

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: P974813

Luminaire Tested: FLR2-24-20HE-L840-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P974813
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-L840-CP080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

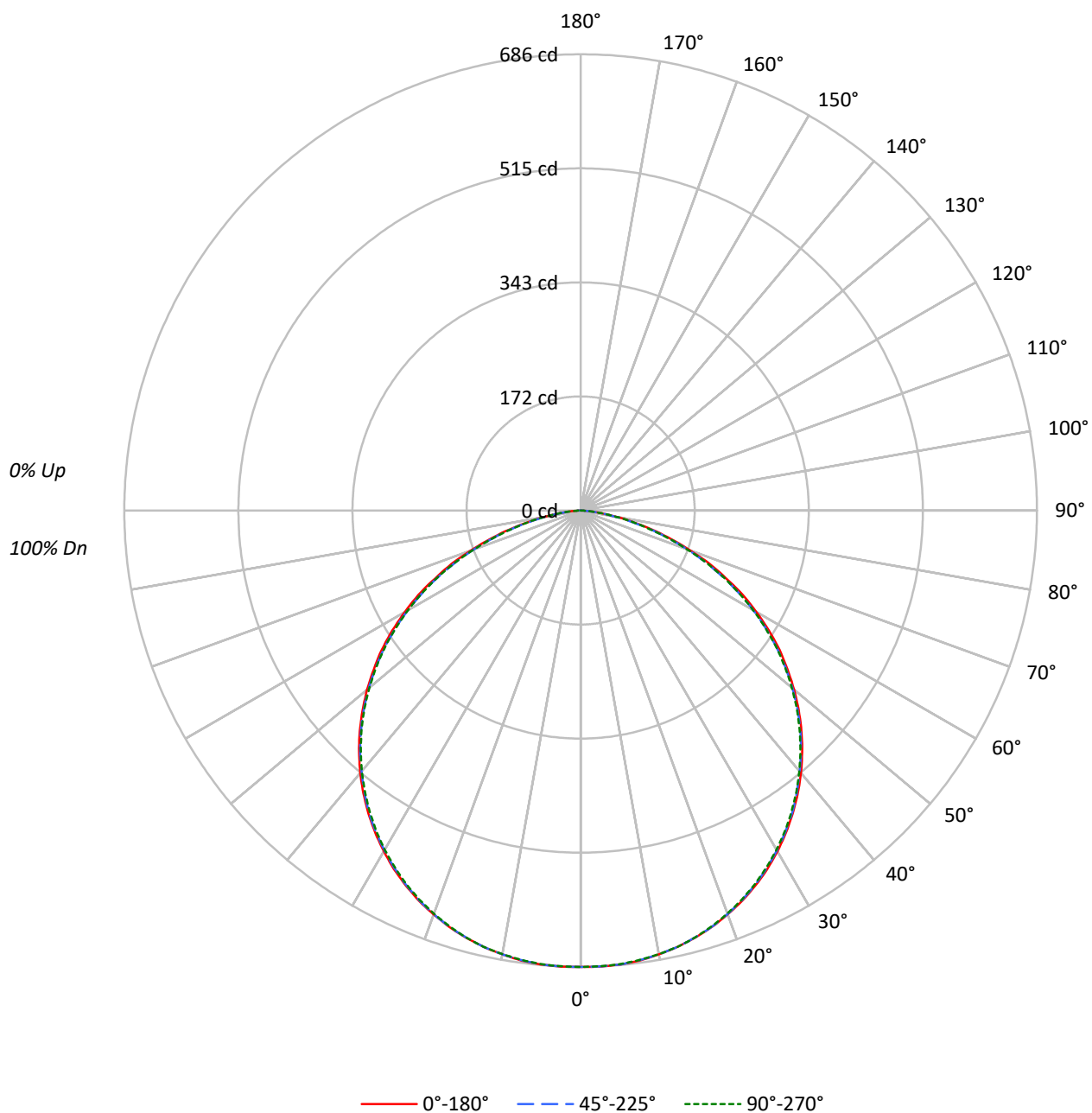
Lumens per Lamp: N/A
Luminaire Lumens: 1940.0 lumens
Efficiency: N/A
Efficacy: 130.2 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

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Luminous Intensity Polar Plot



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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°	924	924	924
5°	925	925	925
10°	926	926	925
15°	926	926	926
20°	925	925	924
25°	924	922	920
30°	919	917	915
35°	913	911	908
40°	905	900	899
45°	894	889	886
50°	877	870	868
55°	856	844	843
60°	820	806	806
65°	768	750	752
70°	691	670	668
75°	580	557	554
80°	424	403	420
85°	239	221	224

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 894 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.2	3.4
10°-20°	187.7	9.7
20°-30°	286.2	14.8
30°-40°	346.7	17.9
40°-50°	360.2	18.6
50°-60°	322.2	16.6
60°-70°	234.8	12.1
70°-80°	116.3	6.0
80°-90°	20.8	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°	539.0	27.8
0°-40°	885.8	45.7
0°-60°	1568.1	80.8
0°-90°	1940.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1940.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	686	686	686	686	686	
5°	685	685	685	685	685	65
15°	665	665	665	665	665	188
25°	622	621	621	621	620	287
35°	556	555	555	554	553	348
45°	470	469	467	466	466	362
55°	365	362	360	360	359	325
65°	241	239	236	236	236	239
75°	112	110	107	109	107	119
85°	16	14	14	14	14	21
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	686.4	686.4	686.4	686.4	686.4
2.5°	686.4	686.2	686.2	686.4	685.9
5°	685.2	685.4	685.2	685.2	684.7
7.5°	682.5	682.2	682.0	682.2	681.5
10°	677.8	677.8	677.6	677.8	677.3
12.5°	672.1	672.1	672.1	672.4	672.1
15°	665.0	664.7	664.7	665.2	664.7
17.5°	656.6	656.4	656.4	656.1	655.6
20°	646.3	646.3	646.0	645.8	645.0
22.5°	635.2	634.9	634.2	634.2	633.2
25°	622.1	621.4	620.9	620.7	619.9
27.5°	607.9	606.9	606.1	605.6	604.9
30°	591.8	590.9	590.1	589.4	588.9
32.5°	574.6	574.1	572.9	572.6	571.6
35°	556.1	555.4	554.7	553.7	552.7
37.5°	536.4	535.7	534.0	533.5	532.7
40°	515.5	514.5	512.3	512.3	511.6
42.5°	493.1	492.1	490.6	489.6	489.1
45°	469.7	468.7	467.0	466.0	465.5
47.5°	444.8	444.1	442.1	441.4	440.6
50°	418.9	418.0	415.7	415.3	414.5
52.5°	391.9	391.4	388.4	388.2	387.4
55°	365.0	362.3	359.8	359.8	359.3
57.5°	335.5	333.5	330.3	330.3	329.8
60°	304.9	303.2	299.5	300.0	299.5
62.5°	275.1	271.4	268.0	269.4	268.2
65°	241.1	239.2	235.5	236.4	236.2
67.5°	210.1	206.4	202.9	204.9	203.9
70°	175.6	173.6	170.2	172.2	169.7
72.5°	143.1	141.4	137.9	140.1	137.7
75°	111.6	109.8	107.1	109.1	106.6
77.5°	81.8	80.5	78.1	80.0	80.5
80°	54.7	53.2	52.0	53.7	54.2
82.5°	32.0	31.0	30.5	30.8	32.0
85°	15.5	14.3	14.3	14.5	14.5
87.5°	4.2	3.7	4.2	4.4	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)