

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: P973949

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

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973949
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-L940-CP250
Description: SHAPER SENSE CIRCLE

Light Source:
Ballast/Driver: -

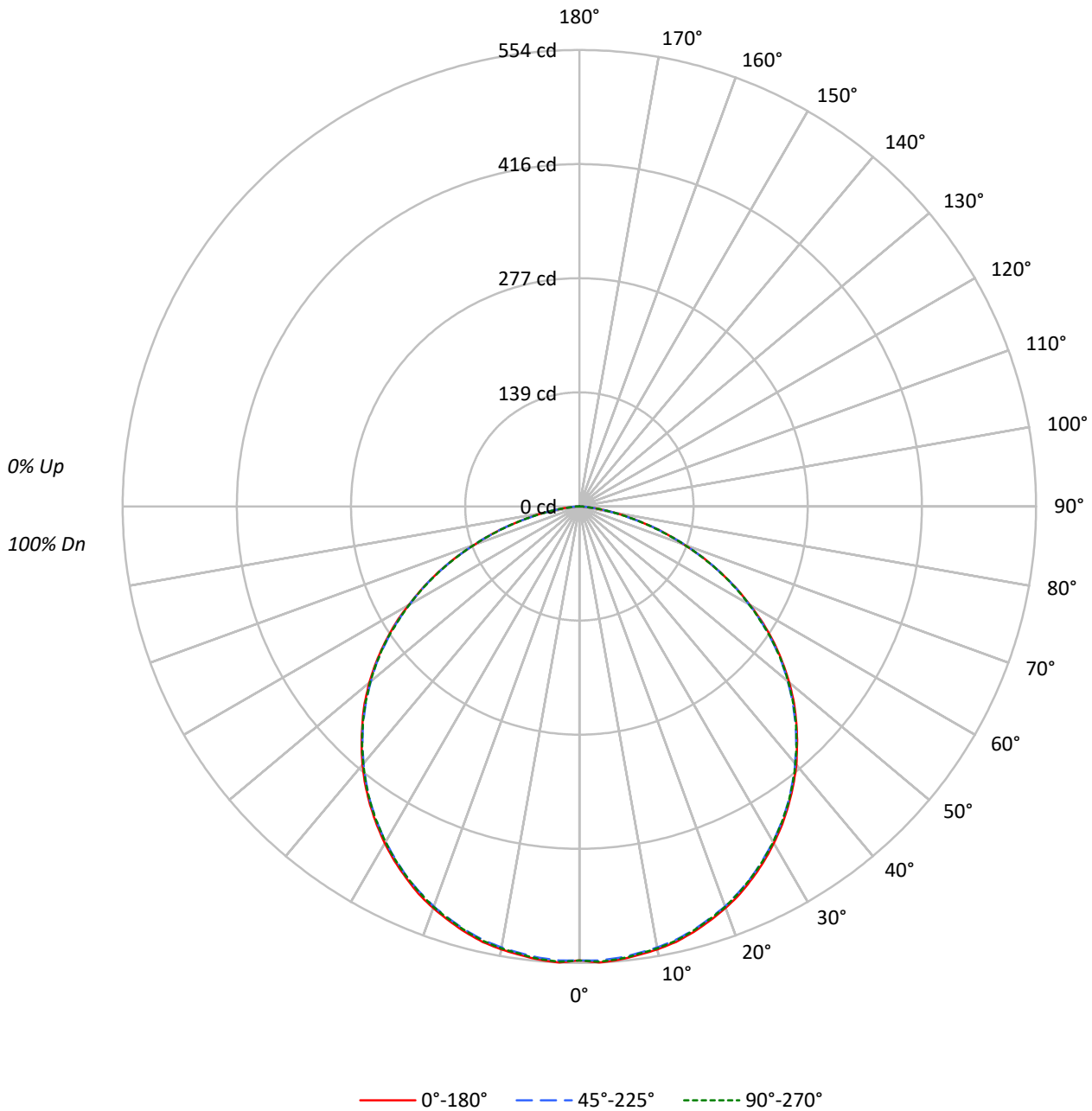
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1540.7 lumens
Efficiency: N/A
Efficacy: 104.1 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

