

Appendix A. This table tries to measure the efficiency of the V-Ray denoiser by comparing relative pixel MSD with a reference image between renders with different noise thresholds and their denoised versions

Scene	V-Ray noise threshold	Luminance rMSE with ref	Denoised luminance rMSE with ref	Luminance rMSE reduction (rMSE/denoised rMSE)		
Iron Spider DOF	0.1	0.0030293	0.00071909	4.212685477		
Iron Spider DOF	0.05	0.00147086	0.00038175	3.852940406		
Iron Spider DOF	0.02	0.00059663	0.00017274	3.453919185		
Iron Spider DOF	0.01	0.0002965	0.00009658	3.069993788		
Iron Spider DOF	0.005	0.00014358	0.00005391	2.663327769		
White room v4	0.1	0.00595152	0.00097476	6.105626		
White room v4	0.05	0.0030497	0.00055967	5.449103936		
White room v4	0.02	0.00125451	0.00031701	3.957319958		
White room v4	0.01	0.00066476	0.00022737	2.92369266		
White room v4	0.005	0.00038041	0.00017657	2.154442997		
Iron Spider	0.1	0.00202418	0.00089464	2.262563713		
Iron Spider	0.05	0.00098371	0.00046558	2.112869969		
Iron Spider	0.02	0.00041703	0.00022793	1.829640679		
Iron Spider	0.01	0.00021211	0.00013366	1.586937004		
Iron Spider	0.005	0.00010625	0.00007703	1.379332728		
AI38	0.1	0.00523922	0.00282947	1.851661265		
AI38	0.05	0.00288062	0.00152028	1.763240982		
AI38	0.02	0.00118616	0.00074492	1.592332063		
AI38	0.01	0.00064467	0.00044733	1.441150828		
AI38	0.005	0.00037031	0.00029067	1.273987684		
AI39	0.1	0.00372491	0.00122699	3.035811213		
AI39	0.05	0.00140372	0.00057561	2.438665068		
AI39	0.02	0.00047621	0.00023298	2.043995193		
AI39	0.01	0.00022141	0.00012289	1.801692571		
AI39	0.005	0.00010336	0.00006527	1.583575915		
Scene_005	0.1	0.00189783	0.00173486	1.093938416		
Scene_005	0.05	0.00098571	0.00091021	1.082947891		
Scene_005	0.02	0.00041351	0.00038863	1.064019762		
Scene_005	0.01	0.0002067	0.00020649	1.001016998		
Scene_005	0.005	0.00010131	0.00010539	0.9612866496		