

Vocabulary size	HKM	AKM	AKM spatial	Ours	Ours spatial
250K	0.399	0.598	0.633	0.620	0.636
500K	0.422	0.606	0.642	0.647	0.658
750K	0.440	0.609	0.630	0.664	0.674
1M	0.439	0.618	0.645	0.655	0.666
1.25M	0.449	0.602	0.625	0.650	0.674
2M	0.457	0.604	0.617	0.621	0.647