



Method: Cooper-Nathans

Position HKLE [10-May-2016 15:46:24]

[Q\_H, Q\_K, Q\_L, E] = [1.0, 1.0, 0.0, array([ 0. , 2.5, 5. , 7.5, 10. , 12.5, 15. ])]

Resolution Matrix M in [Q1,Q2,Qz,E] (M/10<sup>4</sup>):

```
[[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/Å<sup>3</sup>

Intensity prefactor:  $R_0 = 1831.893$

Bragg width in [Q<sub>1</sub>, Q<sub>2</sub>, E] (FWHM):

dQ<sub>1</sub>=0.016 dQ<sub>2</sub>=0.014 [Å<sup>-1</sup>] dE=0.110 [meV]  
dQ<sub>z</sub>=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] [Angs]

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

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