Table S.2: Type I errors ($\delta = 0$) and power ($\delta \neq 0$) given by the investigated test statistics based on bootstrap approach in detecting location shift between two samples generated from the four pairs of $F(x)$ and $G(x)$ with variance-covariance matrix $I_{4\times4}$ and sample sizes $n = m = 20$.

		Type I errors ($\delta = 0$) and power ($\delta \neq 0$)														
$G(x)$	δ value	T^2	$\hat{\Delta}_1^{\max}$	$\hat{\Delta}_2^{\max}$	$\hat{\Delta}_3^{\max}$	T_1	T_2	T_3	T_4	T_5	T_1^*	T_2^*	T_3^*	T_4^*	T_5^*	U
(i)	0	0.037	0.025	0.045	0.040	0.036	0.058	0.053	0.050	0.048	0.023	0.051	0.052	0.040	0.049	0.061
	0.50	0.847	0.479	0.788	0.770	0.511	0.809	0.807	0.788	0.797	0.443	0.755	0.784	0.733	0.762	0.853
	1.00	1.000	0.991	1.000	1.000	0.992	1.000	1.000	1.000	1.000	0.983	1.000	1.000	1.000	1.000	1.000
	1.50	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
	2.00	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
(ii)	0	0.016	0.008	0.026	0.007	0.030	0.042	0.046	0.013	0.014	0.019	0.036	0.041	0.015	0.016	0.041
	0.50	0.032	0.109	0.121	0.034	0.232	0.199	0.215	0.081	0.084	0.249	0.240	0.246	0.125	0.143	0.043
	1.00	0.141	0.585	0.603	0.308	0.812	0.729	0.733	0.506	0.520	0.824	0.777	0.794	0.604	0.635	0.106
	1.50	0.304	0.929	0.938	0.724	0.987	0.960	0.962	0.879	0.881	0.987	0.980	0.984	0.940	0.952	0.225
	2.00	0.485	0.990	0.993	0.926	0.998	0.999	0.999	0.987	0.999	0.999	0.999	0.999	0.988	0.990	0.390
(iii)	0	0.040	0.017	0.045	0.036	0.030	0.052	0.056	0.045	0.047	0.037	0.053	0.052	0.043	0.045	0.068
	0.50	0.432	0.327	0.511	0.445	0.416	0.583	0.576	0.529	0.537	0.390	0.574	0.574	0.505	0.528	0.095
	1.00	0.954	0.954	0.994	0.987	0.976	0.994	0.996	0.995	0.995	0.952	0.991	0.990	0.987	0.986	0.599
	1.50	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.974
	2.00	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
(iv)	0	0.039	0.018	0.047	0.036	0.027	0.053	0.053	0.044	0.043	0.027	0.053	0.054	0.033	0.039	0.059
	0.50	0.179	0.081	0.202	0.123	0.109	0.236	0.238	0.158	0.176	0.113	0.219	0.250	0.149	0.187	0.148
	1.00	0.659	0.397	0.712	0.523	0.472	0.744	0.762	0.586	0.613	0.443	0.741	0.776	0.558	0.629	0.552
	1.50	0.957	0.821	0.984	0.914	0.874	0.989	0.991	0.847	0.960	0.825	0.983	0.987	0.924	0.950	0.908
	2.00	0.998	0.977	0.999	0.995	0.989	1.000	1.000	0.998	0.999	0.984	0.997	0.999	0.996	0.998	0.992