

## How to use Thermal Design Tool

### Icon Instructions

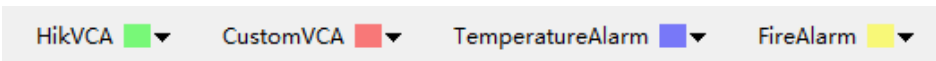
1.  *Import project map*

2.  *Set up Scale*

3.  *Draw line*

4.  *Move*

5.  *Add human or car object*

6.  *Different Color represents the effective area of different smart functions.*

*Different Color represents the effective area of different smart functions.*

7.  *Measurement Units*

8. *Delete: Select the object, press "DELETE" button on computer keyboard.*

## Steps

You can design in two ways.

1. Design perimeter defense project (with project map). →Page2
2. Design perimeter defense project (without project map). →Page 9

### ● Design perimeter defense project (with project map)

#### 1. Import project map

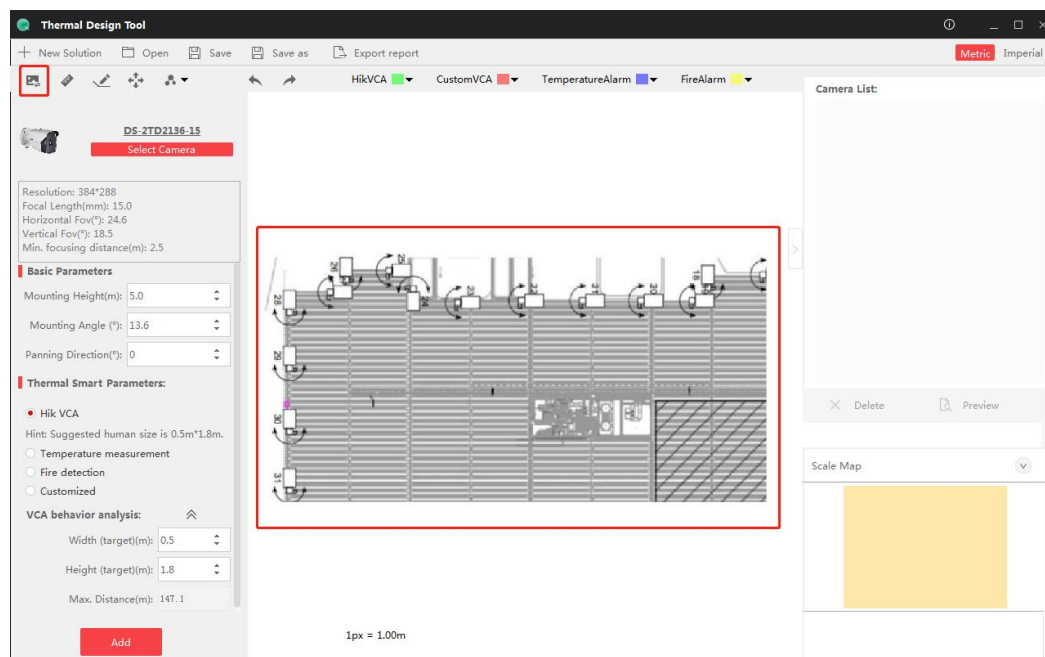


Figure 1

## 2. Scale

Draw a scale line, input the real distance(m) of this line.

