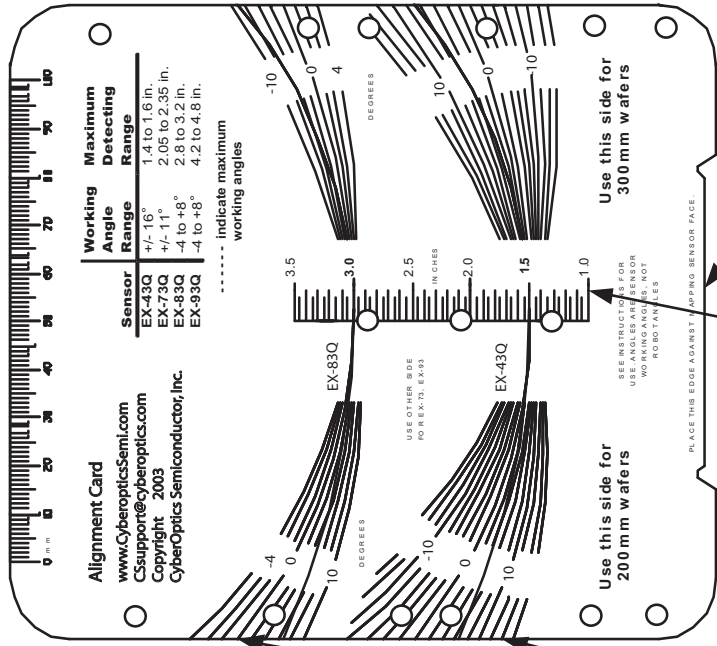


# Alignment Card Instructions & Examples

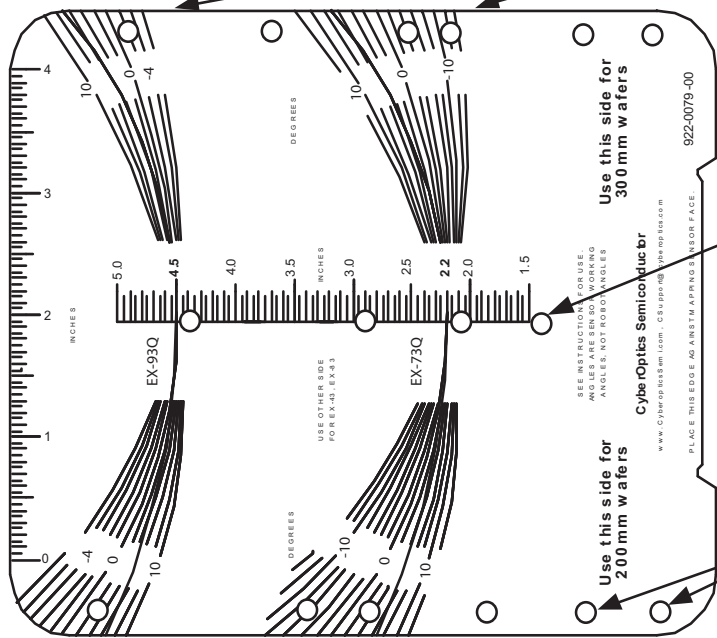
## for use with EX-Q Wafer Mapping Sensors



