Temperature range*	10°C to 40°C
%RH (optional)*	50% to 90% RH as limited by dew points
Temperature uniformity	± 2°C
% RH control (optional)	± 3%
Temperature control at sensor	± 0.2°C
Control resolution	± 0.1°C
Cooling/Heating type	Thermoelectric/Peltier driven-for heating/Cooling
Chamber Volume in Cu. Ft	19.1 cu.ft
External Dimension-LXWXH	27″×31″×81″ (refer to drawing)
Internal Dimension-LXWXH	22.25″ x 25.25″ x 60″ (refer to drawing)- height includes plenum which is 5″H.
Shelf dimension	21.75” x 24.875”
Cabinet specs	Standard: SS exterior/aluminum interior. Optional: Black painted exterior/SS interior
Lights	LED lights with timer.
Electrical requirement	115V/60hz/1ph, Unit plugs into standard wall outlet.
Shelf quantity, type	3 per chamber/ additional shelves available, wire shelf- PVC coated with 4 installation clips. Shelf capacity- 100 lbs distributed load.
Weight specs	Chamber weight- 293bs Shipping weight- 326 lbs

*Specifications are based on 20°C ambient and standard voltage. Specifications are subject to change without notice.

Chamber options:

- Chart recorder
- Additional shelving
- Relative humidity
- Extended temperature ranges
- RO/DI water filtration system
- Water carboy

Chamber features:
This chamber is used by scientists in many research areas, from genomics to clinical epidemiology and species conservation. This chamber not only can be used in drosophila research but also in many types of insect growing projects as well.
All of the Canden chambers interior are made out of premium stainless steel. Chamber has 2” thick CFC free insulation providing good thermal gradient. Door locks are standard in doors with double pane glass. Chambers comes with 2” access port with insulation plug. Chamber also includes pre-installed casters capable of supporting 150-200lbs per caster. Chamber can hold up to 25 shelves.

Chamber uses thermoelectric assembly for heating and cooling. This type of cooling/heating system completely eliminates need for conventional refrigeration system and failures due to mechanical components such as compressors thereby drastically increasing the life expectancy of each chamber. Maintenance cost is also lowered by the thermoelectric/Peltier driven heating/cooling system. The chamber is quiet in operation. Back wall plenum on chambers ensures uniform distribution of conditioned air. Chamber temperature set points are tightly controlled using PID controller.

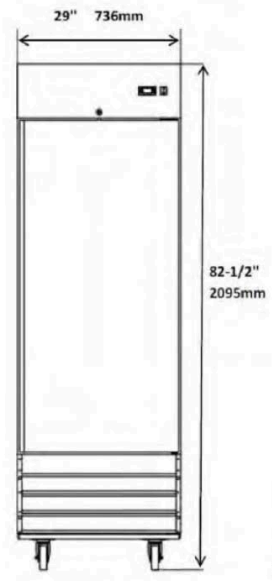
Chamber standard features also include **industry standard programmable grasslin light timer or equivalent.** Chamber has 2-3' led lights Natural 5500k,1080 lumens each,3.4 watts per ft.Customer specified led lights can be added at no cost.

Humidity system: Humidity control is optional. Humidity range is achieved via additive ultrasonic humidification, a controller with with factory calibrated %RH sensor. Humidifier is installed typically in the rear of the chamber and can be easily serviced or replaced. RO/DI system is recommended but not required as long as the water quality specification is met. Tap water should be fine. The humidifier comes with a 15’ ¼” polytube, shut off valve and quick disconnect fittings as well as a fitting to connect to water faucet.

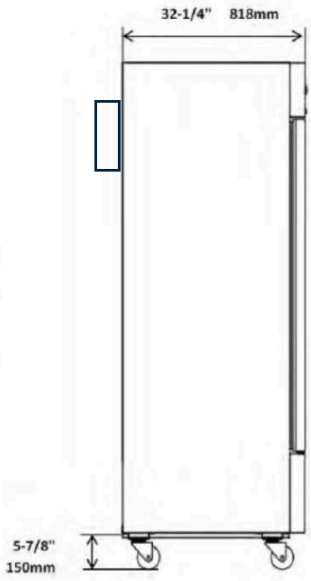
Water quality specification:
Water conductivity greater then 0.1 µS,TDS of < 10 ppm and works in operating pressure range from 10psi to 80 psi

