

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: P973445

Luminaire Tested: FLR2-14-42-L940-CP250

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973445
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: FLR2-14-42-L940-CP250
Description: 1*4 FLR-2.0 4200 LUMEN at 4000 CCT & 90 CRI with Clear Polycarbonate (0.250" thickness)

Light Source:
Ballast/Driver: -

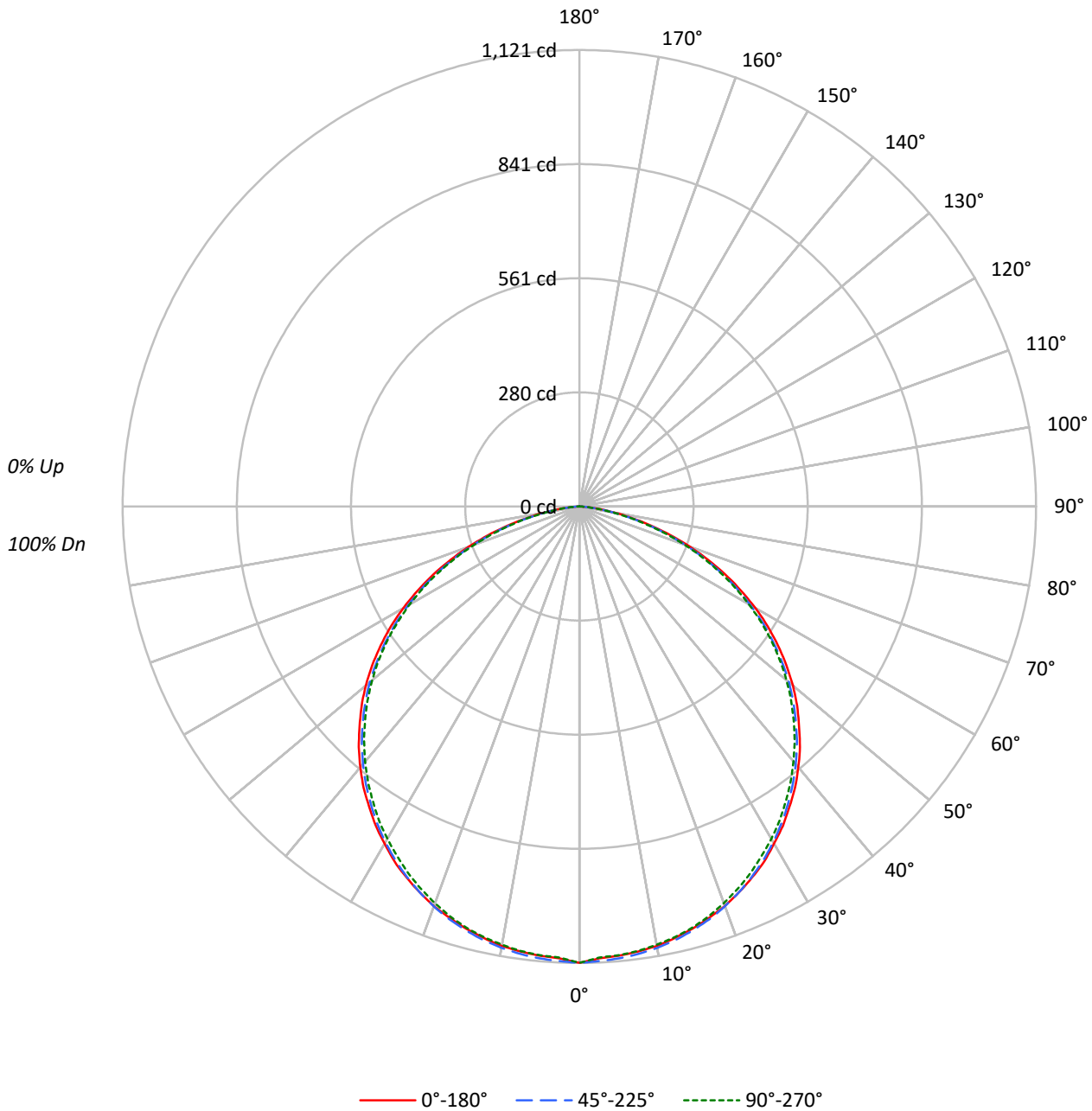
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3136.8 lumens
Efficiency: N/A
Efficacy: 99.0 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): 31.7
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				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°	3016	3016	3016
5°	2992	3010	2988
10°	2995	3008	2986
15°	2990	3002	2984
20°	2990	2993	2969
25°	2983	2978	2950
30°	2971	2958	2929
35°	2955	2932	2903
40°	2938	2902	2873
45°	2902	2861	2832
50°	2864	2812	2779
55°	2792	2727	2701
60°	2684	2609	2587
65°	2514	2440	2413
70°	2267	2175	2157
75°	1901	1804	1784
80°	1381	1286	1251
85°	732	645	587