1 Always place the card notch snug against the sensor face

2 Always measure working distance along the sensor axis, using the scale in the center of the card

3 Find the set of curves on the card for the sensor model being used.  
EX-43Q  
EX-83Q  
EX-93Q  
EX-73Q



4 The buttons may be used as a positioning guide

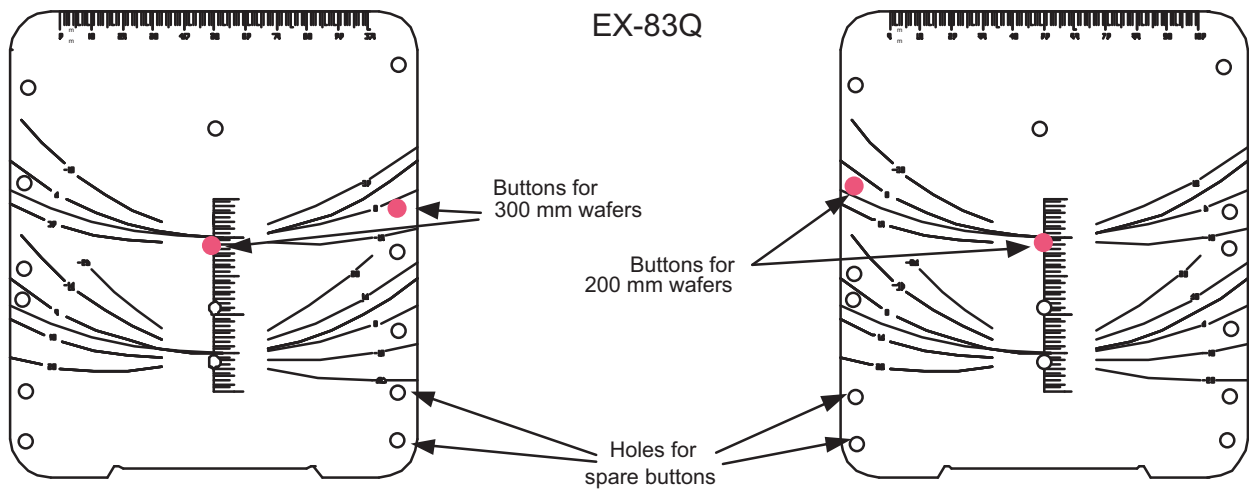
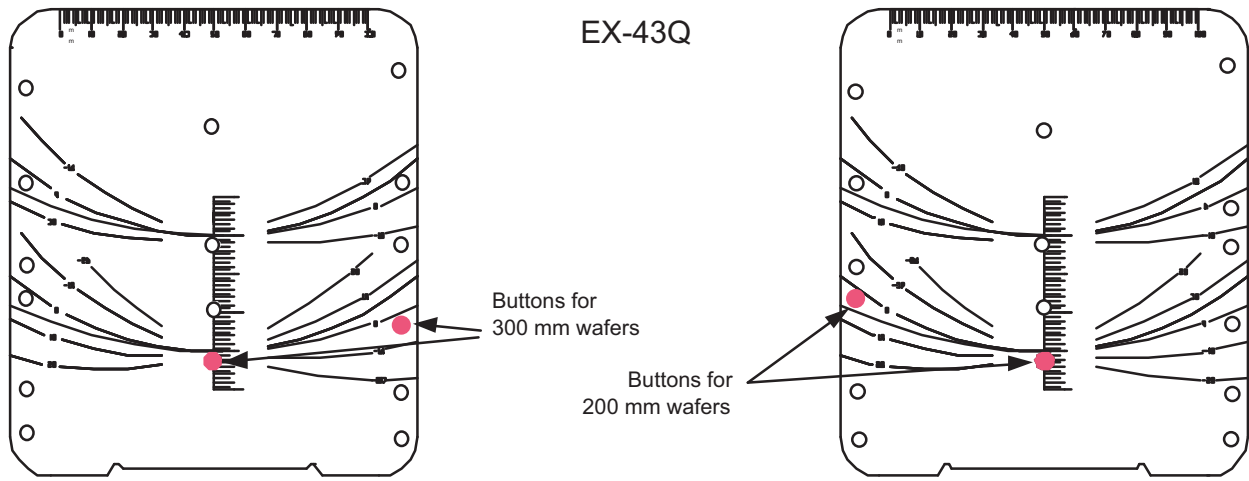
On-axis button sets optimum working distance.

Off-axis button sets optimum working angle. Use correct button position for sensor model and wafer size.

