

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: P973181

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

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973181
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: FLR2-14-42HE-L935-CA080
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 3500CCT & 90 CRI with Clear Aryalic (0.080" thickness)

Light Source:
Ballast/Driver: -

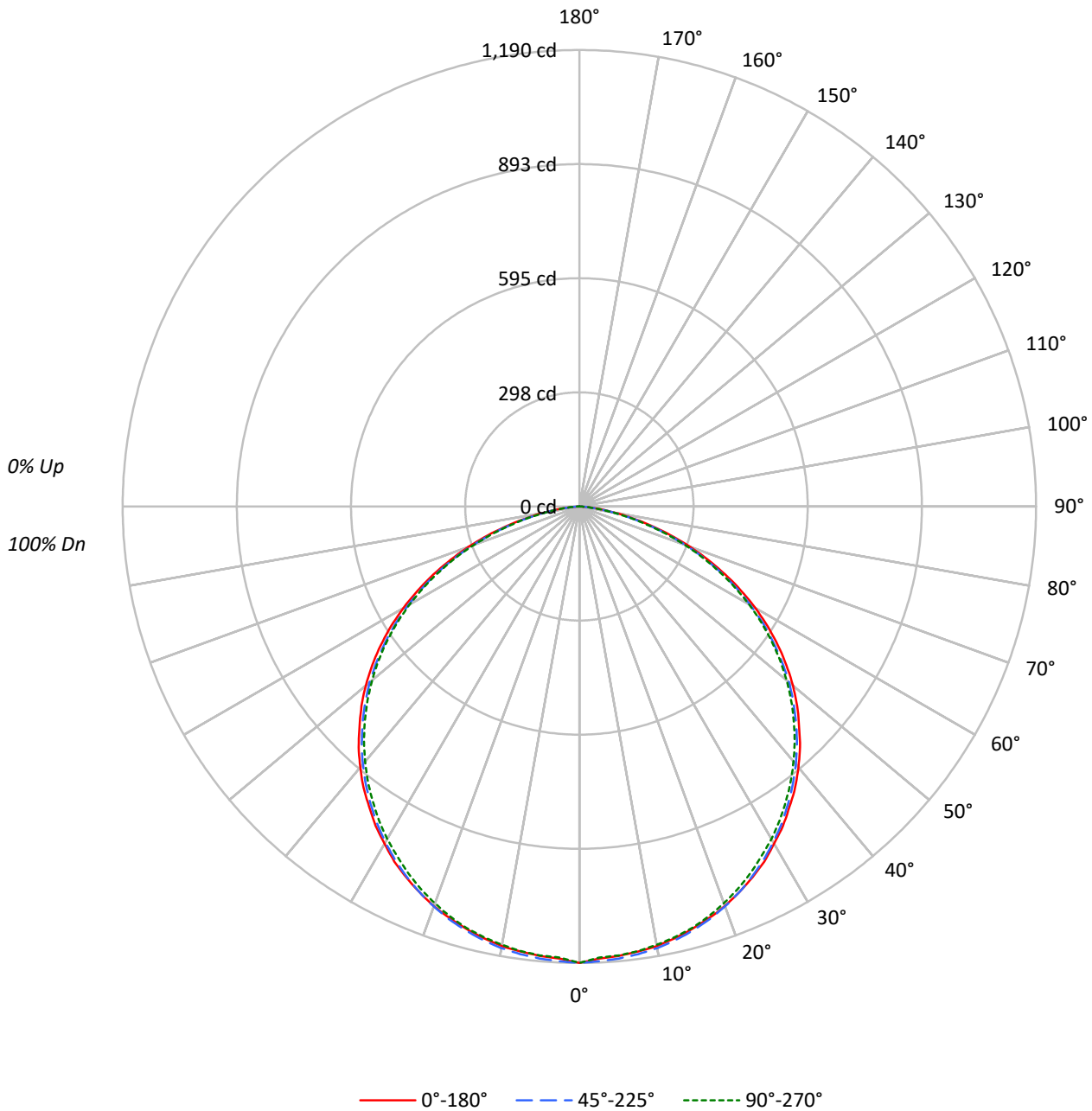
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3330.7 lumens
Efficiency: N/A
Efficacy: 104.4 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): 31.9
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°	3202	3202	3202
5°	3177	3196	3173
10°	3180	3194	3171
15°	3175	3188	3168
20°	3175	3178	3153
25°	3168	3162	3133
30°	3155	3141	3110
35°	3138	3113	3082
40°	3120	3082	3051
45°	3082	3038	3007
50°	3041	2986	2951
55°	2965	2896	2868
60°	2850	2770	2746
65°	2669	2591	2562
70°	2407	2310	2290
75°	2018	1915	1894
80°	1466	1367	1328
85°	775	685	624

