

**APPENDIX TABLE 2a.** Annealing data for apatite RN

| <i>t</i><br>(h) | <i>T</i><br>(°C) | Run  | <i>n</i> | Cf | Measured                     |            | Fitted                       |                              |            | Modeled                          |                  |
|-----------------|------------------|------|----------|----|------------------------------|------------|------------------------------|------------------------------|------------|----------------------------------|------------------|
|                 |                  |      |          |    | <i>l<sub>m</sub></i><br>(μm) | $\sigma_m$ | <i>l<sub>c</sub></i><br>(μm) | <i>l<sub>a</sub></i><br>(μm) | $\sigma_e$ | <i>l<sub>c,mod</sub></i><br>(μm) | $\sigma_{c,mod}$ |
| 1               |                  | 0    | 110      | n  | 16.29 (07)                   | 0.77       | 16.41 (23)                   | 16.23 (13)                   | 0.77       | 16.57 (05)                       | 0.56             |
| 1               | 125              | 61   | 111      | n  | 16.30 (07)                   | 0.70       | 16.44 (22)                   | 16.24 (12)                   | 0.70       | 16.58 (05)                       | 0.50             |
| 1               | 150              | 62   | 108      | n  | 16.05 (08)                   | 0.79       | 16.45 (23)                   | 15.89 (11)                   | 0.78       | 16.41 (05)                       | 0.56             |
| 1               | 150              | 64   | 111      | n  | 15.86 (08)                   | 0.82       | 16.31 (25)                   | 15.70 (11)                   | 0.81       | 16.30 (05)                       | 0.57             |
| 1               | 175              | 10   | 110      | n  | 15.80 (08)                   | 0.84       | 16.24 (24)                   | 15.64 (11)                   | 0.83       | 16.25 (06)                       | 0.58             |
| 1               | 176              | 43   | 110      | n  | 15.54 (08)                   | 0.81       | 16.26 (26)                   | 15.28 (11)                   | 0.78       | 16.07 (05)                       | 0.54             |
| 1               | 202              | 4    | 110      | n  | 15.42 (07)                   | 0.71       | 15.56 (24)                   | 15.36 (12)                   | 0.71       | 15.97 (05)                       | 0.51             |
| 1               | 225              | 9    | 110      | n  | 15.22 (07)                   | 0.73       | 15.95 (23)                   | 14.91 (11)                   | 0.69       | 15.84 (05)                       | 0.48             |
| 1               | 249              | 5    | 110      | n  | 14.36 (08)                   | 0.79       | 14.90 (23)                   | 14.12 (12)                   | 0.77       | 15.23 (05)                       | 0.55             |
| 1               | 250              | 34   | 110      | n  | 14.61 (06)                   | 0.67       | 15.36 (22)                   | 14.25 (12)                   | 0.62       | 15.39 (04)                       | 0.44             |
| 1               | 250              | 35   | 110      | n  | 14.83 (07)                   | 0.73       | 15.89 (26)                   | 14.46 (10)                   | 0.65       | 15.60 (04)                       | 0.46             |
| 1               | 276              | 19   | 110      | n  | 14.05 (07)                   | 0.76       | 15.02 (23)                   | 13.59 (12)                   | 0.68       | 15.00 (05)                       | 0.48             |
| 1               | 301              | 20   | 110      | n  | 13.01 (08)                   | 0.78       | 14.32 (22)                   | 12.38 (11)                   | 0.60       | 14.27 (04)                       | 0.44             |
| 1               | 326              | 21   | 109      | n  | 10.50 (10)                   | 1.09       | 12.69 (26)                   | 9.59 (10)                    | 0.77       | 12.65 (04)                       | 0.45             |
| 1               | 350              | 63   | 0        | y  | 0.00 (00)                    |            | 0.00 (00)                    | 0.00 (00)                    |            | 0.00 (00)                        |                  |
| 1               | 351              | 22   | 0        | n  | 0.00 (00)                    |            | 0.00 (00)                    | 0.00 (00)                    |            | 0.00 (00)                        |                  |
| 1               | 376              | 28   | 0        | n  | 0.00 (00)                    |            | 0.00 (00)                    | 0.00 (00)                    |            | 0.00 (00)                        |                  |
| 1               | 400              | 29   | 0        | n  | 0.00 (00)                    |            | 0.00 (00)                    | 0.00 (00)                    |            | 0.00 (00)                        |                  |
| 2               | 126              | 51   | 110      | n  | 16.01 (08)                   | 0.87       | 16.41 (23)                   | 15.81 (13)                   | 0.86       | 16.37 (06)                       | 0.62             |
| 2               | 150              | 52   | 127      | n  | 15.86 (08)                   | 0.86       | 16.07 (19)                   | 15.77 (11)                   | 0.85       | 16.27 (05)                       | 0.61             |
| 10              | 100              | 53   | 110      | n  | 16.20 (08)                   | 0.80       | 16.37 (21)                   | 16.10 (13)                   | 0.80       | 16.49 (06)                       | 0.58             |
| 10              | 125              | 54   | 113      | n  | 15.86 (08)                   | 0.90       | 16.24 (21)                   | 15.67 (12)                   | 0.89       | 16.26 (06)                       | 0.64             |
| 10              | 151              | 32   | 110      | n  | 15.81 (07)                   | 0.72       | 16.32 (21)                   | 15.56 (12)                   | 0.69       | 16.23 (05)                       | 0.50             |
| 10              | 175              | 12   | 111      | n  | 15.25 (08)                   | 0.80       | 15.67 (20)                   | 15.04 (12)                   | 0.78       | 15.83 (05)                       | 0.56             |
| 10              | 200              | 65   | 110      | n  | 15.32 (07)                   | 0.70       | 15.93 (25)                   | 15.06 (12)                   | 0.67       | 15.90 (04)                       | 0.46             |
| 10              | 202              | 2    | 110      | n  | 15.36 (07)                   | 0.71       | 16.24 (27)                   | 15.03 (12)                   | 0.66       | 15.95 (04)                       | 0.46             |
| 10              | 225              | 11   | 112      | n  | 14.59 (07)                   | 0.77       | 15.16 (23)                   | 14.36 (11)                   | 0.75       | 15.40 (05)                       | 0.52             |
| 10              | 250              | 36   | 110      | n  | 13.99 (08)                   | 0.80       | 15.02 (24)                   | 13.57 (11)                   | 0.72       | 14.99 (05)                       | 0.49             |
| 10              | 251              | 1    | 110      | n  | 13.80 (07)                   | 0.77       | 15.02 (28)                   | 13.42 (10)                   | 0.69       | 14.91 (04)                       | 0.47             |
| 10              | 251              | 37   | 110      | n  | 14.12 (07)                   | 0.76       | 15.14 (26)                   | 13.70 (12)                   | 0.69       | 15.08 (05)                       | 0.48             |
| 10              | 275              | 23   | 110      | n  | 12.41 (09)                   | 0.94       | 14.44 (29)                   | 11.76 (10)                   | 0.74       | 13.96 (05)                       | 0.50             |
| 10              | 300              | *24  | 110      | n  | 9.37 (23)                    | 2.41       | 12.71 (29)                   | 8.63 (17)                    | 0.89       | 12.18 (05)                       | 0.52             |
| 10              | 325              | 25   | 0        | n  | 0.00 (00)                    |            | 0.00 (00)                    | 0.00 (00)                    |            | 0.00 (00)                        |                  |
| 10              | 350              | 26   | 0        | n  | 0.00 (00)                    |            | 0.00 (00)                    | 0.00 (00)                    |            | 0.00 (00)                        |                  |
