

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: P973309

Luminaire Tested: FLR2-14-20HE-L950-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973309
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-14-20HE-L950-CP250
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 5000CCT & 90 CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

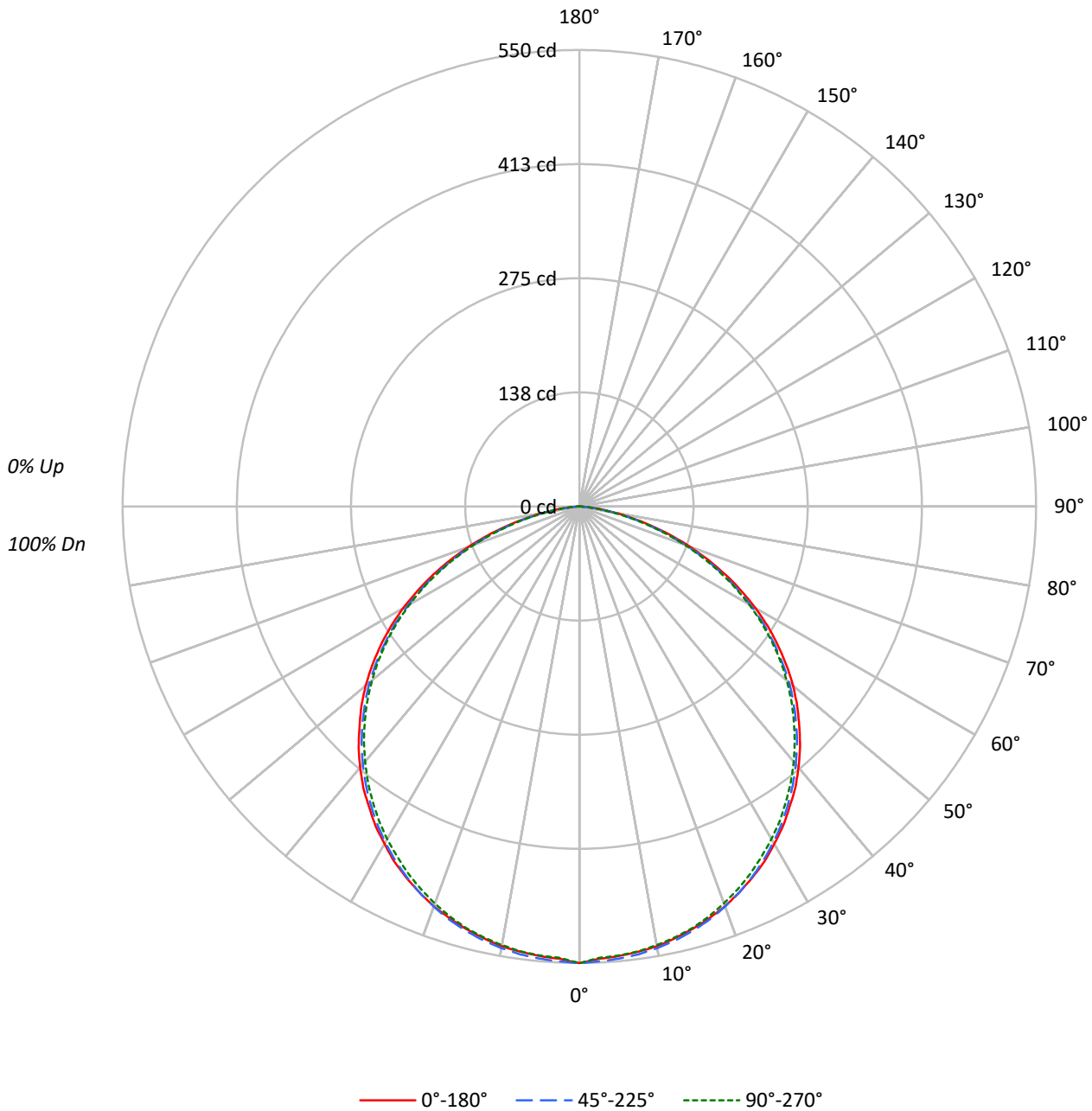
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1540.0 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 1' x L: 4' 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				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	62	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	70	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	49	42	37	48	41	36	47	41	36	34
8	61	47	39	33	59	47	38	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	39	32	27	38	32	27	38	31	27	37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1481	1481	1481
5°	1469	1478	1467
10°	1471	1477	1466
15°	1468	1474	1465
20°	1468	1469	1458
25°	1465	1462	1448
30°	1459	1452	1438
35°	1451	1440	1425
40°	1442	1425	1410
45°	1425	1405	1390
50°	1406	1381	1364
55°	1371	1339	1326
60°	1318	1281	1270
65°	1234	1198	1185
70°	1113	1068	1059
75°	933	886	876
80°	677	632	614
85°	358	315	287

