

OPTIMO ULTRA 12X |
Configuration U35

DEPTH-OF-FIELD TABLES
DISTANCE IN METERS

| Angénieux®

REFERENCE : 321262 - A

DEPTH-OF-FIELD TABLES

F = 26 - 320 mm

The depths of field tables are provided for information purposes only and are estimated with a circle of confusion of 0.013mm (1/2000inch). The width of the sharpness zone grows proportionally with the focus distance and aperture and it is inversely proportional to the focal length. In practice the depth of field limits can only be defined accurately by performing screen tests in true shooting conditions.

TABLES DE PROFONDEUR DE CHAMP
F = 26 - 320 mm

Les tables de profondeur de champ sont fournies à titre indicatif pour un cercle de confusion moyen de 0.013mm (1/2000inch).

La profondeur de champ augmente proportionnellement avec la distance de mise au point ainsi qu'avec le diaphragme et est inversement proportionnelle à la focale.

Dans la pratique, seuls les essais filmés dans des conditions de tournage vous permettront de définir les bornes de cette profondeur de champ avec un maximum de précision.

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		21.552	17.663	12.821	9.132	6.766	4.786	3.596
30 meters	Far	∞	∞	∞	∞	∞	∞	∞
	Near	12.734	11.302	9.147	7.141	5.638	4.219	3.284
10 meters	Far	18.018	22.111	43.237	∞	∞	∞	∞
	Near	7.001	6.567	5.812	4.97	4.225	3.409	2.796
8 meters	Far	12.282	14.014	20.112	61.238	∞	∞	∞
	Near	5.989	5.675	5.113	4.461	3.862	3.179	2.648
5 meters	Far	6.285	6.681	7.728	10.191	17.335	∞	∞
	Near	4.177	4.03	3.755	3.411	3.068	2.643	2.284
4 meters	Far	4.743	4.955	5.481	6.556	8.781	21.583	∞
	Near	3.475	3.377	3.189	2.947	2.697	2.375	2.091

F = 26 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		21.552	17.663	12.821	9.132	6.766	4.786	3.596
3 meters	Far	3.367	3.464	3.695	4.116	4.826	6.905	15.386
	Near	2.714	2.658	2.548	2.402	2.244	2.03	1.831
2.5 meters	Far	2.733	2.793	2.932	3.173	3.551	4.481	6.733
	Near	2.309	2.271	2.195	2.091	1.977	1.818	1.665
2 meters	Far	2.132	2.165	2.239	2.364	2.547	2.942	3.668
	Near	1.887	1.863	1.816	1.751	1.677	1.57	1.464
1.5 meters	Far	1.561	1.576	1.609	1.661	1.735	1.878	2.099
	Near	1.445	1.433	1.41	1.376	1.337	1.278	1.216
1.24 meters	Far	1.275	1.284	1.302	1.331	1.371	1.445	1.551
	Near	1.207	1.2	1.186	1.165	1.141	1.103	1.063

F = 26 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		29.996	24.547	17.766	12.601	9.289	6.519	4.853
30 meters	Far	∞	∞	∞	∞	∞	∞	∞
	Near	15.197	13.696	11.342	9.038	7.235	5.469	4.27
10 meters	Far	14.618	16.35	21.909	45.729	∞	∞	∞
	Near	7.647	7.267	6.58	5.77	5.013	4.135	3.44
8 meters	Far	10.632	11.5	13.934	20.623	53.544	∞	∞
	Near	6.445	6.179	5.684	5.081	4.495	3.787	3.206
5 meters	Far	5.849	6.086	6.664	7.798	9.968	19.154	∞
	Near	4.38	4.263	4.035	3.739	3.429	3.024	2.66
4 meters	Far	4.5	4.633	4.946	5.515	6.467	9.204	19.622
	Near	3.609	3.532	3.38	3.178	2.96	2.664	2.388

F = 33 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		29.996	24.547	17.766	12.601	9.289	6.519	4.853
3 meters	Far	3.252	3.315	3.46	3.709	4.083	4.941	6.707
	Near	2.789	2.746	2.66	2.542	2.41	2.223	2.039
2.5 meters	Far	2.661	2.701	2.791	2.94	3.155	3.609	4.403
	Near	2.36	2.331	2.272	2.19	2.097	1.961	1.825
2 meters	Far	2.092	2.114	2.164	2.244	2.355	2.574	2.911
	Near	1.917	1.9	1.864	1.813	1.755	1.667	1.575
1.5 meters	Far	1.543	1.553	1.575	1.61	1.658	1.745	1.868
	Near	1.46	1.452	1.434	1.408	1.378	1.331	1.28
1.24 meters	Far	1.265	1.271	1.283	1.303	1.329	1.376	1.44
	Near	1.216	1.211	1.201	1.185	1.167	1.137	1.105

