

承認書

SPECIFICATION FOR APPROVAL

致 大鵬科技股份有限公司

送樣日期： 111 年 8 月 15 日

機 種：
Machinery 8403HBPADC10

板材尺寸： 2L FR4 0.6mm

規格： 化金 3X8 PCS/PNL

此承認書均照貴司GERBER製作

認可章	簽 認	
	簽 准	
	校 對	
	設 計	

承認書專用章	公司：	宸電實業有限公司
2022.08.15	地址：	桃園縣平鎮市崇德街87號
宸電實業有限公司	電話：	(03)493-7021
代表號:(03)-4937021	傳真：	(03)401-3489



寰 電 實 業 有 限 公 司

UNIVERSAL ELECTRONICAL ENTERPRISE CO., LTD.

桃園縣平鎮市崇德街 87 號

TEL(03)4937021 FAX:(03)4931602

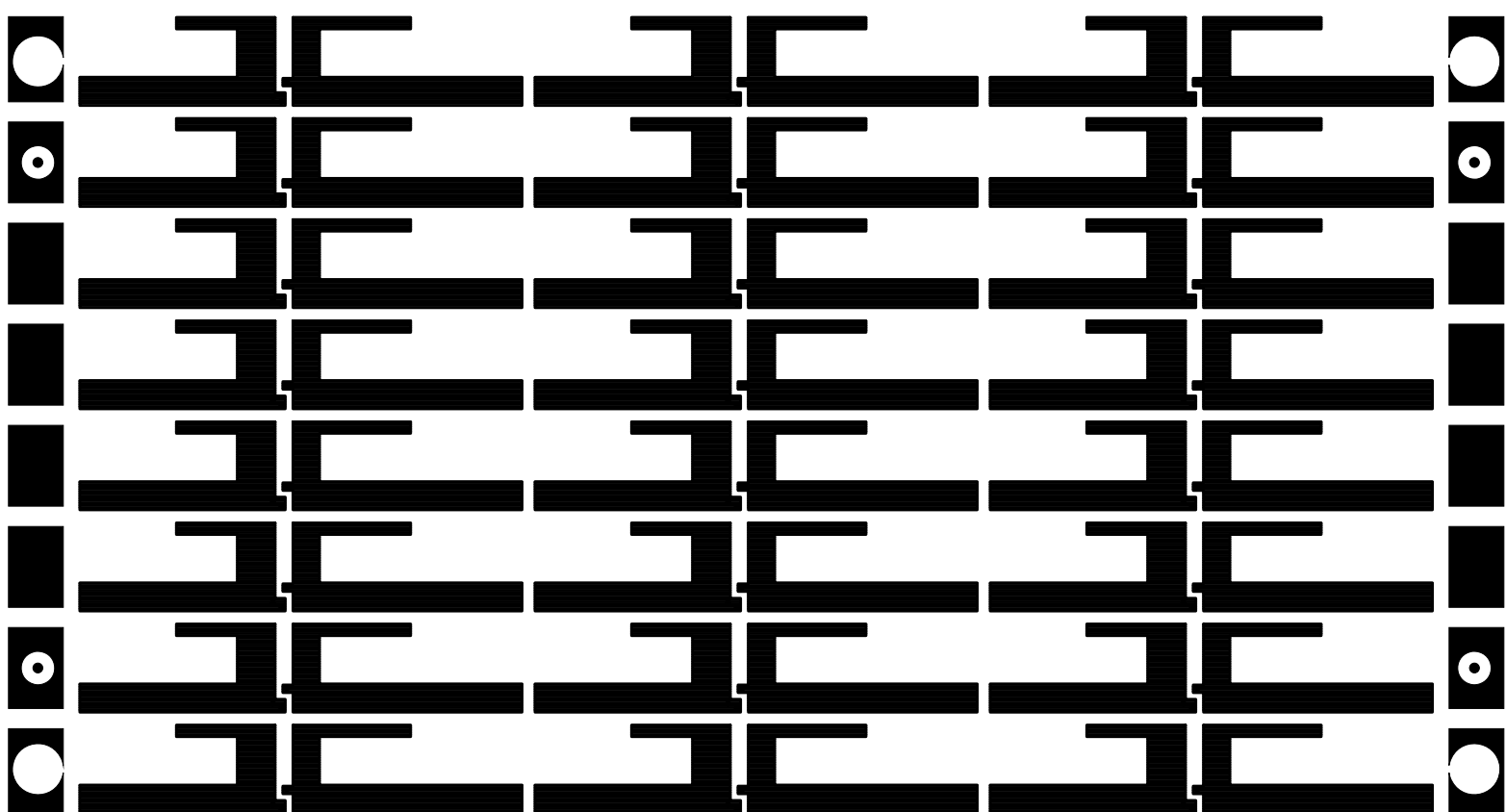
E-mail:kwpcb.one@msa.hinet.net

PCB 製作規格表

客戶名稱: 大鵬

日期: 111/08/15

客戶料號	8403HBPADC10	廠內料號	
1. PCB 層數: ☐ 單面板 ☒ 雙面板 ☐ 四層板 ☐ ____板			
2. PCB 材質: ☒ FR-4 ☐ CEM-1 ☐ 電木板 ☐ 其他			
3. PCB 成品板厚: ☐ 1.6mm ☐ 1.2mm ☐ 1.0mm ☐ 0.85mm ☒ <u>0.6</u> mm			
4. 銅箔厚度: ☐ 內層 <u>1</u> oz 外層 ☒ 1.0oz ☐ 0.5oz ☐ 2oz			
5. 電鍍: ☐ 無鉛噴錫 ☒ 化金 <u>2</u> U ☐ 鍍金 ☐ 噴錫+金手指 ☐ OSP ☐ ____			
6. 防焊: <u>2</u> 面. 顏色: ☒ 綠色 ☐ 藍色 ☐ 黃色 ☐ 黑色 ☐ ____色			
7. 文字: <u>2</u> 面. 顏色: ☒ 白色 ☐ 黑色 ☐ ____色			
8. 外型: 單片尺寸 <u>45</u> x <u>10</u> mm. PNL 排板: <u>3</u> x <u>8</u> PCS/PNL 連片 PNL 尺寸 <u>149</u> x <u>180</u> mm			
9. 金手指規格: 鍍金厚度____U 斜邊角度____ 斜邊深度____			
10. 測試: ☐ 外測 ☐ 開治具 ☐ 其它____			
11. 附件: ☒ 客戶成品孔徑表 ☒ 機構圖 ☒ 材質證明 ☒ 底片 <u>1</u> 套 ☒ 實物板 <u>1</u> 片 ☒ UL 黃卡 ☒ 外測報告			



WiFi ANT 1

5110	5120	5130	5140	5150	5160	5170	5180	5190	5200	5210	5220	5230	5240	5250	5260	5270	5280	5290	5300	5310	5320	5330	5340	5350	5360	5370	5380	5390	5400	5410	5420	5430	5440	5450	5460	5470	5480	5490	5500	5510	5520	5530	5540	5550	5560
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
-2.92536	-3.14168	-3.26659	-3.13676	-3.41325	-3.41039	-3.49233	-3.12172	-3.17113	-2.77261	-2.88587	-2.82637	-2.5615	-2.98306	-2.94899	-3.75425	-3.30185	-3.36009	-3.36512	-3.11289	-3.28242	-3.05373	-3.32793	-2.79405	-3.28488	-2.90877	-3.052	-3.14448	-2.91277	-2.8902	-2.8123	-2.90213	-2.16518	-2.69262	-2.395	-2.30273	-2.41548	-2.40096	-2.49834	-2.31687	-2.77091	-2.28373	-2.59187	-2.78309	-2.63293	-3.19346
