|      |       | PURE   |        |        | UNIFIED |          |        | $RMSE_{validate}$ |      |
|------|-------|--------|--------|--------|---------|----------|--------|-------------------|------|
|      | λ     |        |        |        | λw      |          |        |                   |      |
|      |       |        | 0.001  | 0.01   | 0.1     | <u> </u> | 10     | 0.85              | 3.75 |
|      | 0.001 | 0.9599 | 0.9457 | 0.93   | 0.9193  | 0.9385   | 0.9422 |                   |      |
|      | 0.01  | 0.9401 | 0.9334 | 0.9195 | 0.9081  | 0.9228   | 0.9277 |                   |      |
| k=5  | 0.1   | 0.8866 | 0.9152 | 0.8987 | 0.8751  | 0.8773   | 0.8793 |                   |      |
|      | 1     | 1.3327 | 0.9206 | 0.9055 | 0.8878  | 0.8941   | 0.8974 |                   |      |
|      | 10    | 3.7117 | 0.9207 | 0.9057 | 0.888   | 0.8943   | 0.8975 |                   |      |
|      |       |        |        |        |         |          |        |                   |      |
|      | 0.001 | 1.0852 | 0.9869 | 0.9769 | 0.983   | 1.0127   | 1.0189 |                   |      |
|      | 0.01  | 0.9923 | 0.9559 | 0.9458 | 0.9466  | 0.9693   | 0.9743 |                   |      |
| k=10 | 0.1   | 0.8829 | 0.9109 | 0.895  | 0.8726  | 0.8755   | 0.8782 |                   |      |
|      | 1     | 1.3324 | 0.9205 | 0.9055 | 0.8878  | 0.894    | 0.8972 |                   |      |
|      | 10    | 3.7117 | 0.9208 | 0.9057 | 0.888   | 0.8943   | 0.8975 |                   |      |
|      |       |        |        |        |         |          |        |                   |      |
|      | 0.001 | 1.1963 | 1.0471 | 1.0438 | 1.0705  | 1.1014   | 1.1047 |                   |      |
|      | 0.01  | 1.0325 | 0.9765 | 0.9705 | 0.9867  | 1.0108   | 1.0138 |                   |      |
| k=20 | 0.1   | 0.8755 | 0.9075 | 0.8913 | 0.8682  | 0.8701   | 0.8723 |                   |      |
|      | 1     | 1.3324 | 0.9205 | 0.9055 | 0.8878  | 0.894    | 0.8972 |                   |      |
|      | 10    | 3.7117 | 0.9207 | 0.9057 | 0.888   | 0.8943   | 0.8977 |                   |      |