



Method: Cooper-Nathans
Position HKLE [09-May-2018 20:32:24]

[Q_H, Q_K, Q_L, E] = [1.0, 1.0, 0.0, array([0. , 2.5, 5. , 7.5, 10. , 12.5])]

Resolution Matrix M in [Q1,Q2,Qz,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 [Q₁, Q₂, E] (FWHM):
dQ₁=0.016 dQ₂=0.014 [Å⁻¹] dE=0.110 [meV]
dQ_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

Collimation [arcmin]:

Horizontal: [40, 40, 40, 40]

Vertical: [120, 120, 120, 120]

Sample:

a, b, c = [6, 7, 8] [Å]

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