| 10              | 375              | 30   | 0        | n  | 0.00 (00)                    |            | 0.00 (00)                    | 0.00 (00)                    |            | 0.00 (00)                        |                  |
| 100             | 75               | 55   | 110      | n  | 16.05 (09)                   | 0.92       | 16.49 (20)                   | 15.81 (12)                   | 0.90       | 16.39 (06)                       | 0.65             |
| 100             | 75               | 58   | 110      | n  | 15.94 (08)                   | 0.84       | 16.86 (26)                   | 15.66 (10)                   | 0.80       | 16.37 (05)                       | 0.57             |
| 100             | 101              | 56   | 110      | n  | 15.89 (07)                   | 0.76       | 16.10 (22)                   | 15.81 (11)                   | 0.76       | 16.30 (05)                       | 0.53             |
| 100             | 125              | 68   | 110      | n  | 15.70 (08)                   | 0.82       | 16.16 (23)                   | 15.50 (12)                   | 0.80       | 16.17 (06)                       | 0.58             |
| 100             | 126              | 27   | 110      | n  | 15.68 (07)                   | 0.69       | 16.26 (29)                   | 15.51 (11)                   | 0.67       | 16.19 (04)                       | 0.46             |
| 100             | 150              | 33   | 110      | n  | 15.62 (07)                   | 0.69       | 15.99 (24)                   | 15.46 (12)                   | 0.68       | 16.11 (04)                       | 0.46             |
| 100             | 175              | 14   | 110      | n  | 15.17 (08)                   | 0.80       | 16.37 (23)                   | 14.64 (11)                   | 0.67       | 15.80 (05)                       | 0.49             |
| 100             | 175              | 69   | 110      | n  | 15.29 (07)                   | 0.71       | 15.91 (26)                   | 15.08 (11)                   | 0.68       | 15.91 (04)                       | 0.47             |
| 100             | 202              | 3    | 110      | n  | 14.76 (07)                   | 0.75       | 15.90 (28)                   | 14.38 (11)                   | 0.67       | 15.55 (04)                       | 0.46             |
| 100             | 225              | 13   | 110      | n  | 13.81 (07)                   | 0.77       | 14.99 (27)                   | 13.39 (11)                   | 0.68       | 14.89 (04)                       | 0.46             |
| 100             | 225              | 70   | 110      | n  | 13.91 (08)                   | 0.83       | 15.01 (28)                   | 13.54 (11)                   | 0.77       | 14.97 (05)                       | 0.54             |
| 100             | 250              | 15   | 110      | n  | 12.11 (09)                   | 0.92       | 13.87 (22)                   | 11.39 (10)                   | 0.65       | 13.69 (04)                       | 0.46             |
| 100             | 250              | 50   | 110      | n  | 12.30 (08)                   | 0.86       | 14.08 (27)                   | 11.56 (11)                   | 0.65       | 13.81 (04)                       | 0.45             |
| 100             | 251              | 6    | 110      | n  | 12.24 (08)                   | 0.86       | 13.38 (20)                   | 11.65 (11)                   | 0.71       | 13.71 (05)                       | 0.50             |
| 100             | 251              | 8    | 110      | n  | 12.14 (09)                   | 0.98       | 13.84 (25)                   | 11.50 (10)                   | 0.80       | 13.74 (05)                       | 0.53             |
| 100             | 275              | *16  | 110      | n  | 8.71 (26)                    | 2.75       | 12.17 (27)                   | 8.49 (17)                    | 0.89       | 11.96 (05)                       | 0.51             |
| 100             | 275              | *71  | 110      | y  | 9.41 (15)                    | 1.53       | 11.45 (24)                   | 8.14 (19)                    | 0.91       | 11.68 (05)                       | 0.54             |
| 100             | 275              | 71   | 110      | n  | 8.28 (23)                    | 2.45       | 11.25 (29)                   | 8.30 (27)                    | 1.12       | 11.76 (05)                       | 0.55             |
| 100             | 300              | 17   | 0        | n  | 0.00 (00)                    |            | 0.00 (00)                    | 0.00 (00)                    |            | 0.00 (00)                        |                  |
| 100             | 326              | 31   | 0        | n  | 0.00 (00)                    |            | 0.00 (00)                    | 0.00 (00)                    |            | 0.00 (00)                        |                  |
| 100             | 350              | 57   | 0        | n  | 0.00 (00)                    |            | 0.00 (00)                    | 0.00 (00)                    |            | 0.00 (00)                        |                  |
| 1000            | 100              | 59   | 110      | n  | 15.92 (08)                   | 0.78       | 16.08 (28)                   | 15.86 (11)                   | 0.78       | 16.33 (05)                       | 0.53             |
| 1000            | 125              | 39   | 110      | n  | 15.59 (07)                   | 0.78       | 16.29 (25)                   | 15.24 (13)                   | 0.75       | 16.08 (05)                       | 0.54             |
| 1000            | 150              | 41   | 110      | n  | 15.00 (07)                   | 0.72       | 15.66 (25)                   | 14.76 (11)                   | 0.69       | 15.70 (04)                       | 0.47             |
| 1000            | 175              | 42   | 110      | n  | 14.85 (07)                   | 0.69       | 15.89 (27)                   | 14.46 (11)                   | 0.63       | 15.60 (04)                       | 0.44             |
| 1000            | 200              | 44   | 110      | n  | 14.29 (08)                   | 0.80       | 15.52 (22)                   | 13.73 (11)                   | 0.66       | 15.18 (05)                       | 0.48             |
| 1000            | 225              | 45   | 110      | n  | 12.17 (08)                   | 0.82       | 13.64 (22)                   | 11.50 (11)                   | 0.62       | 13.70 (04)                       | 0.43             |
| 1000            | 250              | *48  | 110      | n  | 9.09 (22)                    | 2.27       | 12.60 (28)                   | 8.18 (13)                    | 0.73       | 11.99 (04)                       | 0.39             |
| 1000            | 250              | 49   | 110      | n  | 11.29 (11)                   | 1.14       | 13.77 (24)                   | 10.16 (10)                   | 0.69       | 13.08 (05)                       | 0.49             |
| 1000            | 250              | *67  | 110      | y  | 9.65 (17)                    | 1.83       | 12.35 (25)                   | 7.80 (16)                    | 0.85       | 11.83 (05)                       | 0.53             |
| 1000            | 251              | *38  | 109      | n  | 8.66 (25)                    | 2.56       | 11.82 (31)                   | 8.94 (34)                    | 0.69       | 11.90 (04)                       | 0.44             |
| 1000            | 275              | **46 | 29       | y  | 7.00 (38)                    | 2.05       | 9.88 (182)                   | 1.53 (115)                   | 3.40       | 9.73 (09)                        | 0.46             |
| 1000            | 275              | 66   | 0        | y  | 0.00 (00)                    |            | 0.00 (00)                    | 0.00 (00)                    |            | 0.00 (00)                        |                  |
| 1000            | 300              | 47   | 0        | n  | 0.00 (00)                    |            | 0.00 (00)                    | 0.00 (00)                    |            | 0.00 (00)                        |                  |

**APPENDIX TABLE 2b.** Annealing data for apatite DR

| <i>t</i><br>(h) | <i>T</i><br>(°C) | Run  | n   | Cf | Measured                     |                      | Fitted                       |                              |                      | Modeled                          |                          |