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2902 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.2	3.4
10°-20°	304.9	9.7
20°-30°	463.1	14.8
30°-40°	560.2	17.9
40°-50°	582.3	18.6
50°-60°	521.3	16.6
60°-70°	380.2	12.1
70°-80°	187.2	6.0
80°-90°	31.3	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°	874.2	27.9
0°-40°	1434.4	45.7
0°-60°	2538.0	80.9
0°-90°	3136.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3136.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1121	1121	1121	1121	1121	
5°	1108	1120	1114	1125	1106	105
15°	1073	1083	1078	1087	1071	303
25°	1005	1010	1003	1008	994	463
35°	900	901	892	896	884	563
45°	763	762	752	753	744	589
55°	595	590	581	580	576	531
65°	395	390	383	380	379	390
75°	183	180	174	172	172	195
85°	24	23	21	19	19	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1120.7	1120.7	1120.7	1120.7	1120.7
2.5°	1111.0	1123.5	1117.5	1128.6	1108.7
5°	1107.7	1119.8	1114.2	1124.9	1106.3
7.5°	1102.2	1114.7	1108.7	1118.9	1101.2
10°	1096.1	1107.3	1100.8	1111.0	1092.9
12.5°	1085.5	1096.6	1090.6	1099.9	1083.2
15°	1073.4	1083.2	1077.6	1086.9	1071.1
17.5°	1059.5	1068.8	1062.7	1071.1	1055.3
20°	1044.2	1051.6	1045.1	1052.1	1036.8
22.5°	1025.2	1032.1	1025.2	1029.8	1016.4
25°	1004.8	1009.9	1002.9	1007.5	993.6
27.5°	983.0	985.7	978.8	982.5	968.1
30°	956.1	959.3	951.9	956.5	942.6
32.5°	930.1	931.9	923.6	927.3	914.8
35°	899.5	901.3	892.5	896.2	883.7
37.5°	870.2	869.8	860.5	862.8	852.1
40°	836.4	835.9	826.2	828.0	817.8
42.5°	801.6	799.7	790.4	791.4	782.1
45°	762.6	761.7	751.9	753.3	744.1
47.5°	725.0	722.3	712.5	713.0	705.1
50°	684.2	680.0	671.7	670.8	663.8
52.5°	640.6	636.0	626.7	625.8	620.7
55°	595.2	590.1	581.2	579.8	575.7
57.5°	548.3	541.8	534.9	532.1	528.8
60°	498.7	492.6	484.8	482.0	480.6
62.5°	447.2	441.1	435.1	432.3	430.5
65°	394.8	390.1	383.2	380.4	379.0
67.5°	341.4	337.2	330.7	327.5	327.0
70°	288.1	283.9	276.5	274.6	274.2
72.5°	234.7	231.0	224.1	222.2	222.2
75°	182.8	179.5	173.5	171.6	171.6
77.5°	133.6	130.8	126.2	123.9	123.9
80°	89.1	87.2	83.0	81.2	80.7
82.5°	51.5	50.6	46.9	45.0	45.9
85°	23.7	22.7	20.9	18.6	19.0
87.5°	6.0	5.6	4.2	3.2	4.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)