

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: P973925

Luminaire Tested: FLR2-22-20HE-L840-CA125

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973925
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-2)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-22-20HE-L840-CA125
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

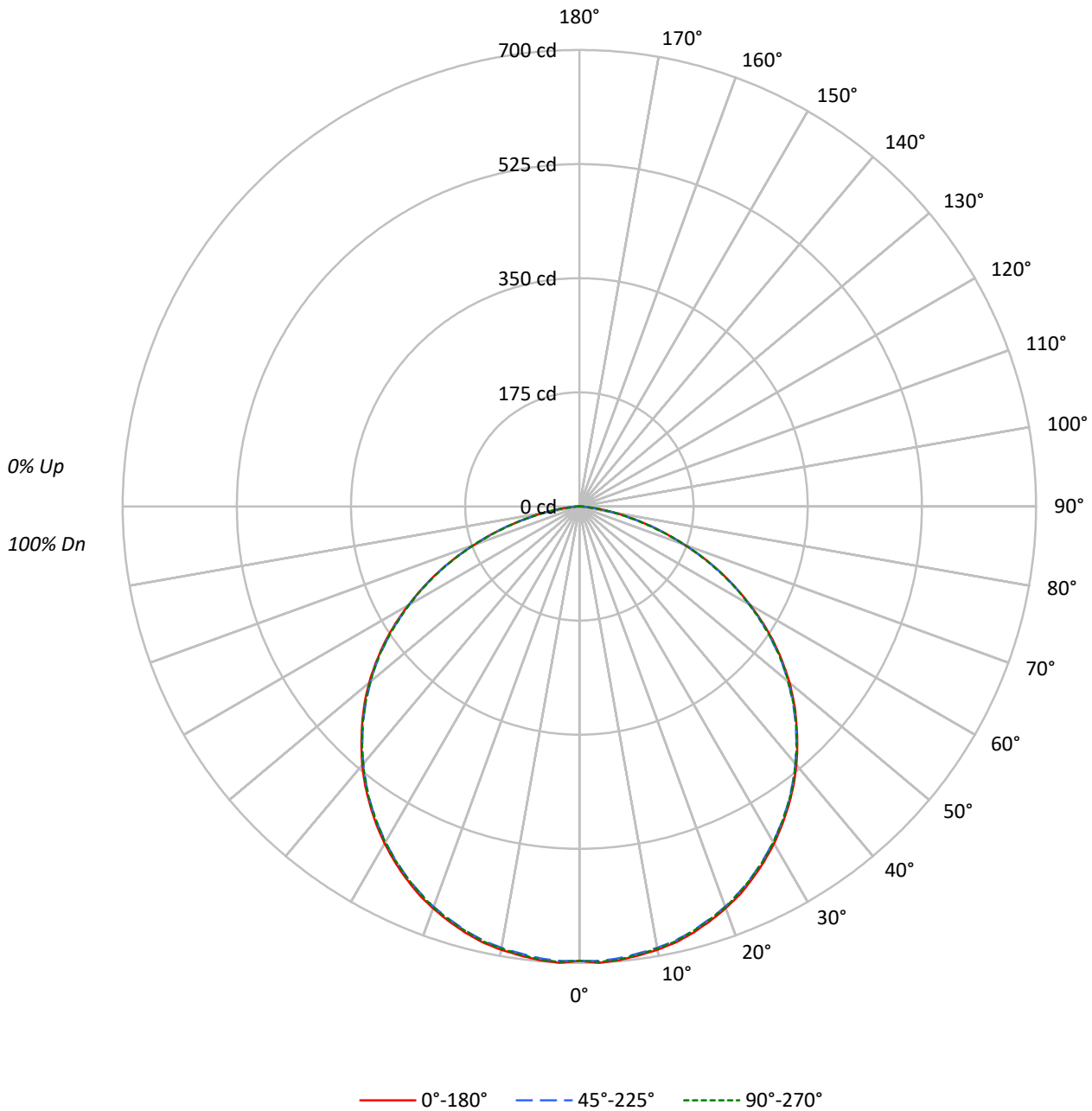
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1948.2 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 14.8
Input Voltage (V): 120
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										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	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	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85					85															
2	99	91	85	79	97	90	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	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51					51															
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44					44															
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39					39															
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34					34															
8	61	47	39	33	59	47	39	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	40	34	29	27					27															
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25					25															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1875	1875	1875
5°	1887	1878	1884
10°	1886	1878	1881
15°	1884	1876	1879
20°	1878	1871	1873
25°	1868	1860	1861
30°	1854	1846	1848
35°	1838	1830	1832
40°	1818	1809	1811
45°	1791	1783	1787
50°	1760	1747	1751
55°	1710	1696	1702
60°	1626	1619	1619
65°	1518	1515	1510
70°	1344	1351	1348
75°	1132	1123	1114
80°	814	800	793
85°	426	426	411