Standard: Stainless steel exterior and Aluminum interior

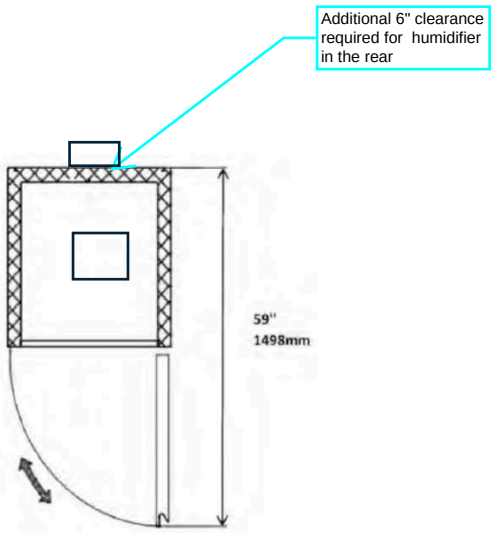
Plan View

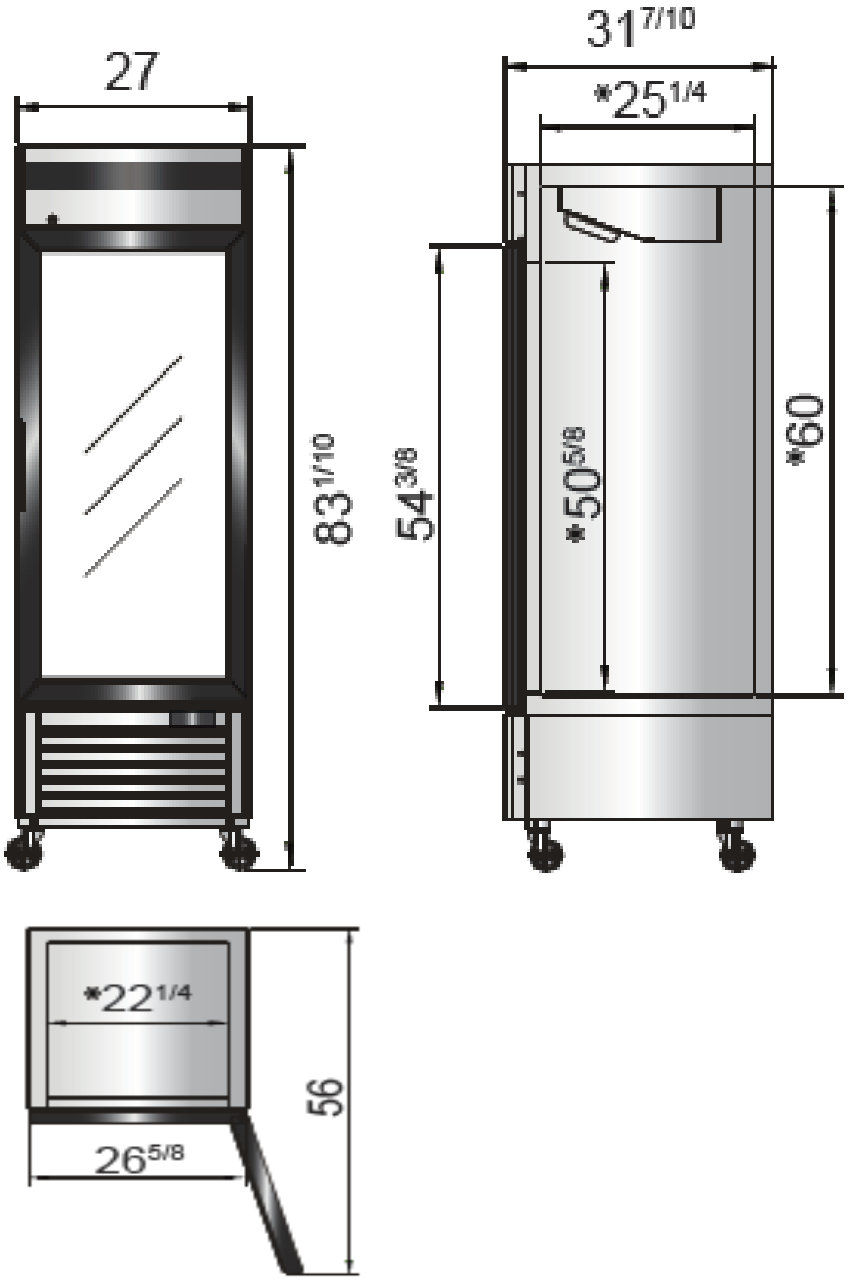


Front View



Side View



Top View

Optional: Black painted exterior and stainless steel interior