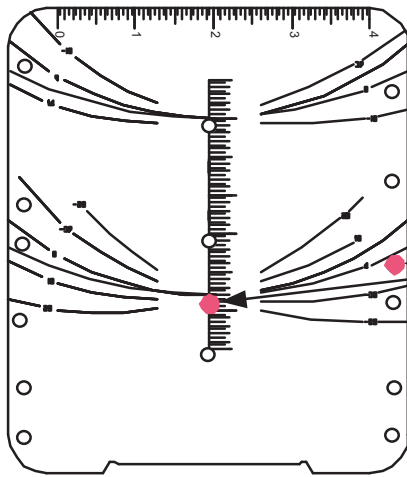
Other holes are to store unused buttons.



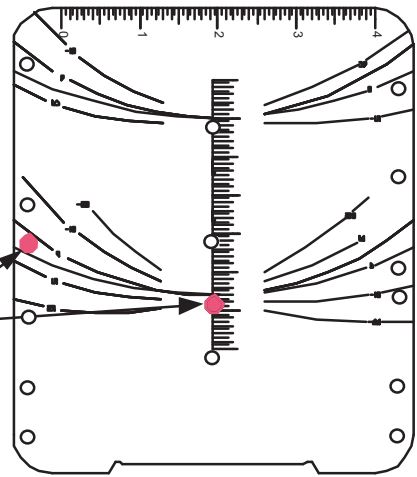
# Button positions for EX-43Q and EX-83Q