7.52475	7.71077	7.10684	7.70389	7.10441	6.77977	7.11256	7.27114	8.50703	7.60655	6.88319	8.25486	8.61651	8.57024	7.46668	7.30022	7.67318	7.67146	7.57841	7.46742	7.8784	7.82468	7.33592	8.02024	7.56497	7.07602	7.25374	7.40342	7.81597	7.8658	7.693	7.82522	7.70813	7.46849	8.07809	8.32326	8.36333	7.57525	7.99022	8.53213	7.73918	8.21704	7.61523	7.56247	6.8805	6.90358
10.4901	10.8525	10.3734	10.8407	10.5177	10.1902	10.6049	10.3929	11.6782	10.3792	9.76906	11.0812	11.178	11.5533	10.4157	11.0545	10.0975	11.0521	10.9435	10.5903	11.1808	10.8784	10.6659	10.8143	10.8498	9.96479	10.3657	10.5479	10.7287	10.756	10.5053	10.7273	9.87331	10.1611	10.4731	10.626	10.7788	9.97621	10.4886	10.1849	10.5301	10.5008	10.2071	10.3456	9.51343	10.097
-2.92536	-3.14168	-3.26659	-3.13676	-3.41325	-3.41039	-3.49233	-3.12172	-3.17113	-2.77261	-2.88587	-2.82637	-2.5615	-2.98306	-2.94899	-3.75425	-3.30185	-3.36009	-3.36512	-3.11289	-3.28242	-3.05373	-3.32793	-2.79405	-3.28488	-2.90877	-3.052	-3.14448	-2.91277	-2.8902	-2.8123	-2.90213	-2.16518	-2.69262	-2.395	-2.30273	-2.41548	-2.40096	-2.49834	-2.31687	-2.77091	-2.28373	-2.59187	-2.78309	-2.63293	-3.19346
50.9875	48.51	47.1347	48.565	45.5696	45.8996	44.7473	48.7336	48.1822	52.8128	51.4532	52.163	55.4434	50.3146	50.7109	42.1284	46.7536	46.1255	46.0774	48.7204	46.9633	49.5025	46.4737	52.5526	46.9366	51.1826	49.5222	48.4789	51.1355	51.4019	52.3323	51.261	60.7411	53.7945	57.6102	58.8474	57.3393	57.5312	56.2556	58.6561	52.8334	59.1054	55.0571	52.6855	54.539	47.9352
7.52475	7.71077	7.10684	7.70389	7.10441	6.77977	7.11256	7.27114	8.50703	7.60655	6.88319	8.25486	8.61651	8.57024	7.46668	7.30022	7.67318	7.67146	7.57841	7.46742	7.8784	7.82468	7.33592	8.02024	7.56497	7.07602	7.25374	7.40342	7.81597	7.8658	7.693	7.82522	7.70813	7.46849	8.07809	8.32326	8.36333	7.57525	7.99022	8.53213	7.73918	8.21704	7.61523	7.56247	6.8805	6.90358

