



IWA Tiers of Performance Report

Stove Manufacturer	Envirofit
Stove Model	SmartSaver Charcoal (Econochar)
Testing Center	Colorado State University
Test Protocol	Water Boiling Test - Version 4.2.4
Fuel Used	Big Green Egg Organic Charcoal - USA
Pot Used	UNHCR 7-L
Test Dates	23 - 30 November, 2016

These results were obtained in accordance with the IWA and the Global Alliance for Clean Cookstoves' reporting requirements¹. This data and additional supporting data are shared publicly through the Clean Cooking Catalog.

Name of Tester(s)	Andrew Andraski, Kelly Banta
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		Metric	Value	Unit	Sub-Tier
Efficiency / Fuel Use					
Tier	2	High power Thermal Efficiency	26.0	%	2
		Low power Specific Consumption	0.007	MJ/min/l	4
Emissions					
Tier	0	High power CO	20.2	g/MJd	0
		Low power CO	0.046	g/min/l	4
		High power PM 2.5	174.1	g/MJd	2
		Low power PM 2.5	0.026	mg/min/l	4
Indoor Emissions					
Tier	0	Indoor emissions CO	1.226	g/min	0
		Indoor emissions PM 2.5	10.7	mg/min	2
Safety					
Tier	3	10 weighted safety parameters	90.5	Points	3

Tier 0 → Improving Importance → Tier 4

¹ Interim Stove Performance Reporting Requirements:

<http://www.cleancookstoves.org/our-work/standards-and-testing/guidelines-and-standards/guidelines--standards-documents/interim-stove-performance.pdf>



Individual Scores for Safety Assessment Criteria

Please note this is a summary of the criteria evaluated by the Biomass Stove Safety Protocol. For the full protocol and data calculation sheet, visit: <http://www.cleancookstoves.org/our-work/standards-and-testing/learn-about-testing-protocols/>

Assessment Criteria	Score 1-4	Multiplier	Subtotal
Sharp Edges and Points	3	1.5	4.5
Cookstove Tipping	4	3.0	12.0
Containment of Fuel	4	2.5	10.0
Obstructions Near Cooking Surface	4	2.0	8.0
Surface Temperature	1	2.0	2.0
Heat Transmission to Surroundings	4	2.5	10.0
Temperature of Operational Construction	3	2.0	6.0
Chimney Shielding	4	2.5	10.0
Flames Surrounding the Cookpot	4	3.0	12.0
Flames/Fuel Exiting Fuel Chamber, Canister, or Pipes	4	4.0	16.0
Total			90.5

Stove Rating	Good
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Stove Safety IWA Tier	3
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