

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: P973629

Luminaire Tested: FLR2-22-20-L840-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973629
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: FLR2-22-20-L840-CA080
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

Summary

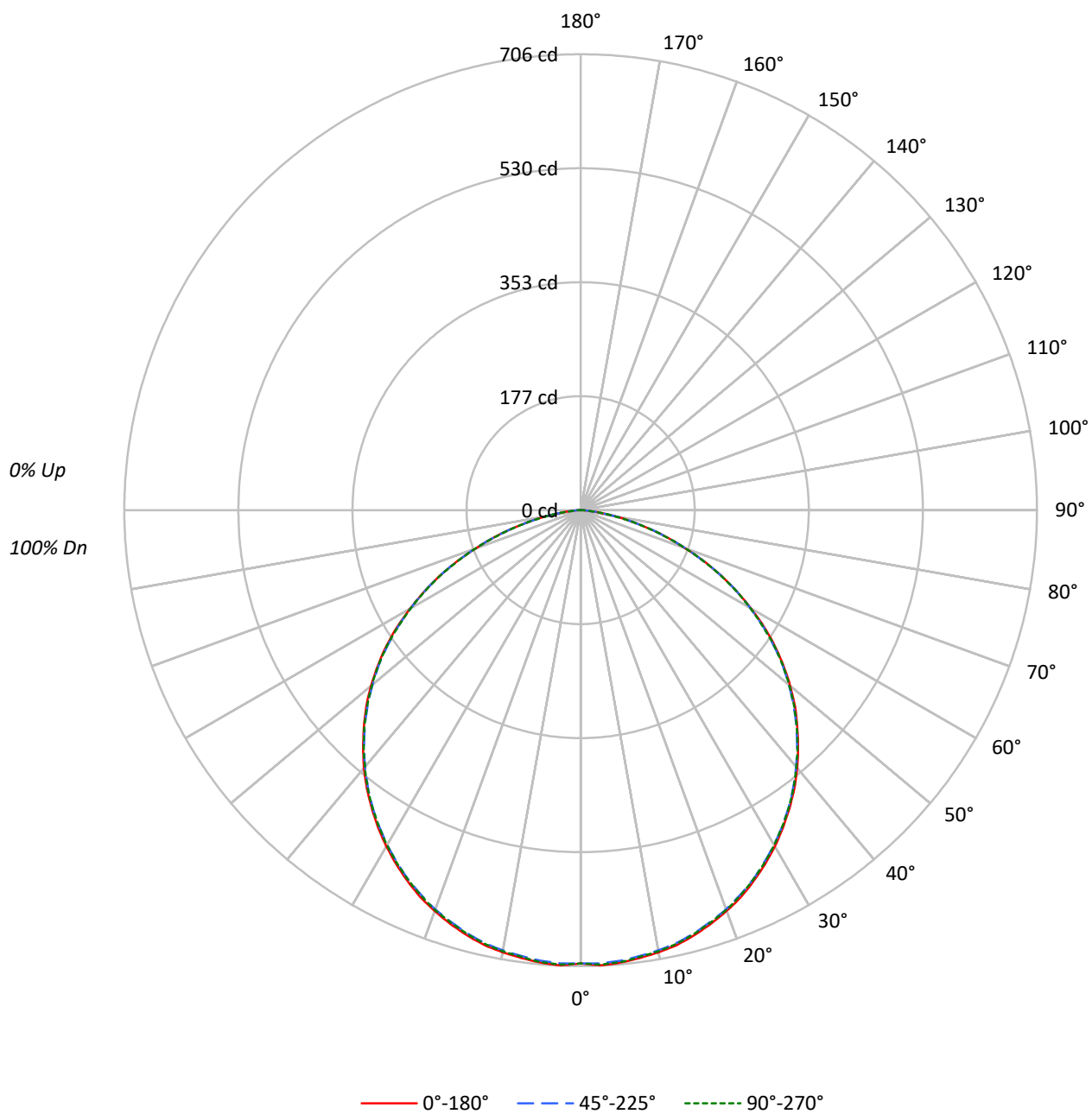
Lumens per Lamp: N/A
Luminaire Lumens: 1962.3 lumens
Efficiency: N/A
Efficacy: 130.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.38
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 15.1
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					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	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°	1888	1888	1888
5°	1900	1892	1898
10°	1900	1891	1895
15°	1898	1890	1892
20°	1891	1884	1887
25°	1882	1874	1875
30°	1868	1860	1861
35°	1851	1844	1845
40°	1832	1822	1824
45°	1805	1796	1800
50°	1773	1760	1764
55°	1722	1708	1714
60°	1638	1631	1631
65°	1529	1526	1521
70°	1354	1360	1357
75°	1141	1131	1122
80°	820	806	800
85°	429	429	414

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1805 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.4	3.4
10°-20°	191.1	9.7
20°-30°	290.4	14.8
30°-40°	351.0	17.9
40°-50°	364.3	18.6
50°-60°	325.7	16.6
60°-70°	236.8	12.1
70°-80°	116.4	5.9
80°-90°	20.2	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°	547.9	27.9
0°-40°	898.9	45.8
0°-60°	1588.9	81.0
0°-90°	1962.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1962.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	703	695	700	698	703	67
15°	681	674	678	677	679	192
25°	634	627	631	630	632	292
35°	563	560	561	562	562	352
45°	474	472	472	473	473	366
55°	367	365	364	365	365	327
65°	240	241	240	240	239	237
75°	110	110	109	109	108	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°	701.7	701.7	701.7	701.7	701.7
2.5°	705.6	697.4	702.6	699.5	704.3
5°	703.4	695.2	700.4	697.8	702.6
7.5°	699.5	691.3	696.5	693.9	697.8
10°	695.2	686.5	692.2	689.6	693.5
12.5°	689.6	681.3	686.5	684.4	687.8
15°	681.3	673.5	678.3	676.6	679.2
17.5°	671.4	663.6	668.3	667.0	669.2
20°	660.5	653.2	657.9	656.6	658.8
22.5°	648.4	640.6	644.9	644.1	645.8
25°	633.7	626.7	631.1	629.8	631.5
27.5°	618.0	611.5	615.0	615.0	615.9
30°	601.1	595.1	598.5	598.5	599.0
32.5°	582.9	578.2	580.3	580.8	580.8
35°	563.4	559.5	561.3	561.7	561.7
37.5°	543.1	539.2	540.5	541.3	541.3
40°	521.4	517.9	518.8	519.7	519.2
42.5°	498.0	495.4	495.8	496.7	496.7
45°	474.2	472.0	472.0	472.9	472.9
47.5°	449.9	447.7	446.8	447.7	447.7
50°	423.4	421.3	420.4	421.3	421.3
52.5°	395.7	393.5	393.5	393.5	394.0
55°	367.1	364.9	364.1	364.9	365.4
57.5°	336.8	335.9	334.6	335.0	333.7
60°	304.3	304.3	303.0	303.8	303.0
62.5°	272.6	273.5	272.2	272.2	271.3
65°	240.1	241.0	239.7	239.7	238.8
67.5°	206.7	208.0	206.3	206.3	205.4
70°	172.1	174.7	172.9	173.4	172.5
72.5°	140.9	142.2	140.4	140.4	139.6
75°	109.7	110.5	108.8	109.2	107.9
77.5°	78.9	80.2	78.4	78.9	78.4
80°	52.9	53.3	52.0	52.4	51.6
82.5°	30.8	31.2	30.8	30.3	29.9
85°	13.9	14.3	13.9	13.9	13.4
87.5°	3.5	3.5	3.5	3.5	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)