

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: P975099

Luminaire Tested: FLR2-24-20HE-L950-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975099
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-L950-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

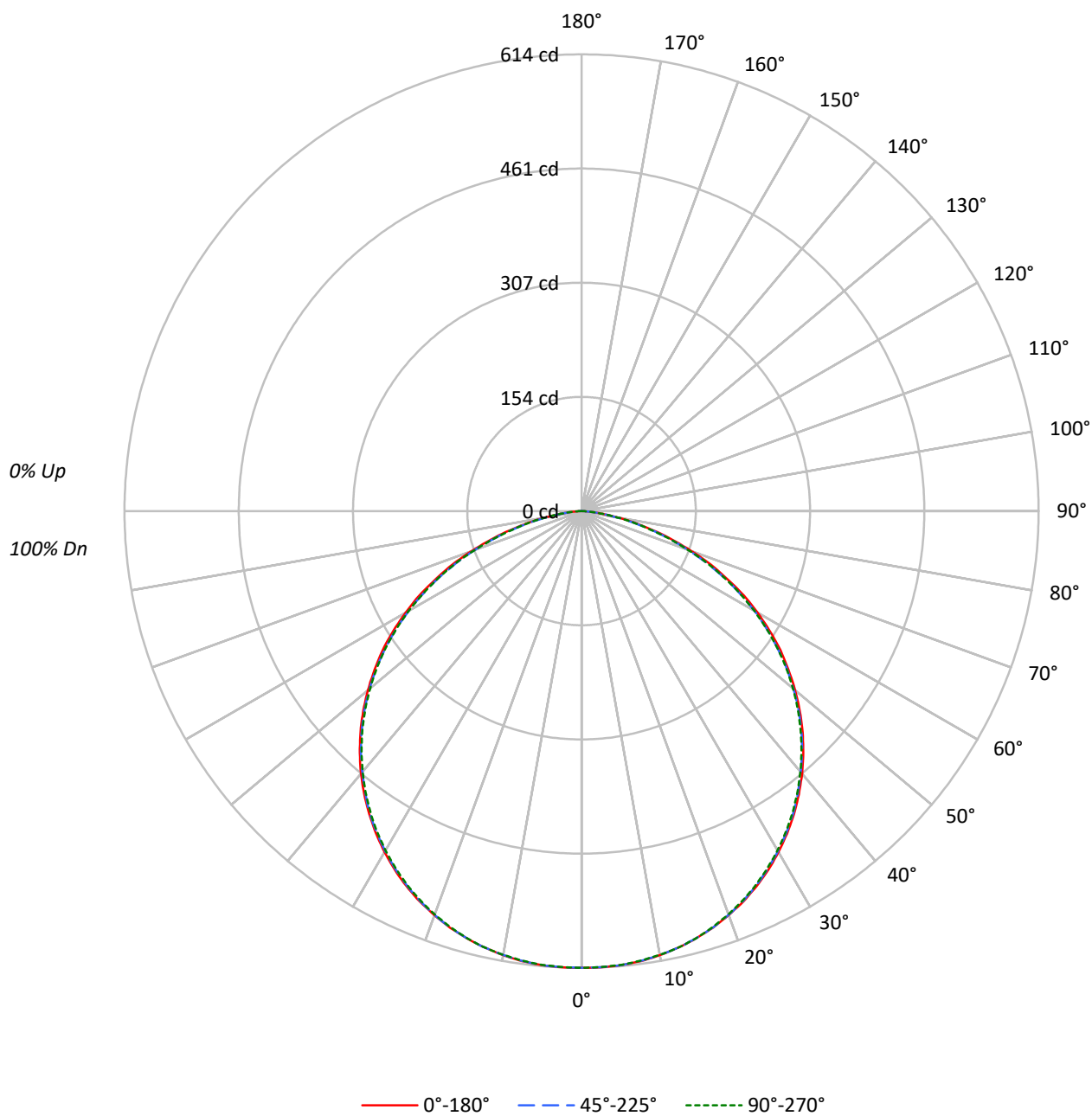
Lumens per Lamp: N/A
Luminaire Lumens: 1735.0 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	826	826	826
5°	828	828	827
10°	828	828	828
15°	828	828	828
20°	828	827	826
25°	826	824	823
30°	822	820	818
35°	817	815	812
40°	810	805	804
45°	799	795	792
50°	784	778	776
55°	766	755	754
60°	734	721	721
65°	686	670	672
70°	618	599	597
75°	519	498	496
80°	379	360	376
85°	215	198	201

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 799 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.3	3.4
10°-20°	167.9	9.7
20°-30°	255.9	14.8
30°-40°	310.1	17.9
40°-50°	322.1	18.6
50°-60°	288.1	16.6
60°-70°	210.0	12.1
70°-80°	104.0	6.0
80°-90°	18.6	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°	482.1	27.8
0°-40°	792.1	45.7
0°-60°	1402.4	80.8
0°-90°	1735.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1735.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	614	614	614	614	614	
5°	613	613	613	613	612	58
15°	595	594	594	595	594	168
25°	556	556	555	555	554	256
35°	497	497	496	495	494	311
45°	420	419	418	417	416	324
55°	326	324	322	322	321	291
65°	216	214	211	212	211	214
75°	100	98	96	98	95	106
85°	14	13	13	13	13	19
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	613.9	613.9	613.9	613.9	613.9
2.5°	613.9	613.7	613.7	613.9	613.4
5°	612.8	613.0	612.8	612.8	612.3
7.5°	610.3	610.1	609.9	610.1	609.5
10°	606.2	606.2	605.9	606.2	605.7
12.5°	601.1	601.1	601.1	601.3	601.1
15°	594.7	594.5	594.5	594.9	594.5
17.5°	587.2	587.0	587.0	586.8	586.3
20°	578.0	578.0	577.7	577.5	576.9
22.5°	568.1	567.8	567.2	567.2	566.3
25°	556.4	555.7	555.3	555.1	554.4
27.5°	543.6	542.7	542.1	541.6	541.0
30°	529.3	528.4	527.7	527.1	526.6
32.5°	513.9	513.4	512.3	512.1	511.2
35°	497.4	496.7	496.0	495.1	494.3
37.5°	479.7	479.1	477.5	477.1	476.4
40°	461.0	460.1	458.1	458.1	457.5
42.5°	441.0	440.1	438.8	437.9	437.4
45°	420.0	419.2	417.6	416.7	416.3
47.5°	397.8	397.1	395.4	394.7	394.0
50°	374.7	373.8	371.8	371.4	370.7
52.5°	350.4	350.0	347.4	347.1	346.5
55°	326.4	324.0	321.8	321.8	321.4
57.5°	300.0	298.2	295.4	295.4	294.9
60°	272.7	271.1	267.8	268.3	267.8
62.5°	246.0	242.7	239.6	241.0	239.9
65°	215.6	213.9	210.6	211.5	211.2
67.5°	187.9	184.6	181.5	183.3	182.4
70°	157.0	155.3	152.2	154.0	151.8
72.5°	128.0	126.4	123.3	125.3	123.1
75°	99.8	98.2	95.8	97.6	95.4
77.5°	73.1	72.0	69.8	71.6	72.0
80°	48.9	47.6	46.5	48.0	48.5
82.5°	28.6	27.8	27.3	27.5	28.6
85°	13.9	12.8	12.8	13.0	13.0
87.5°	3.7	3.3	3.7	4.0	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)