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1425 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.1	3.4
10°-20°	149.7	9.7
20°-30°	227.4	14.8
30°-40°	275.1	17.9
40°-50°	285.9	18.6
50°-60°	255.9	16.6
60°-70°	186.7	12.1
70°-80°	91.9	6.0
80°-90°	15.4	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°	429.2	27.9
0°-40°	704.2	45.7
0°-60°	1246.0	80.9
0°-90°	1540.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1540.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	550	550	550	550	550	
5°	544	550	547	552	543	52
15°	527	532	529	534	526	149
25°	493	496	492	495	488	227
35°	442	442	438	440	434	277
45°	374	374	369	370	365	289
55°	292	290	285	285	283	261
65°	194	192	188	187	186	191
75°	90	88	85	84	84	96
85°	12	11	10	9	9	17
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	550.2	550.2	550.2	550.2	550.2
2.5°	545.5	551.6	548.6	554.1	544.3
5°	543.9	549.8	547.0	552.3	543.2
7.5°	541.1	547.3	544.3	549.3	540.7
10°	538.2	543.6	540.4	545.5	536.6
12.5°	532.9	538.4	535.4	540.0	531.8
15°	527.0	531.8	529.1	533.6	525.9
17.5°	520.2	524.7	521.8	525.9	518.1
20°	512.7	516.3	513.1	516.5	509.0
22.5°	503.3	506.7	503.3	505.6	499.0
25°	493.3	495.8	492.4	494.7	487.8
27.5°	482.6	484.0	480.5	482.4	475.3
30°	469.4	471.0	467.3	469.6	462.8
32.5°	456.6	457.5	453.4	455.3	449.1
35°	441.6	442.5	438.2	440.0	433.9
37.5°	427.3	427.0	422.5	423.6	418.4
40°	410.6	410.4	405.6	406.5	401.5
42.5°	393.5	392.6	388.1	388.5	384.0
45°	374.4	374.0	369.2	369.9	365.3
47.5°	356.0	354.6	349.8	350.0	346.2
50°	335.9	333.9	329.8	329.3	325.9
52.5°	314.5	312.2	307.7	307.2	304.7
55°	292.2	289.7	285.4	284.7	282.6
57.5°	269.2	266.0	262.6	261.2	259.6
60°	244.8	241.9	238.0	236.6	235.9
62.5°	219.5	216.6	213.6	212.3	211.3
65°	193.8	191.5	188.1	186.8	186.1
67.5°	167.6	165.6	162.4	160.8	160.6
70°	141.4	139.4	135.7	134.8	134.6
72.5°	115.2	113.4	110.0	109.1	109.1
75°	89.7	88.1	85.2	84.3	84.3
77.5°	65.6	64.2	61.9	60.8	60.8
80°	43.7	42.8	40.8	39.9	39.6
82.5°	25.3	24.8	23.0	22.1	22.5
85°	11.6	11.2	10.2	9.1	9.3
87.5°	3.0	2.7	2.0	1.6	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)