

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: P973425

Luminaire Tested: FLR2-14-20-L840-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973425
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: FLR2-14-20-L840-CP375
Description: 1*4 FLR-2.0 2000 LUMEN at 4000 CCT & 80CRI with Clear Polycarbonate (0.375" thickness)

Light Source:
Ballast/Driver: -

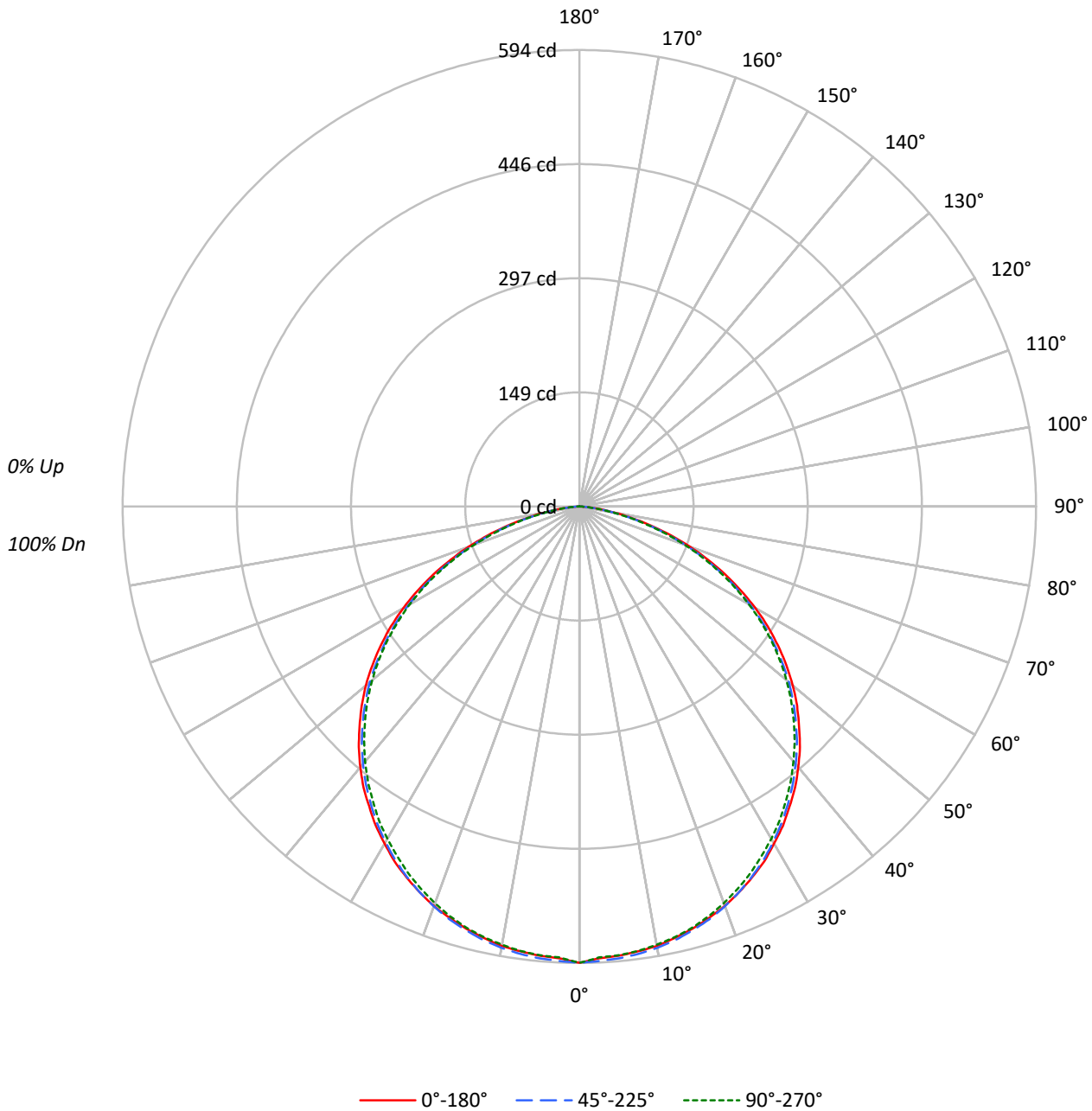
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1661.9 lumens
Efficiency: N/A
Efficacy: 101.3 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): 16.4
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: P973425
CATALOG NUMBER: FLR2-14-20-L840-CP375

