

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: P973482

Luminaire Tested: FLR2-14-20-L950-CP187

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973482
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-L950-CP187
Description: 1*4 FLR-2.0 2000 LUMEN at 5000 CCT & 90 CRI with Clear Polycarbonate (0.187" thickness)

Light Source:
Ballast/Driver: -

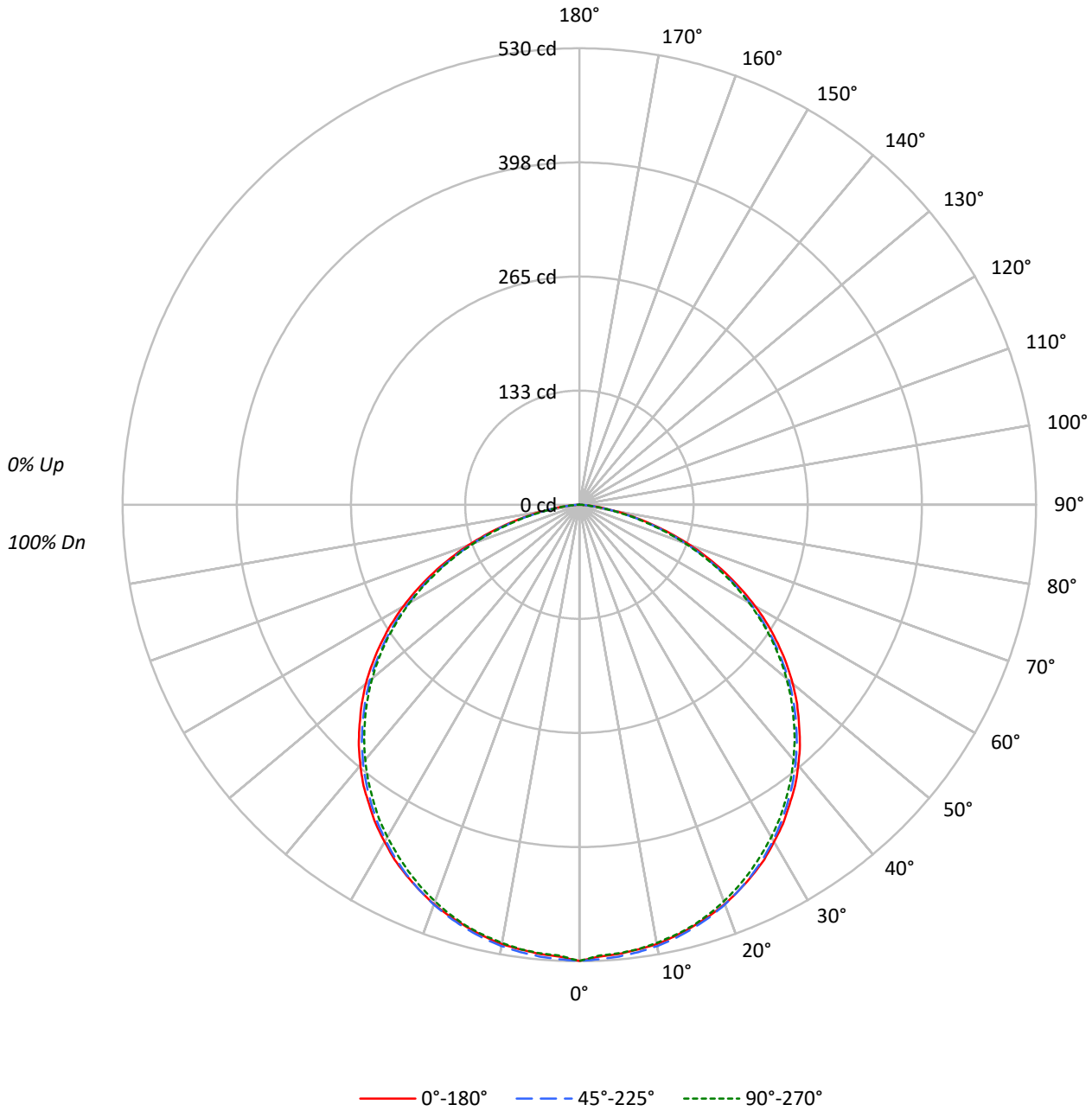
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1482.6 lumens
Efficiency: N/A
Efficacy: 90.4 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 (A_{in}): 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: P973482
CATALOG NUMBER: FLR2-14-20-L950-CP187