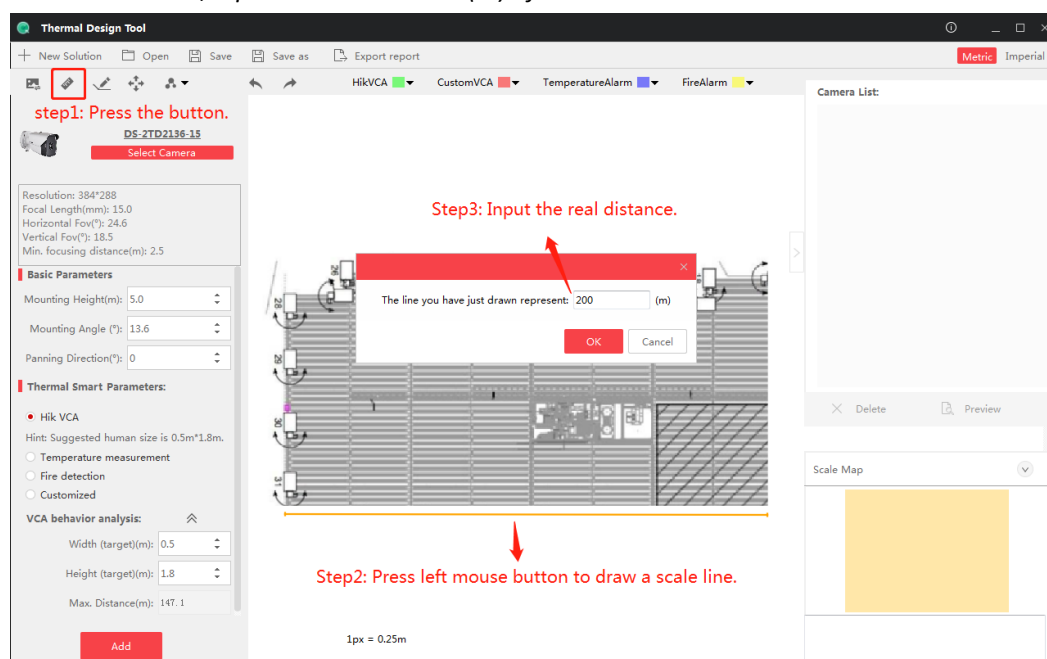


Figure 2

The tool will compute the corresponding value between pixel and real distance.

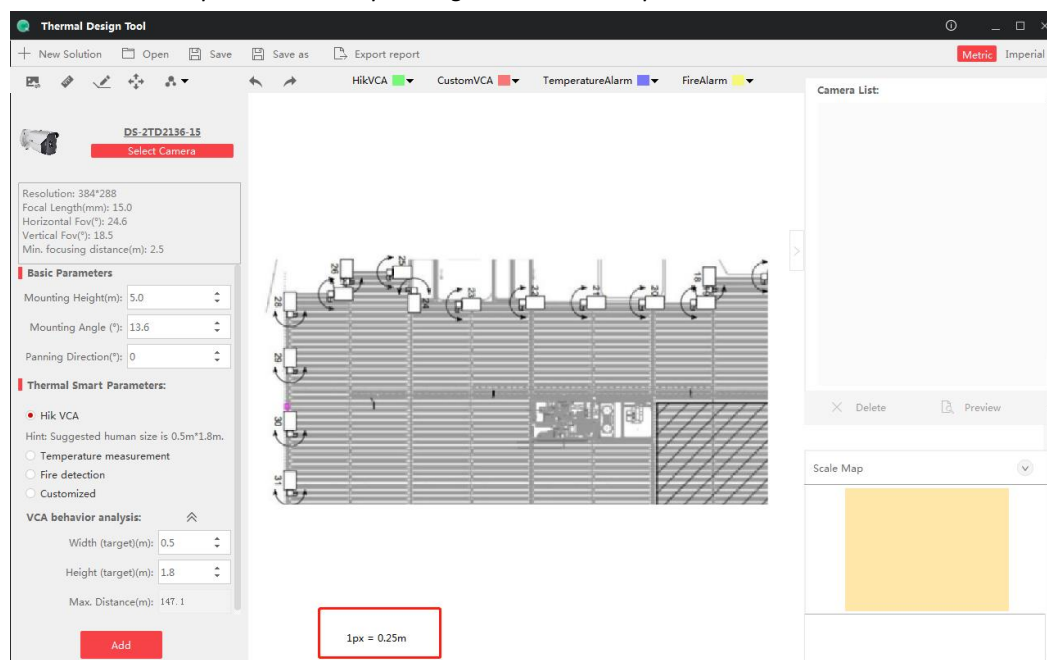


Figure 3

(For example, as define the long side as 200 meters, each pixel represents 0.25 meters.)