Luminous Intensity Polar Plot





TEST NUMBER: P973425
 CATALOG NUMBER: FLR2-14-20-L840-CP375

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°	1598	1598	1598
5°	1585	1595	1583
10°	1587	1594	1582
15°	1584	1590	1581
20°	1584	1586	1573
25°	1581	1578	1563
30°	1574	1567	1552
35°	1566	1554	1538
40°	1557	1538	1522
45°	1538	1516	1500
50°	1518	1490	1472
55°	1479	1445	1431
60°	1422	1382	1370
65°	1332	1293	1279
70°	1201	1153	1143
75°	1006	955	945
80°	731	682	663
85°	386	343	312

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1538 cd/sqm



TEST NUMBER: P973425
 CATALOG NUMBER: FLR2-14-20-L840-CP375

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.2	3.4
10°-20°	161.5	9.7
20°-30°	245.4	14.8
30°-40°	296.8	17.9
40°-50°	308.5	18.6
50°-60°	276.2	16.6
60°-70°	201.5	12.1
70°-80°	99.2	6.0
80°-90°	16.6	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°	463.2	27.9
0°-40°	760.0	45.7
0°-60°	1344.7	80.9
0°-90°	1661.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1661.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	594	594	594	594	594	
5°	587	593	590	596	586	56
15°	569	574	571	576	568	161
25°	532	535	531	534	526	245
35°	477	478	473	475	468	298
45°	404	404	398	399	394	312
55°	315	313	308	307	305	281
65°	209	207	203	202	201	207
75°	97	95	92	91	91	103
85°	12	12	11	10	10	18
90°	0	0	0	0	0	



TEST NUMBER: P973425
 CATALOG NUMBER: FLR2-14-20-L840-CP375

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	593.8	593.8	593.8	593.8	593.8
2.5°	588.6	595.3	592.1	598.0	587.4
5°	586.9	593.3	590.4	596.0	586.2
7.5°	584.0	590.6	587.4	592.8	583.5
10°	580.8	586.7	583.2	588.6	579.1
12.5°	575.1	581.0	577.8	582.7	573.9
15°	568.7	573.9	570.9	575.9	567.5
17.5°	561.4	566.3	563.1	567.5	559.1
20°	553.2	557.2	553.7	557.4	549.3
22.5°	543.2	546.9	543.2	545.6	538.5
25°	532.4	535.1	531.4	533.8	526.5
27.5°	520.8	522.3	518.6	520.6	512.9
30°	506.5	508.3	504.3	506.8	499.4
32.5°	492.8	493.8	489.3	491.3	484.7
35°	476.6	477.5	472.9	474.8	468.2
37.5°	461.1	460.8	455.9	457.1	451.5
40°	443.1	442.9	437.7	438.7	433.3
42.5°	424.7	423.7	418.8	419.3	414.4
45°	404.1	403.6	398.4	399.1	394.2
47.5°	384.1	382.7	377.5	377.8	373.6
50°	362.5	360.3	355.9	355.4	351.7
52.5°	339.4	337.0	332.0	331.6	328.8
55°	315.3	312.6	308.0	307.2	305.0
57.5°	290.5	287.1	283.4	281.9	280.2
60°	264.2	261.0	256.8	255.4	254.6
62.5°	236.9	233.7	230.5	229.1	228.1
65°	209.2	206.7	203.0	201.5	200.8
67.5°	180.9	178.7	175.2	173.5	173.3
70°	152.6	150.4	146.5	145.5	145.3
72.5°	124.4	122.4	118.7	117.7	117.7
75°	96.8	95.1	91.9	90.9	90.9
77.5°	70.8	69.3	66.9	65.6	65.6
80°	47.2	46.2	44.0	43.0	42.8
82.5°	27.3	26.8	24.8	23.8	24.3
85°	12.5	12.0	11.1	9.8	10.1
87.5°	3.2	2.9	2.2	1.7	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)