

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: P973156

Luminaire Tested: FLR2-14-42HE-L935-CP080

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973156
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-CP080
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 3500CCT & 90 CRI with Clear Polycarbonate (0.080" thickness)

Light Source:
Ballast/Driver: -

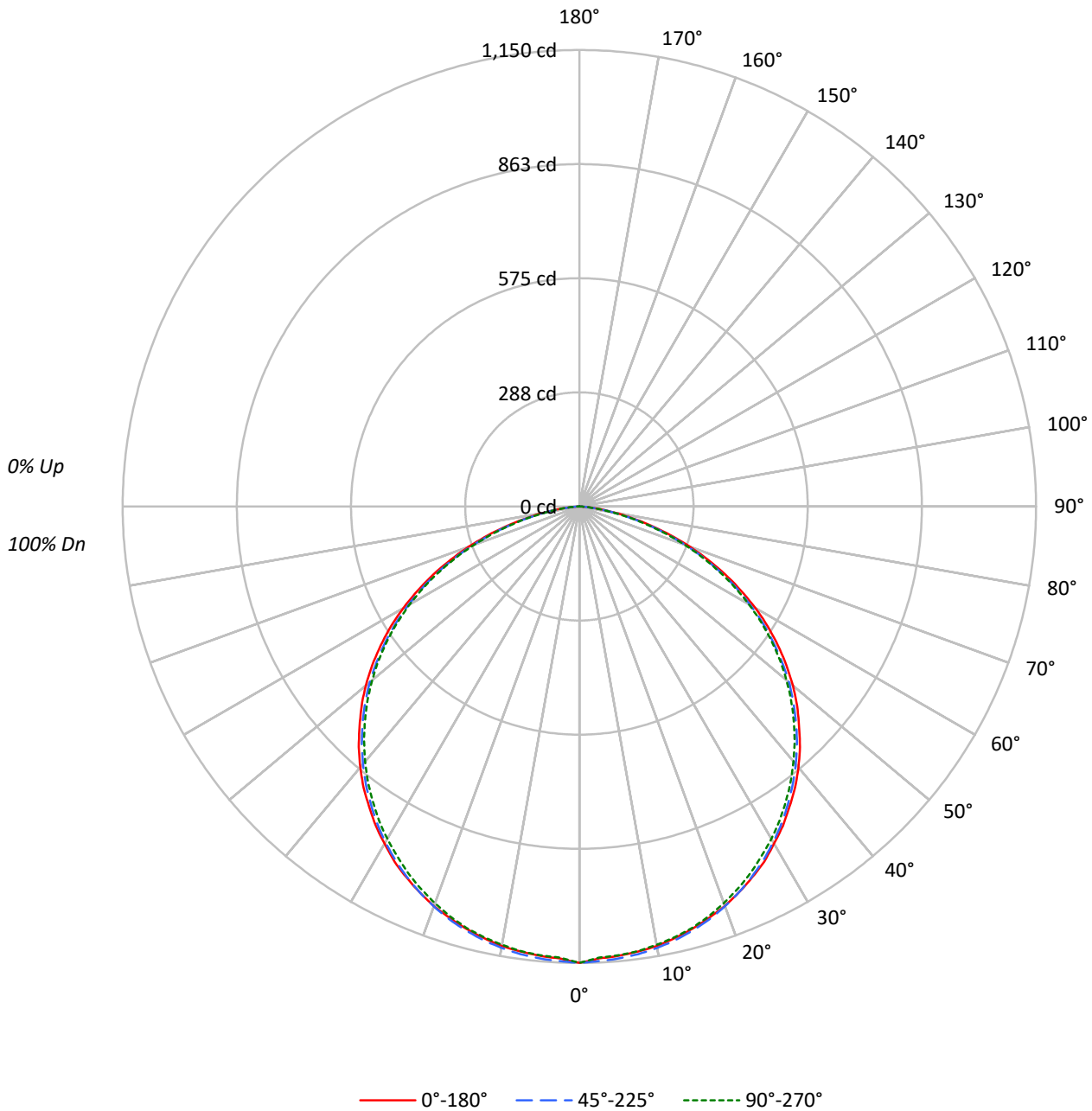
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3218.2 lumens
Efficiency: N/A
Efficacy: 100.9 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°	3094	3094	3094
5°	3070	3088	3066
10°	3073	3086	3064
15°	3068	3080	3061
20°	3068	3070	3046
25°	3061	3055	3027
30°	3048	3035	3005
35°	3031	3008	2978
40°	3014	2977	2947
45°	2978	2936	2905
50°	2939	2885	2851
55°	2865	2798	2771
60°	2753	2676	2653
65°	2579	2503	2476
70°	2325	2231	2213
75°	1949	1851	1831
80°	1416	1320	1283
85°	750	661	602

