



Focal Length 18 mm

Circle of Confusion 0.025 mm

T/No	2.1	2.4	2.8	3.4	4	4.8	5.6
Hyperfocal Distance (m)	7.2	6.3	5.3	4.5	3.8	3.2	2.7

T/No	2.1		2.4		2.8		3.4		4		4.8		5.6	
Focus Distance (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)
Infinity	7.143	Infinity	6.315	Infinity	5.321	Infinity	4.485	Infinity	3.782	Infinity	3.191	Infinity	2.694	Infinity
10.0	4.204	Infinity	3.907	Infinity	3.507	Infinity	3.129	Infinity	2.774	Infinity	2.447	Infinity	2.147	Infinity
5.0	2.978	16.214	2.828	23.181	2.616	76.42	2.402	Infinity	2.191	Infinity	1.984	Infinity	1.785	Infinity
3.0	2.144	5.054	2.067	5.565	1.953	6.654	1.834	8.686	1.71	13.678	1.584	43.803	1.457	Infinity
2.0	1.588	2.717	1.547	2.854	1.484	3.108	1.416	3.478	1.343	4.056	1.265	5.06	1.185	7.195
1.5	1.261	1.858	1.235	1.919	1.196	2.028	1.152	2.175	1.105	2.381	1.053	2.686	0.998	3.172
1.0	0.893	1.139	0.881	1.16	0.862	1.197	0.84	1.244	0.816	1.305	0.789	1.386	0.759	1.498
0.7	0.649	0.76	0.643	0.769	0.634	0.784	0.623	0.802	0.61	0.826	0.596	0.855	0.58	0.893
0.5	0.476	0.527	0.473	0.531	0.468	0.537	0.463	0.545	0.457	0.554	0.449	0.566	0.441	0.581
0.3	0.293	0.307	0.292	0.308	0.291	0.31	0.289	0.312	0.287	0.314	0.285	0.317	0.282	0.321
0.22	0.217	0.223	0.217	0.223	0.216	0.224	0.215	0.225	0.215	0.226	0.214	0.227	0.213	0.228

6.7	8	9.5	11	13	16	19	22
2.3	1.9	1.6	1.4	1.2	1.0	0.9	0.7

6.7		8		9.5		11		13		16		19		22	
Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)
2.276	Infinity	1.924	Infinity	1.629	Infinity	1.38	Infinity	1.171	Infinity	0.995	Infinity	0.848	Infinity	0.723	Infinity
1.877	Infinity	1.634	Infinity	1.419	Infinity	1.229	Infinity	1.062	Infinity	0.918	Infinity	0.792	Infinity	0.684	Infinity
1.597	Infinity	1.42	Infinity	1.257	Infinity	1.107	Infinity	0.972	Infinity	0.851	Infinity	0.743	Infinity	0.648	Infinity
1.331	Infinity	1.209	Infinity	1.09	Infinity	0.978	Infinity	0.873	Infinity	0.776	Infinity	0.687	Infinity	0.606	Infinity
1.102	14.567	1.019	Infinity	0.935	Infinity	0.853	Infinity	0.774	Infinity	0.698	Infinity	0.627	Infinity	0.56	Infinity
0.94	4.052	0.88	6.076	0.819	15.244	0.757	Infinity	0.695	Infinity	0.635	Infinity	0.577	Infinity	0.521	Infinity
0.727	1.659	0.692	1.905	0.655	2.318	0.617	3.139	0.577	5.492	0.537	60.8	0.497	Infinity	0.457	Infinity
0.562	0.944	0.543	1.013	0.521	1.111	0.498	1.257	0.474	1.494	0.448	1.938	0.421	3.037	0.394	9.913
0.432	0.6	0.421	0.624	0.409	0.657	0.396	0.7	0.382	0.76	0.366	0.849	0.35	0.99	0.332	1.241
0.279	0.325	0.276	0.33	0.272	0.337	0.267	0.346	0.262	0.356	0.256	0.37	0.25	0.388	0.243	0.413
0.211	0.23	0.21	0.232	0.208	0.234	0.206	0.237	0.203	0.241	0.201	0.246	0.197	0.252	0.194	0.259



Focal Length 25 mm

Circle of Confusion 0.025 mm

T/No	2.1	2.4	2.8	3.4	4	4.8	5.6
Hyperfocal Distance (m)	13.1	11.6	9.8	8.2	6.9	5.8	4.9