|-----------------|------------------|------|-----|----|------------------------------|----------------------|------------------------------|------------------------------|----------------------|----------------------------------|--------------------------|
|                 |                  |      |     |    | <i>l<sub>m</sub></i><br>(μm) | <i>σ<sub>m</sub></i> | <i>l<sub>c</sub></i><br>(μm) | <i>l<sub>a</sub></i><br>(μm) | <i>σ<sub>e</sub></i> | <i>l<sub>c,mod</sub></i><br>(μm) | <i>σ<sub>c,mod</sub></i> |
| 1               |                  | 0    | 110 | n  | 16.21 (07)                   | 0.75                 | 16.49 (23)                   | 16.09 (12)                   | 0.75                 | 16.52 (05)                       | 0.52                     |
| 1               | 125              | 61   | 116 | n  | 16.02 (08)                   | 0.81                 | 16.70 (25)                   | 15.77 (11)                   | 0.78                 | 16.40 (05)                       | 0.55                     |
| 1               | 150              | 62   | 110 | n  | 15.94 (08)                   | 0.80                 | 16.44 (22)                   | 15.74 (10)                   | 0.78                 | 16.34 (05)                       | 0.54                     |
| 1               | 150              | 64   | 110 | n  | 15.99 (07)                   | 0.78                 | 16.28 (19)                   | 15.84 (11)                   | 0.77                 | 16.35 (05)                       | 0.56                     |
| 1               | 175              | 10   | 110 | n  | 15.72 (07)                   | 0.72                 | 16.43 (21)                   | 15.35 (12)                   | 0.67                 | 16.17 (05)                       | 0.49                     |
| 1               | 176              | 43   | 110 | n  | 15.71 (07)                   | 0.75                 | 16.21 (22)                   | 15.48 (12)                   | 0.73                 | 16.17 (05)                       | 0.51                     |
| 1               | 202              | 4    | 110 | n  | 15.52 (07)                   | 0.70                 | 15.82 (18)                   | 15.36 (11)                   | 0.68                 | 16.01 (05)                       | 0.49                     |
| 1               | 225              | 9    | 110 | n  | 15.27 (07)                   | 0.71                 | 15.97 (22)                   | 14.90 (12)                   | 0.66                 | 15.84 (04)                       | 0.47                     |
| 1               | 249              | 5    | 110 | n  | 14.94 (07)                   | 0.75                 | 15.64 (22)                   | 14.64 (11)                   | 0.70                 | 15.64 (05)                       | 0.49                     |
| 1               | 250              | 34   | 110 | n  | 15.00 (08)                   | 0.81                 | 15.71 (21)                   | 14.63 (12)                   | 0.77                 | 15.65 (05)                       | 0.54                     |
| 1               | 250              | 35   | 110 | n  | 15.23 (07)                   | 0.77                 | 15.86 (20)                   | 14.89 (12)                   | 0.73                 | 15.81 (05)                       | 0.55                     |
| 1               | 276              | 19   | 110 | n  | 14.31 (07)                   | 0.76                 | 15.23 (20)                   | 13.87 (11)                   | 0.67                 | 15.18 (04)                       | 0.46                     |
| 1               | 301              | 20   | 110 | n  | 13.46 (08)                   | 0.83                 | 14.52 (19)                   | 12.92 (11)                   | 0.69                 | 14.57 (05)                       | 0.51                     |
| 1               | 326              | 21   | 110 | n  | 11.87 (09)                   | 0.97                 | 13.43 (24)                   | 11.28 (10)                   | 0.81                 | 13.57 (05)                       | 0.52                     |
| 1               | 350              | 63   | 110 | y  | 10.03 (15)                   | 1.53                 | 11.94 (20)                   | 8.43 (19)                    | 0.79                 | 11.91 (05)                       | 0.54                     |
| 1               | 350              | **63 | 110 | n  | 8.29 (25)                    | 2.66                 | 10.49 (23)                   | 9.22 (32)                    | 1.74                 | 11.79 (05)                       | 0.54                     |
| 1               | 351              | **22 | 109 | n  | 8.14 (26)                    | 2.72                 | 11.02 (22)                   | 8.70 (30)                    | 0.82                 | 11.61 (05)                       | 0.54                     |
| 1               | 376              | 28   | 0   | n  | 0.00 (00)                    |                      | 0.00 (00)                    | 0.00 (00)                    |                      | 0.00 (00)                        |                          |
| 1               | 400              | 29   | 0   | n  | 0.00 (00)                    |                      | 0.00 (00)                    | 0.00 (00)                    |                      | 0.00 (00)                        |                          |
| 2               | 126              | 51   | 110 | n  | 15.96 (07)                   | 0.72                 | 16.32 (24)                   | 15.81 (11)                   | 0.71                 | 16.35 (05)                       | 0.49                     |
| 2               | 150              | 52   | 110 | n  | 16.00 (07)                   | 0.73                 | 16.26 (23)                   | 15.90 (11)                   | 0.73                 | 16.38 (05)                       | 0.50                     |
| 10              | 100              | 53   | 110 | n  | 16.18 (08)                   | 0.81                 | 16.25 (19)                   | 16.14 (12)                   | 0.81                 | 16.48 (06)                       | 0.58                     |
| 10              | 125              | 54   | 110 | n  | 16.12 (08)                   | 0.87                 | 16.20 (25)                   | 16.09 (12)                   | 0.87                 | 16.46 (06)                       | 0.60                     |
| 10              | 151              | 32   | 110 | n  | 15.83 (08)                   | 0.80                 | 16.22 (22)                   | 15.68 (11)                   | 0.79                 | 16.26 (05)                       | 0.56                     |
| 10              | 175              | 12   | 111 | n  | 15.39 (08)                   | 0.87                 | 16.08 (19)                   | 15.01 (12)                   | 0.82                 | 15.93 (06)                       | 0.62                     |
| 10              | 200              | 65   | 110 | n  | 15.28 (08)                   | 0.85                 | 15.86 (22)                   | 15.03 (11)                   | 0.82                 | 15.88 (06)                       | 0.60                     |
| 10              | 202              | 2    | 110 | n  | 15.12 (08)                   | 0.82                 | 15.98 (23)                   | 14.76 (11)                   | 0.77                 | 15.77 (05)                       | 0.53                     |
| 10              | 225              | 11   | 113 | n  | 14.96 (07)                   | 0.76                 | 15.74 (20)                   | 14.60 (11)                   | 0.70                 | 15.64 (05)                       | 0.50                     |
| 10              | 250              | 36   | 110 | n  | 14.29 (07)                   | 0.73                 | 15.25 (26)                   | 13.95 (11)                   | 0.66                 | 15.22 (04)                       | 0.46                     |
| 10              | 251              | 1    | 111 | n  | 14.07 (06)                   | 0.67                 | 15.17 (30)                   | 13.70 (11)                   | 0.61                 | 15.08 (04)                       | 0.42                     |
| 10              | 251              | 37   | 110 | n  | 14.35 (07)                   | 0.75                 | 14.62 (22)                   | 14.22 (12)                   | 0.75                 | 15.21 (05)                       | 0.54                     |
| 10              | 275              | 23   | 110 | n  | 13.30 (08)                   | 0.81                 | 14.67 (26)                   | 12.80 (11)                   | 0.68                 | 14.54 (04)                       | 0.45                     |