TEST NUMBER: P973949
CATALOG NUMBER: FLR2-22-20HE-L940-CP250

Luminous Intensity Polar Plot





TEST NUMBER: P973949
 CATALOG NUMBER: FLR2-22-20HE-L940-CP250

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°	1482	1482	1482
5°	1492	1485	1490
10°	1491	1485	1488
15°	1490	1484	1485
20°	1485	1479	1481
25°	1477	1471	1472
30°	1467	1460	1461
35°	1453	1448	1449
40°	1438	1431	1432
45°	1417	1410	1413
50°	1392	1382	1385
55°	1352	1341	1346
60°	1286	1280	1280
65°	1200	1198	1194
70°	1063	1068	1065
75°	895	888	881
80°	643	632	628
85°	337	337	324

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1417 cd/sqm



TEST NUMBER: P973949
 CATALOG NUMBER: FLR2-22-20HE-L940-CP250

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.2	3.4
10°-20°	150.0	9.7
20°-30°	228.0	14.8
30°-40°	275.6	17.9
40°-50°	286.0	18.6
50°-60°	255.7	16.6
60°-70°	185.9	12.1
70°-80°	91.4	5.9
80°-90°	15.9	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°	430.2	27.9
0°-40°	705.8	45.8
0°-60°	1247.5	81.0
0°-90°	1540.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1540.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	551	551	551	551	551	
5°	552	546	550	548	552	52
15°	535	529	533	531	533	151
25°	498	492	496	494	496	229
35°	442	439	441	441	441	277
45°	372	371	371	371	371	287
55°	288	286	286	286	287	257
65°	188	189	188	188	188	186
75°	86	87	85	86	85	91
85°	11	11	11	11	10	16
90°	0	0	0	0	0	



TEST NUMBER: P973949
 CATALOG NUMBER: FLR2-22-20HE-L940-CP250

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	550.9	550.9	550.9	550.9	550.9
2.5°	554.0	547.5	551.6	549.2	553.0
5°	552.3	545.8	549.9	547.9	551.6
7.5°	549.2	542.8	546.9	544.8	547.9
10°	545.8	539.0	543.5	541.4	544.5
12.5°	541.4	534.9	539.0	537.3	540.0
15°	534.9	528.8	532.6	531.2	533.2
17.5°	527.1	521.0	524.7	523.7	525.4
20°	518.6	512.8	516.6	515.5	517.2
22.5°	509.1	503.0	506.4	505.7	507.0
25°	497.5	492.1	495.5	494.4	495.8
27.5°	485.3	480.2	482.9	482.9	483.6
30°	472.0	467.2	469.9	469.9	470.3
32.5°	457.7	454.0	455.7	456.0	456.0
35°	442.4	439.3	440.7	441.0	441.0
37.5°	426.4	423.3	424.3	425.0	425.0
40°	409.4	406.7	407.3	408.0	407.7
42.5°	391.0	389.0	389.3	390.0	390.0
45°	372.3	370.6	370.6	371.3	371.3
47.5°	353.2	351.5	350.8	351.5	351.5
50°	332.5	330.8	330.1	330.8	330.8
52.5°	310.7	309.0	309.0	309.0	309.3
55°	288.2	286.5	285.8	286.5	286.9
57.5°	264.4	263.7	262.7	263.0	262.0
60°	238.9	238.9	237.9	238.5	237.9
62.5°	214.0	214.7	213.7	213.7	213.0
65°	188.5	189.2	188.2	188.2	187.5
67.5°	162.3	163.3	162.0	162.0	161.3
70°	135.1	137.1	135.8	136.1	135.4
72.5°	110.6	111.6	110.3	110.3	109.6
75°	86.1	86.8	85.4	85.8	84.7
77.5°	61.9	63.0	61.6	61.9	61.6
80°	41.5	41.9	40.8	41.2	40.5
82.5°	24.2	24.5	24.2	23.8	23.5
85°	10.9	11.2	10.9	10.9	10.5
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)