

# APPLICATION NOTE: ANAE-05

## AE SERIES DISPLAYS VISIBILITY INFORMATION

Visibility of LED digital displays is dependent on many factors such as digit size, color, brightness, and viewing angle. In addition, other factors associated with the specific installation must be considered. For example, ambient light, steam or dust, and even the viewer's eyesight.

A basic rule-of-thumb is that for every inch of digit height add 50 feet to the viewing distance. This means that a 1" high digit could be viewed at 50 feet, a 2" digit at 100 feet, and so on. However, at these distances, a person would have to stop and concentrate on the display to read it. In most applications, digital displays need to be viewed at a glance. Digit size versus viewing distance, then becomes more subjective. In these applications the viewing distance should more likely be 50% to 75% of the rule-of-thumb distances. The user may want to experiment with a printed digit, or have a sample display for testing the impact of a specific application.

AE Series devices range in size from .8" high to 12" high, red LED digits. There are two different types of digits used. One is the diffused type in which the digit's segments appear as a lighted bar, and the other is the LED bulb type in which each segment is made up of discrete, super bright LED bulbs. The diffused type is available in the .8", 1", 1.8", 2.3", and 4" digit sizes. The bulb type is available in the 4", 8", and 12" digit sizes. The diffused type make a better appearance and are therefore more suited for applications such as, boardrooms, lobbies, museums, etc. The bulb type are brighter and cost less and are more suited for applications where low cost and high brightness are more important, such as, schools, factories, studios, etc.

### AE SERIES DISPLAY VISIBILITY CHART

<u>DIGIT SIZE</u>	<u>MAXIMUM VIEWING DISTANCE</u>	<u>TYPICAL VIEWING DISTANCE</u>
.8 INCH	40 FEET	15 TO 25 FEET
1 INCH	50 FEET	25 TO 35 FEET
1.8 INCH	85 FEET	25 TO 50 FEET
2.3 INCH	110 FEET	50 TO 80 FEET
4 INCH	200 FEET	100 TO 150 FEET
8 INCH	350 FEET	200 TO 300 FEET
12 INCH	500 FEET	350 TO 450 FEET



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