NIST Reference Standard on the MRD. 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, Analyze View:



## Peak List:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pos. [°2θ] | Height [cts] | FWHM Left [°2θ] | d-spacing [Å] | Rel. Int. [%] |
| 25.5192 | 135.33 | 0.2817 | 3.48771 | 61.30 |
| 35.0983 | 213.95 | 0.2817 | 2.55469 | 96.91 |
| 37.7240 | 100.95 | 0.2817 | 2.38269 | 45.73 |
| 41.6303 | 0.90 | 0.2817 | 2.16769 | 0.41 |
| 43.3045 | 215.09 | 0.2817 | 2.08769 | 97.43 |
| 46.1298 | 3.40 | 0.2817 | 1.96618 | 1.54 |
| 52.5072 | 111.56 | 0.2817 | 1.74140 | 50.53 |
| 57.4598 | 220.77 | 0.2817 | 1.60252 | 100.00 |
| 59.6993 | 5.67 | 0.2817 | 1.54764 | 2.57 |
| 61.0897 | 7.46 | 0.2817 | 1.51570 | 3.38 |
| 61.2673 | 16.71 | 0.2817 | 1.51173 | 7.57 |
| 66.4821 | 88.69 | 0.2817 | 1.40524 | 40.17 |
| 68.1731 | 136.00 | 0.2817 | 1.37444 | 61.60 |
| 70.3834 | 2.76 | 0.2817 | 1.33660 | 1.25 |
| 74.2733 | 3.55 | 0.2817 | 1.27593 | 1.61 |
| 76.8515 | 39.85 | 0.2817 | 1.23942 | 18.05 |
| 77.2119 | 20.79 | 0.2817 | 1.23453 | 9.42 |
| 80.3943 | 1.78 | 0.2817 | 1.19349 | 0.81 |
| 80.6715 | 15.71 | 0.2817 | 1.19008 | 7.12 |
| 83.1935 | 0.97 | 0.2817 | 1.16029 | 0.44 |
| 83.1935 | 0.96 | 0.2817 | 1.16029 | 0.44 |
| 84.3320 | 12.58 | 0.2817 | 1.14751 | 5.70 |
| 85.1157 | 0.69 | 0.2817 | 1.13893 | 0.31 |
| 86.3287 | 9.36 | 0.2817 | 1.12601 | 4.24 |
| 86.4848 | 6.78 | 0.2817 | 1.12438 | 3.07 |
| 88.9841 | 18.69 | 0.2817 | 1.09916 | 8.47 |
| 90.7009 | 4.48 | 0.2817 | 1.08277 | 2.03 |
| 91.1700 | 22.49 | 0.2817 | 1.07841 | 10.19 |
| 94.8049 | 0.47 | 0.2817 | 1.04642 | 0.22 |
| 95.2357 | 45.30 | 0.2817 | 1.04283 | 20.52 |
| 98.3807 | 6.00 | 0.2817 | 1.01772 | 2.72 |
| 101.0730 | 34.63 | 0.2817 | 0.99776 | 15.68 |
| 102.8282 | 0.73 | 0.2817 | 0.98545 | 0.33 |
| 103.3099 | 6.33 | 0.2817 | 0.98216 | 2.87 |
| 104.6370 | 0.48 | 0.2817 | 0.97331 | 0.22 |
| 109.5392 | 1.28 | 0.2817 | 0.94302 | 0.58 |
| 109.8700 | 0.80 | 0.2817 | 0.94111 | 0.36 |
| 110.8284 | 0.46 | 0.2817 | 0.93565 | 0.21 |
| 110.9952 | 10.66 | 0.2817 | 0.93471 | 4.83 |
| 114.0807 | 7.40 | 0.2817 | 0.91806 | 3.35 |
| 116.1072 | 37.56 | 0.2817 | 0.90779 | 17.01 |
| 116.6288 | 13.01 | 0.2817 | 0.90523 | 5.90 |
| 117.8597 | 21.66 | 0.2817 | 0.89932 | 9.81 |
| 120.2263 | 1.28 | 0.2817 | 0.88845 | 0.58 |
| 122.0510 | 6.59 | 0.2817 | 0.88051 | 2.98 |
| 122.0510 | 6.61 | 0.2817 | 0.88051 | 3.00 |
| 124.6209 | 8.47 | 0.2817 | 0.86992 | 3.84 |
| 127.7162 | 50.30 | 0.2817 | 0.85808 | 22.78 |
| 129.9208 | 9.70 | 0.2817 | 0.85021 | 4.40 |
| 129.9208 | 9.74 | 0.2817 | 0.85021 | 4.41 |
| 131.1534 | 20.51 | 0.2817 | 0.84600 | 9.29 |
| 132.2528 | 1.48 | 0.2817 | 0.84237 | 0.67 |
| 132.6752 | 1.07 | 0.2817 | 0.84101 | 0.49 |
| 136.1196 | 43.62 | 0.2817 | 0.83044 | 19.76 |
| 136.1196 | 43.70 | 0.2817 | 0.83044 | 19.80 |
| 139.4310 | 0.47 | 0.2817 | 0.82123 | 0.21 |

## Pattern List:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Visible | Ref. Code | Score | Compound Name | Displacement [°2Th.] | Scale Factor | Chemical Formula |
| \* | 01-074-1081 | 62 | Aluminum Oxide | 0.000 | 0.661 | Al2 O3 |