

Table 43A-14-001. Rb₂Cd₂(SO₄)₃. Lines of Raman spectra [cm⁻¹] [84Lat]. X', Y' || <110>.

| Attribution | Z(XX)Y | | Z(Y'X')Y' | | Z(YZ)Y | | Z(XZ)Y | | Z(YX)Y | |
|-----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|----------------|
| | A + E | | E | | F, x | | F, y | | F, z | |
| T[°C] | +20 | -126 -150 -186 | +20 | -135 | +20 | -130 -152 -178 | +20 | -125 -149 -186 | +20 | -128 -148 -178 |
| Lattice vibrations | 20 | 20 20 | 20 | | | | | | | |
| | | 29 30 | | | | | | | | |
| | | 37 | | | | | | | | |
| | | 40 | | | | | | | | |
| | | 45 | | | | | | | | |
| | 50 | 49 50 54 | 50 | 49 50 | 50 51 52 | 54 54 | 49 50 51 53 | 45 | 49 52 54 | 54 |
| | AT | AT | | | | | | | | |
| | | 59 | | | | | | | | |
| | 74 | 73 75 78 | 76 | | 73 75 75 | 72 72 | 74 74 75 70 | 74 77 78 | 76 | |
| | 82 | 83 85 | | 79 | | 82 82 | | 78 | 83 | |
| | | 88 | | | | | | | | |
| | | 94 | | | 93 98 | | 97 | | 95 | |
| | 107 110 107 107 | 109 107 107 107 | 109 107 107 107 | 113 110 110 110 | 113 110 110 110 | 103 106 111 108 | 104 110 108 110 | | | |
| | 125 | | 123 | | | | | | | |
| | 132 133 132 133 | | | | | | | 133 135 | | |
| | 139 | | | | | | | | | |
| | 152 157 153 150 | 150 155 150 150 | 150 155 150 150 | 154 160 155 169 | 154 160 155 163 | 154 159 160 156 | 153 160 154 157 | | | |
| | 167 188 | | | | | | | | | |
| ν ₂ (SO ₄) | | AT | | | | | | | | 206 |
| | 212 216 | 215 215 436 436 | 212 214 211 218 | 217 219 217 219 | 217 219 217 219 | 209 216 218 217 | 210 217 216 217 | 210 217 216 217 | 216 217 | 217 |
| | | 441 444 443 442 | | 436 437 436 437 | 436 438 436 438 | 437 437 437 437 | 437 437 437 437 | 437 437 437 437 | 437 438 | 438 |
| | 447 | 446 447 446 447 | 447 445 446 448 | 447 445 446 448 | 447 445 446 448 | 445 445 445 445 | 447 449 449 449 | 446 447 448 448 | 443 444 444 444 | 444 |
| | | 460 | | 448 449 448 449 | 448 449 448 449 | 449 449 449 449 | 449 449 449 449 | 446 447 448 448 | 448 449 449 449 | 449 |
| | | 466 464 463 463 | 464 462 465 465 | 464 462 465 465 | 462 465 462 465 | 465 465 465 465 | 463 462 464 464 | 465 464 465 465 | 464 464 464 464 | 465 |
| | 470 | 471 472 472 472 | 472 472 472 472 | 472 472 472 472 | 472 472 472 472 | 473 473 473 473 | AT 472 472 472 | 465 464 465 465 | 464 464 464 464 | 465 |
| | | | | | | 477 477 477 477 | 472 472 472 472 | 472 472 472 472 | 472 472 472 472 | 473 |
| | | | | | | | | | | |
| | | | | | | | | | | |

(continued)

Table 43A-14-001 (continued)

| Attribution | Z(XX)Y | | Z(Y'X')Y' | | Z(YZ)Y | | Z(XZ)Y | | Z(YX)Y | |
|-----------------------------------|--------|----------------|-----------|------|--------|----------------|--------|----------------|-----------|---------------------|
| | A + E | | E | | F, x | | F, y | | F, z | |
| T [°C] | +20 | -126 -150 -186 | +20 | -135 | +20 | -130 -152 -178 | +20 | -125 -149 -186 | +20 | -128 -148 -178 |
| ν ₄ (SO ₄) | 604 | 601 599 508 | 602 | 601 | 605 | 692 601 601 | 603 | 601 601 600 | 604 | 602 601 601 |
| | | AT | | | AT | 608 607 605 | 609 | 607 607 607 | 608 | 607 605 605 |
| | 620 | 621 620 619 | 619 | 621 | 621 | 622 620 622 | 620 | 621 620 620 | 620 | 621 621 621 |
| | 627 | 626 625 625 | | | 626 | 628 627 627 | 626 | 627 628 627 | 627 | 627 627 626 |
| | | | | | | 630 | | | | |
| | 642 | 641 640 | 642 | 643 | 641 | 642 642 643 | 641 | 641 643 641 | 641 | 642 642 643 |
| ν ₃ (SO ₄) | | AT AT | | | 646 | 649 650 651 | 647 | 648 650 649 | 646 | 649 652 |
| | | AT 1011 | | | | | | | 1011 | 1009 |
| | | 1015 | | | | | | | 1016 | 1015 |
| | | 1019 | | | | | | | 1019 | 1018 |
| | | AT | | | | | | | AT | AT |
| | AT | 1024 | | AT | AT | AT | AT | AT | AT | AT |
| | 1029 | 1029 1028 | 1028 | 1029 | 1028 | 1029 1030 1030 | 1028 | 1028 1029 1029 | 1028 | 1029 1029 1028 |
| | | 1085 | | | | | | | 1088 | |
| | 1096 | 1093 1091 1089 | 1094 | 1092 | 1093 | 1092 1092 1091 | 1094 | 1092 1092 1093 | 1093 | 1093 1092 1092 |
| | | AT AT | AT | AT | | AT 1099 | | AT | 1102 | 1104 |
| | 1120 | 1121 1119 1120 | | | | 1122 AT | | | 1120 | 1120 |
| | | 1135 | | | 1132 | 1135 AT | 1130 | 1132 | 1126 1129 | 1132 1136 |
| ν ₂ (SO ₄) | | 1140 | 1142 | | | | | AT | 1143 1137 | |
| | 1142 | 1148 1150 1147 | | 1149 | 1149 | 1143 | | 1149 | 1152 1150 | 1149 1155 1152 1151 |
| | | | | | | 1155 1151 1151 | | | 1157 1158 | AT |
| | | 1161 | | | | 1157 1158 | | | | |
| | | AT 1204 | | | AT | AT | AT | AT | AT | AT |
| | 1216 | 1218 1215 | 1215 | 1215 | 1214 | 1217 1220 1219 | 1214 | 1217 1218 1216 | 1213 | 1218 1218 1218 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

AT: asymmetric tail.