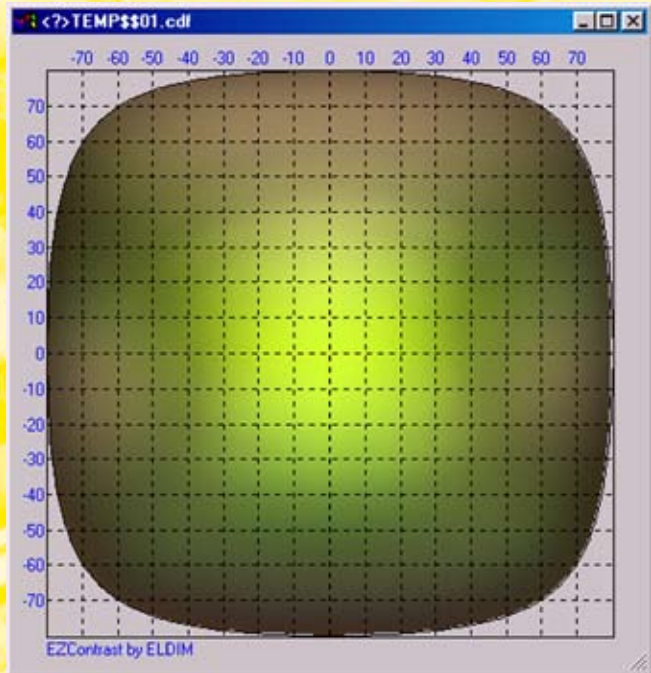




Horizontal/Vertical coordinates for EZCom Software



The EZContrast Series provides contrast, luminance and color information in polar coordinates. Horizontal/Vertical (HV) representation provides an additional tool for analysis. This approach is generally used in display characterization for avionic or automotive applications.

This software package provides the capabilities to convert polar coordinates into horizontal/vertical coordinates for analysis

Display modes	Display of luminance / Contrast / Color maps (numeric & analog)
Features	<ul style="list-style-type: none"> - Contrast computation - Horizontal Cross-sections - Vertical Cross-section - False color representation - Isoluminance, Isocontrast - Report printing - Raw results downloading by DDE and/or DLL

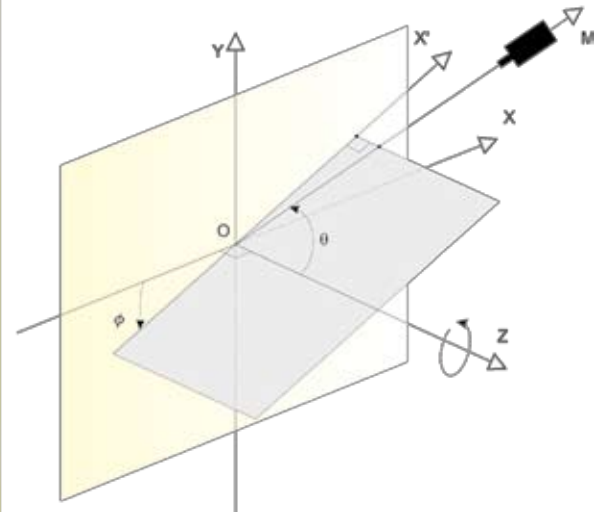
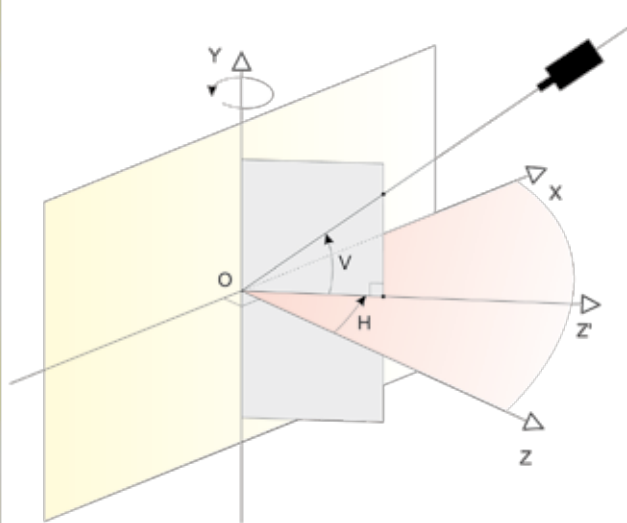
North polar HV system

$$\begin{aligned} \tan(H) &= \tan(q) \times \cos(f) \\ \sin(V) &= \sin(q) \times \sin(f) \end{aligned}$$

The North polar HV system isn't the only one used by display specialist. Other approaches are available in the HV module (East polar and Azimuthal HV systems).

