

Traditional Lao Stove (TLS) Water Boiling and Safety Test Results

Stove Manufacturer	Various (4 different producers)
Stove Model	Traditional Lao Stove (TLS)

Water Boiling Test

Testing Center	GERES Biomass Energy Laboratory (G-BEL), Phnom Penh, Cambodia
Test Protocol	Water Boiling Test - Version 4.2.3
Fuel Used	Average Cambodian Hardwood
Pot Used	5 Liter - Aluminum
Test Dates	2014

IWA PERFORMANCE TIERS	units	Average	St Dev	COV	Tier
High Power Thermal Efficiency	%	27.2	0.9%	3.2%	2
Low Power Specific Fuel Consumption	MJ/(min·L)	0.046	0.003	7.0%	1
High Power CO	g/MJ	4.9	0.6	11.7%	4
Low Power CO	g/(min·L)	0.14	0.010	7.8%	1
High Power PM	mg/MJ	1036	246	23.7%	0
Low Power PM	mg/(min·L)	6.2	1.7	27.1%	1
Indoor CO Emissions	g/min	0.53	0.043	8.2%	2
Indoor PM Emissions	mg/min	85	24.5	28.7%	0

Safety Test

Testing Center	GERES Biomass Energy Laboratory (G-BEL), Phnom Penh, Cambodia
Test Protocol	Biomass Stove Safety Protocol (BSSP) v1.1
Fuel Used	Average Cambodian Hardwood
Test Dates	November 2015

Test	Overall Point Score	Overall Rating
Safety	79.5	Fair