T/No	2.1		2.4		2.8		3.4		4		4.8		5.6	
Focus Distance (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)
Infinity	13.09	Infinity	11.565	Infinity	9.734	Infinity	8.195	Infinity	6.901	Infinity	5.813	Infinity	4.898	Infinity
10	5.705	41.626	5.4	71.957	4.97	Infinity	4.541	Infinity	4.119	Infinity	3.71	Infinity	3.32	Infinity
5.0	3.648	7.99	3.522	8.682	3.336	10.098	3.14	12.534	2.935	17.594	2.725	33.941	2.511	Infinity
3.0	2.463	3.846	2.406	3.997	2.32	4.267	2.225	4.64	2.122	5.18	2.012	6.016	1.895	7.452
2.0	1.752	2.334	1.724	2.387	1.68	2.478	1.631	2.596	1.576	2.753	1.516	2.966	1.45	3.269
1.5	1.359	1.675	1.343	1.702	1.317	1.746	1.287	1.803	1.254	1.875	1.216	1.969	1.175	2.094
1.0	0.938	1.071	0.931	1.081	0.919	1.098	0.905	1.119	0.889	1.145	0.871	1.177	0.851	1.219
0.7	0.671	0.732	0.668	0.736	0.662	0.743	0.655	0.752	0.647	0.763	0.638	0.776	0.628	0.793
0.5	0.487	0.514	0.485	0.516	0.482	0.52	0.479	0.523	0.475	0.528	0.471	0.534	0.465	0.541
0.4	0.392	0.408	0.391	0.409	0.389	0.411	0.387	0.414	0.385	0.416	0.382	0.42	0.379	0.423
0.3	0.296	0.304	0.296	0.305	0.295	0.305	0.294	0.306	0.293	0.308	0.291	0.309	0.29	0.311

6.7	8	9.5	11	13	16	19	22
4.2	3.5	3.0	2.5	2.1	1.8	1.5	1.3

6.7		8		9.5		11		13		16		19		22	
Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)
4.128	Infinity	3.481	Infinity	2.937	Infinity	2.479	Infinity	2.095	Infinity	1.771	Infinity	1.499	Infinity	1.27	Infinity
2.953	Infinity	2.61	Infinity	2.296	Infinity	2.01	Infinity	1.753	Infinity	1.523	Infinity	1.32	Infinity	1.142	Infinity
2.298	Infinity	2.088	Infinity	1.885	Infinity	1.69	Infinity	1.507	Infinity	1.336	Infinity	1.179	Infinity	1.037	Infinity
1.773	10.42	1.648	19.897	1.521	Infinity	1.394	Infinity	1.269	Infinity	1.148	Infinity	1.032	Infinity	0.923	Infinity
1.38	3.722	1.304	4.462	1.225	5.854	1.144	9.346	1.06	32.85	0.976	Infinity	0.893	Infinity	0.812	Infinity
1.129	2.266	1.079	2.513	1.026	2.89	0.969	3.523	0.91	4.779	0.849	8.354	0.787	84.068	0.725	Infinity
0.828	1.272	0.802	1.342	0.774	1.437	0.743	1.57	0.709	1.765	0.673	2.076	0.635	2.634	0.596	3.898
0.616	0.813	0.603	0.84	0.588	0.873	0.571	0.917	0.552	0.976	0.531	1.057	0.509	1.175	0.485	1.358
0.46	0.55	0.453	0.56	0.445	0.574	0.436	0.59	0.426	0.612	0.415	0.64	0.402	0.677	0.388	0.728
0.376	0.428	0.372	0.434	0.367	0.441	0.361	0.45	0.355	0.462	0.348	0.476	0.339	0.494	0.33	0.519
0.288	0.313	0.286	0.316	0.284	0.319	0.281	0.323	0.277	0.328	0.274	0.334	0.269	0.342	0.264	0.351



Focal Length 35 mm

Circle of Confusion 0.025 mm

T/No	2.1	2.4	2.8	3.4	4	4.8	5.6
Hyperfocal Distance (m)	25.6	22.6	19.0	16.0	13.5	11.3	9.6

