



### Position Reconstruction Summary

Metric	Baseline	Optimized	Improvement
3D Resolution (mm)	9.73	8.82	9.4%
PMT Count	30	50	+67%
Coverage Factor	1.25	2.08	+66%
Center Resolution (mm)	7.79	7.06	9.4%
Edge Resolution (mm)	14.60	11.47	21.5%