

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: P975022

Luminaire Tested: FLR2-24-20HE-L850-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P975022
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-L850-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

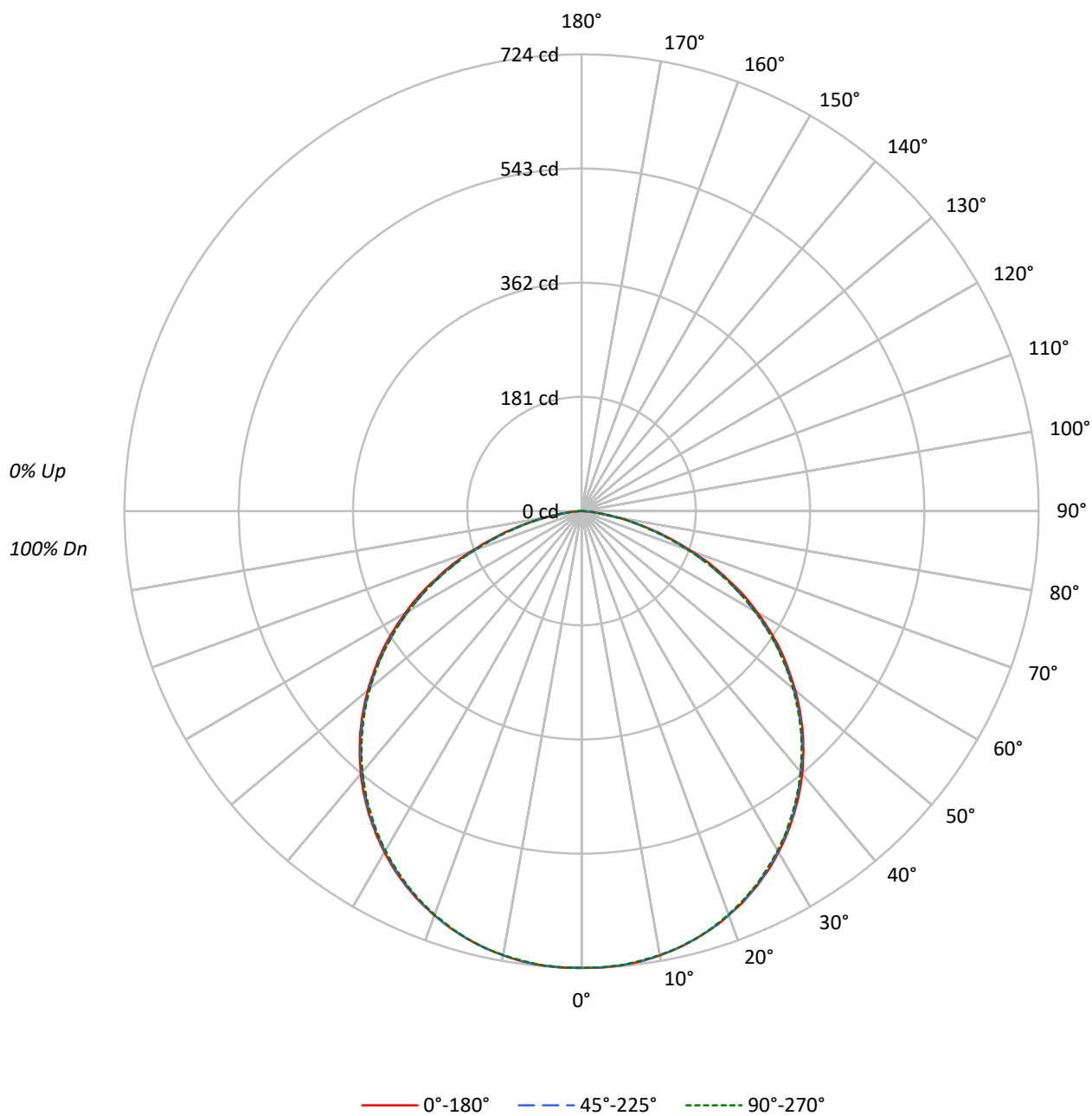
Lumens per Lamp: N/A
Luminaire Lumens: 2046.9 lumens
Efficiency: N/A
Efficacy: 137.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.39
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	974	974	974
5°	976	976	976
10°	977	977	976
15°	977	977	977
20°	976	976	975
25°	974	973	971
30°	970	967	965
35°	964	961	958
40°	955	949	948
45°	943	938	934
50°	925	918	915
55°	903	891	889
60°	866	850	850
65°	810	791	793
70°	729	707	704
75°	612	587	585
80°	447	425	443
85°	253	233	236

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 943 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.7	3.4
10°-20°	198.0	9.7
20°-30°	301.9	14.8
30°-40°	365.8	17.9
40°-50°	380.0	18.6
50°-60°	339.9	16.6
60°-70°	247.8	12.1
70°-80°	122.7	6.0
80°-90°	21.9	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°	568.7	27.8
0°-40°	934.6	45.7
0°-60°	1654.5	80.8
0°-90°	2046.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2046.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	724	724	724	724	724	
5°	723	723	723	723	722	69
15°	702	701	701	702	701	198
25°	656	656	655	655	654	303
35°	587	586	585	584	583	367
45°	496	494	493	492	491	382
55°	385	382	380	380	379	343
65°	254	252	248	250	249	252
75°	118	116	113	115	112	126
85°	16	15	15	15	15	23
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	724.2	724.2	724.2	724.2	724.2
2.5°	724.2	724.0	724.0	724.2	723.7
5°	722.9	723.2	722.9	722.9	722.4
7.5°	720.1	719.8	719.6	719.8	719.0
10°	715.1	715.1	714.9	715.1	714.6
12.5°	709.2	709.2	709.2	709.4	709.2
15°	701.6	701.4	701.4	701.9	701.4
17.5°	692.8	692.5	692.5	692.3	691.7
20°	681.9	681.9	681.6	681.4	680.6
22.5°	670.2	669.9	669.1	669.1	668.1
25°	656.4	655.6	655.1	654.8	654.1
27.5°	641.3	640.3	639.5	639.0	638.2
30°	624.4	623.4	622.6	621.8	621.3
32.5°	606.3	605.7	604.4	604.2	603.1
35°	586.8	586.0	585.2	584.2	583.1
37.5°	566.0	565.2	563.4	562.9	562.1
40°	543.9	542.8	540.5	540.5	539.7
42.5°	520.2	519.2	517.6	516.6	516.1
45°	495.6	494.5	492.7	491.7	491.1
47.5°	469.3	468.5	466.4	465.7	464.9
50°	442.0	441.0	438.6	438.1	437.3
52.5°	413.4	412.9	409.8	409.5	408.8
55°	385.1	382.3	379.7	379.7	379.1
57.5°	353.9	351.9	348.5	348.5	348.0
60°	321.7	319.9	316.0	316.5	316.0
62.5°	290.3	286.4	282.7	284.3	283.0
65°	254.4	252.3	248.4	249.5	249.2
67.5°	221.7	217.8	214.1	216.2	215.2
70°	185.3	183.2	179.6	181.6	179.0
72.5°	151.0	149.2	145.5	147.9	145.3
75°	117.7	115.9	113.0	115.1	112.5
77.5°	86.3	85.0	82.4	84.5	85.0
80°	57.7	56.1	54.8	56.6	57.2
82.5°	33.8	32.7	32.2	32.5	33.8
85°	16.4	15.1	15.1	15.3	15.3
87.5°	4.4	3.9	4.4	4.7	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)