| 10              | 300              | 24   | 110 | n  | 11.44 (09)                   | 0.98                 | 13.28 (25)                   | 10.68 (11)                   | 0.75                 | 13.23 (05)                       | 0.49                     |
| 10              | 325              | *25  | 110 | y  | 9.37 (16)                    | 1.69                 | 11.74 (24)                   | 8.14 (14)                    | 0.89                 | 11.84 (05)                       | 0.55                     |
| 10              | 350              | 26   | 0   | n  | 0.00 (00)                    |                      | 0.00 (00)                    | 0.00 (00)                    |                      | 0.00 (00)                        |                          |
| 10              | 375              | 30   | 0   | n  | 0.00 (00)                    |                      | 0.00 (00)                    | 0.00 (00)                    |                      | 0.00 (00)                        |                          |
| 100             | 75               | 55   | 110 | n  | 15.99 (09)                   | 0.92                 | 16.49 (22)                   | 15.78 (11)                   | 0.90                 | 16.37 (06)                       | 0.63                     |
| 100             | 75               | 58   | 110 | n  | 16.03 (07)                   | 0.71                 | 16.25 (24)                   | 15.95 (11)                   | 0.71                 | 16.40 (05)                       | 0.49                     |
| 100             | 101              | 56   | 110 | n  | 16.07 (08)                   | 0.79                 | 16.57 (23)                   | 15.86 (12)                   | 0.77                 | 16.43 (05)                       | 0.54                     |
| 100             | 125              | 68   | 111 | n  | 15.76 (07)                   | 0.75                 | 16.35 (21)                   | 15.52 (11)                   | 0.72                 | 16.21 (05)                       | 0.52                     |
| 100             | 126              | 27   | 110 | n  | 15.84 (07)                   | 0.70                 | 16.23 (21)                   | 15.67 (11)                   | 0.69                 | 16.26 (05)                       | 0.49                     |
| 100             | 150              | 33   | 110 | n  | 15.77 (07)                   | 0.74                 | 16.33 (22)                   | 15.53 (11)                   | 0.71                 | 16.22 (05)                       | 0.50                     |
| 100             | 175              | 14   | 110 | n  | 15.28 (07)                   | 0.77                 | 15.77 (19)                   | 15.01 (12)                   | 0.75                 | 15.84 (05)                       | 0.53                     |
| 100             | 175              | 69   | 110 | n  | 15.36 (07)                   | 0.71                 | 16.01 (25)                   | 15.12 (11)                   | 0.68                 | 15.95 (04)                       | 0.47                     |
| 100             | 202              | 3    | 110 | n  | 14.55 (07)                   | 0.70                 | 14.86 (20)                   | 14.40 (12)                   | 0.69                 | 15.34 (05)                       | 0.50                     |
| 100             | 225              | 13   | 110 | n  | 14.44 (06)                   | 0.67                 | 15.12 (22)                   | 14.07 (12)                   | 0.62                 | 15.25 (04)                       | 0.44                     |
| 100             | 225              | 70   | 109 | n  | 14.30 (07)                   | 0.73                 | 15.10 (26)                   | 14.01 (11)                   | 0.69                 | 15.22 (04)                       | 0.46                     |
| 100             | 250              | 15   | 110 | n  | 13.01 (08)                   | 0.79                 | 14.07 (24)                   | 12.50 (12)                   | 0.70                 | 14.27 (04)                       | 0.47                     |
| 100             | 250              | 50   | 110 | n  | 13.40 (07)                   | 0.78                 | 14.44 (20)                   | 12.88 (11)                   | 0.65                 | 14.53 (04)                       | 0.47                     |
| 100             | 251              | 6    | 110 | n  | 13.59 (08)                   | 0.81                 | 14.63 (21)                   | 13.08 (11)                   | 0.71                 | 14.67 (05)                       | 0.50                     |
| 100             | 251              | 8    | 110 | n  | 13.08 (09)                   | 0.89                 | 14.42 (23)                   | 12.49 (11)                   | 0.75                 | 14.34 (05)                       | 0.53                     |
| 100             | 275              | 16   | 110 | n  | 11.12 (10)                   | 1.07                 | 13.16 (24)                   | 10.15 (11)                   | 0.76                 | 12.95 (05)                       | 0.52                     |
| 100             | 275              | 71   | 110 | n  | 11.40 (09)                   | 0.96                 | 13.01 (23)                   | 10.75 (10)                   | 0.76                 | 13.22 (05)                       | 0.49                     |
| 100             | 300              | *17  | 111 | y  | 7.16 (25)                    | 2.68                 | 10.53 (28)                   | 6.57 (44)                    | 0.93                 | 10.78 (05)                       | 0.53                     |
| 100             | 326              | 31   | 0   | n  | 0.00 (00)                    |                      | 0.00 (00)                    | 0.00 (00)                    |                      | 0.00 (00)                        |                          |
| 100             | 350              | 57   | 0   | y  | 0.00 (00)                    |                      | 0.00 (00)                    | 0.00 (00)                    |                      | 0.00 (00)                        |                          |
| 1000            | 100              | 59   | 110 | n  | 15.99 (08)                   | 0.82                 | 16.35 (20)                   | 15.81 (11)                   | 0.81                 | 16.35 (06)                       | 0.58                     |
| 1000            | 125              | 39   | 110 | n  | 15.72 (08)                   | 0.80                 | 15.95 (21)                   | 15.61 (12)                   | 0.79                 | 16.17 (05)                       | 0.55                     |
| 1000            | 150              | 41   | 110 | n  | 15.24 (07)                   | 0.73                 | 15.49 (21)                   | 15.12 (11)                   | 0.72                 | 15.83 (05)                       | 0.52                     |
| 1000            | 175              | 42   | 110 | n  | 15.12 (07)                   | 0.70                 | 15.76 (20)                   | 14.78 (12)                   | 0.66                 | 15.73 (04)                       | 0.47                     |
| 1000            | 200              | 44   | 110 | n  | 14.55 (06)                   | 0.65                 | 15.11 (21)                   | 14.29 (11)                   | 0.62                 | 15.35 (04)                       | 0.45                     |
| 1000            | 225              | 45   | 110 | n  | 13.16 (08)                   | 0.86                 | 14.40 (22)                   | 12.59 (11)                   | 0.71                 | 14.39 (05)                       | 0.49                     |
| 1000            | 250              | 48   | 110 | n  | 11.65 (09)                   | 0.99                 | 13.15 (22)                   | 10.99 (10)                   | 0.81                 | 13.35 (06)                       | 0.58                     |
| 1000            | 250              | 49   | 110 | n  | 12.68 (08)                   | 0.80                 | 13.96 (20)                   | 11.94 (12)                   | 0.60                 | 13.98 (04)                       | 0.44                     |
| 1000            | 250              | 67   | 110 | n  | 10.83 (10)                   | 1.02                 | 12.51 (26)                   | 10.18 (11)                   | 0.87                 | 12.88 (05)                       | 0.54                     |