T/No	2.1		2.4		2.8		3.4		4		4.8		5.6	
Focus Distance (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)
Infinity	25.541	Infinity	22.558	Infinity	18.978	Infinity	15.967	Infinity	13.435	Infinity	11.307	Infinity	9.517	Infinity
10.00	7.216	16.326	6.96	17.824	6.582	20.932	6.184	26.415	5.769	38.386	5.343	83.398	4.913	Infinity
5.00	4.201	6.18	4.115	6.38	3.982	6.732	3.834	7.206	3.673	7.865	3.498	8.827	3.311	10.332
3.00	2.698	3.379	2.663	3.437	2.608	3.535	2.545	3.659	2.474	3.818	2.395	4.027	2.308	4.307
2.00	1.865	2.157	1.848	2.18	1.822	2.218	1.792	2.265	1.757	2.324	1.718	2.397	1.674	2.491
1.50	1.424	1.585	1.415	1.596	1.4	1.616	1.383	1.64	1.362	1.67	1.339	1.707	1.313	1.753
1.00	0.967	1.035	0.963	1.04	0.957	1.048	0.949	1.057	0.94	1.069	0.929	1.083	0.917	1.1
0.70	0.685	0.716	0.683	0.718	0.68	0.721	0.676	0.726	0.672	0.731	0.667	0.737	0.661	0.744
0.50	0.493	0.507	0.492	0.508	0.491	0.51	0.489	0.512	0.487	0.514	0.484	0.517	0.482	0.52
0.35	0.347	0.353	0.347	0.353	0.346	0.354	0.345	0.355	0.344	0.356	0.343	0.357	0.342	0.358



6.7	8	9.5	11	13	16	19	22
8.0	6.8	5.7	4.8	4.1	3.4	2.9	2.5

6.7		8		9.5		11		13		16		19		22	
Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)
8.011	Infinity	6.746	Infinity	5.681	Infinity	4.786	Infinity	4.033	Infinity	3.401	Infinity	2.868	Infinity	2.421	Infinity
4.484	Infinity	4.064	Infinity	3.657	Infinity	3.269	Infinity	2.904	Infinity	2.565	Infinity	2.254	Infinity	1.972	Infinity
3.113	12.966	2.907	18.626	2.696	38.859	2.482	Infinity	2.269	Infinity	2.059	Infinity	1.857	Infinity	1.663	Infinity
2.212	4.697	2.108	5.265	1.996	6.153	1.879	7.702	1.756	11.011	1.63	22.635	1.503	Infinity	1.376	Infinity
1.624	2.614	1.568	2.776	1.507	2.999	1.441	3.315	1.369	3.794	1.294	4.584	1.214	6.106	1.132	10.131
1.283	1.811	1.249	1.885	1.211	1.983	1.169	2.113	1.122	2.292	1.072	2.551	1.018	2.949	0.961	3.628
0.903	1.122	0.887	1.148	0.869	1.182	0.848	1.225	0.824	1.28	0.798	1.352	0.769	1.451	0.738	1.589
0.654	0.753	0.646	0.765	0.637	0.778	0.627	0.795	0.614	0.816	0.601	0.843	0.585	0.878	0.568	0.923
0.478	0.524	0.474	0.529	0.47	0.535	0.465	0.542	0.459	0.551	0.452	0.562	0.444	0.576	0.434	0.593
0.341	0.36	0.339	0.362	0.337	0.364	0.335	0.367	0.332	0.37	0.329	0.375	0.325	0.38	0.321	0.386



Focal Length 50 mm

Circle of Confusion 0.025 mm

T/No	2.1	2.4	2.8	3.4	4	4.8	5.6
Hyperfocal Distance (m)	53.7	47.4	39.9	33.6	28.2	23.8	20.0

T/No	2.1		2.4		2.8		3.4		4		4.8		5.6	
Focus Distance (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)
Infinity	53.636	Infinity	47.363	Infinity	39.835	Infinity	33.504	Infinity	28.18	Infinity	23.704	Infinity	19.939	Infinity
10.0	8.447	12.257	8.277	12.636	8.016	13.3	7.726	14.186	7.408	15.409	7.062	17.169	6.691	19.87
5.0	4.584	5.499	4.534	5.573	4.456	5.697	4.366	5.851	4.264	6.046	4.149	6.296	4.02	6.622
3.0	2.848	3.169	2.829	3.193	2.799	3.233	2.764	3.281	2.723	3.34	2.677	3.414	2.623	3.505
2.0	1.933	2.072	1.924	2.082	1.911	2.098	1.895	2.118	1.876	2.142	1.854	2.171	1.829	2.207
1.5	1.463	1.539	1.458	1.545	1.45	1.553	1.441	1.564	1.431	1.577	1.418	1.592	1.404	1.611
1.0	0.984	1.016	0.982	1.019	0.979	1.022	0.975	1.027	0.97	1.032	0.965	1.038	0.958	1.046
0.8	0.79	0.81	0.789	0.811	0.787	0.814	0.784	0.816	0.782	0.819	0.778	0.823	0.774	0.828
0.6	0.595	0.605	0.594	0.606	0.593	0.607	0.592	0.609	0.59	0.61	0.588	0.612	0.586	0.614
0.5	0.497	0.503	0.496	0.504	0.495	0.505	0.495	0.506	0.494	0.507	0.492	0.508	0.491	0.509



