

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: P973409

Luminaire Tested: FLR2-14-42-L935-CA080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973409
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-L935-CA080
Description: 1*4 FLR-2.0 4200 LUMEN at 3500 CCT & 90CRI with Clear Acrylic (0.080" thickness)

Light Source:
Ballast/Driver: -

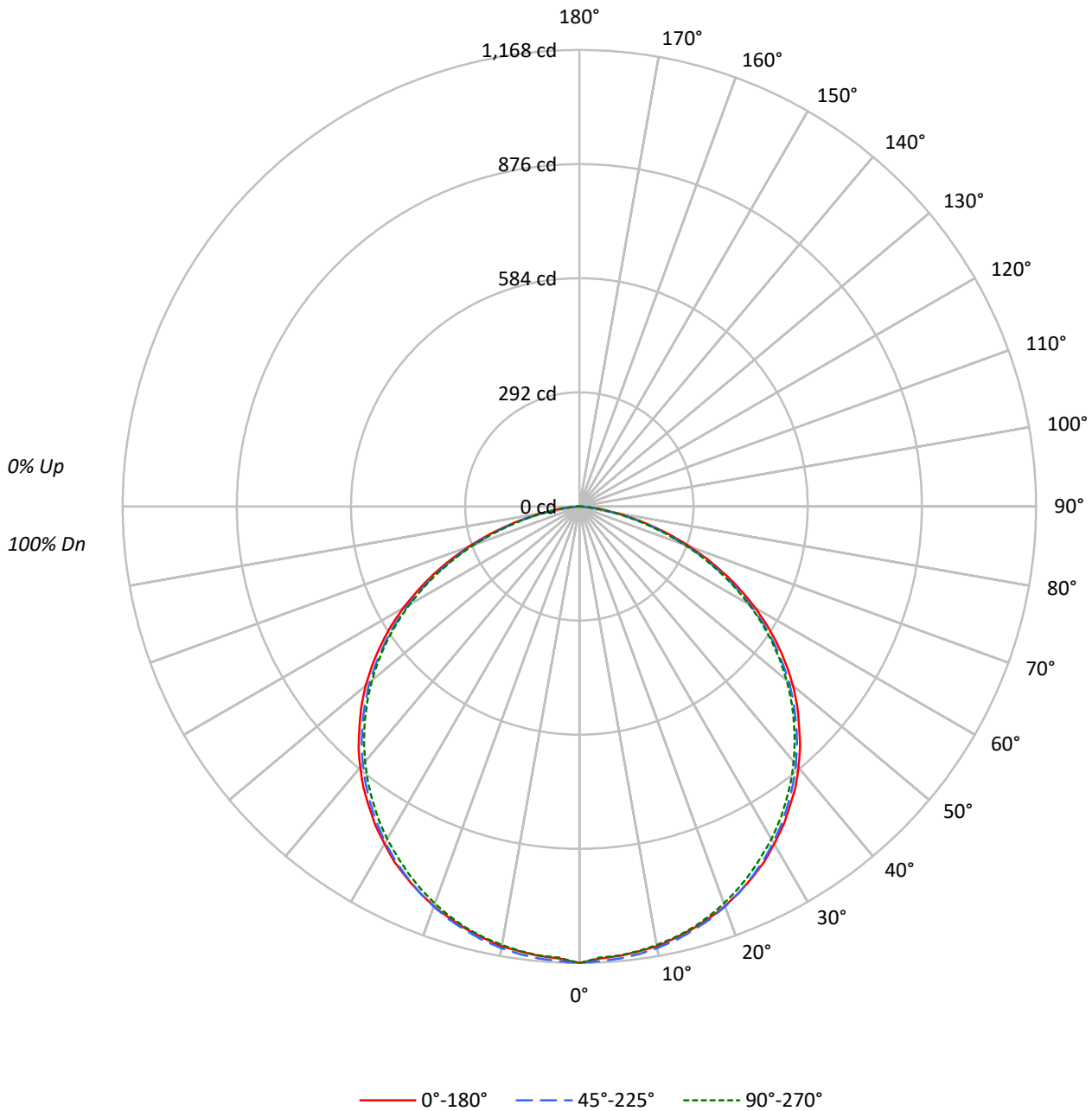
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3269.7 lumens
Efficiency: N/A
Efficacy: 103.1 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

