

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: P973229

Luminaire Tested: FLR2-14-20HE-L940-CP125

Issue Date: 3/13/2025

**Test Information**

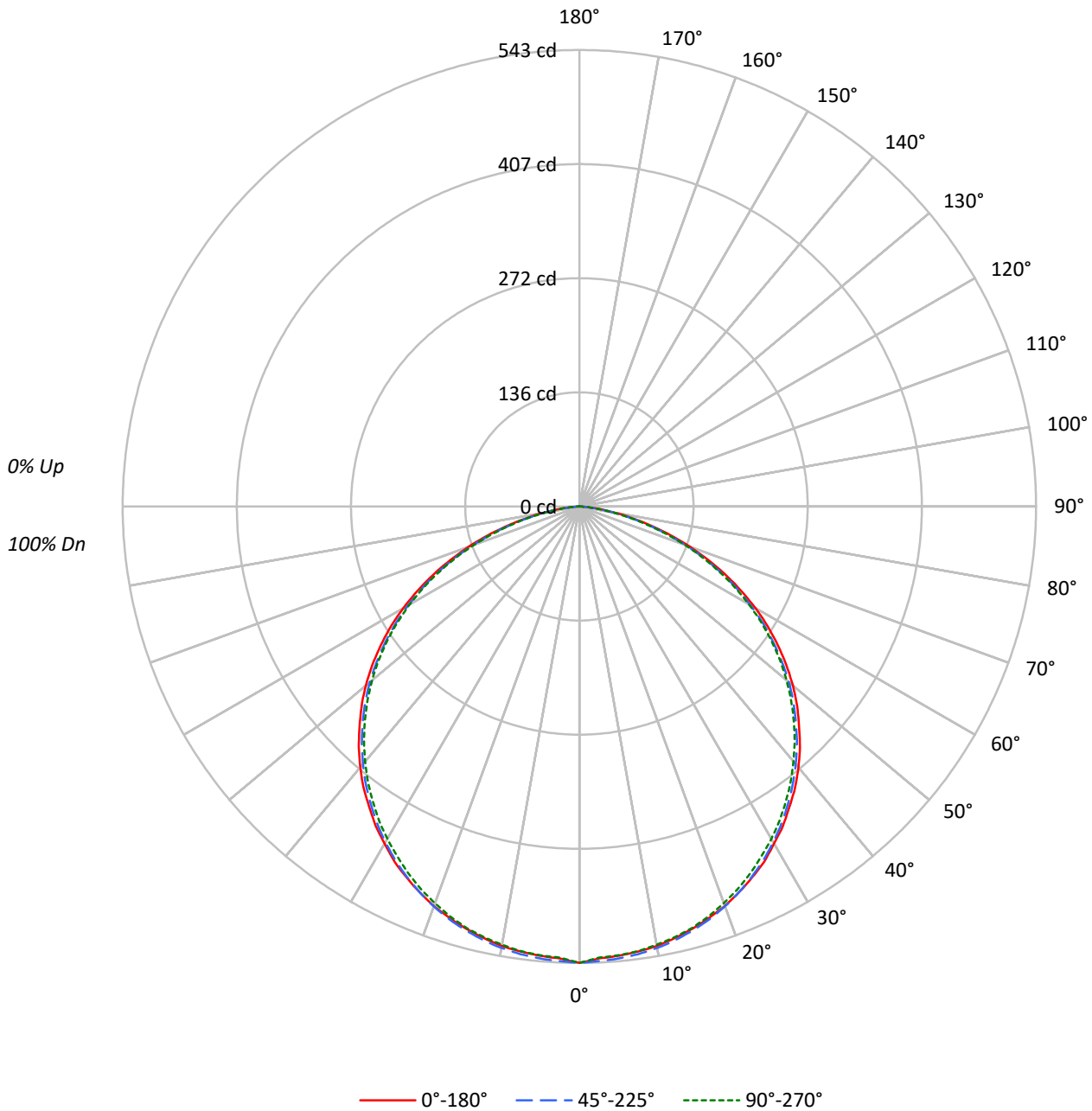
Test Method: LM-79-2019  
Report Number: P973229  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/13/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: FAIL-SAFE  
Catalog Number: FLR2-14-20HE-L940-CP125  
Description: 1\*4 FLR-2.0 2000 Lumen High Efficacy at 4000CCT & 90 CRI with Clear Polycarbonate (0.125" thickness)  
  