F = 33 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		53.094	43.38	31.297	22.098	16.2	11.267	8.301
30 meters	Far	67.903	95.36	690.34	∞	∞	∞	∞
	Near	19.351	17.926	15.515	12.918	10.699	8.347	6.635
10 meters	Far	12.139	12.762	14.326	17.607	24.81	81.185	∞
	Near	8.519	8.246	7.722	7.053	6.369	5.495	4.732
8 meters	Far	9.282	9.633	10.48	12.094	15.028	25.549	183.377
	Near	7.041	6.857	6.498	6.027	5.529	4.87	4.271
5 meters	Far	5.441	5.552	5.806	6.238	6.889	8.369	11.371
	Near	4.63	4.554	4.403	4.194	3.961	3.63	3.305
4 meters	Far	4.265	4.33	4.476	4.717	5.063	5.782	7.003
	Near	3.769	3.721	3.623	3.486	3.33	3.102	2.871

F = 45 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		53.094	43.38	31.297	22.098	16.2	11.267	8.301
3 meters	Far	3.135	3.168	3.24	3.355	3.513	3.819	4.274
	Near	2.877	2.851	2.797	2.721	2.631	2.496	2.354
2.5 meters	Far	2.588	2.608	2.654	2.726	2.823	3.004	3.261
	Near	2.419	2.402	2.366	2.314	2.253	2.158	2.057
2 meters	Far	2.05	2.062	2.088	2.128	2.181	2.278	2.408
	Near	1.953	1.942	1.921	1.889	1.852	1.793	1.729
1.5 meters	Far	1.524	1.529	1.541	1.559	1.583	1.625	1.679
	Near	1.477	1.472	1.462	1.446	1.428	1.398	1.364
1.24 meters	Far	1.254	1.257	1.264	1.274	1.288	1.311	1.341
	Near	1.227	1.224	1.217	1.208	1.197	1.179	1.158

F = 45 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		82.612	67.452	48.598	34.245	25.043	17.345	12.718
30 meters	Far	46.637	53.36	76.954	233.19	∞	∞	∞
	Near	22.162	20.933	18.736	16.188	13.845	11.174	9.096
10 meters	Far	11.269	11.604	12.386	13.795	16.106	22.445	43.113
	Near	8.995	8.797	8.404	7.877	7.307	6.526	5.793
8 meters	Far	8.775	8.972	9.422	10.198	11.38	14.144	20.085
	Near	7.356	7.225	6.964	6.605	6.207	5.645	5.098
5 meters	Far	5.273	5.339	5.486	5.724	6.055	6.709	7.724
	Near	4.756	4.704	4.598	4.448	4.275	4.016	3.747
4 meters	Far	4.165	4.205	4.291	4.429	4.616	4.969	5.48
	Near	3.849	3.816	3.749	3.653	3.54	3.368	3.184

F = 55 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		82.612	67.452	48.598	34.245	25.043	17.345	12.718
3 meters	Far	3.085	3.105	3.149	3.217	3.307	3.471	3.694
	Near	2.92	2.903	2.866	2.814	2.751	2.653	2.545
2.5 meters	Far	2.555	2.568	2.596	2.639	2.696	2.797	2.931
	Near	2.447	2.436	2.412	2.377	2.334	2.267	2.193
2 meters	Far	2.032	2.039	2.055	2.08	2.112	2.167	2.239
	Near	1.969	1.962	1.948	1.927	1.902	1.861	1.815
1.5 meters	Far	1.515	1.519	1.526	1.537	1.552	1.577	1.608
	Near	1.485	1.482	1.475	1.465	1.453	1.432	1.409
1.24 meters	Far	1.249	1.251	1.255	1.262	1.27	1.284	1.302
	Near	1.231	1.229	1.225	1.219	1.212	1.2	1.186

F = 55 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		161.311	131.648	94.749	66.656	48.645	33.579	24.521
30 meters	Far	36.668	38.612	43.511	53.829	76.696	266.667	∞
	Near	25.4	24.551	22.929	20.857	18.742	16.041	13.688
10 meters	Far	10.609	10.758	11.087	11.625	12.38	13.892	16.3
	Near	9.459	9.345	9.113	8.784	8.405	7.844	7.265
8 meters	Far	8.377	8.467	8.666	8.984	9.419	10.25	11.475
	Near	7.657	7.583	7.433	7.217	6.964	6.582	6.177
5 meters	Far	5.136	5.167	5.236	5.343	5.485	5.739	6.08
	Near	4.872	4.844	4.786	4.701	4.599	4.439	4.262
4 meters	Far	4.083	4.102	4.143	4.207	4.29	4.438	4.63
	Near	3.921	3.904	3.867	3.814	3.749	3.647	3.531

