

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: P973244

Luminaire Tested: FLR2-14-20HE-L940-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973244
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-L940-CP375
Description: 1*4 FLR-2.0 2000 Lumen High Efficacy at 4000CCT & 90 CRI with Clear Polycarbonate (0.375" thickness)

Light Source:
Ballast/Driver: -

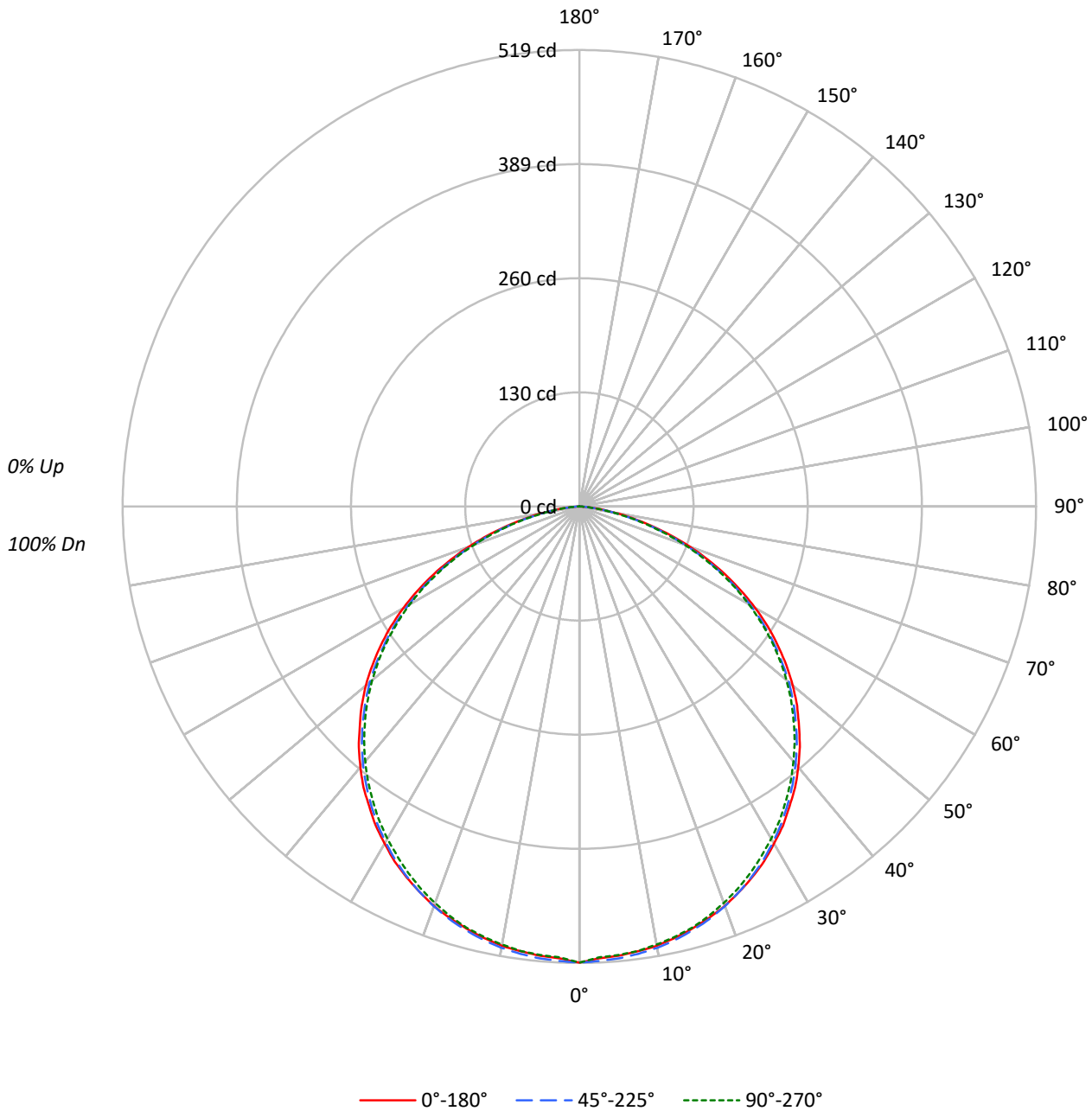
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1451.7 lumens
Efficiency: N/A
Efficacy: 98.1 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										
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	62	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	70	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	49	42	37	48	41	36	47	41	36	34					34															
8	61	47	39	33	59	47	38	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	39	32	27	38	32	27	38	31	27	37	31	26	25					25															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1396	1396	1396
5°	1385	1393	1383
10°	1386	1392	1382
15°	1384	1389	1381
20°	1384	1385	1374
25°	1381	1378	1366
30°	1375	1369	1355
35°	1368	1357	1344
40°	1360	1343	1330
45°	1343	1324	1311
50°	1326	1302	1286
55°	1292	1262	1250
60°	1242	1208	1197
65°	1163	1129	1117
70°	1049	1007	998
75°	880	835	826
80°	638	595	580
85°	337	299	272