5570	5580	5590	5600	5610	5620	5630	5640	5650	5660	5670	5680	5690	5700	5710	5720	5730	5740	5750	5760	5770	5780	5790	5800	5810	5820	5830	5840	5850	5860	5870	5880	5890	5900	5910	5920	5930	5940	5950	5960	5970	5980	5990	6000
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.04966	-3.41679	-3.09776	-3.59394	-3.41181	-3.03155	-2.78878	-2.51401	-2.81076	-2.4916	-2.98808	-2.77856	-2.93093	-3.08386	-2.47588	-2.62667	-2.33055	-2.57833	-2.23162	-2.84522	-2.7634	-3.04111	-2.97949	-2.7626	-2.91109	-2.2489	-2.51305	-2.43739	-2.77696	-2.68549	-3.04591	-3.15914	-2.7372	-2.82119	-2.43476	-2.30109	-2.36634	-2.19094	-2.22291	-2.1845	-2.11055	-2.15792	-2.37221	-2.54559
7.28332	6.54475	6.54678	7.1428	6.49549	6.65139	6.60038	6.99065	6.75287	7.57125	7.19835	7.07763	7.2303	6.11943	7.02711	7.15359	7.77541	7.06942	7.06645	6.36587	6.50683	6.26294	6.35424	7.2064	5.8612	6.08453	7.26172	6.42047	6.65158	6.05399	5.43175	5.65192	6.89034	7.15404	6.29858	7.21401	6.69037	7.28891	6.72462	6.96732	7.52915	6.86672	5.80716	5.89413
10.333	9.96154	9.64454	10.7367	9.9073	9.68294	9.38916	9.50465	9.46363	10.0629	10.1864	9.85619	10.1612	9.20329	9.90299	9.78026	10.106	9.64775	9.28807	9.2111	9.27023	9.30406	9.33373	9.96901	8.77229	8.33343	9.77476	8.85786	9.42853	8.73948	8.47767	8.81106	9.62754	9.97523	8.73334	9.5151	9.05671	9.47985	8.94754	9.15182	9.63997	9.02464	8.17936	8.49772
-3.04966	-3.41679	-3.09776	-3.59394	-3.41181	-3.03155	-2.78878	-2.51401	-2.81076	-2.4916	-2.98808	-2.77856	-2.93093	-3.08386	-2.47588	-2.62667	-2.33055	-2.57833	-2.23162	-2.84522	-2.7634	-3.04111	-2.97949	-2.7626	-2.91109	-2.2489	-2.51305	-2.43739	-2.77696	-2.68549	-3.04591	-3.15914	-2.7372	-2.82119	-2.43476	-2.30109	-2.36634	-2.19094	-2.22291	-2.1845	-2.11055	-2.15792	-2.37221	-2.54559
49.5488	45.5324	49.0031	43.7125	45.5847	49.7559	52.6165	56.0531	52.3509	56.343	50.2565	52.7405	50.9222	49.1603	56.5473	54.6177	58.4715	55.229	59.8189	51.9371	52.9248	49.6465	50.356	52.9346	51.1553	59.5813	56.0655	57.0507	52.76	53.8828	49.5917	48.3155	53.2452	52.2253	57.0853	58.8696	57.9918	60.3818	59.9389	60.4714	61.3099	60.8426	57.9135	55.6468
7.28332	6.54475	6.54678	7.1428	6.49549	6.65139	6.60038	6.99065	6.75287	7.57125	7.19835	7.07763	7.2303	6.11943	7.02711	7.15359	7.77541	7.06942	7.06645	6.36587	6.50683	6.26294	6.35424	7.2064	5.8612	6.08453	7.26172	6.42047	6.65158	6.05399	5.43175	5.65192	6.89034	7.15404	6.29858	7.21401	6.69037	7.28891	6.72462	6.96732	7.52915	6.86672	5.80716	5.89413