# Button positions for EX-73Q and EX-93Q

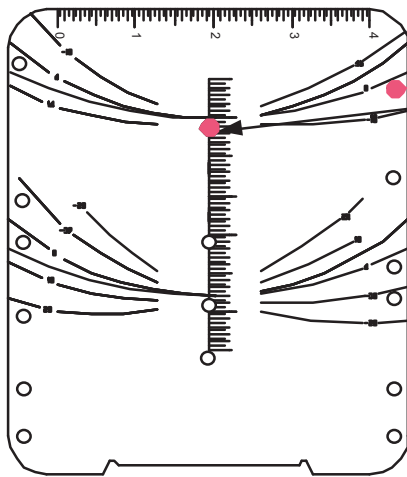


EX-73Q

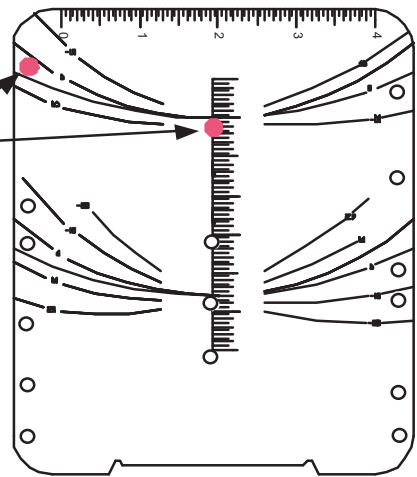


Buttons for 300 mm wafers

Buttons for 200 mm wafers



