



Figure 2. Resolution function for different detector horizontal positions at vertical position 90 mm.

Resolution function and instrumental parameters as a function of detector distance

LaB₆ powder in 0.2 mm glass capillary was measured with the detector at horizontal positions 210 mm (detector 50, frame 0), 310 mm (50, 100), 410 mm (50, 200), 510 mm (50, 300), 610 mm (50, 400) and 710 mm (50, 500). Detector vertical position 90 mm. Refined wavelength: 0.6980 Ang.

Instrumental parameters for the different horizontal positions (Table 1, figure 1) are calculated from the fitted FWHM² by using the Caglioti equation.

Resolution functions for the different detector positions are plotted in figure 2.

Table 1 and figure 1. Instrumental parameters for different detector horizontal positions.

Detector distance (mm)	U	V	W
210	-0.0076 (0.0016)	-0.00139 (0.00099)	0.00586 (0.00013)
310	-0.0035 (0.0018)	-0.00095 (0.00085)	0.00286 (0.00009)
410	0.0063 (0.0023)	-0.00413 (0.00095)	0.00204 (0.00009)
510	0.0074 (0.0040)	-0.0041 (0.0015)	0.00152 (0.00012)
610	0.0190 (0.0062)	-0.0068 (0.0019)	0.00129 (0.00013)
710	0.0183 (0.0089)	-0.0063 (0.0026)	0.00107 (0.00017)

