



Method: Cooper-Nathans
Position HKLE [08-Mar-2016 15:12:21]

$[Q_H, Q_K, Q_L, E] = [1.0, 1.0, 0.0, \text{array}([0., 2.5, 5., 7.5, 10., 12.5, 15.])]$

Resolution Matrix M in $[Q_1, Q_2, Q_z, E]$ (M/10⁴):
[[9.0017, -9.1153, 0.0000, 1.2309]
[-9.1153, 11.8231, 0.0000, -1.4360]
[0.0000, 0.0000, 0.0635, 0.0000]
[1.2309, -1.4360, 0.0000, 0.1828]]

Resolution volume: $V_0 = 0.000025$ meV/Å³

Intensity prefactor: $R_0 = 1831.893$

Bragg width in $[Q_1, Q_2, E]$ (FWHM):

$\delta Q_1 = 0.016$ $\delta Q_2 = 0.014$ [Å⁻¹] $\delta E = 0.110$ [meV]

$\delta Q_z = 0.187$ Vanadium width $V = 1.821$ [meV]

Instrument parameters:

DM = 3.354 ETAM = 25.000 SM = -1

KFIX = 2.663 FX = 2 SS = 1

DA = 3.354 ETAA = 25.000 SA = -1

A1 = -20.59 A2 = -41.18 A3 = -115.60 A4 = 30.01 A5 = -20.59 A6 = -41.18 [deg]

Collimation [arcmin]:

Horizontal: [40, 40, 40, 40]

Vertical: [120, 120, 120, 120]

Sample:

a, b, c = [6, 7, 8] [Ångs]

Alpha, Beta, Gamma = [90, 90, 90] [deg]

U = [1 0 0] [rlu] V = [0 1 0] [rlu]