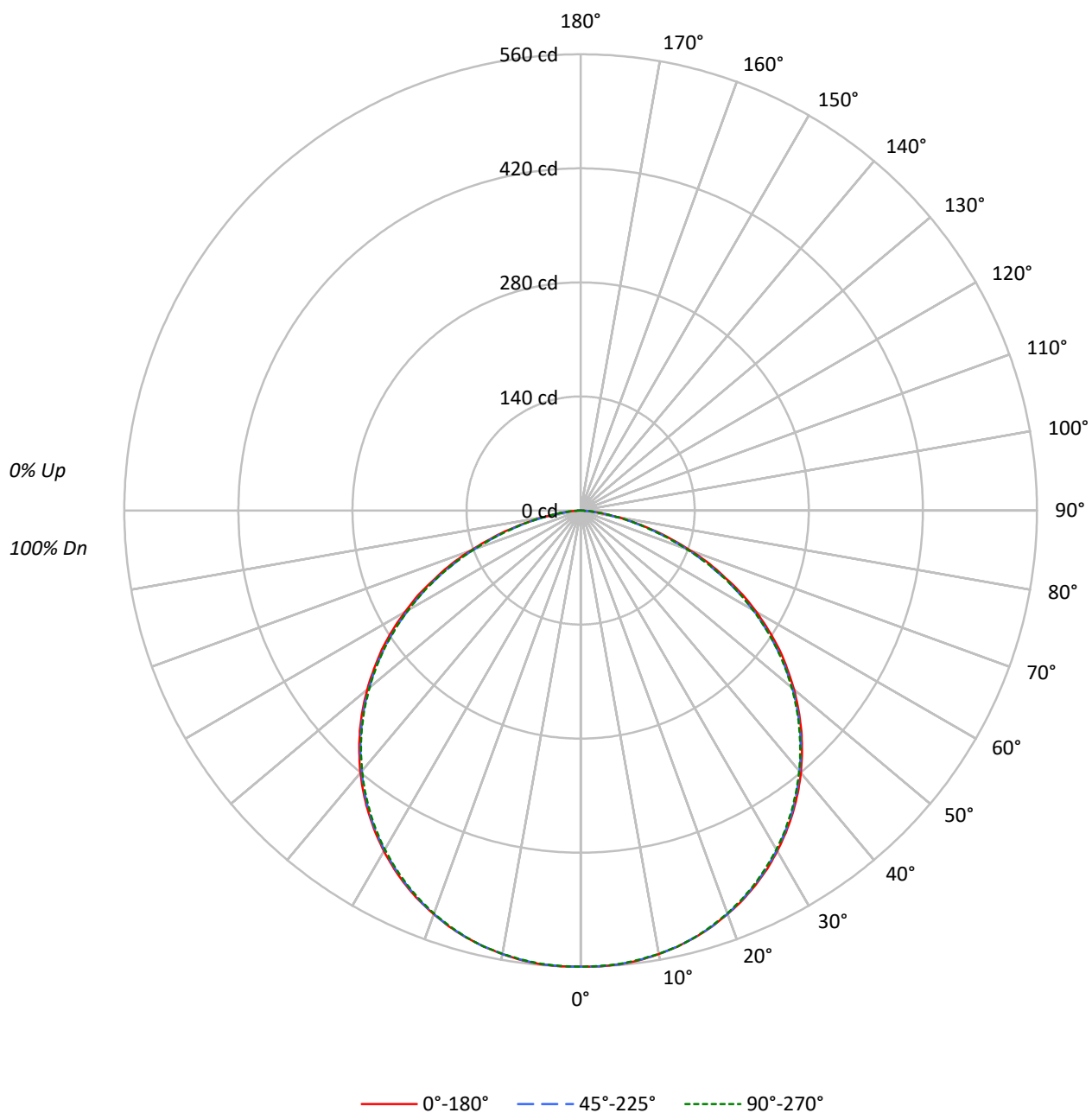
Lumens per Lamp: N/A
Luminaire Lumens: 1582.6 lumens
Efficiency: N/A
Efficacy: 106.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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: P974912