Luminous Intensity Polar Plot





TEST NUMBER: P973482
 CATALOG NUMBER: FLR2-14-20-L950-CP187

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°	1425	1425	1425
5°	1414	1422	1412
10°	1416	1422	1412
15°	1413	1419	1411
20°	1413	1415	1403
25°	1410	1407	1394
30°	1404	1398	1384
35°	1396	1386	1372
40°	1389	1372	1358
45°	1372	1353	1338
50°	1354	1329	1314
55°	1320	1289	1277
60°	1269	1233	1222
65°	1188	1153	1140
70°	1072	1028	1020
75°	898	853	843
80°	652	607	590
85°	346	306	278

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1372 cd/sqm



TEST NUMBER: P973482
 CATALOG NUMBER: FLR2-14-20-L950-CP187

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.2	3.4
10°-20°	144.1	9.7
20°-30°	218.9	14.8
30°-40°	264.8	17.9
40°-50°	275.2	18.6
50°-60°	246.4	16.6
60°-70°	179.7	12.1
70°-80°	88.5	6.0
80°-90°	14.8	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°	413.2	27.9
0°-40°	678.0	45.7
0°-60°	1199.6	80.9
0°-90°	1482.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1482.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	530	530	530	530	530	
5°	524	529	527	532	523	50
15°	507	512	509	514	506	143
25°	475	477	474	476	470	219
35°	425	426	422	424	418	266
45°	360	360	355	356	352	278
55°	281	279	275	274	272	251
65°	187	184	181	180	179	184
75°	86	85	82	81	81	92
85°	11	11	10	9	9	16
90°	0	0	0	0	0	



TEST NUMBER: P973482
 CATALOG NUMBER: FLR2-14-20-L950-CP187

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	529.7	529.7	529.7	529.7	529.7
2.5°	525.1	531.0	528.2	533.4	524.0
5°	523.6	529.3	526.6	531.7	522.9
7.5°	520.9	526.9	524.0	528.8	520.5
10°	518.1	523.4	520.3	525.1	516.6
12.5°	513.1	518.3	515.5	519.8	512.0
15°	507.3	512.0	509.3	513.7	506.3
17.5°	500.8	505.2	502.3	506.3	498.8
20°	493.5	497.0	494.0	497.3	490.0
22.5°	484.5	487.8	484.5	486.7	480.4
25°	474.9	477.3	474.0	476.2	469.6
27.5°	464.6	465.9	462.6	464.4	457.6
30°	451.9	453.4	449.9	452.1	445.5
32.5°	439.6	440.5	436.5	438.3	432.4
35°	425.1	426.0	421.8	423.6	417.7
37.5°	411.3	411.1	406.7	407.8	402.8
40°	395.3	395.1	390.5	391.4	386.5
42.5°	378.9	378.0	373.6	374.0	369.7
45°	360.5	360.0	355.4	356.1	351.7
47.5°	342.7	341.4	336.8	337.0	333.3
50°	323.4	321.4	317.5	317.0	313.8
52.5°	302.8	300.6	296.2	295.8	293.4
55°	281.3	278.9	274.7	274.1	272.1
57.5°	259.2	256.1	252.8	251.5	249.9
60°	235.7	232.8	229.1	227.8	227.1
62.5°	211.4	208.5	205.7	204.3	203.5
65°	186.6	184.4	181.1	179.8	179.1
67.5°	161.4	159.4	156.3	154.8	154.6
70°	136.2	134.2	130.7	129.8	129.6
72.5°	110.9	109.2	105.9	105.0	105.0
75°	86.4	84.9	82.0	81.1	81.1
77.5°	63.1	61.8	59.6	58.5	58.5
80°	42.1	41.2	39.2	38.4	38.1
82.5°	24.3	23.9	22.1	21.3	21.7
85°	11.2	10.7	9.9	8.8	9.0
87.5°	2.9	2.6	2.0	1.5	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)