

## ASBC Approved Methods Beer – 10A

A. Spectrophotometric color method.

Report beer color as degrees to one decimal place.

Beer color = 10 ( $A_{1/2}$ ), 430 nm

### Spectrophotometric Color Method

Absorbance in 10 mm square cuvet at 430 nm

Absorbance in 10 mm square cuvet at 700 nm

Conversion factor 10 mm to 1/2 inch thick

#### Result

Beer color

Absorbance of beer sample in a 10 mm square cuvet (inside) is 0.31 at 430 nm and 0.01 at 700 nm.

Conversion factor 10 mm to 1/2 in. thickness = 1.27.

( $A_{1/2}$ , 430 nm) =  $1.27 \times 0.31 = 0.394$ ;  $0.039 \times 0.394 = 0.0154$ .

( $A_{1/2}$ , 700 nm) =  $1.27 \times 0.01 = 0.0127$ . Since 0.0127 is less than 0.0154, beer sample is "free of turbidity" and,

Beer color =  $10 \times 0.394$

= 3.94 or 3.9°.