WiFi ANT 2

Total	Frequency (MHz)	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	5000	5010	5020	5030	5040	5050	5060	5070	5080	5090	5100	5110	5120	5130
	Point Values																																													
	Ant. Port Input Pwr. (dBm)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Tot. Rad. Pwr. (dBm)	-3.03931	-3.17317	-3.02406	-3.07021	-2.93855	-2.98397	-2.60025	-2.66327	-2.62119	-3.00034	-2.66761	-2.93353	-3.07619	-2.78682	-2.56056	-2.76156	-2.99319	-2.83855	-3.02071	-3.00232	-2.80488	-2.9507	-2.7505	-2.69912	-2.59707	-2.70351	-2.74068	-2.89591	-2.96048	-3.01548	-3.04924	-3.27715	-3.30297	-3.13944	-3.38059	-3.23261	-3.46274	-4.03941	-3.70303	-3.87852	-3.90773	-3.65626	-3.42156	-3.61664	-3.78851
	Peak EIRP (dBm)	3.69911	3.751	3.81089	3.92092	4.32122	4.18456	4.55681	4.33076	4.66143	4.0918	4.70447	4.1873	4.20656	4.28737	4.9383	4.73769	4.80023	4.72442	4.9548	4.80265	5.11524	5.02175	5.45092	5.4679	5.8199	5.59086	5.74885	5.59724	5.68114	5.65549	5.59889	4.91604	5.48357	5.8596	5.03539	5.70218	5.73491	4.33295	4.83815	4.3191	4.13884	5.01722	5.06021	5.01229	4.71272
	Directivity (dBi)	6.73842	6.92417	6.83496	6.99113	7.25977	7.16853	7.15705	6.99403	7.28262	7.09213	7.37208	7.12083	7.28275	7.0742	7.49886	7.49925	7.79342	7.56297	7.97551	7.80497	7.92011	7.97244	8.20142	8.16702	8.41697	8.29437	8.48953	8.49315	8.64162	8.67097	8.64813	8.19318	8.78655	8.99904	8.41598	8.93479	9.19766	8.37235	8.54119	8.19762	8.04657	8.67349	8.48177	8.62893	8.50123
	Efficiency (dB)	-3.03931	-3.17317	-3.02406	-3.07021	-2.93855	-2.98397	-2.60025	-2.66327	-2.62119	-3.00034	-2.66761	-2.93353	-3.07619	-2.78682	-2.56056	-2.76156	-2.99319	-2.83855	-3.02071	-3.00232	-2.80488	-2.9507	-2.7505	-2.69912	-2.59707	-2.70351	-2.74068	-2.89591	-2.96048	-3.01548	-3.04924	-3.27715	-3.30297	-3.13944	-3.38059	-3.23261	-3.46274	-4.03941	-3.70303	-3.87852	-3.90773	-3.65626	-3.42156	-3.61664	-3.78851
	Efficiency (%)	49.6672	48.1596	49.8418	49.315	50.8329	50.3041	54.951	54.1593	54.6866	50.1149	54.1052	50.8917	49.2471	52.6402	55.4554	52.9473	50.1973	52.0169	49.8803	50.0919	52.4219	50.6909	53.0824	53.7141	54.9912	53.6598	53.2025	51.3345	50.5769	49.9404	49.5537	47.0203	46.7415	48.5352	45.9136	47.505	45.0532	39.4511	42.6282	40.94	40.6655	43.0897	45.4824	43.4846	41.7974
	Gain (dBi)	3.69911	3.751	3.81089	3.92092	4.32122	4.18456	4.55681	4.33076	4.66143	4.0918	4.70447	4.1873	4.20656	4.28737	4.9383	4.73769	4.80023	4.72442	4.9548	4.80265	5.11524	5.02175	5.45092	5.4679	5.8199	5.59086	5.74885	5.59724	5.68114	5.65549	5.59889	4.91604	5.48357	5.8596	5.03539	5.70218	5.73491	4.33295	4.83815	4.3191	4.13884	5.01722	5.06021	5.01229	4.71272