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2978 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.9	3.4
10°-20°	312.8	9.7
20°-30°	475.2	14.8
30°-40°	574.8	17.9
40°-50°	597.4	18.6
50°-60°	534.8	16.6
60°-70°	390.1	12.1
70°-80°	192.1	6.0
80°-90°	32.1	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°	896.8	27.9
0°-40°	1471.6	45.7
0°-60°	2603.8	80.9
0°-90°	3218.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3218.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1150	1150	1150	1150	1150	
5°	1136	1149	1143	1154	1135	108
15°	1101	1111	1106	1115	1099	311
25°	1031	1036	1029	1034	1019	475
35°	923	925	916	920	907	578
45°	782	782	772	773	763	604
55°	611	605	596	595	591	545
65°	405	400	393	390	389	400
75°	188	184	178	176	176	200
85°	24	23	21	19	20	35
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1149.8	1149.8	1149.8	<i>1149.8</i>	1149.8
2.5°	<i>1139.8</i>	<i>1152.7</i>	<i>1146.5</i>	<i>1157.9</i>	<i>1137.4</i>
5°	1136.5	1148.9	1143.1	<i>1154.1</i>	1135.1
7.5°	1130.8	1143.6	1137.4	<i>1147.9</i>	1129.8
10°	1124.6	1136.0	1129.3	<i>1139.8</i>	1121.3
12.5°	1113.6	1125.1	1118.9	<i>1128.4</i>	1111.3
15°	1101.3	1111.3	1105.6	<i>1115.1</i>	1098.9
17.5°	1087.0	1096.5	1090.3	<i>1098.9</i>	1082.7
20°	1071.3	1078.9	1072.2	<i>1079.4</i>	1063.7
22.5°	1051.8	1058.9	1051.8	<i>1056.5</i>	1042.7
25°	1030.8	1036.1	1028.9	<i>1033.7</i>	1019.4
27.5°	1008.5	1011.3	1004.2	<i>1008.0</i>	993.2
30°	980.9	984.2	976.6	<i>981.3</i>	967.1
32.5°	954.2	956.1	947.5	<i>951.4</i>	938.5
35°	922.8	924.7	915.7	<i>919.5</i>	906.6
37.5°	892.8	892.3	882.8	<i>885.2</i>	874.3
40°	858.1	857.6	847.6	<i>849.5</i>	839.0
42.5°	822.4	820.5	811.0	<i>811.9</i>	802.4
45°	782.4	781.5	771.5	<i>772.9</i>	763.4
47.5°	743.9	741.0	731.0	<i>731.5</i>	723.4
50°	702.0	697.7	689.1	<i>688.2</i>	681.0
52.5°	657.2	652.5	643.0	<i>642.0</i>	636.8
55°	610.6	605.4	596.3	<i>594.9</i>	590.6
57.5°	562.5	555.9	548.7	<i>545.9</i>	542.5
60°	511.6	505.4	497.3	<i>494.5</i>	493.0
62.5°	458.8	452.6	446.4	<i>443.6</i>	441.6
65°	405.0	400.2	393.1	<i>390.3</i>	388.8
67.5°	350.3	346.0	339.3	<i>336.0</i>	335.5
70°	295.5	291.3	283.6	<i>281.7</i>	281.3
72.5°	240.8	237.0	229.9	<i>228.0</i>	228.0
75°	187.5	184.2	178.0	<i>176.1</i>	176.1
77.5°	137.1	134.2	129.4	<i>127.1</i>	127.1
80°	91.4	89.5	85.2	<i>83.3</i>	82.8
82.5°	52.8	51.9	48.1	<i>46.2</i>	47.1
85°	24.3	23.3	21.4	<i>19.0</i>	19.5
87.5°	6.2	5.7	4.3	<i>3.3</i>	4.3
90°	0.0	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)