

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: P973649

Luminaire Tested: FLR2-22-20-L940-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973649
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-L940-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

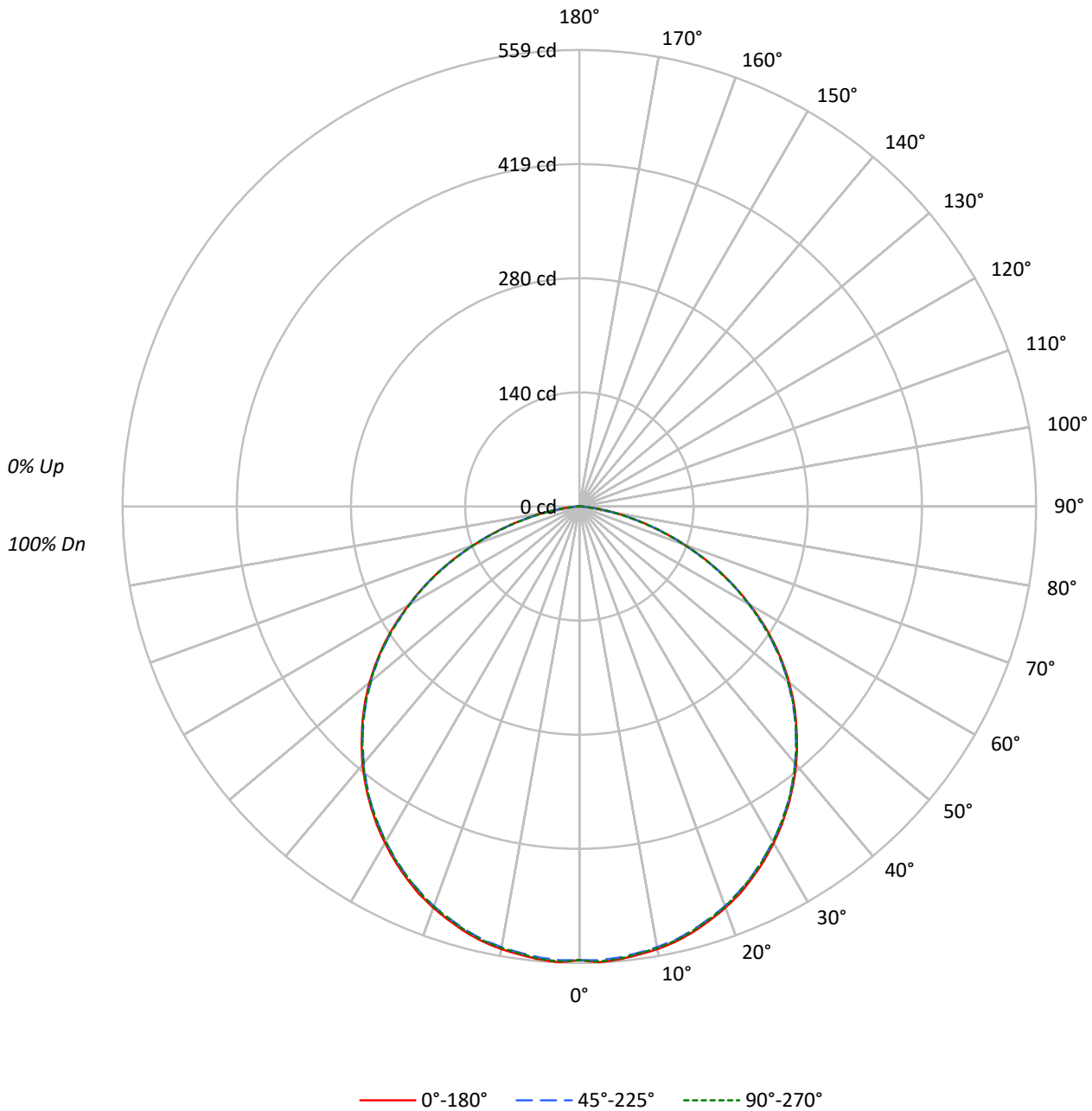
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1553.5 lumens
Efficiency: N/A
Efficacy: 102.9 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				10	0
RW	70	50	30	10	70	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
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	32	43	37	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1495	1495	1495
5°	1504	1498	1502
10°	1504	1497	1500
15°	1503	1496	1498
20°	1497	1492	1494
25°	1490	1483	1484
30°	1479	1473	1473
35°	1465	1460	1461
40°	1450	1443	1444
45°	1429	1422	1425
50°	1403	1393	1396
55°	1363	1352	1357
60°	1297	1291	1291
65°	1210	1209	1204
70°	1072	1077	1075
75°	902	895	888
80°	649	638	632
85°	340	340	327

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1429 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.6	3.4
10°-20°	151.3	9.7
20°-30°	229.9	14.8
30°-40°	277.9	17.9
40°-50°	288.4	18.6
50°-60°	257.8	16.6
60°-70°	187.5	12.1
70°-80°	92.2	5.9
80°-90°	16.0	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°	433.8	27.9
0°-40°	711.6	45.8
0°-60°	1257.9	81.0
0°-90°	1553.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1553.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	556	556	556	556	556	
5°	557	550	554	552	556	53
15°	539	533	537	536	538	152
25°	502	496	500	499	500	231
35°	446	443	444	445	445	279
45°	375	374	374	374	374	290
55°	291	289	288	289	289	259
65°	190	191	190	190	189	187
75°	87	88	86	86	85	92
85°	11	11	11	11	11	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	555.5	555.5	555.5	555.5	555.5
2.5°	558.6	552.1	556.2	553.8	557.6
5°	556.9	550.4	554.5	552.4	556.2
7.5°	553.8	547.3	551.4	549.3	552.4
10°	550.4	543.5	548.0	545.9	549.0
12.5°	545.9	539.4	543.5	541.8	544.5
15°	539.4	533.2	537.0	535.6	537.7
17.5°	531.5	525.3	529.1	528.1	529.8
20°	522.9	517.1	520.9	519.8	521.6
22.5°	513.3	507.1	510.6	509.9	511.3
25°	501.7	496.2	499.6	498.6	499.9
27.5°	489.3	484.2	486.9	486.9	487.6
30°	475.9	471.1	473.9	473.9	474.2
32.5°	461.5	457.7	459.4	459.8	459.8
35°	446.1	443.0	444.4	444.7	444.7
37.5°	429.9	426.9	427.9	428.6	428.6
40°	412.8	410.0	410.7	411.4	411.1
42.5°	394.3	392.2	392.5	393.2	393.2
45°	375.4	373.7	373.7	374.4	374.4
47.5°	356.2	354.5	353.8	354.5	354.5
50°	335.2	333.5	332.8	333.5	333.5
52.5°	313.3	311.6	311.6	311.6	311.9
55°	290.6	288.9	288.2	288.9	289.3
57.5°	266.6	265.9	264.9	265.2	264.2
60°	240.9	240.9	239.8	240.5	239.8
62.5°	215.8	216.5	215.5	215.5	214.8
65°	190.1	190.8	189.8	189.8	189.1
67.5°	163.7	164.7	163.3	163.3	162.6
70°	136.2	138.3	136.9	137.3	136.6
72.5°	111.5	112.5	111.2	111.2	110.5
75°	86.8	87.5	86.1	86.5	85.4
77.5°	62.4	63.5	62.1	62.4	62.1
80°	41.9	42.2	41.2	41.5	40.8
82.5°	24.4	24.7	24.4	24.0	23.7
85°	11.0	11.3	11.0	11.0	10.6
87.5°	2.7	2.7	2.7	2.7	2.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)