| 1000            | 251              | 38   | 110 | n  | 11.19 (09)                   | 0.98                 | 13.15 (25)                   | 10.42 (10)                   | 0.71                 | 13.09 (04)                       | 0.46                     |
| 1000            | 275              | *46  | 111 | y  | 8.76 (24)                    | 2.53                 | 11.43 (22)                   | 8.02 (22)                    | 0.93                 | 11.53 (06)                       | 0.59                     |
| 1000            | 275              | *66  | 110 | y  | 9.49 (16)                    | 1.66                 | 10.88 (16)                   | 7.56 (36)                    | 0.78                 | 11.09 (07)                       | 0.71                     |
| 1000            | 275              | **66 | 58  | n  | 7.44 (42)                    | 3.16                 | 11.74 (47)                   | 7.75 (70)                    | 0.45                 | 11.31 (07)                       | 0.54                     |
| 1000            | 300              | 47   | 0   | n  | 0.00 (00)                    |                      | 0.00 (00)                    | 0.00 (00)                    |                      | 0.00 (00)                        |                          |

**APPENDIX TABLE 2c.** Annealing data for apatite B3

| <i>t</i><br>(h) | <i>T</i><br>(°C) | Run | n   | Cf | Measured                     |                      | Fitted                       |                              |                      | Modeled                          |                          |
|-----------------|------------------|-----|-----|----|------------------------------|----------------------|------------------------------|------------------------------|----------------------|----------------------------------|--------------------------|
|                 |                  |     |     |    | <i>l<sub>m</sub></i><br>(μm) | <i>σ<sub>m</sub></i> | <i>l<sub>c</sub></i><br>(μm) | <i>l<sub>a</sub></i><br>(μm) | <i>σ<sub>a</sub></i> | <i>l<sub>c,mod</sub></i><br>(μm) | <i>σ<sub>c,mod</sub></i> |
|                 |                  | 0   | 110 | n  | 16.93 (08)                   | 0.86                 | 17.43 (13)                   | 16.46 (12)                   | 0.79                 | 17.04 (06)                       | 0.67                     |
| 1               | 125              | 61  | 110 | n  | 16.75 (08)                   | 0.82                 | 17.05 (13)                   | 16.45 (13)                   | 0.79                 | 16.88 (06)                       | 0.65                     |
| 1               | 150              | 62  | 110 | n  | 16.53 (08)                   | 0.87                 | 16.84 (14)                   | 16.29 (12)                   | 0.85                 | 16.72 (06)                       | 0.66                     |
| 1               | 150              | 64  | 111 | n  | 16.56 (08)                   | 0.87                 | 16.81 (13)                   | 16.32 (13)                   | 0.86                 | 16.73 (06)                       | 0.66                     |
| 1               | 175              | 10  | 108 | n  | 16.38 (09)                   | 0.90                 | 17.01 (16)                   | 15.96 (11)                   | 0.83                 | 16.63 (06)                       | 0.65                     |
| 1               | 176              | 43  | 110 | n  | 16.29 (08)                   | 0.79                 | 16.65 (16)                   | 16.05 (12)                   | 0.77                 | 16.55 (06)                       | 0.59                     |
| 1               | 202              | 4   | 110 | n  | 16.30 (07)                   | 0.77                 | 16.42 (14)                   | 16.21 (12)                   | 0.77                 | 16.53 (06)                       | 0.58                     |
| 1               | 225              | 9   | 110 | n  | 15.97 (07)                   | 0.76                 | 16.32 (15)                   | 15.65 (13)                   | 0.73                 | 16.28 (05)                       | 0.56                     |
| 1               | 249              | 5   | 110 | n  | 15.66 (08)                   | 0.78                 | 16.01 (14)                   | 15.39 (12)                   | 0.76                 | 16.07 (05)                       | 0.57                     |
| 1               | 250              | 34  | 110 | n  | 15.52 (08)                   | 0.87                 | 16.04 (16)                   | 15.17 (11)                   | 0.83                 | 15.99 (06)                       | 0.61                     |
| 1               | 250              | 35  | 110 | n  | 15.49 (07)                   | 0.74                 | 15.87 (13)                   | 15.13 (12)                   | 0.69                 | 15.91 (05)                       | 0.54                     |
| 1               | 276              | 19  | 112 | n  | 15.03 (09)                   | 0.95                 | 15.39 (15)                   | 14.74 (12)                   | 0.93                 | 15.60 (07)                       | 0.69                     |
| 1               | 301              | 20  | 110 | n  | 14.50 (09)                   | 0.98                 | 15.24 (14)                   | 13.85 (12)                   | 0.87                 | 15.19 (06)                       | 0.68                     |
| 1               | 326              | 21  | 110 | n  | 13.36 (10)                   | 0.99                 | 14.34 (15)                   | 12.54 (12)                   | 0.81                 | 14.35 (06)                       | 0.61                     |
| 1               | 350              | 63  | 114 | y  | 11.82 (09)                   | 0.98                 | 12.67 (14)                   | 11.05 (12)                   | 0.82                 | 13.17 (06)                       | 0.65                     |
| 1               | 350              | 63  | 67  | n  | 11.93 (15)                   | 1.18                 | 13.16 (19)                   | 11.04 (14)                   | 0.94                 | 13.34 (08)                       | 0.68                     |
| 1               | 351              | 22  | 110 | n  | 12.13 (11)                   | 1.10                 | 13.31 (15)                   | 11.10 (12)                   | 0.84                 | 13.42 (06)                       | 0.62                     |
| 1               | 376              | *28 | 110 | y  | 9.49 (22)                    | 2.36                 | 11.96 (20)                   | 8.56 (27)                    | 0.92                 | 11.89 (06)                       | 0.64                     |
| 1               | 400              | 29  | 0   | n  | 0.00 (00)                    |                      | 0.00 (00)                    | 0.00 (00)                    |                      | 0.00 (00)                        |                          |
| 2               | 126              | 51  | 109 | n  | 16.79 (09)                   | 0.96                 | 17.02 (13)                   | 16.54 (14)                   | 0.95                 | 16.90 (07)                       | 0.75                     |
| 2               | 150              | 52  | 109 | n  | 16.55 (08)                   | 0.83                 | 16.80 (14)                   | 16.36 (12)                   | 0.82                 | 16.73 (06)                       | 0.61                     |
| 10              | 100              | 53  | 110 | n  | 16.59 (09)                   | 0.92                 | 16.91 (15)                   | 16.33 (12)                   | 0.91                 | 16.76 (07)                       | 0.70                     |
| 10              | 125              | 54  | 111 | n  | 16.75 (09)                   | 0.95                 | 16.99 (15)                   | 16.56 (12)                   | 0.94                 | 16.88 (07)                       | 0.73                     |
| 10              | 151              | 32  | 110 | n  | 16.31 (09)                   | 0.93                 | 16.70 (14)                   | 16.01 (11)                   | 0.89                 | 16.57 (07)                       | 0.72                     |
| 10              | 175              | 12  | 110 | n  | 16.06 (09)                   | 0.96                 | 16.53 (14)                   | 15.65 (12)                   | 0.92                 | 16.37 (07)                       | 0.73                     |