## 3. Select the function and set up parameters

### 3.1 Take "Hik VCA" as an instance

#### 3.1.1 Select Hik VCA

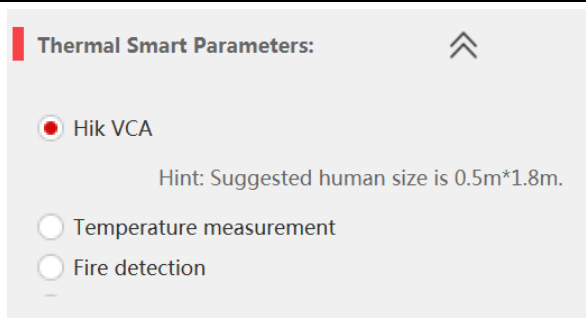


Figure 4

3.1.2 Set up the target size (Suggested human size is 0.5m\*1.8m.)

3.1.3 The maximum distance will automatically be displayed according to the camera you select.

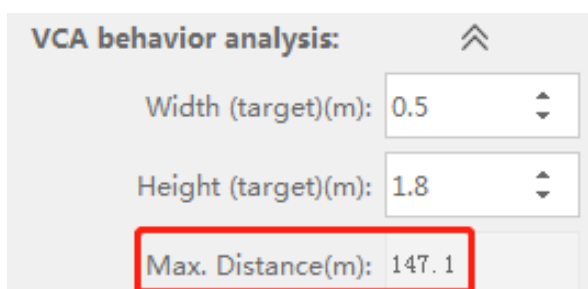


Figure 5

3.2 Take "Customized" as an instance

3.2.1 Select Customized.

3.2.2 Select human or car.

3.2.3 Set up the minimum pixel of horizontal and vertical, the total pixels on target will be computed automatically.

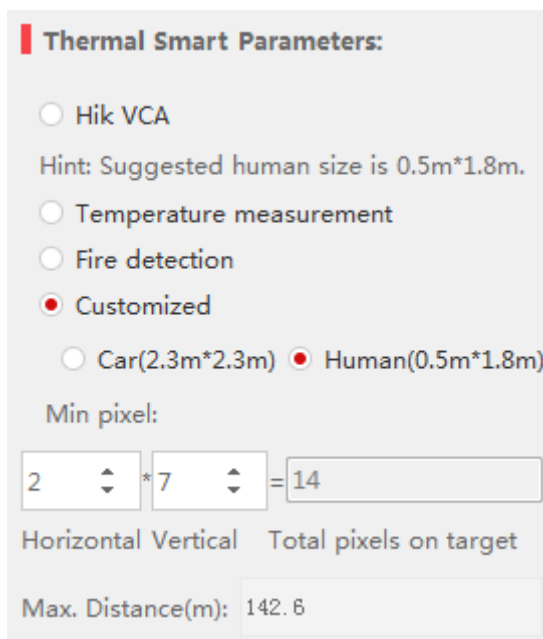


Figure 6

(Notice: Customized is more suitable for the users who use 3<sup>rd</sup> party algorithm to do intelligent analysis.)

## 4. Select Camera

4.1 For example, select DS-2TD2136-10/V1, press "Add".

Then the camera1 will be added in the design table and camera list.

