1 TIMEOUT PARAMETER EVALUATION
In this section, we evaluate the impact of the timeout parameter of the solver. On the profile generic-full-space-LDS with the u7 modifier, we consider several timeout values in \{10, 30, 60, 90, 120, 180, 210\} seconds. As illustrated in Figure 1, the timeout has an important impact on the overall performance of the solver, yet, 8-dimensional $L_2$ discrepancy plots turn out to be quite similar for this profile.

2 CHANGING THE BASE
In Figure 2, we evaluate the impact of changing the base $p$ on the performance of the solver for the Generic-full-space-LDS. As illustrated in this figure, generalized $L_2$ discrepancies are similar and timings show that increasing $p$ speeds up the solver for low matrix sizes.

3 RENDERING RESULTS
We present detailed rendering results in 6d and 8d following the setting described in the main document.
Fig. 1. Evaluation of the General-full-space-LDS profile with the \( u^7 \) modifier for various timeout values: (top) overall timings as the matrix size \( m \) increases, (bottom) associated generalized \( L_2 \) discrepancy graphs.
Fig. 2. Evaluation of the Generic-full-space-LDS profile with the u6 modifier for various bases \( p = \{3, 5, 7, 11\} \): (Top) the timings as \( m \) increases, (bottom) the generalized \( L_2 \) discrepancy in \( s = 8 \) dimensions for \( p^k \) samples, \( k \in \mathbb{N}_0 \).
Fig. 3. Rendering results and comparisons in 6d, 1 light source case. The 6 dimensions are used to sample the lens (2d), the time (1d), and one light source (3d).
Fig. 4. Rendering results and comparisons in 6d, 2 light sources case: please refer to Fig. 7, row 1 in the main document. The 6 dimensions are used to sample the lens (2d), the time (1d), and two light sources (3d).
Fig. 5. Rendering results and comparisons in 6d, 3 light sources case: please refer to Fig. 7, row 2 in the main document. The 6 dimensions are used to sample the lens (2d), the time (1d), and three light sources (3d).
Fig. 6. Rendering results and comparisons in 6d, 5 light sources case: please refer to Fig. 7, row 3 in the main document. The 6 dimensions are used to sample the lens (2d), the time (1d), and five light sources (3d).
Fig. 7. Rendering results and comparisons in 8d, 2 light sources case: please refer to Fig. 7, last row in the main document. The 8 dimensions are used to sample the pixel (2d), the direct lighting (3d) and the indirect lighting (3d).
Fig. 8. Rendering results and comparisons in 8d, 3 light sources case: please refer to Fig. 7, last row in the main document. The 8 dimensions are used to sample the pixel (2d), the direct lighting (3d) and the indirect lighting (3d).
Fig. 9. Rendering results and comparisons in 8d, 2 light sources case: The 8 dimensions are used to sample the pixel (2d), the direct lighting (3d) and the indirect lighting (3d).
Fig. 10. **Rendering results and comparisons in 8d, 3 light sources case:** The 8 dimensions are used to sample the pixel (2d), the direct lighting (3d) and the indirect lighting (3d).