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3082 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.7	3.4
10°-20°	323.7	9.7
20°-30°	491.8	14.8
30°-40°	594.9	17.9
40°-50°	618.3	18.6
50°-60°	553.6	16.6
60°-70°	403.7	12.1
70°-80°	198.8	6.0
80°-90°	33.2	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°	928.2	27.9
0°-40°	1523.1	45.7
0°-60°	2694.9	80.9
0°-90°	3330.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3330.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1190	1190	1190	1190	1190	
5°	1176	1189	1183	1194	1175	112
15°	1140	1150	1144	1154	1137	322
25°	1067	1072	1065	1070	1055	492
35°	955	957	948	952	938	598
45°	810	809	798	800	790	625
55°	632	626	617	616	611	564
65°	419	414	407	404	402	414
75°	194	191	184	182	182	207
85°	25	24	22	20	20	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1190.0	1190.0	1190.0	<i>1190.0</i>	1190.0
2.5°	<i>1179.7</i>	<i>1193.0</i>	<i>1186.6</i>	<i>1198.4</i>	<i>1177.2</i>
5°	1176.2	1189.0	1183.1	<i>1194.5</i>	1174.8
7.5°	1170.3	1183.6	1177.2	<i>1188.1</i>	1169.3
10°	1163.9	1175.8	1168.9	<i>1179.7</i>	1160.5
12.5°	1152.6	1164.4	1158.0	<i>1167.9</i>	1150.1
15°	1139.8	1150.1	1144.2	<i>1154.1</i>	1137.3
17.5°	1125.0	1134.9	1128.5	<i>1137.3</i>	1120.6
20°	1108.8	1116.6	1109.7	<i>1117.1</i>	1100.9
22.5°	1088.6	1096.0	1088.6	<i>1093.5</i>	1079.2
25°	1066.9	1072.3	1064.9	<i>1069.8</i>	1055.1
27.5°	1043.7	1046.7	1039.3	<i>1043.3</i>	1028.0
30°	1015.2	1018.6	1010.7	<i>1015.7</i>	1000.9
32.5°	987.6	989.6	980.7	<i>984.6</i>	971.3
35°	955.1	957.1	947.7	<i>951.6</i>	938.3
37.5°	924.0	923.6	913.7	<i>916.2</i>	904.8
40°	888.1	887.6	877.3	<i>879.2</i>	868.4
42.5°	851.2	849.2	839.3	<i>840.3</i>	830.5
45°	809.8	808.8	798.4	<i>799.9</i>	790.1
47.5°	769.9	766.9	756.6	<i>757.1</i>	748.7
50°	726.5	722.1	713.2	<i>712.2</i>	704.9
52.5°	680.2	675.3	665.5	<i>664.5</i>	659.1
55°	632.0	626.5	617.2	<i>615.7</i>	611.3
57.5°	582.2	575.3	567.9	<i>565.0</i>	561.5
60°	529.5	523.1	514.7	<i>511.8</i>	510.3
62.5°	474.8	468.4	462.0	<i>459.1</i>	457.1
65°	419.2	414.2	406.9	<i>403.9</i>	402.4
67.5°	362.5	358.1	351.2	<i>347.8</i>	347.3
70°	305.9	301.4	293.6	<i>291.6</i>	291.1
72.5°	249.2	245.3	237.9	<i>235.9</i>	235.9
75°	194.1	190.6	184.2	<i>182.2</i>	182.2
77.5°	141.9	138.9	134.0	<i>131.5</i>	131.5
80°	94.6	92.6	88.2	<i>86.2</i>	85.7
82.5°	54.7	53.7	49.7	<i>47.8</i>	48.8
85°	25.1	24.1	22.2	<i>19.7</i>	20.2
87.5°	6.4	5.9	4.4	<i>3.4</i>	4.4
90°	0.0	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)