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1343 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.1	3.4
10°-20°	141.1	9.7
20°-30°	214.4	14.8
30°-40°	259.3	17.9
40°-50°	269.5	18.6
50°-60°	241.3	16.6
60°-70°	176.0	12.1
70°-80°	86.6	6.0
80°-90°	14.5	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°	404.6	27.9
0°-40°	663.9	45.7
0°-60°	1174.6	80.9
0°-90°	1451.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1451.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	519	519	519	519	519	
5°	513	518	516	521	512	49
15°	497	501	499	503	496	140
25°	465	467	464	466	460	214
35°	416	417	413	415	409	261
45°	353	352	348	349	344	273
55°	275	273	269	268	266	246
65°	183	181	177	176	175	180
75°	85	83	80	79	79	90
85°	11	10	10	9	9	16
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	518.7	518.7	518.7	518.7	518.7
2.5°	514.2	520.0	517.2	522.3	513.1
5°	512.7	518.3	515.7	520.6	512.0
7.5°	510.1	515.9	513.1	517.8	509.7
10°	507.3	512.5	509.5	514.2	505.8
12.5°	502.4	507.5	504.7	509.0	501.3
15°	496.8	501.3	498.7	503.0	495.7
17.5°	490.4	494.6	491.9	495.7	488.4
20°	483.3	486.7	483.7	486.9	479.8
22.5°	474.5	477.7	474.5	476.6	470.4
25°	465.0	467.4	464.2	466.3	459.9
27.5°	454.9	456.2	453.0	454.7	448.1
30°	442.5	444.0	440.5	442.7	436.2
32.5°	430.5	431.3	427.4	429.2	423.4
35°	416.3	417.1	413.1	414.8	409.0
37.5°	402.8	402.5	398.2	399.3	394.4
40°	387.1	386.9	382.4	383.2	378.5
42.5°	371.0	370.1	365.8	366.3	362.0
45°	352.9	352.5	348.0	348.7	344.4
47.5°	335.6	334.3	329.8	330.0	326.3
50°	316.7	314.7	310.9	310.4	307.2
52.5°	296.5	294.3	290.0	289.6	287.3
55°	275.4	273.1	269.0	268.4	266.4
57.5°	253.8	250.8	247.5	246.2	244.7
60°	230.8	228.0	224.4	223.1	222.4
62.5°	207.0	204.2	201.4	200.1	199.2
65°	182.7	180.6	177.3	176.0	175.4
67.5°	158.0	156.1	153.1	151.6	151.4
70°	133.3	131.4	128.0	127.1	126.9
72.5°	108.6	106.9	103.7	102.8	102.8
75°	84.6	83.1	80.3	79.4	79.4
77.5°	61.8	60.5	58.4	57.3	57.3
80°	41.2	40.4	38.4	37.6	37.4
82.5°	23.8	23.4	21.7	20.8	21.3
85°	10.9	10.5	9.7	8.6	8.8
87.5°	2.8	2.6	1.9	1.5	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)