Light Source:  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1519.5 lumens  
Efficiency: N/A  
Efficacy: 102.7 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									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	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°	1461	1461	1461
5°	1449	1458	1448
10°	1451	1457	1447
15°	1449	1454	1446
20°	1448	1450	1438
25°	1445	1442	1429
30°	1439	1433	1419
35°	1431	1420	1406
40°	1423	1406	1392
45°	1406	1386	1372
50°	1388	1362	1346
55°	1353	1321	1308
60°	1300	1264	1253
65°	1217	1182	1169
70°	1098	1054	1045
75°	920	873	864
80°	668	623	606
85°	355	312	284

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 1406 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.4	3.4
10°-20°	147.7	9.7
20°-30°	224.4	14.8
30°-40°	271.4	17.9
40°-50°	282.1	18.6
50°-60°	252.5	16.6
60°-70°	184.2	12.1
70°-80°	90.7	6.0
80°-90°	15.2	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°	423.5	27.9
0°-40°	694.9	45.7
0°-60°	1229.5	80.9
0°-90°	1519.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1519.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	543	543	543	543	543	
5°	537	542	540	545	536	51
15°	520	525	522	526	519	147
25°	487	489	486	488	481	224
35°	436	437	432	434	428	273
45°	369	369	364	365	360	285
55°	288	286	282	281	279	257
65°	191	189	186	184	184	189
75°	88	87	84	83	83	94
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°	542.9	542.9	542.9	542.9	542.9
2.5°	538.2	544.3	541.3	546.7	537.1
5°	536.6	542.5	539.8	544.9	536.0
7.5°	533.9	540.0	537.1	542.0	533.5
10°	531.0	536.4	533.3	538.2	529.4
12.5°	525.8	531.2	528.3	532.8	524.7
15°	520.0	524.7	522.0	526.5	518.9
17.5°	513.3	517.8	514.8	518.9	511.2
20°	505.8	509.4	506.3	509.7	502.2
22.5°	496.6	500.0	496.6	498.9	492.4
25°	486.7	489.2	485.8	488.1	481.3
27.5°	476.2	477.5	474.2	476.0	469.0
30°	463.1	464.7	461.1	463.4	456.6
32.5°	450.6	451.5	447.4	449.2	443.1
35°	435.7	436.6	432.4	434.2	428.1
37.5°	421.6	421.3	416.9	418.0	412.8
40°	405.2	404.9	400.2	401.1	396.2
42.5°	388.3	387.4	382.9	383.4	378.9
45°	369.4	369.0	364.3	364.9	360.5
47.5°	351.2	349.9	345.2	345.4	341.6
50°	331.5	329.4	325.4	324.9	321.6
52.5°	310.3	308.1	303.6	303.1	300.7
55°	288.3	285.8	281.6	280.9	278.9
57.5°	265.6	262.5	259.1	257.8	256.2
60°	241.6	238.7	234.8	233.5	232.8
62.5°	216.6	213.7	210.8	209.4	208.5
65°	191.2	189.0	185.6	184.3	183.6
67.5°	165.4	163.4	160.2	158.7	158.4
70°	139.6	137.5	133.9	133.0	132.8
72.5°	113.7	111.9	108.5	107.6	107.6
75°	88.5	87.0	84.0	83.1	83.1
77.5°	64.7	63.4	61.1	60.0	60.0
80°	43.1	42.2	40.2	39.3	39.1
82.5°	24.9	24.5	22.7	21.8	22.2
85°	11.5	11.0	10.1	9.0	9.2
87.5°	2.9	2.7	2.0	1.6	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)