NIST Reference Standard on the Alpha-1. Primary peak position and relative intensity match against the NIST reference data, and the lattice cell refinement for the a and c cells also match. The instrument is operating correctly.

## Main Graphics



## Peak List:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pos. [°2θ] | Height [cts] | FWHM Left [°2θ] | d-spacing [Å] | Rel. Int. [%] |
| 25.6229 | 456.18 | 0.0743 | 3.47383 | 63.47 |
| 35.1955 | 718.69 | 0.0743 | 2.54785 | 100.00 |
| 37.8234 | 335.49 | 0.0743 | 2.37666 | 46.68 |
| 41.7208 | 3.18 | 0.0743 | 2.16320 | 0.44 |
| 43.3993 | 716.35 | 0.0743 | 2.08335 | 99.67 |
| 46.2240 | 10.91 | 0.0743 | 1.96240 | 1.52 |
| 52.5956 | 363.51 | 0.0743 | 1.73868 | 50.58 |
| 57.5420 | 718.10 | 0.0743 | 1.60042 | 99.92 |
| 59.7852 | 18.35 | 0.0743 | 1.54562 | 2.55 |
| 61.1742 | 23.88 | 0.0743 | 1.51381 | 3.32 |
| 61.3431 | 54.91 | 0.0743 | 1.51005 | 7.64 |
| 66.5610 | 284.08 | 0.0743 | 1.40376 | 39.53 |
| 68.2528 | 434.83 | 0.0743 | 1.37303 | 60.50 |
| 70.4580 | 9.12 | 0.0743 | 1.33536 | 1.27 |
| 74.3396 | 10.97 | 0.0743 | 1.27495 | 1.53 |
| 76.9110 | 124.95 | 0.0743 | 1.23861 | 17.39 |
| 77.2736 | 66.43 | 0.0743 | 1.23370 | 9.24 |
| 80.4573 | 5.39 | 0.0743 | 1.19271 | 0.75 |
| 80.7405 | 48.50 | 0.0743 | 1.18924 | 6.75 |
| 83.2556 | 2.80 | 0.0743 | 1.15958 | 0.39 |
| 83.2556 | 2.80 | 0.0743 | 1.15958 | 0.39 |
| 84.3964 | 39.51 | 0.0743 | 1.14679 | 5.50 |
| 85.1805 | 2.12 | 0.0743 | 1.13823 | 0.29 |
| 86.3919 | 28.97 | 0.0743 | 1.12535 | 4.03 |
| 86.5402 | 21.06 | 0.0743 | 1.12380 | 2.93 |
| 89.0325 | 57.93 | 0.0743 | 1.09868 | 8.06 |
| 90.7420 | 13.90 | 0.0743 | 1.08238 | 1.93 |
| 91.2268 | 68.83 | 0.0743 | 1.07789 | 9.58 |
| 94.8566 | 1.56 | 0.0743 | 1.04599 | 0.22 |
| 95.2856 | 137.65 | 0.0743 | 1.04241 | 19.15 |
| 98.4311 | 18.22 | 0.0743 | 1.01734 | 2.54 |
| 101.1080 | 103.55 | 0.0743 | 0.99751 | 14.41 |
| 102.8554 | 2.39 | 0.0743 | 0.98526 | 0.33 |
| 103.3530 | 18.79 | 0.0743 | 0.98187 | 2.61 |
| 104.6742 | 1.31 | 0.0743 | 0.97307 | 0.18 |
| 109.5765 | 3.84 | 0.0743 | 0.94281 | 0.53 |
| 109.8908 | 2.60 | 0.0743 | 0.94099 | 0.36 |
| 110.8636 | 1.27 | 0.0743 | 0.93545 | 0.18 |
| 111.0220 | 32.16 | 0.0743 | 0.93456 | 4.47 |
| 114.1008 | 22.24 | 0.0743 | 0.91795 | 3.09 |
| 116.1335 | 108.88 | 0.0743 | 0.90766 | 15.15 |
| 116.6289 | 37.84 | 0.0743 | 0.90523 | 5.27 |
| 117.8856 | 62.16 | 0.0743 | 0.89920 | 8.65 |
| 120.2451 | 3.81 | 0.0743 | 0.88837 | 0.53 |
| 122.0693 | 19.52 | 0.0743 | 0.88043 | 2.72 |
| 122.0693 | 19.52 | 0.0743 | 0.88043 | 2.72 |
| 124.6266 | 24.96 | 0.0743 | 0.86990 | 3.47 |
| 127.7105 | 142.71 | 0.0743 | 0.85810 | 19.86 |
| 129.9035 | 28.20 | 0.0743 | 0.85027 | 3.92 |
| 129.9035 | 28.20 | 0.0743 | 0.85027 | 3.92 |
| 131.1246 | 59.58 | 0.0743 | 0.84610 | 8.29 |
| 132.2465 | 4.27 | 0.0743 | 0.84239 | 0.59 |
| 132.6474 | 2.92 | 0.0743 | 0.84109 | 0.41 |
| 136.1073 | 123.32 | 0.0743 | 0.83048 | 17.16 |
| 136.1073 | 123.32 | 0.0743 | 0.83048 | 17.16 |
| 139.3945 | 1.57 | 0.0743 | 0.82133 | 0.22 |

## Pattern List: (Bookmark 4)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Visible | Ref.Code | Score | Compound Name | Displ.[°2θ] | Scale Fac. | Chem. Formula |
| \* | 04-010-6477 | 58 | Aluminum Oxide | 0.000 | 0.235 | Al2 O3 |