| 10              | 200              | 65  | 111 | n  | 16.07 (08)                   | 0.83                 | 16.36 (15)                   | 15.83 (13)                   | 0.81                 | 16.37 (06)                       | 0.61                     |
| 10              | 202              | 2   | 110 | n  | 15.92 (08)                   | 0.86                 | 16.46 (15)                   | 15.50 (12)                   | 0.80                 | 16.27 (06)                       | 0.61                     |
| 10              | 225              | 11  | 111 | n  | 15.41 (08)                   | 0.80                 | 15.95 (15)                   | 14.92 (13)                   | 0.74                 | 15.87 (05)                       | 0.57                     |
| 10              | 250              | 36  | 110 | n  | 14.93 (08)                   | 0.84                 | 15.67 (14)                   | 14.34 (12)                   | 0.71                 | 15.54 (05)                       | 0.54                     |
| 10              | 251              | 1   | 110 | n  | 14.77 (08)                   | 0.83                 | 15.50 (16)                   | 14.30 (11)                   | 0.74                 | 15.46 (05)                       | 0.55                     |
| 10              | 251              | 37  | 110 | n  | 14.93 (07)                   | 0.73                 | 15.32 (16)                   | 14.65 (12)                   | 0.70                 | 15.54 (05)                       | 0.51                     |
| 10              | 275              | 23  | 108 | n  | 14.19 (10)                   | 1.04                 | 15.25 (14)                   | 13.36 (11)                   | 0.81                 | 15.00 (06)                       | 0.64                     |
| 10              | 300              | 24  | 110 | n  | 12.96 (08)                   | 0.89                 | 13.87 (15)                   | 12.28 (12)                   | 0.73                 | 14.08 (05)                       | 0.54                     |
| 10              | 325              | 25  | 111 | n  | 11.75 (12)                   | 1.30                 | 13.05 (14)                   | 10.45 (12)                   | 1.02                 | 13.07 (07)                       | 0.79                     |
| 10              | 350              | *26 | 108 | y  | 9.31 (24)                    | 2.50                 | 11.76 (17)                   | 6.77 (30)                    | 1.07                 | 11.39 (07)                       | 0.72                     |
| 10              | 375              | 30  | 0   | n  | 0.00 (00)                    |                      | 0.00 (00)                    | 0.00 (00)                    |                      | 0.00 (00)                        |                          |
| 100             | 75               | 55  | 109 | n  | 16.73 (09)                   | 0.89                 | 17.14 (15)                   | 16.39 (13)                   | 0.86                 | 16.87 (06)                       | 0.67                     |
| 100             | 75               | 58  | 109 | n  | 16.61 (07)                   | 0.76                 | 17.00 (16)                   | 16.32 (12)                   | 0.73                 | 16.79 (05)                       | 0.57                     |
| 100             | 101              | 56  | 110 | n  | 16.60 (09)                   | 0.91                 | 16.87 (14)                   | 16.37 (12)                   | 0.89                 | 16.77 (06)                       | 0.68                     |
| 100             | 125              | 68  | 110 | n  | 16.31 (09)                   | 0.91                 | 16.81 (15)                   | 15.93 (12)                   | 0.87                 | 16.56 (06)                       | 0.63                     |
| 100             | 126              | 27  | 110 | n  | 16.30 (08)                   | 0.88                 | 16.46 (14)                   | 16.15 (13)                   | 0.87                 | 16.53 (06)                       | 0.66                     |
| 100             | 150              | 33  | 110 | n  | 16.23 (08)                   | 0.81                 | 16.68 (14)                   | 15.81 (13)                   | 0.76                 | 16.49 (06)                       | 0.59                     |
| 100             | 175              | 14  | 110 | n  | 15.85 (09)                   | 0.94                 | 16.32 (13)                   | 15.41 (12)                   | 0.89                 | 16.20 (06)                       | 0.68                     |
| 100             | 175              | 69  | 111 | n  | 15.76 (08)                   | 0.84                 | 15.79 (16)                   | 15.74 (12)                   | 0.84                 | 16.15 (06)                       | 0.62                     |
| 100             | 202              | 3   | 110 | n  | 15.37 (08)                   | 0.82                 | 16.18 (17)                   | 14.86 (11)                   | 0.71                 | 15.90 (05)                       | 0.51                     |
| 100             | 225              | 13  | 110 | n  | 14.80 (09)                   | 0.97                 | 15.36 (13)                   | 14.18 (13)                   | 0.90                 | 15.36 (06)                       | 0.67                     |
| 100             | 225              | 70  | 110 | n  | 14.88 (09)                   | 0.89                 | 15.55 (15)                   | 14.41 (12)                   | 0.81                 | 15.52 (06)                       | 0.60                     |
| 100             | 250              | 15  | 110 | n  | 14.28 (10)                   | 1.10                 | 15.36 (15)                   | 13.51 (11)                   | 0.93                 | 15.09 (07)                       | 0.73                     |
| 100             | 250              | 50  | 110 | n  | 14.00 (09)                   | 0.91                 | 14.85 (17)                   | 13.49 (11)                   | 0.81                 | 14.91 (06)                       | 0.59                     |
| 100             | 251              | 6   | 110 | n  | 13.95 (08)                   | 0.87                 | 14.61 (15)                   | 13.45 (12)                   | 0.79                 | 14.81 (06)                       | 0.60                     |
| 100             | 251              | 8   | 110 | n  | 13.94 (08)                   | 0.83                 | 14.71 (15)                   | 13.32 (12)                   | 0.71                 | 14.79 (05)                       | 0.54                     |
| 100             | 275              | 16  | 109 | n  | 13.02 (10)                   | 1.03                 | 13.97 (15)                   | 12.22 (12)                   | 0.88                 | 14.10 (06)                       | 0.64                     |
| 100             | 275              | 71  | 112 | n  | 13.11 (11)                   | 1.14                 | 14.01 (13)                   | 12.25 (12)                   | 0.98                 | 14.12 (07)                       | 0.73                     |
| 100             | 300              | 17  | 105 | n  | 11.36 (12)                   | 1.18                 | 12.83 (16)                   | 10.11 (12)                   | 0.82                 | 12.87 (06)                       | 0.59                     |
| 100             | 326              | *31 | 115 | y  | 9.60 (24)                    | 2.52                 | 11.93 (17)                   | 7.20 (37)                    | 1.23                 | 11.51 (08)                       | 0.91                     |
| 100             | 350              | 57  | 0   | y  | 0.00 (00)                    |                      | 0.00 (00)                    | 0.00 (00)                    |                      | 0.00 (00)                        |                          |
| 1000            | 100              | 59  | 114 | n  | 16.35 (07)                   | 0.75                 | 16.41 (14)                   | 16.30 (12)                   | 0.75                 | 16.56 (05)                       | 0.57                     |
| 1000            | 125              | 39  | 110 | n  | 16.25 (08)                   | 0.89                 | 16.82 (14)                   | 15.79 (12)                   | 0.82                 | 16.52 (06)                       | 0.64                     |
| 1000            | 150              | 41  | 110 | n  | 15.72 (09)                   | 0.94                 | 16.35 (15)                   | 15.28 (11)                   | 0.88                 | 16.14 (07)                       | 0.70                     |