TEST NUMBER: P973409
CATALOG NUMBER: FLR2-14-42-L935-CA080

Luminous Intensity Polar Plot





TEST NUMBER: P973409
 CATALOG NUMBER: FLR2-14-42-L935-CA080

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	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°	3144	3144	3144
5°	3119	3138	3115
10°	3122	3135	3113
15°	3117	3129	3110
20°	3117	3120	3095
25°	3110	3104	3075
30°	3097	3083	3053
35°	3080	3056	3026
40°	3062	3025	2995
45°	3025	2983	2952
50°	2986	2931	2897
55°	2911	2843	2815
60°	2798	2720	2696
65°	2620	2543	2516
70°	2363	2268	2249
75°	1981	1880	1860
80°	1438	1342	1303
85°	763	673	611

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3025 cd/sqm



TEST NUMBER: P973409
 CATALOG NUMBER: FLR2-14-42-L935-CA080

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	110.7	3.4
10°-20°	317.8	9.7
20°-30°	482.8	14.8
30°-40°	584.0	17.9
40°-50°	606.9	18.6
50°-60°	543.4	16.6
60°-70°	396.4	12.1
70°-80°	195.2	6.0
80°-90°	32.6	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°	911.2	27.9
0°-40°	1495.2	45.7
0°-60°	2645.5	80.9
0°-90°	3269.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3269.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1168	1168	1168	1168	1168	
5°	1155	1167	1162	1173	1153	110
15°	1119	1129	1123	1133	1116	316
25°	1047	1053	1045	1050	1036	483
35°	938	940	930	934	921	587
45°	795	794	784	785	776	614
55°	620	615	606	604	600	554
65°	412	407	399	396	395	406
75°	190	187	181	179	179	203
85°	25	24	22	19	20	36
90°	0	0	0	0	0	



TEST NUMBER: P973409
 CATALOG NUMBER: FLR2-14-42-L935-CA080

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1168.2	1168.2	1168.2	<i>1168.2</i>	1168.2
2.5°	<i>1158.1</i>	<i>1171.1</i>	<i>1164.8</i>	<i>1176.4</i>	<i>1155.7</i>
5°	1154.7	1167.3	1161.5	<i>1172.6</i>	1153.2
7.5°	1148.9	1161.9	1155.7	<i>1166.3</i>	1147.9
10°	1142.6	1154.2	1147.4	<i>1158.1</i>	1139.2
12.5°	1131.5	1143.1	1136.8	<i>1146.5</i>	1129.1
15°	1118.9	1129.1	1123.3	<i>1132.9</i>	1116.5
17.5°	1104.4	1114.1	1107.8	<i>1116.5</i>	1100.1
20°	1088.4	1096.2	1089.4	<i>1096.7</i>	1080.7
22.5°	1068.6	1075.9	1068.6	<i>1073.5</i>	1059.4
25°	1047.3	1052.7	1045.4	<i>1050.2</i>	1035.7
27.5°	1024.6	1027.5	1020.3	<i>1024.1</i>	1009.1
30°	996.6	1000.0	992.2	<i>997.1</i>	982.6
32.5°	969.5	971.4	962.7	<i>966.6</i>	953.5
35°	937.6	939.5	930.3	<i>934.2</i>	921.1
37.5°	907.1	906.6	897.0	<i>899.4</i>	888.3
40°	871.8	871.3	861.2	<i>863.1</i>	852.5
42.5°	835.6	833.6	823.9	<i>824.9</i>	815.2
45°	794.9	794.0	783.8	<i>785.3</i>	775.6
47.5°	755.8	752.9	742.7	<i>743.2</i>	735.0
50°	713.2	708.9	700.2	<i>699.2</i>	691.9
52.5°	667.8	662.9	653.3	<i>652.3</i>	647.0
55°	620.4	615.1	605.9	<i>604.4</i>	600.1
57.5°	571.5	564.8	557.5	<i>554.6</i>	551.2
60°	519.8	513.5	505.3	<i>502.4</i>	500.9
62.5°	466.1	459.8	453.6	<i>450.7</i>	448.7
65°	411.5	406.7	399.4	<i>396.5</i>	395.1
67.5°	355.9	351.5	344.8	<i>341.4</i>	340.9
70°	300.3	295.9	288.2	<i>286.3</i>	285.8
72.5°	244.7	240.8	233.5	<i>231.6</i>	231.6
75°	190.5	187.1	180.8	<i>178.9</i>	178.9
77.5°	139.3	136.4	131.5	<i>129.1</i>	129.1
80°	92.8	90.9	86.6	<i>84.6</i>	84.1
82.5°	53.7	52.7	48.8	<i>46.9</i>	47.9
85°	24.7	23.7	21.8	<i>19.3</i>	19.8
87.5°	6.3	5.8	4.4	<i>3.4</i>	4.4
90°	0.0	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)