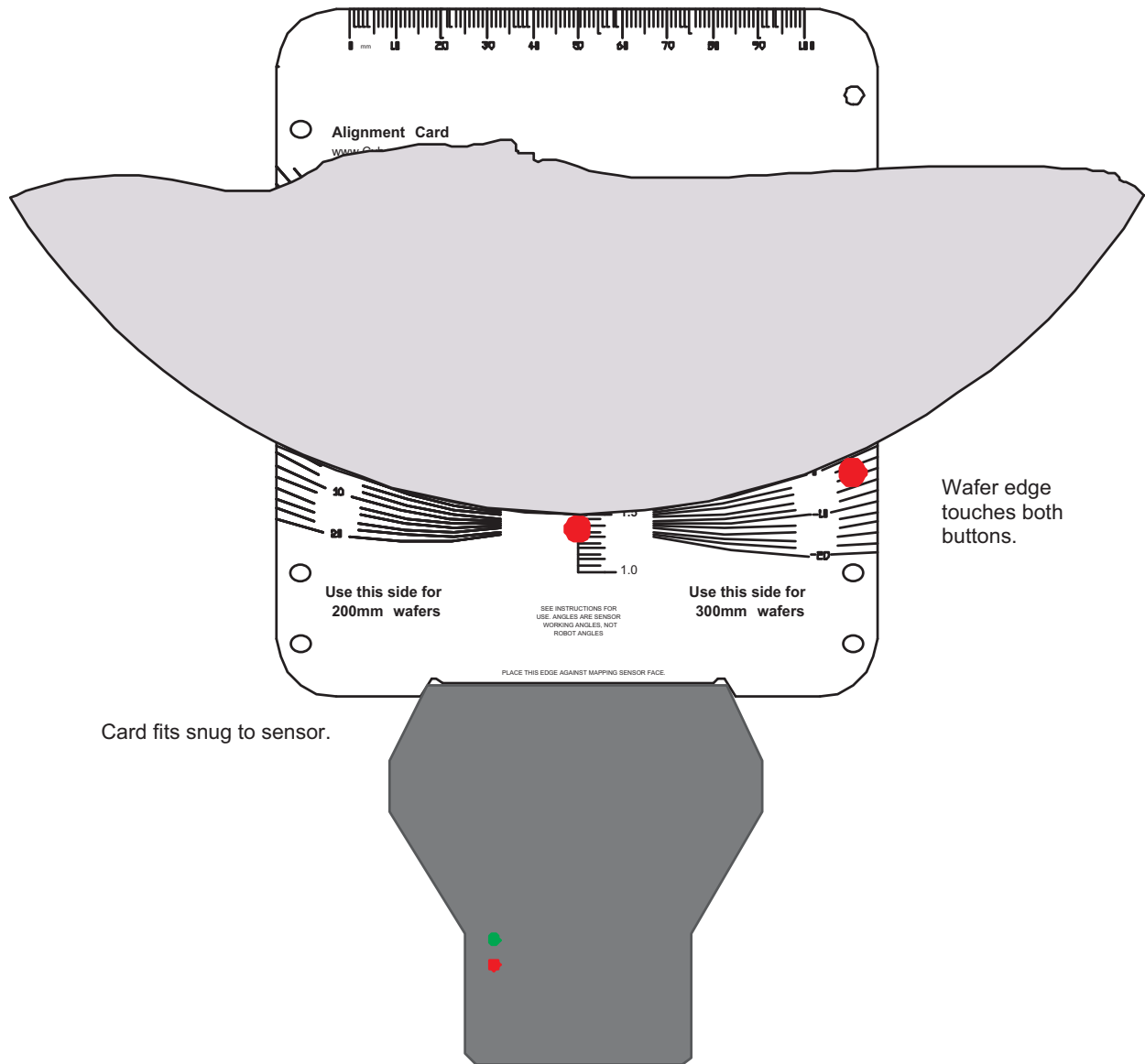
EX-93Q



Buttons for 300 mm wafers

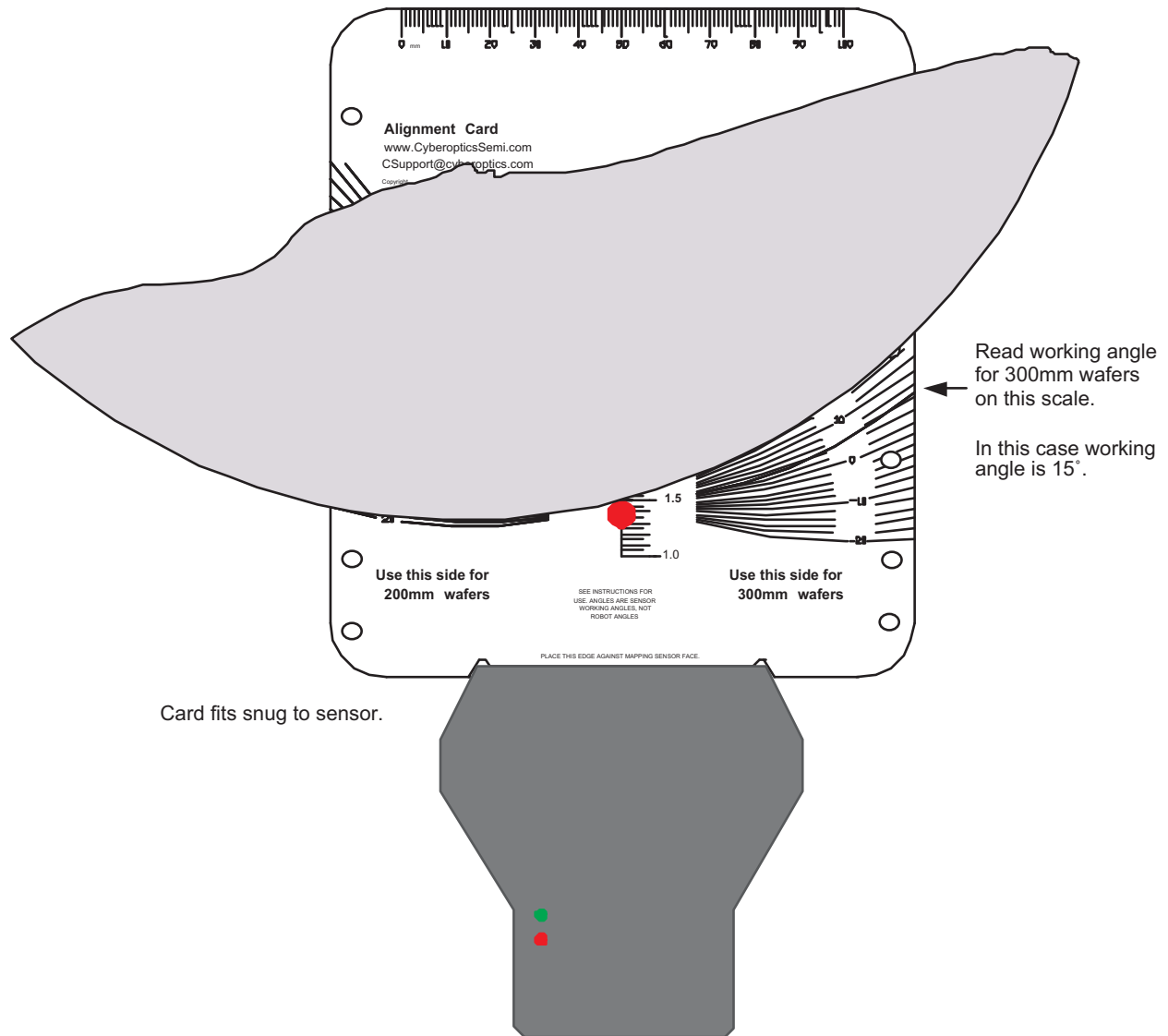
Buttons for 200 mm wafers

