

## 2.14 31634 THE FUNDAMENTALS OF DISPLAY TECHNOLOGIES

1. The Effect of Display Specification
  - 1.1 Lumens
  - 1.2 Candelas per Meter Squared (cd/m<sup>2</sup>), or Nits
  - 1.3 Contrast
  - 1.4 Display Color
  - 1.5 Display Resolution
  - 1.6 Display Scanning
  - 1.7 Aspect Ratios and Screen Formats
  - 1.8 Common Aspect Ratios
2. Scaling
  - 2.1 Analog Image Display
  - 2.2 Digital Fixed Matrix Display Scan Conversion
3. Video Signals
  - 3.1 What Comprises a Video Signal?
  - 3.2 Composite (aka NTSC)
  - 3.3 Y/C (aka S-Video)
  - 3.4 Component Video
  - 3.5 VGA (Video Graphics Array)
4. DVI (Digital Video Interface)
  - 4.1 HDMI (High-Definition Multimedia Interface)
5. Digital Display Technologies
  - 5.1 Plasma Display Technology
  - 5.2 PDP Characteristics
  - 5.3 PDP Operates in the Following Manner
  - 5.4 Liquid Crystal Displays
  - 5.5 LCD Characteristics
  - 5.6 LCD Operates in the Following Manner
  - 5.7 Digital Light Processing
  - 5.8 DLP Characteristics
  - 5.9 DLP Operates in the Following Manner
  - 5.10 New DLP BrilliantColor™ Color Wheel Technology
  - 5.11 Liquid Crystal on Silicon
  - 5.12 LCoS Characteristics
  - 5.13 LCoS Operates in the Following Manner
  - 5.14 Organic Light Emitting Diode



5.15 OLED Characteristics

5.16 OLED Works in the Following Manner

**6. Light Emitting Diode**

6.1 LED Characteristics

6.2 LED Operates in the Following Manner

6.3 Resolution

**Reference book:**

1. F. A. Everest, Master Handbook of Acoustics, Third Edition, TAB Books, 1998. 7. R. H. Bolt, "Note on Normal Frequency Statistics for Rectangular Rooms," JASA, vol. 18 no. 1, July 1946, pp. 130-133.