5140	5150	5160	5170	5180	5190	5200	5210	5220	5230	5240	5250	5260	5270	5280	5290	5300	5310	5320	5330	5340	5350	5360	5370	5380	5390	5400	5410	5420	5430	5440	5450	5460	5470	5480	5490	5500	5510	5520	5530	5540	5550	5560	5570	5580	5590	5600	5610	5620	
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.51382	-3.86331	-3.83524	-4.05782	-3.7467	-3.7482	-3.32723	-3.44461	-3.61873	-3.60161	-3.86083	-3.66317	-4.31562	-4.27097	-4.20712	-4.11273	-3.6775	-3.94233	-3.87733	-3.76708	-3.29799	-3.91078	-3.57262	-3.83183	-3.87888	-3.73855	-3.62379	-3.46477	-3.6711	-3.11063	-3.24412	-3.20829	-3.1857	-3.42338	-3.20976	-3.46874	-3.21779	-3.49867	-3.34969	-3.39153	-3.43151	-3.29263	-3.83359	-3.7131	-4.04203	-3.66286	-3.90307	-3.87806	-3.56354	
4.67127	5.04469	5.22562	4.40199	5.4424	4.80854	6.10694	5.3035	5.19484	5.01377	4.59227	4.87299	3.94795	4.21951	4.29773	3.78346	4.29189	4.175	4.54445	5.16396	5.08384	3.48942	3.82224	3.77646	4.46253	4.31508	4.19308	4.3339	4.26148	5.45027	4.95344	4.80809	3.99441	4.57452	4.46014	3.77447	4.04852	3.70445	3.85339	3.87073	4.12805	4.07388	3.77756	3.63679	3.59547	4.04859	3.29494	3.75959	4.00841	
8.18508	8.90801	9.06086	8.45981	9.18009	8.55674	9.43417	8.74811	8.81357	8.61538	8.4531	8.53615	8.26357	8.49049	8.50485	7.89619	7.96939	8.11734	8.42178	8.93105	8.38182	7.4002	7.39486	7.60829	8.34141	8.05363	7.81686	7.79867	7.93258	8.56091	8.19756	8.01638	7.18011	7.99791	7.66991	7.24321	7.26632	7.20312	7.20308	7.26225	7.55956	7.36651	7.61115	7.34989	7.6375	7.71145	7.19801	7.63765	7.57195	
-3.51382	-3.86331	-3.83524	-4.05782	-3.7467	-3.7482	-3.32723	-3.44461	-3.61873	-3.60161	-3.86083	-3.66317	-4.31562	-4.27097	-4.20712	-4.11273	-3.6775	-3.94233	-3.87733	-3.76708	-3.29799	-3.91078	-3.57262	-3.83183	-3.87888	-3.73855	-3.62379	-3.46477	-3.6711	-3.11063	-3.24412	-3.20829	-3.1857	-3.42338	-3.20976	-3.46874	-3.21779	-3.49867	-3.34969	-3.39153	-3.43151	-3.29263	-3.83359	-3.7131	-4.04203	-3.66286	-3.90307	-3.87806	-3.56354	
44.5265	41.0836	41.35	39.2842	42.2017	42.1871	46.4812	45.2417	43.4637	43.6354	41.1071	43.0213	37.0202	37.4027	37.9567	38.7906	42.8795	40.3429	40.9513	42.0041	46.7952	40.6371	43.9277	41.3826	40.9366	42.2809	43.4131	45.0322	42.9428	48.8581	47.3792	47.7717	48.0208	45.4634	47.7555	44.991	47.6673	44.6821	46.2414	45.7881	45.3784	46.853	41.3658	42.5295	39.4273	43.0243	40.7092	40.9443	44.0196	
4.67127	5.04469	5.22562	4.40199	5.4424	4.80854	6.10694	5.3035	5.19484	5.01377	4.59227	4.87299	3.94795	4.21951	4.29773	3.78346	4.29189	4.175	4.54445	5.16396	5.08384	3.48942	3.82224	3.77646	4.46253	4.31508	4.19308	4.3339	4.26148	5.45027	4.95344	4.80809	3.99441	4.57452	4.46014	3.77447	4.04852	3.70445	3.85339	3.87073	4.12805	4.07388	3.77756	3.63679	3.59547	4.04859	3.29494	3.75959	4.00841	