CATALOG NUMBER: FLR2-24-20HE-L940-CP187

Luminous Intensity Polar Plot



TEST NUMBER: P974912

CATALOG NUMBER: FLR2-24-20HE-L940-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°	753	753	753
5°	755	755	754
10°	755	755	755
15°	756	755	755
20°	755	755	753
25°	753	752	751
30°	750	748	746
35°	745	743	741
40°	739	734	733
45°	729	725	722
50°	715	710	708
55°	699	688	688
60°	669	657	657
65°	626	612	613
70°	564	546	544
75°	473	454	452
80°	346	329	342
85°	196	181	184

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 729 cd/sqm

TEST NUMBER: P974912

CATALOG NUMBER: FLR2-24-20HE-L940-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.2	3.4
10°-20°	153.1	9.7
20°-30°	233.5	14.8
30°-40°	282.9	17.9
40°-50°	293.8	18.6
50°-60°	262.8	16.6
60°-70°	191.6	12.1
70°-80°	94.9	6.0
80°-90°	17.0	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°	439.7	27.8
0°-40°	722.6	45.7
0°-60°	1279.2	80.8
0°-90°	1582.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1582.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	560	560	560	560	560	
5°	559	559	559	559	559	53
15°	542	542	542	543	542	153
25°	508	507	506	506	506	234
35°	454	453	452	452	451	284
45°	383	382	381	380	380	295
55°	298	296	294	294	293	265
65°	197	195	192	193	193	195
75°	91	90	87	89	87	97
85°	13	12	12	12	12	18
90°	0	0	0	0	0	

TEST NUMBER: P974912

CATALOG NUMBER: FLR2-24-20HE-L940-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	560.0	560.0	560.0	560.0	560.0
2.5°	560.0	559.8	559.8	560.0	559.6
5°	559.0	559.2	559.0	559.0	558.6
7.5°	556.7	556.5	556.3	556.5	555.9
10°	552.9	552.9	552.7	552.9	552.5
12.5°	548.3	548.3	548.3	548.5	548.3
15°	542.5	542.3	542.3	542.7	542.3
17.5°	535.7	535.5	535.5	535.3	534.8
20°	527.2	527.2	527.0	526.8	526.2
22.5°	518.2	518.0	517.4	517.4	516.6
25°	507.5	506.9	506.5	506.3	505.7
27.5°	495.9	495.1	494.5	494.1	493.5
30°	482.8	482.0	481.4	480.8	480.4
32.5°	468.7	468.3	467.3	467.1	466.3
35°	453.7	453.1	452.5	451.7	450.9
37.5°	437.6	437.0	435.6	435.2	434.6
40°	420.5	419.7	417.9	417.9	417.3
42.5°	402.2	401.4	400.2	399.4	399.0
45°	383.2	382.4	380.9	380.1	379.7
47.5°	362.9	362.3	360.7	360.0	359.4
50°	341.8	341.0	339.2	338.8	338.1
52.5°	319.7	319.3	316.9	316.6	316.0
55°	297.8	295.6	293.5	293.5	293.1
57.5°	273.7	272.0	269.4	269.4	269.0
60°	248.7	247.3	244.3	244.7	244.3
62.5°	224.4	221.4	218.6	219.8	218.8
65°	196.7	195.1	192.1	192.9	192.7
67.5°	171.4	168.4	165.6	167.2	166.4
70°	143.3	141.6	138.8	140.4	138.4
72.5°	116.7	115.3	112.5	114.3	112.3
75°	91.0	89.6	87.4	89.0	87.0
77.5°	66.7	65.7	63.7	65.3	65.7
80°	44.6	43.4	42.4	43.8	44.2
82.5°	26.1	25.3	24.9	25.1	26.1
85°	12.7	11.7	11.7	11.9	11.9
87.5°	3.4	3.0	3.4	3.6	3.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)