6.7	8	9.5	11	13	16	19	22
16.8	14.2	11.9	10.0	8.5	7.1	6.0	5.1

6.7		8		9.5		11		13		16		19		22	
Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)
16.774	Infinity	14.112	Infinity	11.873	Infinity	9.991	Infinity	8.408	Infinity	7.077	Infinity	5.958	Infinity	5.017	Infinity
6.297	24.446	5.886	33.68	5.463	61.197	5.032	2252.236	4.602	Infinity	4.178	Infinity	3.766	Infinity	3.372	Infinity
3.876	7.056	3.719	7.653	3.547	8.51	3.363	9.82	3.168	12.024	2.964	16.413	2.753	29.048	2.539	353.27
2.563	3.621	2.494	3.769	2.417	3.962	2.332	4.219	2.238	4.573	2.136	5.08	2.026	5.852	1.91	7.15
1.8	2.251	1.767	2.306	1.729	2.375	1.686	2.463	1.637	2.577	1.583	2.727	1.523	2.929	1.458	3.214
1.387	1.634	1.368	1.662	1.345	1.696	1.32	1.74	1.291	1.794	1.258	1.863	1.22	1.954	1.179	2.073
0.951	1.055	0.942	1.066	0.932	1.079	0.92	1.096	0.907	1.116	0.891	1.141	0.873	1.173	0.853	1.213
0.769	0.833	0.764	0.84	0.757	0.848	0.75	0.858	0.741	0.87	0.731	0.884	0.719	0.902	0.706	0.925
0.584	0.617	0.581	0.621	0.577	0.625	0.573	0.63	0.568	0.636	0.563	0.643	0.556	0.652	0.549	0.663
0.489	0.511	0.487	0.514	0.485	0.516	0.482	0.519	0.479	0.523	0.475	0.528	0.471	0.534	0.466	0.54



Focal Length 73 mm

Circle of Confusion 0.025 mm

T/No	2.1	2.4	2.8	3.4	4	4.8	5.6
Hyperfocal Distance (m)	104.0	91.8	77.2	65.0	54.7	46.0	38.7

T/No	2.1		2.4		2.8		3.4		4		4.8		5.6	
Focus Distance (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)
Infinity	103.91	Infinity	91.754	Infinity	77.165	Infinity	64.897	Infinity	54.58	Infinity	45.905	Infinity	38.61	Infinity
10.00	9.136	11.045	9.033	11.201	8.871	11.461	8.685	11.787	8.475	12.2	8.237	12.731	7.972	13.425
5.00	4.778	5.244	4.75	5.278	4.706	5.334	4.654	5.402	4.594	5.486	4.524	5.589	4.444	5.716
3.00	2.921	3.084	2.91	3.095	2.894	3.114	2.875	3.137	2.852	3.164	2.826	3.197	2.795	3.238
2.00	1.965	2.036	1.961	2.041	1.954	2.049	1.945	2.058	1.935	2.069	1.923	2.083	1.91	2.1
1.50	1.481	1.519	1.479	1.522	1.475	1.526	1.47	1.531	1.464	1.537	1.458	1.545	1.45	1.554
1.00	0.992	1.008	0.991	1.009	0.989	1.011	0.987	1.013	0.985	1.015	0.982	1.018	0.979	1.022
0.75	0.746	0.754	0.745	0.755	0.744	0.756	0.743	0.757	0.742	0.758	0.741	0.76	0.739	0.762



