

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: P973407

Luminaire Tested: FLR2-14-20-L935-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973407
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-L935-CA080
Description: 1*4 FLR-2.0 2000 LUMEN at 3500 CCT & 90CRI with Clear Acrylic (0.080" thickness)

Light Source:
Ballast/Driver: -

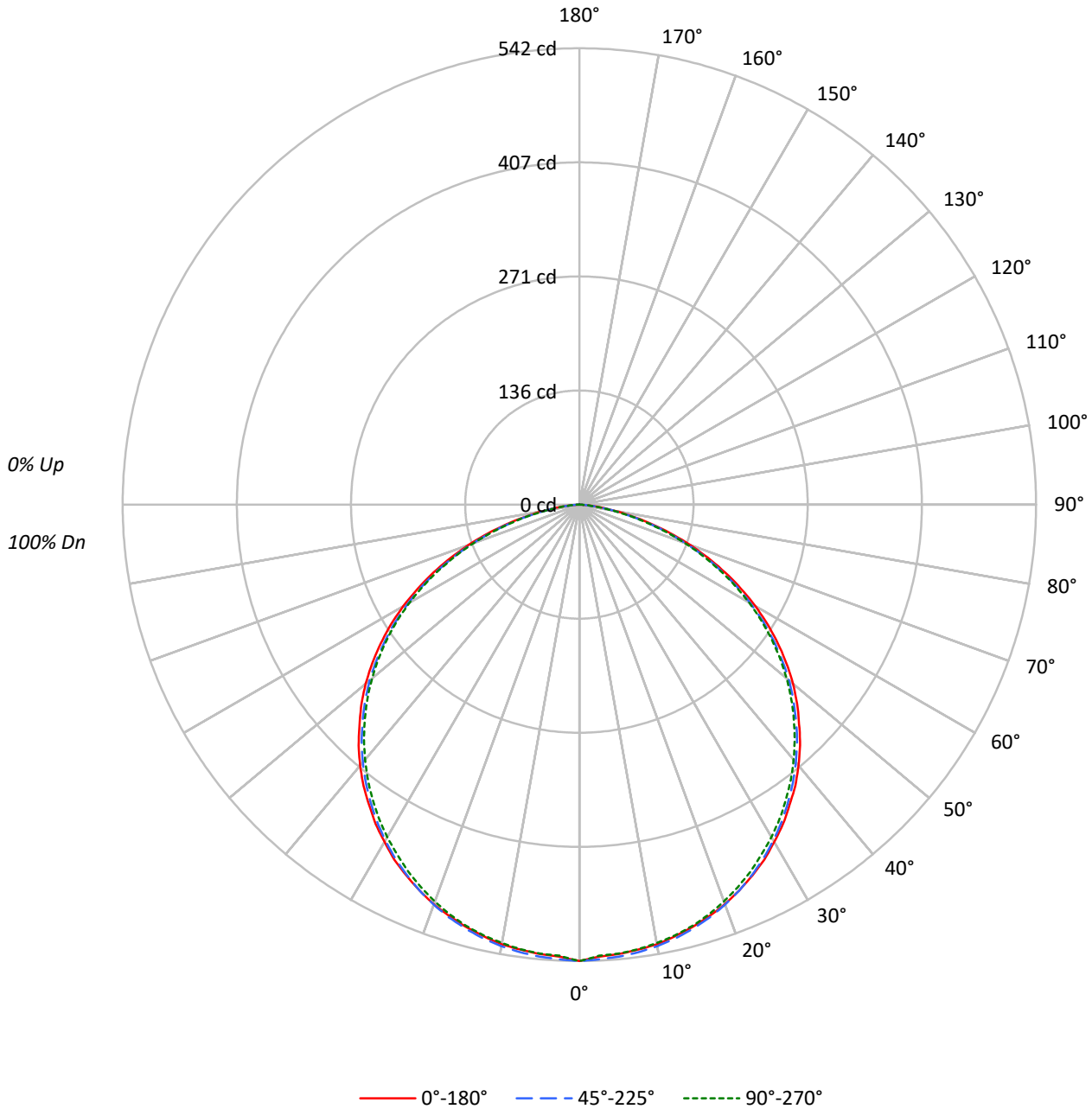
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1517.4 lumens
Efficiency: N/A
Efficacy: 92.5 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: P973407
CATALOG NUMBER: FLR2-14-20-L935-CA080