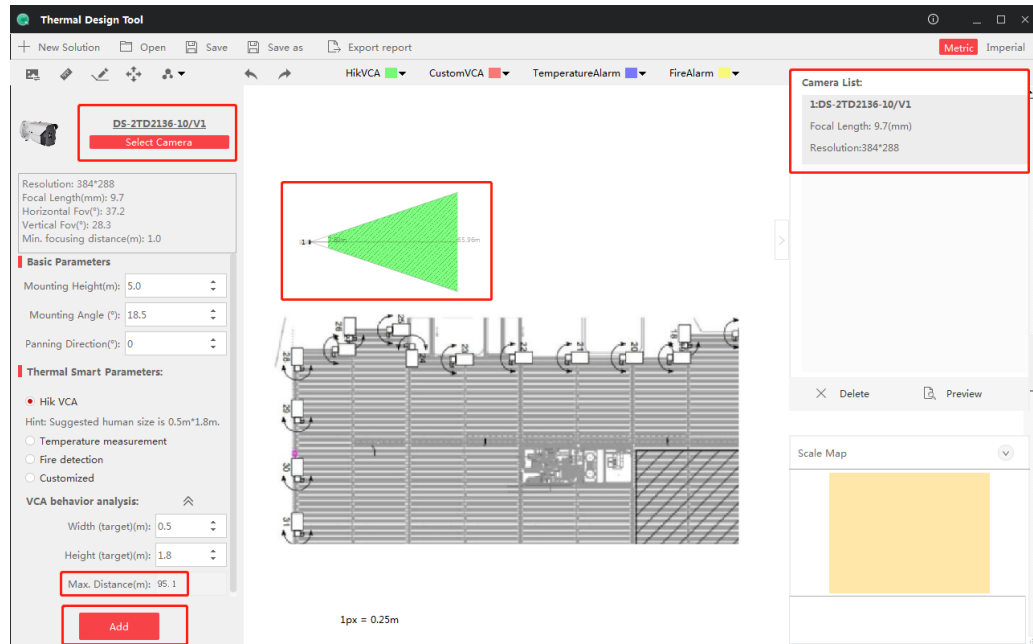


Figure 7

4.2 Camera1 displays the blind area (figure in red) and effective Hik VCA distance for human (figure in blue) which according to the basic parameters you set up.

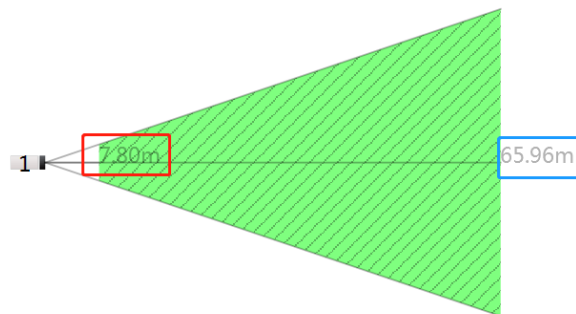


Figure 8

## 5. Set Up Basic Parameters

5.1 Review the design table, and adjust the **mounting height** by mouse wheel.

5.2 Review the design table, and adjust the **mounting angle** by mouse wheel.

(Suggestion: half vertical angle of thermal lens < **mounting angle** < half horizontal angle of thermal lens.)

5.3 Review the design table, and adjust the **panning direction** by mouse wheel.

(Notice: Panning direction represents the camera direction. Horizontal rightward represents 0° and the direction angle increases clockwise. )