| 1000            | 175              | 42  | 110 | n  | 15.41 (09)                   | 0.89                 | 15.95 (14)                   | 14.98 (12)                   | 0.83                 | 15.89 (06)                       | 0.66                     |
| 1000            | 200              | 44  | 110 | n  | 15.01 (08)                   | 0.89                 | 15.44 (14)                   | 14.59 (13)                   | 0.85                 | 15.54 (06)                       | 0.65                     |
| 1000            | 225              | 45  | 110 | n  | 14.02 (07)                   | 0.76                 | 14.59 (15)                   | 13.49 (13)                   | 0.68                 | 14.80 (05)                       | 0.55                     |
| 1000            | 250              | 48  | 110 | n  | 13.04 (10)                   | 1.01                 | 14.22 (16)                   | 12.17 (12)                   | 0.81                 | 14.16 (06)                       | 0.61                     |
| 1000            | 250              | 49  | 110 | n  | 13.60 (09)                   | 0.95                 | 14.55 (15)                   | 12.73 (13)                   | 0.78                 | 14.50 (06)                       | 0.61                     |
| 1000            | 250              | 67  | 111 | n  | 12.97 (11)                   | 1.10                 | 14.10 (14)                   | 11.98 (12)                   | 0.85                 | 14.05 (06)                       | 0.65                     |
| 1000            | 251              | 38  | 110 | n  | 12.92 (10)                   | 1.07                 | 14.07 (16)                   | 12.13 (11)                   | 0.89                 | 14.09 (06)                       | 0.63                     |
| 1000            | 275              | 46  | 110 | n  | 11.93 (11)                   | 1.16                 | 13.13 (14)                   | 10.85 (12)                   | 0.90                 | 13.26 (06)                       | 0.65                     |
| 1000            | 275              | 66  | 115 | y  | 11.38 (13)                   | 1.44                 | 13.20 (15)                   | 9.98 (11)                    | 0.99                 | 12.95 (07)                       | 0.70                     |
| 1000            | 275              | 66  | 111 | n  | 11.53 (13)                   | 1.37                 | 13.11 (16)                   | 10.37 (11)                   | 1.05                 | 13.09 (07)                       | 0.70                     |
| 1000            | 300              | *47 | 109 | y  | 10.12 (18)                   | 1.89                 | 11.59 (15)                   | 7.33 (29)                    | 1.02                 | 11.40 (08)                       | 0.82                     |
| 1000            | 325              | 60  | 0   | y  | 0.00 (00)                    |                      | 0.00 (00)                    | 0.00 (00)                    |                      | 0.00 (00)                        |                          |

**APPENDIX TABLE 2d.** Annealing data for apatite HS

| t<br>(h) | T<br>(°C) | Run  | n   | Cf | Measured                   |            | Fitted                     |                            |            | Modeled                                 |                         |
|----------|-----------|------|-----|----|----------------------------|------------|----------------------------|----------------------------|------------|---|-------------------------|
|          |           |      |     |    | $l_m$<br>( $\mu\text{m}$ ) | $\sigma_m$ | $l_c$<br>( $\mu\text{m}$ ) | $l_a$<br>( $\mu\text{m}$ ) | $\sigma_a$ | $l_{c,\text{mod}}$<br>( $\mu\text{m}$ ) | $\sigma_{c,\text{mod}}$ |
| 1        | 125       | 0    | 79  | n  | 16.38 (09)                 | 0.78       | 16.63 (17)                 | 16.21 (13)                 | 0.77       | 16.61 (06)                              | 0.57                    |
| 1        | 125       | 61   | 111 | y  | 16.59 (09)                 | 0.90       | 16.53 (18)                 | 16.44 (10)                 | 0.89       | 16.79 (06)                              | 0.64                    |
| 1        | 150       | 62   | 110 | y  | 16.45 (08)                 | 0.78       | 16.53 (16)                 | 16.40 (10)                 | 0.78       | 16.66 (06)                              | 0.58                    |
| 1        | 150       | 64   | 108 | y  | 15.99 (09)                 | 0.92       | 16.55 (15)                 | 15.63 (11)                 | 0.86       | 16.35 (06)                              | 0.65                    |
| 1        | 175       | 10   | 110 | n  | 15.43 (10)                 | 1.00       | 15.63 (15)                 | 15.28 (12)                 | 0.99       | 15.89 (07)                              | 0.75                    |
| 1        | 176       | 43   | 110 | n  | 15.62 (08)                 | 0.82       | 15.61 (14)                 | 15.63 (11)                 | 0.82       | 16.03 (06)                              | 0.66                    |
| 1        | 202       | 4    | 110 | n  | 15.38 (08)                 | 0.85       | 15.66 (15)                 | 15.21 (11)                 | 0.84       | 15.88 (06)                              | 0.62                    |
| 1        | 225       | 9    | 110 | n  | 15.05 (08)                 | 0.82       | 15.53 (16)                 | 14.77 (11)                 | 0.77       | 15.66 (06)                              | 0.58                    |
| 1        | 249       | 5    | 110 | n  | 14.56 (08)                 | 0.83       | 15.16 (15)                 | 14.15 (11)                 | 0.75       | 15.28 (05)                              | 0.57                    |
| 1        | 250       | 34   | 110 | y  | 14.62 (06)                 | 0.64       | 15.09 (18)                 | 14.39 (11)                 | 0.60       | 15.39 (04)                              | 0.43                    |
| 1        | 250       | 35   | 110 | y  | 14.82 (08)                 | 0.83       | 15.27 (16)                 | 14.55 (11)                 | 0.79       | 15.49 (05)                              | 0.56                    |
| 1        | 276       | 19   | 110 | n  | 13.71 (08)                 | 0.84       | 14.11 (15)                 | 13.43 (11)                 | 0.81       | 14.65 (06)                              | 0.66                    |
| 1        | 301       | 20   | 110 | n  | 12.16 (08)                 | 0.84       | 12.84 (16)                 | 11.75 (11)                 | 0.76       | 13.59 (06)                              | 0.61                    |
| 1        | 326       | 21*  | 110 | y  | 7.75 (18)                  | 1.94       | 9.10 (17)                  | 6.37 (73)                  | 0.97       | 10.22 (09)                              | 0.95                    |
| 1        | 350       | 63   | 0   | y  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 1        | 351       | 22   | 0   | y  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 1        | 376       | 28   | 0   | y  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 1        | 400       | 29   | 0   | y  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 2        | 126       | 51   | 110 | y  | 16.04 (08)                 | 0.86       | 16.42 (16)                 | 15.84 (10)                 | 0.84       | 16.39 (06)                              | 0.60                    |
| 2        | 150       | 52   | 110 | y  | 16.01 (08)                 | 0.84       | 16.41 (16)                 | 15.80 (10)                 | 0.82       | 16.37 (05)                              | 0.56                    |
| 10       | 100       | 53   | 110 | y  | 16.45 (08)                 | 0.89       | 16.60 (15)                 | 16.36 (11)                 | 0.88       | 16.66 (06)                              | 0.66                    |
| 10       | 125       | 54   | 110 | y  | 16.09 (10)                 | 1.01       | 16.17 (16)                 | 16.05 (11)                 | 1.01       | 16.40 (07)                              | 0.78                    |
| 10       | 151       | 32   | 110 | y  | 15.81 (09)                 | 0.91       | 16.44 (19)                 | 15.54 (10)                 | 0.86       | 16.25 (06)                              | 0.60                    |
| 10       | 175       | 12   | 110 | n  | 15.29 (08)                 | 0.85       | 15.61 (15)                 | 15.08 (11)                 | 0.83       | 15.81 (06)                              | 0.64                    |