# Example I: EX-43Q and 300mm wafer with 0° working angle



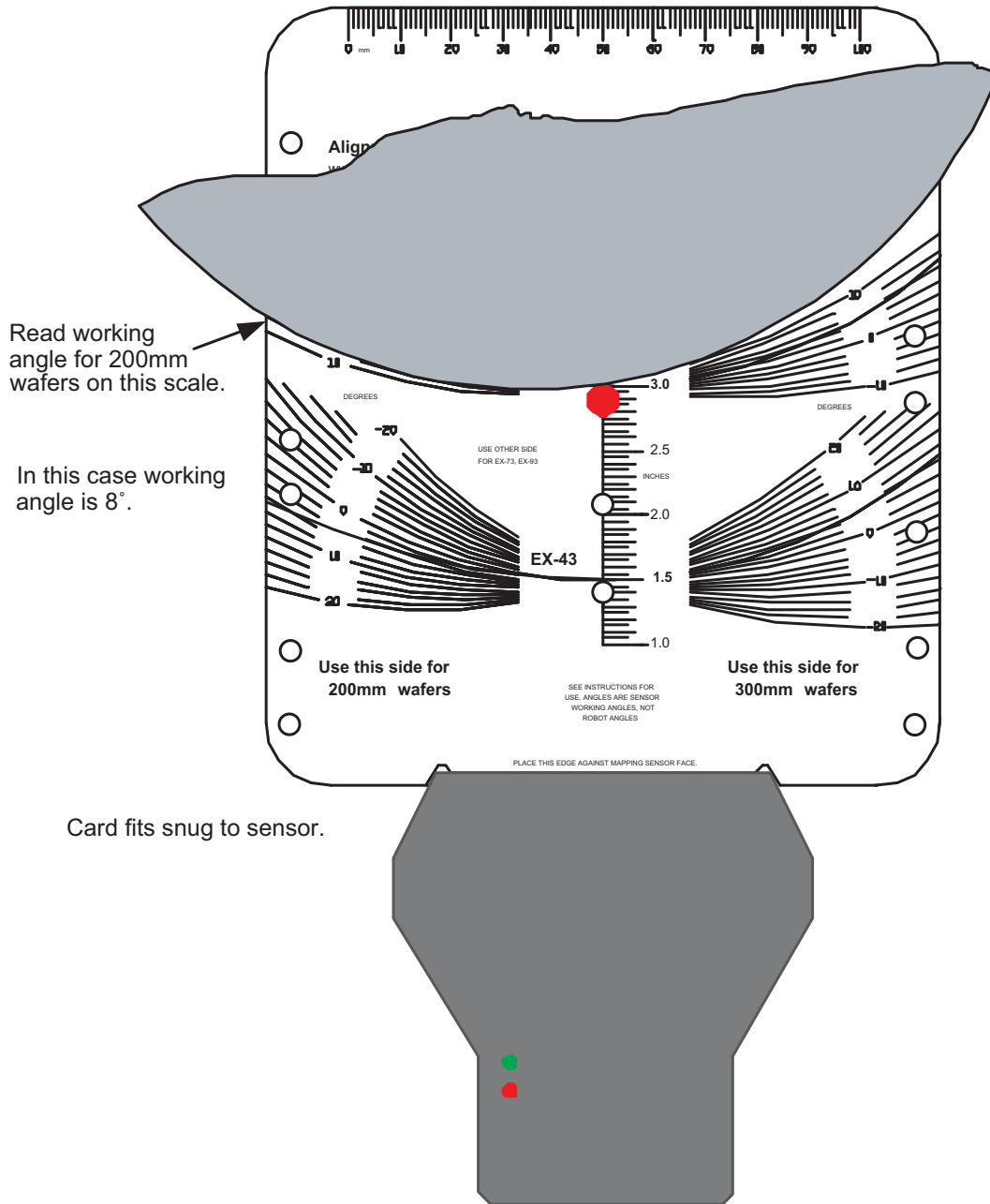
Using alignment card to set EX-43Q and 300mm wafer to 1.5" working distance and 0° working angle.