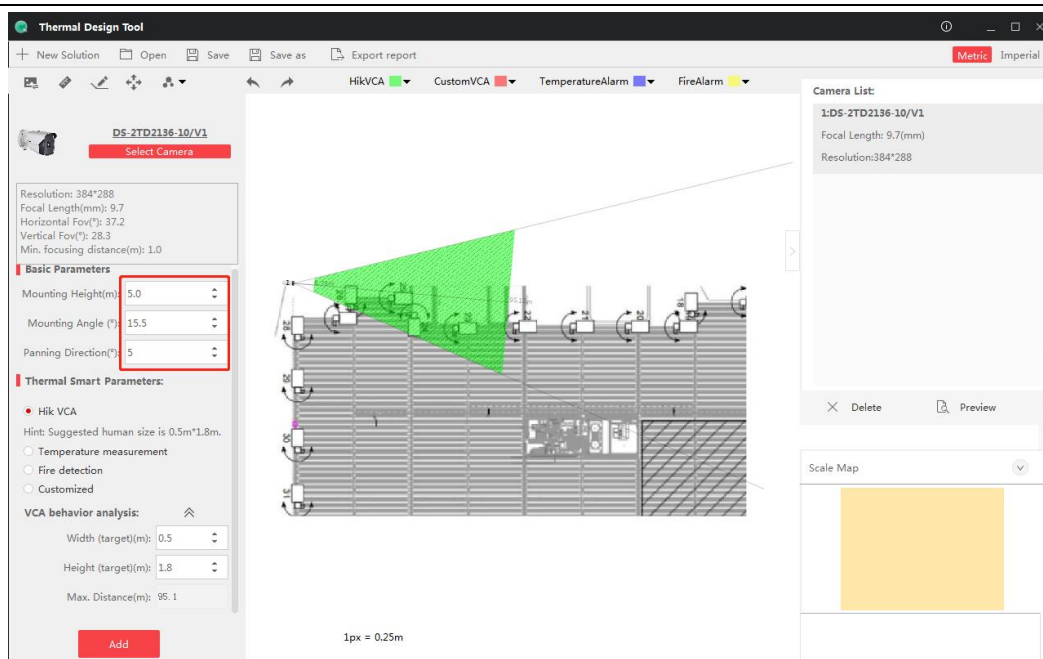


Figure 9

### 5.3 Continue to add cameras to cover the perimeter

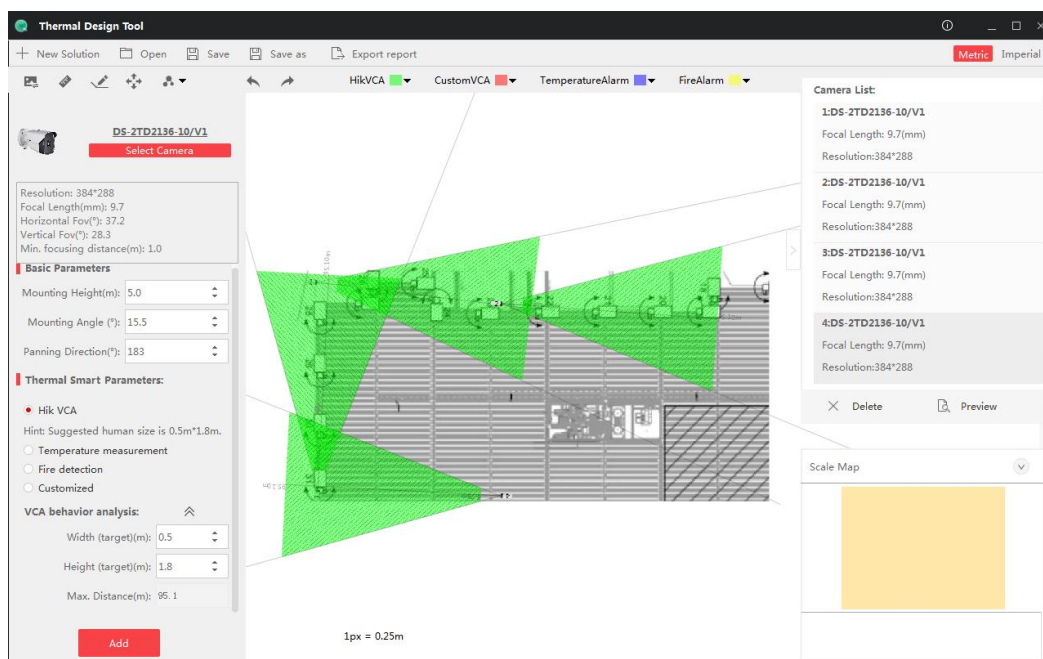


Figure 10

### 5.4 Delete and preview camera

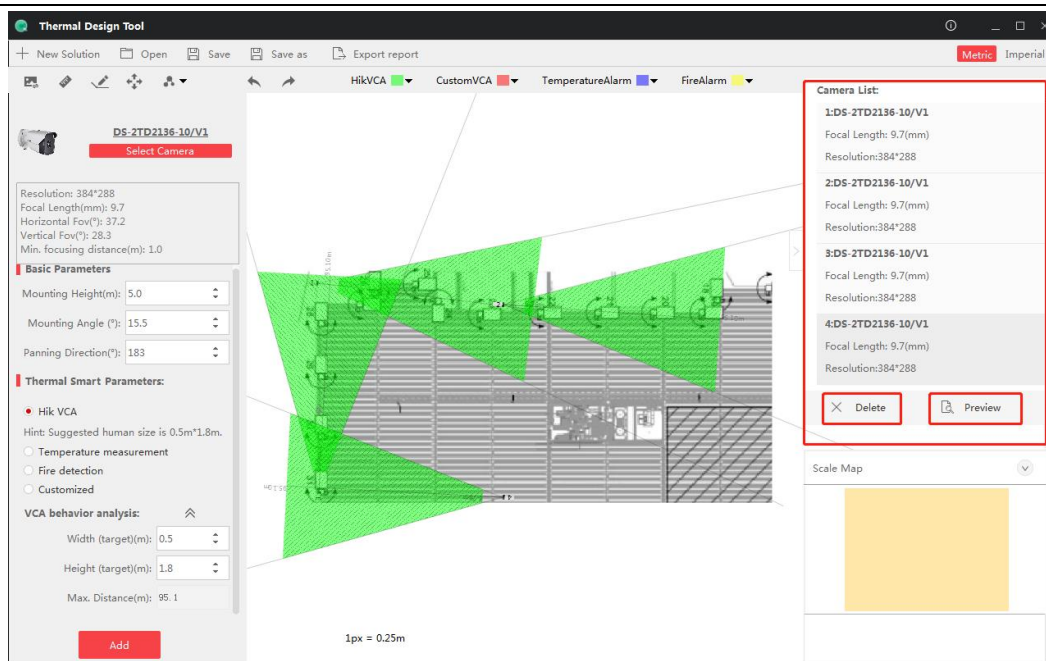


Figure 11

## 5.5 Add human or car

For example, add human and car in the visible area of camera1.

