

**Project Name : 4th Attempt**

System : 1

Harrodsburg, KY, United States

**LEXINGTON, BLUEGRASS AP, KENTUCKY**

|                   |      |                  |    |                |     |                 |        |
|-------------------|------|------------------|----|----------------|-----|-----------------|--------|
| Summer Outdoor F: | 89.0 | Summer Indoor F: | 75 | Design Grains: | 38  | Daily Range:    | MEDIUM |
| Winter Outdoor F: | 13.0 | Winter Indoor F: | 70 | Cooling RH:    | 50% | Elevation (Ft): | 988    |

**Cooling Loads**

| Name                  | Area  | Sensible | Latent |
|-----------------------|-------|----------|--------|
| Windows & Glass Doors | 517   | 5,089    | 0      |
| Skylights             | 0     | 0        | 0      |
| Doors                 | 60    | 608      | 0      |
| Above Grade Walls     | 3,213 | 1,435    | 0      |
| Floors                | 1,968 | 724      | 0      |
| Ceiling               | 1,968 | 1,417    | 0      |
| Ventilation           | 0     | 0        | 0      |
| Infiltration          | 0     | 426      | 715    |
| Internal              | 0     | 5,681    | 800    |
| Duct                  | 0     | 0        | 0      |
| Blower Heat           | 0     | 0        | 0      |
| AED Excursion         | 0     | 1,851    | 0      |

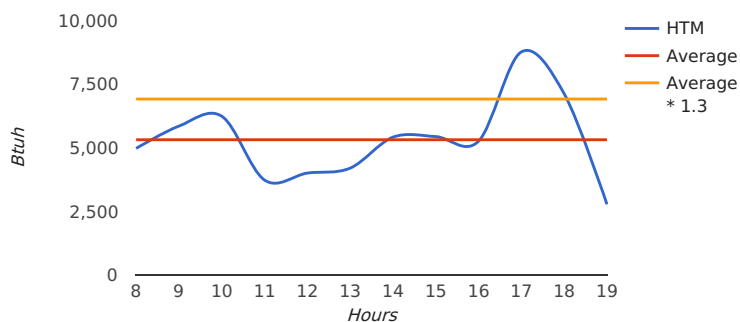
|              |       |        |       |
|--------------|-------|--------|-------|
| <b>Total</b> | 7,726 | 17,232 | 1,515 |
|--------------|-------|--------|-------|

**Heating Loads**

| Name                  | Area  | Heat Loss |
|-----------------------|-------|-----------|
| Windows & Glass Doors | 517   | 8,547     |
| Skylights             | 0     | 0         |
| Doors                 | 60    | 1,334     |
| Above Grade Walls     | 3,213 | 7,398     |
| Below Grade Walls     | 0     | 0         |
| Ceiling               | 1,968 | 2,019     |
| Ventilation           | 0     | 0         |
| Infiltration          | 0     | 3,480     |
| Internal              | 0     | 0         |
| Floors                | 1,968 | 2,607     |
| Duct                  | 0     | 0         |
| Humidification        | 0     | 0         |
| Hot Water Piping      | 0     | 0         |

|              |       |        |
|--------------|-------|--------|
| <b>Total</b> | 7,726 | 25,384 |
|--------------|-------|--------|

Warning: This application has glass areas that produced relatively large cooling loads for part of the day. Variable air volume devices are required to overcome spikes in solar load for one or more rooms. Install a zoned system or provide zone control (provided by individual, motorized, thermostatically controlled dampers) for problem rooms. Single speed equipment may not be suitable for the application.

**AED Graph****Approved ACCA MJ8 Calculations**

Calculations are based on the ACCA Manual J 8th Edition and are approved by ACCA. All computed calculations are estimates on building use, weather data, and inputted values such as R-Values, window types, duct loss, etc. Equipment selections should meet both the latent and sensible gain as well as building heat loss. See Cool Calc Manual S Report for equipment sizing verification.