5630	5640	5650	5660	5670	5680	5690	5700	5710	5720	5730	5740	5750	5760	5770	5780	5790	5800	5810	5820	5830	5840	5850	5860	5870	5880	5890	5900	5910	5920	5930	5940	5950	5960	5970	5980	5990	6000
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-3.50309	-2.87928	-3.25213	-3.11271	-3.2482	-3.25241	-3.52916	-3.33411	-3.11894	-3.37226	-2.98281	-3.13306	-2.92434	-3.19426	-3.48735	-3.49977	-3.54196	-3.39651	-2.89809	-2.76421	-2.87249	-2.88153	-3.14225	-3.02939	-3.53265	-3.36859	-3.15082	-3.40198	-3.09876	-2.67866	-2.72876	-2.59817	-2.62456	-2.42921	-2.54273	-2.47721	-2.1724	-2.46983
4.12515	4.42651	3.93694	4.55922	4.74221	4.26652	4.04471	4.5488	4.68073	5.13017	5.12617	4.93591	6.12224	4.254	4.04966	4.33283	4.81116	5.57675	4.99565	4.58072	5.64855	4.35248	3.98239	3.97451	3.49192	3.90315	3.23086	3.57639	4.35515	3.7876	4.30744	5.00909	4.34067	4.53718	4.83702	5.48998	5.65605	5.59227
7.62824	7.30579	7.18907	7.67194	7.99041	7.51893	7.57387	7.8829	7.79967	8.50243	8.10898	8.06897	9.04658	7.44825	7.53701	7.83261	8.35312	8.97326	7.89373	7.34493	8.52104	7.23401	7.12464	7.0039	7.02457	7.27174	6.38168	6.97837	7.45391	6.46627	7.0362	7.60726	6.96523	6.96639	7.37975	7.96719	7.82845	8.0621
-3.50309	-2.87928	-3.25213	-3.11271	-3.2482	-3.25241	-3.52916	-3.33411	-3.11894	-3.37226	-2.98281	-3.13306	-2.92434	-3.19426	-3.48735	-3.49977	-3.54196	-3.39651	-2.89809	-2.76421	-2.87249	-2.88153	-3.14225	-3.02939	-3.53265	-3.36859	-3.15082	-3.40198	-3.09876	-2.67866	-2.72876	-2.59817	-2.62456	-2.42921	-2.54273	-2.47721	-2.1724	-2.46983
44.6366	51.5314	47.2919	48.8347	47.3348	47.2889	44.3695	46.4076	48.7647	46.0017	50.3174	48.6065	50.9995	47.9264	44.7987	44.6707	44.2289	45.7456	51.3087	52.9151	51.612	51.5047	48.5057	49.7807	44.3338	46.0406	48.4081	45.688	48.9918	53.9077	53.3488	54.9772	54.6442	57.1582	55.6835	56.53	60.6401	56.6261
4.12515	4.42651	3.93694	4.55922	4.74221	4.26652	4.04471	4.5488	4.68073	5.13017	5.12617	4.93591	6.12224	4.254	4.04966	4.33283	4.81116	5.57675	4.99565	4.58072	5.64855	4.35248	3.98239	3.97451	3.49192	3.90315	3.23086	3.57639	4.35515	3.7876	4.30744	5.00909	4.34067	4.53718	4.83702	5.48998	5.65605	5.59227