| 10       | 200       | 65   | 114 | y  | 15.22 (08)                 | 0.81       | 15.61 (15)                 | 14.99 (11)                 | 0.78       | 15.78 (05)                              | 0.58                    |
| 10       | 202       | 2    | 111 | n  | 14.99 (08)                 | 0.83       | 15.45 (16)                 | 14.72 (11)                 | 0.80       | 15.62 (06)                              | 0.59                    |
| 10       | 225       | 11   | 110 | n  | 14.24 (08)                 | 0.88       | 14.85 (16)                 | 13.91 (10)                 | 0.83       | 15.10 (06)                              | 0.60                    |
| 10       | 250       | 36   | 112 | y  | 13.41 (07)                 | 0.76       | 14.16 (19)                 | 13.08 (10)                 | 0.69       | 14.56 (05)                              | 0.51                    |
| 10       | 251       | 1    | 110 | n  | 13.17 (08)                 | 0.79       | 13.77 (17)                 | 12.84 (10)                 | 0.73       | 14.33 (05)                              | 0.56                    |
| 10       | 251       | 37   | 110 | n  | 13.75 (08)                 | 0.81       | 14.23 (15)                 | 13.43 (11)                 | 0.77       | 14.69 (06)                              | 0.59                    |
| 10       | 275       | 23   | 110 | y  | 11.87 (09)                 | 0.96       | 12.84 (16)                 | 11.34 (10)                 | 0.82       | 13.41 (06)                              | 0.63                    |
| 10       | 300       | 24*  | 110 | y  | 7.78 (22)                  | 2.31       | 9.72 (16)                  | 6.53 (36)                  | 1.07       | 10.64 (08)                              | 0.84                    |
| 10       | 325       | 25   | 0   | y  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 10       | 350       | 26   | 0   | y  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 10       | 375       | 30   | 0   | y  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 100      | 75        | 55   | 110 | y  | 16.39 (09)                 | 0.94       | 16.63 (15)                 | 16.24 (11)                 | 0.93       | 16.62 (07)                              | 0.69                    |
| 100      | 75        | 58   | 112 | y  | 16.65 (09)                 | 0.90       | 17.29 (22)                 | 16.44 (10)                 | 0.87       | 16.84 (06)                              | 0.60                    |
| 100      | 101       | 56   | 110 | y  | 16.13 (07)                 | 0.77       | 16.32 (16)                 | 16.03 (11)                 | 0.76       | 16.44 (05)                              | 0.57                    |
| 100      | 125       | 68   | 111 | y  | 15.95 (08)                 | 0.87       | 16.05 (15)                 | 15.89 (11)                 | 0.87       | 16.29 (06)                              | 0.66                    |
| 100      | 126       | 27   | 110 | y  | 15.93 (08)                 | 0.82       | 16.30 (16)                 | 15.73 (10)                 | 0.79       | 16.31 (06)                              | 0.59                    |
| 100      | 150       | 33   | 110 | y  | 15.56 (07)                 | 0.73       | 15.98 (16)                 | 15.33 (11)                 | 0.70       | 16.04 (05)                              | 0.53                    |
| 100      | 175       | 14   | 110 | n  | 15.08 (08)                 | 0.81       | 15.36 (14)                 | 14.85 (12)                 | 0.80       | 15.61 (06)                              | 0.62                    |
| 100      | 175       | 69   | 110 | y  | 15.20 (08)                 | 0.83       | 15.65 (16)                 | 14.96 (10)                 | 0.80       | 15.78 (06)                              | 0.58                    |
| 100      | 202       | 3    | 110 | n  | 14.17 (07)                 | 0.78       | 14.56 (15)                 | 13.94 (11)                 | 0.75       | 15.01 (05)                              | 0.57                    |
| 100      | 225       | 13   | 110 | n  | 13.44 (08)                 | 0.84       | 13.90 (14)                 | 13.08 (12)                 | 0.79       | 14.41 (06)                              | 0.64                    |
| 100      | 225       | 70   | 112 | y  | 13.65 (08)                 | 0.87       | 13.70 (13)                 | 13.60 (12)                 | 0.87       | 14.53 (08)                              | 0.81                    |
| 100      | 250       | 15   | 111 | n  | 11.76 (10)                 | 1.06       | 12.86 (15)                 | 11.01 (11)                 | 0.85       | 13.26 (06)                              | 0.63                    |
| 100      | 250       | 50   | 83  | n  | 11.34 (09)                 | 0.84       | 12.29 (19)                 | 10.83 (12)                 | 0.69       | 13.05 (06)                              | 0.56                    |
| 100      | 251       | 6    | 110 | n  | 11.36 (11)                 | 1.11       | 12.46 (15)                 | 10.60 (11)                 | 0.90       | 12.97 (06)                              | 0.64                    |
| 100      | 251       | 8    | 111 | n  | 11.42 (11)                 | 1.12       | 12.44 (15)                 | 10.56 (12)                 | 0.93       | 12.93 (07)                              | 0.73                    |
| 100      | 275       | 16*  | 110 | y  | 9.12 (19)                  | 1.96       | 11.01 (19)                 | 8.38 (50)                  | 0.94       | 11.70 (07)                              | 0.73                    |
| 100      | 275       | 71   | 30  | y  | 8.54 (35)                  | 1.92       | 9.53 (20)                  | 6.77 (58)                  | 1.09       | 9.99 (19)                               | 1.05                    |
| 100      | 300       | 17   | 0   | n  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 100      | 326       | 31   | 0   | y  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 100      | 350       | 57   | 0   | y  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 1000     | 100       | 59   | 111 | y  | 16.28 (08)                 | 0.83       | 16.74 (16)                 | 16.00 (11)                 | 0.80       | 16.55 (06)                              | 0.59                    |
| 1000     | 125       | 39   | 84  | n  | 15.36 (09)                 | 0.82       | 15.75 (17)                 | 15.07 (13)                 | 0.79       | 15.85 (06)                              | 0.58                    |
| 1000     | 150       | 41   | 110 | n  | 15.08 (08)                 | 0.82       | 15.58 (15)                 | 14.78 (11)                 | 0.78       | 15.68 (06)                              | 0.58                    |
| 1000     | 175       | 42   | 110 | n  | 14.81 (07)                 | 0.74       | 15.37 (13)                 | 14.31 (12)                 | 0.63       | 15.41 (05)                              | 0.49                    |
| 1000     | 200       | 44   | 110 | y  | 13.70 (08)                 | 0.82       | 14.09 (17)                 | 13.50 (10)                 | 0.80       | 14.71 (06)                              | 0.65                    |
| 1000     | 225       | 45   | 110 | y  | 11.82 (09)                 | 0.90       | 12.55 (16)                 | 11.36 (11)                 | 0.81       | 13.32 (06)                              | 0.66                    |
| 1000     | 250       | 48*  | 47  | y  | 8.10 (35)                  | 2.39       | 9.80 (25)                  | 7.15 (101)                 | 0.79       | 10.63 (11)                              | 0.78                    |
| 1000     | 250       | 49*  | 112 | y  | 9.52 (16)                  | 1.75       | 11.38 (19)                 | 9.33 (22)                  | 0.85       | 12.06 (06)                              | 0.60                    |
| 1000     | 250       | 67** | 27  | y  | 8.38 (38)                  | 2.00       | 10.26 (39)                 | 3.49 (64)                  | 0.58       | 10.31 (16)                              | 0.81                    |
| 1000     | 251       | 38   | 0   | n  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 1000     | 275       | 46   | 0   | y  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 1000     | 275       | 66   | 0   | y  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |
| 1000     | 300       | 47   | 0   | y  | 0.00 (00)                  |            | 0.00 (00)                  | 0.00 (00)                  |            | 0.00 (00)                               |                         |