6.7	8	9.5	11	13	16	19	22
32.5	27.4	23.1	19.4	16.3	13.8	11.6	9.8

6.7		8		9.5		11		13		16		19		22	
Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)
32.475	Infinity	27.317	Infinity	22.979	Infinity	19.331	Infinity	16.264	Infinity	13.684	Infinity	11.515	Infinity	9.692	Infinity
7.677	14.357	7.355	15.65	7.005	17.528	6.63	20.448	6.234	25.507	5.821	36.154	5.396	71.886	4.966	Infinity
4.353	5.876	4.249	6.078	4.132	6.337	4.001	6.675	3.856	7.128	3.696	7.755	3.523	8.663	3.338	10.065
2.76	3.287	2.719	3.348	2.671	3.423	2.617	3.517	2.556	3.636	2.486	3.788	2.409	3.987	2.322	4.254
1.893	2.12	1.875	2.144	1.853	2.174	1.827	2.21	1.798	2.255	1.764	2.311	1.726	2.381	1.683	2.471
1.441	1.564	1.43	1.577	1.418	1.592	1.404	1.611	1.387	1.634	1.367	1.663	1.345	1.698	1.319	1.741
0.975	1.026	0.97	1.031	0.965	1.038	0.959	1.045	0.951	1.054	0.943	1.065	0.933	1.078	0.921	1.095
0.737	0.764	0.734	0.766	0.731	0.77	0.728	0.773	0.724	0.778	0.719	0.784	0.714	0.79	0.707	0.799



Focal Length 100 mm

Circle of Confusion 0.025 mm

T/No	2.1	2.4	2.8	3.4	4	4.8	5.6
Hyperfocal Distance (m)	192.9	170.3	143.3	120.5	101.3	85.3	71.7

T/No	2.1		2.4		2.8		3.4		4		4.8		5.6	
Focus Distance (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)
Infinity	192.756	Infinity	170.204	Infinity	143.14	Infinity	120.38	Infinity	101.24	Infinity	85.145	Infinity	71.611	Infinity
10.00	9.518	10.534	9.458	10.609	9.362	10.732	9.25	10.883	9.121	11.068	8.972	11.297	8.801	11.581
5.00	4.879	5.127	4.864	5.144	4.839	5.172	4.81	5.206	4.775	5.247	4.735	5.297	4.688	5.357
3.00	2.958	3.044	2.952	3.05	2.943	3.059	2.933	3.071	2.92	3.084	2.906	3.101	2.889	3.121
2.00	1.982	2.018	1.979	2.021	1.976	2.025	1.971	2.03	1.966	2.036	1.959	2.042	1.952	2.051
1.50	1.49	1.51	1.489	1.511	1.487	1.513	1.484	1.516	1.481	1.519	1.478	1.523	1.474	1.527
1.00	0.996	1.004	0.995	1.005	0.995	1.005	0.994	1.006	0.992	1.008	0.991	1.009	0.989	1.011
0.85	0.847	0.853	0.847	0.853	0.846	0.854	0.846	0.854	0.845	0.855	0.844	0.856	0.843	0.857



6.7	8	9.5	11	13	16	19	22
60.3	50.8	42.7	35.9	30.3	25.5	21.4	18.1

6.7		8		9.5		11		13		16		19		22	
Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)	Short Focus (m)	Long Focus (m)
60.229	Infinity	50.658	Infinity	42.61	Infinity	35.842	Infinity	30.151	Infinity	25.366	Infinity	21.341	Infinity	17.957	Infinity
8.606	11.939	8.385	12.395	8.136	12.984	7.86	13.762	7.555	14.82	7.221	16.311	6.862	18.531	6.479	22.115
4.634	5.43	4.57	5.52	4.497	5.631	4.414	5.769	4.318	5.943	4.21	6.163	4.088	6.448	3.952	6.823
2.868	3.145	2.845	3.174	2.817	3.209	2.785	3.252	2.748	3.304	2.705	3.369	2.656	3.449	2.6	3.55
1.943	2.061	1.933	2.072	1.92	2.087	1.906	2.104	1.889	2.125	1.87	2.15	1.847	2.182	1.821	2.22
1.469	1.532	1.463	1.539	1.457	1.546	1.449	1.555	1.44	1.566	1.429	1.579	1.416	1.595	1.401	1.615
0.987	1.013	0.985	1.015	0.982	1.018	0.979	1.022	0.975	1.026	0.97	1.032	0.965	1.038	0.959	1.045
0.841	0.859	0.84	0.861	0.838	0.863	0.835	0.865	0.833	0.868	0.83	0.872	0.826	0.876	0.821	0.881