Supplementary results

Additional power results

	With bootstrap sampling					Without bootstrap sampling				
Square window										
ρ	χ^2	LR	SC	VT	UT	χ^2	LR	SC	VT	UT
100 Points										
0.05	0.339	0.523	0.498	0.52	0.537	0.407	0.771	0.665	0.765	0.785
0.1	0.266	0.303	0.24	0.295	0.323	0.422	0.57	0.384	0.547	0.622
0.2	0.2	0.218	0.179	0.223	0.239	0.26	0.338	0.213	0.335	0.395
500 Points										
0.05	0.545	0.517	0.495	0.503	0.588	0.951	0.976	0.885	0.957	0.995
0.1	0.321	0.378	0.276	0.302	0.486	0.618	0.771	0.413	0.607	0.914
0.2	0.162	0.188	0.121	0.141	0.299	0.231	0.358	0.142	0.208	0.614
1000 Points										
0.05	0.058	0.104	0.127	0.064	0.266	0.008	0.035	0.112	0.007	0.407
0.1	0.003	0.013	0.019	0.003	0.091	0	0	0.005	0	0.052
0.2	0	0.004	0.002	0	0.03	0	0	0.002	0	0.001
Convex hull window										
ρ	χ^2	LR	SC	VT	UT	χ^2	LR	SC	VT	UT
100 Points										
0.05	0.249	0.45	0.409	0.445	0.468	0.275	0.533	0.419	0.569	0.613
0.1	0.214	0.201	0.128	0.217	0.244	0.249	0.246	0.12	0.287	0.348
0.2	0.152	0.15	0.092	0.155	0.171	0.172	0.18	0.097	0.206	0.259
500 Points										
0.05	0.209	0.17	0.102	0.197	0.33	0.084	0.031	0.009	0.064	0.495
0.1	0.08	0.065	0.024	0.068	0.218	0.017	0.004	0	0.007	0.281
0.2	0.056	0.04	0.016	0.053	0.12	0.014	0.009	0.001	0.005	0.11
1000 Points										
0.05	0.003	0.001	0.001	0.002	0.03	0	0	0	0	0
0.1	0	0	0	0	0.003	0	0	0	0	0
0.2	0	0	0	0	0.003	0	0	0	0	0

Table 1: Power values for the extended bootstrap test applied to **radial** inhomogeneous regular point patterns in a *square* and *convex hull* window.

	With bootstrap sampling					Without bootstrap sampling				
Square window										
ρ	χ^2	LR	SC	VT	UT	χ^2	LR	SC	VT	UT
100 Points										
0.05	0.585	0.718	0.645	0.709	0.718	0.641	0.964	0.904	0.962	0.959
0.1	0.562	0.528	0.436	0.527	0.544	0.841	0.923	0.739	0.914	0.925
0.2	0.475	0.41	0.323	0.42	0.427	0.738	0.698	0.461	0.715	0.708
500 Points										
0.05	0.922	0.825	0.777	0.809	0.845	1	1	1	1	1
0.1	0.844	0.82	0.731	0.782	0.87	1	1	0.999	1	1
0.2	0.723	0.757	0.547	0.694	0.82	0.999	0.998	0.877	0.992	0.999
1000 Points										
0.05	0.631	0.682	0.695	0.594	0.812	0.998	1	0.99	0.997	1
0.1	0.258	0.438	0.366	0.246	0.677	0.511	0.873	0.649	0.397	0.995
0.2	0.178	0.315	0.222	0.142	0.523	0.245	0.645	0.408	0.168	0.935
Convex hull window										
ρ	χ^2	LR	SC	VT	UT	χ^2	LR	SC	VT	UT
100 Points										
0.05	0.458	0.605	0.559	0.611	0.627	0.594	0.848	0.604	0.837	0.869
0.1	0.483	0.423	0.309	0.439	0.456	0.657	0.656	0.345	0.706	0.722
0.2	0.349	0.3	0.209	0.312	0.336	0.506	0.407	0.187	0.458	0.485
500 Points										
0.05	0.669	0.535	0.335	0.585	0.701	0.993	0.917	0.207	0.988	0.994
0.1	0.548	0.445	0.194	0.477	0.686	0.915	0.711	0.029	0.83	0.978
0.2	0.434	0.331	0.126	0.363	0.548	0.771	0.474	0.052	0.583	0.875
1000 Points										
0.05	0.174	0.153	0.075	0.153	0.395	0.002	0.001	0	0.002	0.472
0.1	0.046	0.043	0.018	0.032	0.258	0	0	0	0	0.228
0.2	0.043	0.038	0.013	0.02	0.194	0.001	0.003	0.001	0	0.134

Table 2: Power values for the extended bootstrap test applied to **gradient** inhomogeneous regular point patterns in a *square* and *convex hull* window.

Additional elongation results

	Radial inhomogeneous intensity					
	Area	Perimeter	Circularity	RR	AR	Drazić's
Max	8.1806	11.7105	0.9557	0.6731	0.8528	3.5380
Min	0.2956	2.3451	0.6444	0.0105	0.0008	0.3012
Mean	1.25	4.4155	0.8708	0.3578	0.1944	1.0546
Median	1.0761	4.2190	0.8781	0.3561	0.1469	0.9998
Standard deviation	0.7508	1.1203	0.0457	0.1072	0.1961	0.3651
$P_{2.5}$	0.4943	2.9045	0.7605	0.1293	0.0057	0.5266
$P_{97.5}$	2.9986	7.0651	0.9366	0.5647	0.6134	1.8763
	Gradient inhomogeneous intensity					
	Area	Perimeter	Circularity	RR	AR	Drazić's
Max	11.4292	13.9451	0.9560	0.6794	0.8488	3.2095
Min	0.2709	2.2551	0.6492	0.0114	0.0008	0.2915
Mean	1.25	4.3248	0.8731	0.3673	0.1961	1.0432
Median	0.9682	3.9835	0.8803	0.3682	0.1489	0.9946
Standard deviation	1.1141	1.4607	0.0450	0.1094	0.1693	0.3447
$P_{2.5}$	0.4571	2.7826	0.7630	0.1258	0.0059	0.5245
$P_{97.5}$	3.9211	8.2619	0.9373	0.5733	0.6139	1.8205

Table 3: Some descriptive statistics and empirical confidence intervals for the average area, perimeter and four measures of elongation of the Voronoi cells tessellating **radial** and gradient **inhomogeneous** regular point patterns.