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1791 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	3.4
10°-20°	189.7	9.7
20°-30°	288.3	14.8
30°-40°	348.5	17.9
40°-50°	361.7	18.6
50°-60°	323.3	16.6
60°-70°	235.1	12.1
70°-80°	115.6	5.9
80°-90°	20.0	1.0
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°	544.0	27.9
0°-40°	892.4	45.8
0°-60°	1577.4	81.0
0°-90°	1948.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1948.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	697	697	697	697	697	
5°	698	690	695	693	698	66
15°	676	669	673	672	674	191
25°	629	622	626	625	627	290
35°	559	556	557	558	558	350
45°	471	469	469	470	470	363
55°	364	362	361	362	363	325
65°	238	239	238	238	237	235
75°	109	110	108	108	107	116
85°	14	14	14	14	13	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	696.7	696.7	696.7	696.7	696.7
2.5°	700.5	692.3	697.5	694.5	699.2
5°	698.4	690.2	695.4	692.8	697.5
7.5°	694.5	686.3	691.5	688.9	692.8
10°	690.2	681.6	687.2	684.6	688.5
12.5°	684.6	676.4	681.6	679.4	682.9
15°	676.4	668.7	673.4	671.7	674.3
17.5°	666.5	658.8	663.5	662.2	664.4
20°	655.8	648.5	653.2	651.9	654.1
22.5°	643.7	636.0	640.3	639.4	641.1
25°	629.1	622.2	626.5	625.2	626.9
27.5°	613.6	607.1	610.6	610.6	611.5
30°	596.8	590.8	594.2	594.2	594.7
32.5°	578.7	574.0	576.2	576.6	576.6
35°	559.4	555.5	557.2	557.7	557.7
37.5°	539.2	535.3	536.6	537.4	537.4
40°	517.6	514.2	515.1	515.9	515.5
42.5°	494.4	491.8	492.3	493.1	493.1
45°	470.7	468.6	468.6	469.5	469.5
47.5°	446.6	444.5	443.6	444.5	444.5
50°	420.4	418.2	417.4	418.2	418.2
52.5°	392.9	390.7	390.7	390.7	391.1
55°	364.5	362.3	361.4	362.3	362.7
57.5°	334.3	333.5	332.2	332.6	331.3
60°	302.1	302.1	300.8	301.6	300.8
62.5°	270.7	271.5	270.2	270.2	269.4
65°	238.4	239.2	238.0	238.0	237.1
67.5°	205.3	206.5	204.8	204.8	204.0
70°	170.8	173.4	171.7	172.1	171.3
72.5°	139.8	141.1	139.4	139.4	138.6
75°	108.9	109.7	108.0	108.4	107.1
77.5°	78.3	79.6	77.9	78.3	77.9
80°	52.5	52.9	51.6	52.1	51.2
82.5°	30.6	31.0	30.6	30.1	29.7
85°	13.8	14.2	13.8	13.8	13.3
87.5°	3.4	3.4	3.4	3.4	3.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)