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°	1459	1459	1459
5°	1448	1456	1446
10°	1449	1455	1445
15°	1447	1452	1443
20°	1446	1448	1436
25°	1443	1440	1427
30°	1437	1431	1417
35°	1429	1418	1404
40°	1421	1404	1390
45°	1404	1384	1370
50°	1386	1360	1344
55°	1351	1319	1307
60°	1298	1262	1251
65°	1216	1181	1167
70°	1097	1052	1043
75°	919	872	863
80°	668	623	604
85°	352	312	284

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 1404 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.4	3.4
10°-20°	147.5	9.7
20°-30°	224.0	14.8
30°-40°	271.0	17.9
40°-50°	281.7	18.6
50°-60°	252.2	16.6
60°-70°	183.9	12.1
70°-80°	90.6	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°	422.9	27.9
0°-40°	693.9	45.7
0°-60°	1227.7	80.9
0°-90°	1517.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1517.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	542	542	542	542	542	
5°	536	542	539	544	535	51
15°	519	524	521	526	518	147
25°	486	488	485	487	481	224
35°	435	436	432	434	428	272
45°	369	368	364	364	360	285
55°	288	285	281	280	278	257
65°	191	189	185	184	183	189
75°	88	87	84	83	83	94
85°	11	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°	542.1	542.1	542.1	542.1	542.1
2.5°	537.4	543.5	540.6	546.0	536.3
5°	535.9	541.7	539.0	544.2	535.2
7.5°	533.2	539.2	536.3	541.2	532.7
10°	530.3	535.6	532.5	537.4	528.7
12.5°	525.1	530.5	527.6	532.0	524.0
15°	519.3	524.0	521.3	525.8	518.1
17.5°	512.5	517.0	514.1	518.1	510.5
20°	505.1	508.7	505.6	508.9	501.5
22.5°	495.9	499.3	495.9	498.2	491.7
25°	486.0	488.5	485.1	487.4	480.7
27.5°	475.5	476.8	473.5	475.3	468.3
30°	462.5	464.1	460.5	462.7	456.0
32.5°	449.9	450.8	446.8	448.6	442.5
35°	435.1	436.0	431.7	433.5	427.5
37.5°	421.0	420.7	416.3	417.4	412.2
40°	404.6	404.4	399.7	400.6	395.6
42.5°	387.8	386.9	382.4	382.8	378.3
45°	368.9	368.5	363.7	364.4	359.9
47.5°	350.7	349.4	344.7	344.9	341.1
50°	331.0	329.0	324.9	324.5	321.1
52.5°	309.9	307.7	303.2	302.7	300.2
55°	287.9	285.4	281.2	280.5	278.5
57.5°	265.2	262.1	258.7	257.4	255.8
60°	241.2	238.3	234.5	233.2	232.5
62.5°	216.3	213.4	210.5	209.1	208.2
65°	191.0	188.7	185.4	184.0	183.3
67.5°	165.2	163.1	160.0	158.4	158.2
70°	139.4	137.3	133.7	132.8	132.6
72.5°	113.5	111.8	108.4	107.5	107.5
75°	88.4	86.8	83.9	83.0	83.0
77.5°	64.6	63.3	61.0	59.9	59.9
80°	43.1	42.2	40.2	39.3	39.0
82.5°	24.9	24.5	22.7	21.8	22.2
85°	11.4	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)