Supplemental Material: Real-time Denoising Using BRDF Pre-integration Factorization

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1. More results

In Figure 1, we compare our method with [BVM*17] (KPCN) for two scenes. KPCN was trained for 1.5 days on a RTX 2080Ti graphics card. Since our method is applied to denoise real-time renderings and KPCN is used for offline renderings, the inputs for our method and KPCN are not identical, which is expected. The input images for KPCN are rendered with 128 samples per pixel. To denoise each image, KPCN costs about 11 seconds, while our method costs about 2 ms. By comparison, our method is able to produce visually similar results to KPCN (with some quality degradation), with much less cost. More importantly, our method is suitable for real-time rendering.

Figure 1: *Comparison between our method and KPCN.*

References

[BVM*17] BAKO S., VOGELS T., MCWILLIAMS B., MEYER M., NOVÁK J., HARVILL A., SEN P., DEROSE T., ROUSSELLE F.: Kernel-predicting convolutional networks for denoising Monte Carlo renderings. *ACM Transactions on Graphics (TOG) (Proceedings of SIGGRAPH 2017) 36*, 4 (July 2017). 1