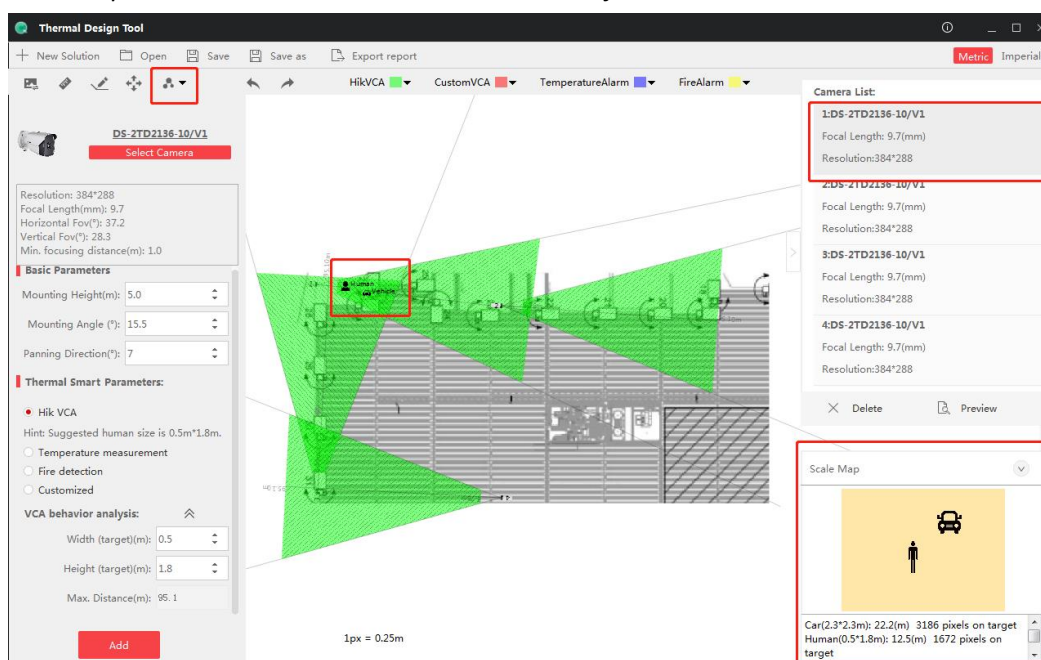


Figure 12

Then the scale map of camera 1 shows how many pixels on target.

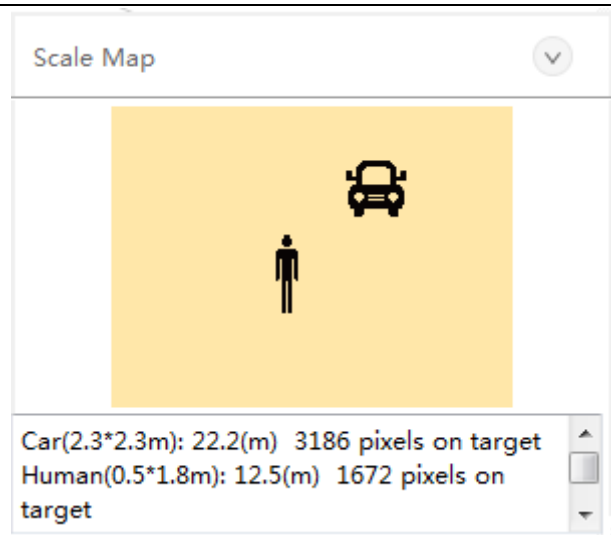


Figure 13

## 6. Export design report.

Save the design report which format is PDF in your local folder.