Polar qf system

$$\begin{aligned} \cos(q) &= \cos(V) \times \cos(H) \\ \tan(f) &= \tan(V) \times \sin(H) \end{aligned}$$

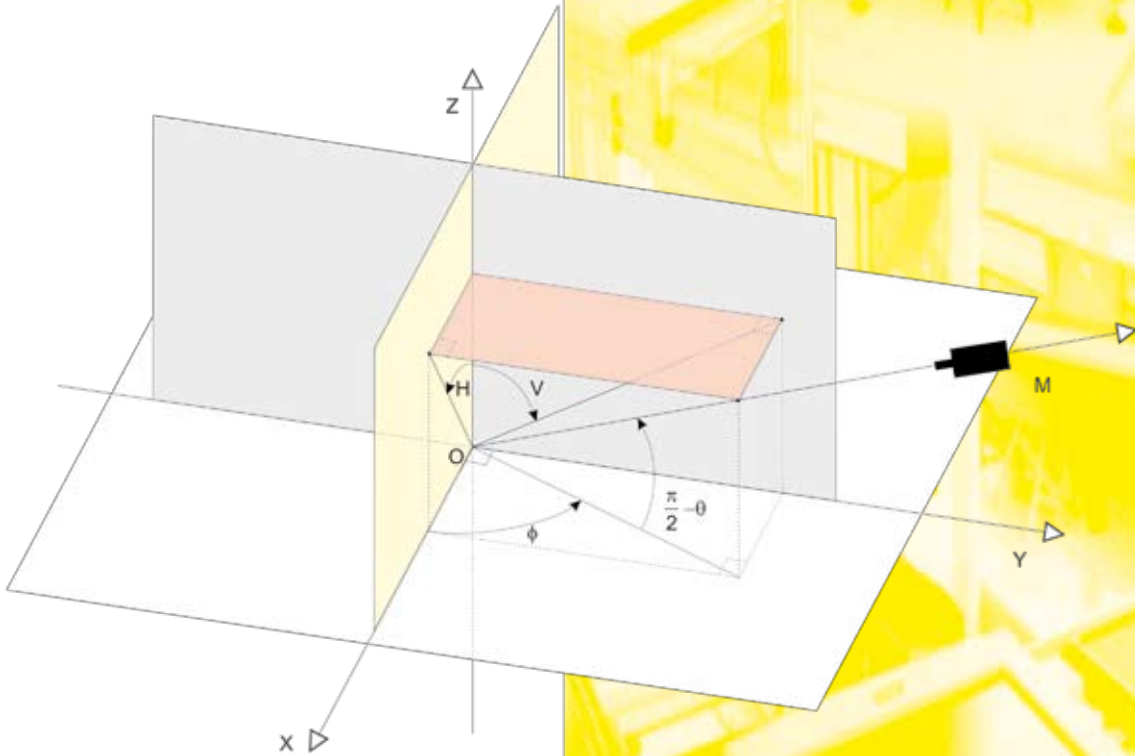
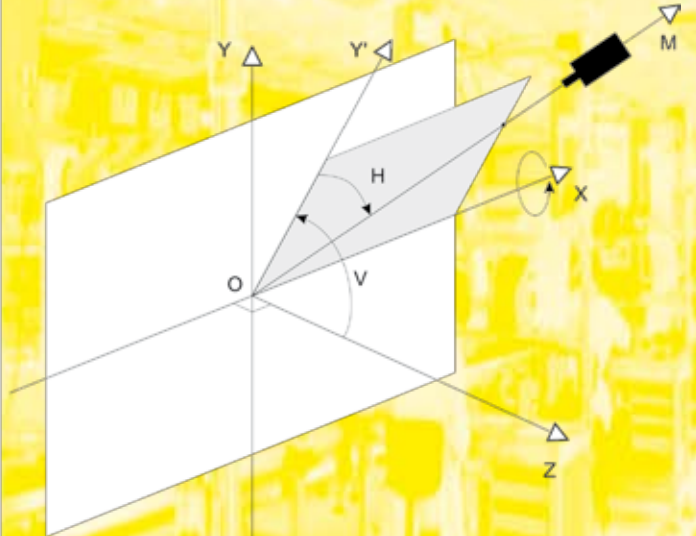




East polar HV system

$$\begin{aligned} \sin(H) &= \sin(q) \times \cos(f) \\ \tan(V) &= \tan(q) \times \sin(f) \end{aligned}$$

$$\begin{aligned} \cos(q) &= \cos(V) \times \cos(H) \\ \tan(f) &= \sin(V) / \tan(H) \end{aligned}$$



Azimuthal HV system

$$\begin{aligned} \tan(H) &= \tan(q) \times \cos(f) \\ \tan(V) &= \sin(q) \times \sin(f) \end{aligned}$$

$$\begin{aligned} \tan(q) &= \text{SQRT}(\tan^2(H) + \tan^2(V)) \\ \tan(f) &= \tan(V) / \tan(H) \end{aligned}$$