## Example 2: EX-43Q and 300mm wafer with 15° working angle



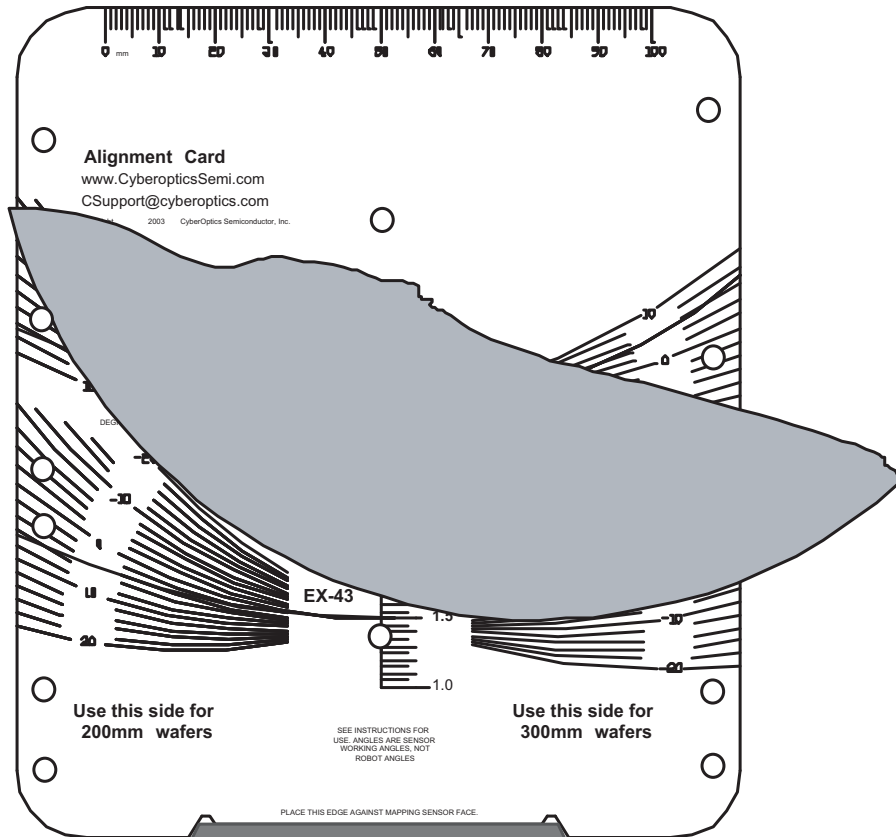
Using alignment card to measure working angle with 300mm wafer (sensor must be at the nominal working distance 1.5" in this example.)

### Example 3: EX-83Q and 200mm wafer with 8°

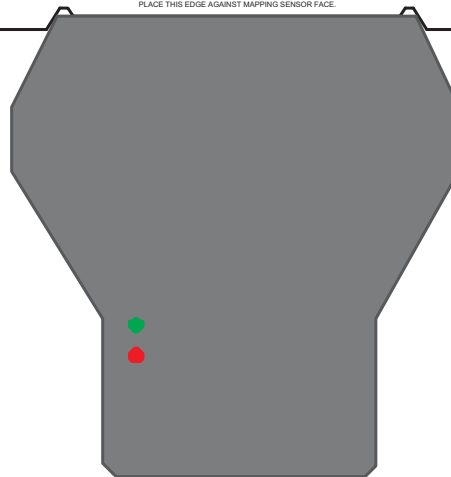


Using alignment card to measure working angle with 200mm wafer (sensor must be at the nominal working distance - 3.0" in this example.)

# Example 4: EX-43Q with working distance at 1.65"



Card fits snug to sensor.



Read working distance on the center scale for both 200mm and 300mm wafers.

In this case working distance is 1.65 inches.

Using alignment card to measure working distance.

## Technical Support

Providing responsive technical support for our products is top priority for CyberOptics. We have a dedicated technical support group available to answer your questions Monday through Friday, 8a.m. to 5p.m. (PT).  
E-mail: [CSsupport@cyberoptics.com](mailto:CSsupport@cyberoptics.com)

For information about CyberOptics' offices and global support network, please visit [www.cyberoptics.com](http://www.cyberoptics.com).

Note: Wiping down Alignment Card with pure alcohol will result in removal of printing.  
Printed on Class 100 material.



For information about CyberOptics' offices and global support network, please visit [www.cyberoptics.com](http://www.cyberoptics.com).