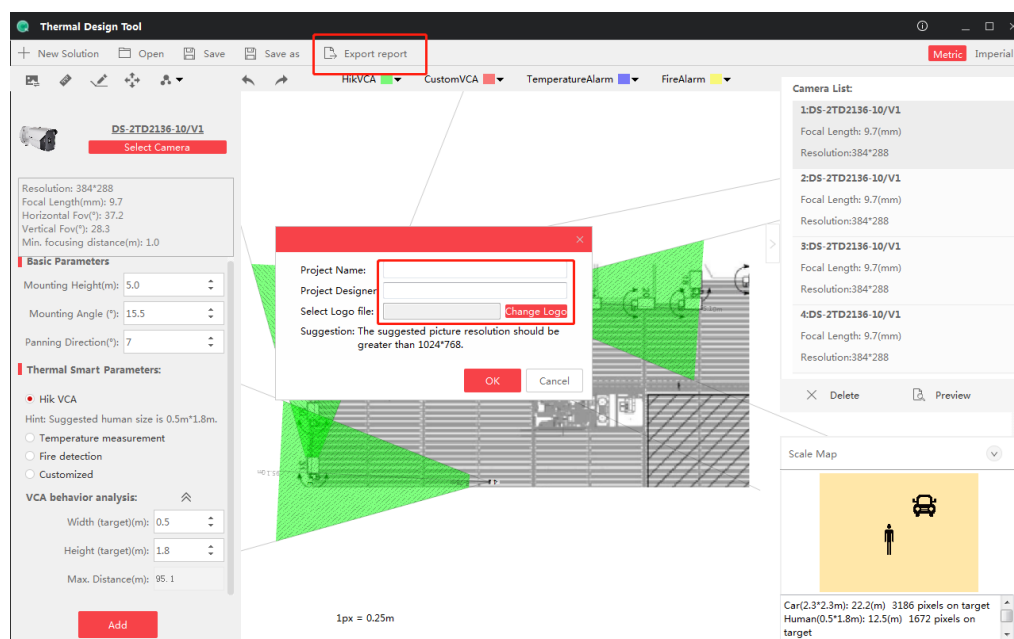


Figure 14



- **Design perimeter defense project (without project map)**

1. *Draw lines. (1 pixel = 1.00m)*

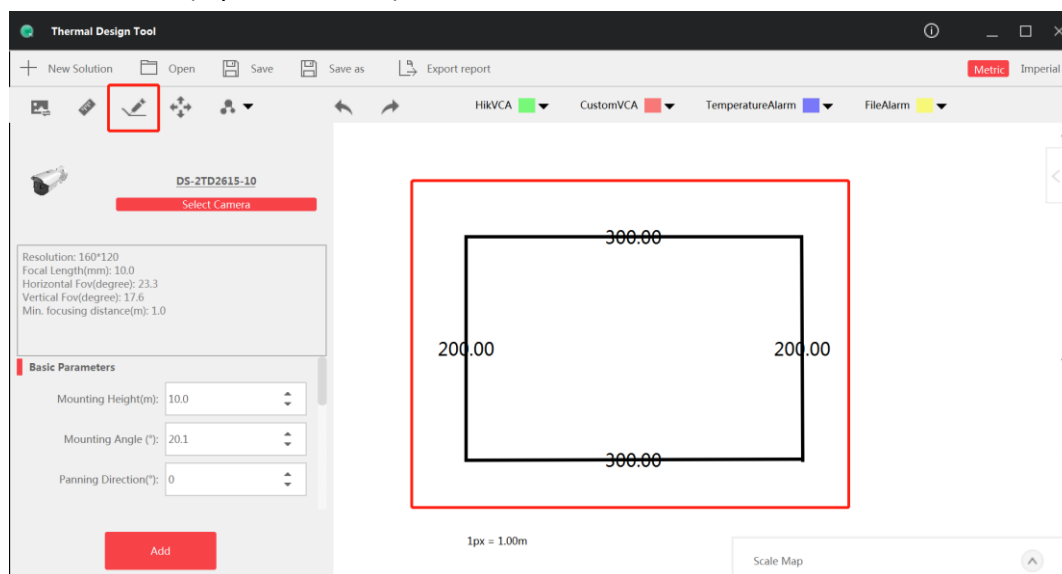


Figure 15

2. *Next steps are the same as the step 3-6 in first way.*

**First Choice for Security Professionals**

**HIKVISION Technical Support**