F = 80 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		161.311	131.648	94.749	66.656	48.645	33.579	24.521
3 meters	Far	3.043	3.053	3.074	3.106	3.148	3.221	3.314
	Near	2.958	2.949	2.93	2.901	2.867	2.81	2.746
2.5 meters	Far	2.528	2.534	2.548	2.569	2.596	2.642	2.7
	Near	2.473	2.467	2.454	2.435	2.412	2.374	2.331
2 meters	Far	2.016	2.02	2.028	2.04	2.055	2.081	2.114
	Near	1.984	1.981	1.973	1.962	1.948	1.926	1.9
1.5 meters	Far	1.508	1.509	1.513	1.519	1.526	1.538	1.553
	Near	1.492	1.491	1.487	1.482	1.475	1.464	1.452
1.24 meters	Far	1.244	1.245	1.248	1.251	1.255	1.262	1.271
	Near	1.236	1.235	1.232	1.229	1.225	1.219	1.211

F = 80 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		266.479	217.452	156.449	109.999	80.215	55.3	40.32
30 meters	Far	33.704	34.672	36.923	40.935	47.401	64.432	113.665
	Near	27.036	26.447	25.279	23.704	21.99	19.629	17.395
10 meters	Far	10.36	10.444	10.629	10.921	11.311	12.03	13.027
	Near	9.665	9.593	9.443	9.226	8.968	8.57	8.137
8 meters	Far	8.224	8.276	8.389	8.566	8.799	9.219	9.781
	Near	7.789	7.743	7.647	7.507	7.338	7.075	6.783
5 meters	Far	5.081	5.1	5.14	5.202	5.281	5.42	5.598
	Near	4.922	4.904	4.868	4.814	4.749	4.644	4.524
4 meters	Far	4.049	4.061	4.085	4.122	4.17	4.253	4.356
	Near	3.952	3.941	3.919	3.885	3.844	3.778	3.701

F = 100 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		266.479	217.452	156.449	109.999	80.215	55.3	40.32
3 meters	Far	3.026	3.032	3.044	3.063	3.088	3.129	3.181
	Near	2.975	2.969	2.957	2.94	2.918	2.882	2.84
2.5 meters	Far	2.517	2.521	2.529	2.541	2.557	2.584	2.617
	Near	2.483	2.48	2.472	2.46	2.446	2.422	2.395
2 meters	Far	2.01	2.012	2.017	2.024	2.033	2.048	2.067
	Near	1.99	1.988	1.984	1.977	1.968	1.954	1.938
1.5 meters	Far	1.505	1.506	1.508	1.511	1.516	1.523	1.531
	Near	1.495	1.494	1.492	1.489	1.485	1.478	1.47
1.24 meters	Far	1.243	1.243	1.245	1.247	1.249	1.253	1.258
	Near	1.237	1.237	1.235	1.234	1.231	1.227	1.222

F = 100 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		472.099	385.217	277.091	194.759	141.963	97.794	71.239
30 meters	Far	31.982	32.466	33.545	35.315	37.817	42.898	51.171
	Near	28.252	27.885	27.139	26.087	24.88	23.099	21.274
10 meters	Far	10.2	10.246	10.345	10.499	10.698	11.049	11.503
	Near	9.808	9.766	9.678	9.548	9.39	9.138	8.853
8 meters	Far	8.125	8.153	8.215	8.309	8.431	8.643	8.912
	Near	7.879	7.853	7.797	7.714	7.612	7.449	7.263
5 meters	Far	5.045	5.056	5.078	5.112	5.155	5.228	5.319
	Near	4.955	4.946	4.925	4.893	4.855	4.792	4.719
4 meters	Far	4.028	4.034	4.048	4.068	4.094	4.138	4.193
	Near	3.973	3.967	3.954	3.934	3.91	3.871	3.825

F = 135 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		472.099	385.217	277.091	194.759	141.963	97.794	71.239
3 meters	Far	3.014	3.018	3.025	3.035	3.049	3.071	3.099
	Near	2.986	2.982	2.976	2.966	2.953	2.932	2.908
2.5 meters	Far	2.509	2.512	2.516	2.523	2.532	2.546	2.564
	Near	2.491	2.489	2.484	2.477	2.469	2.455	2.439
2 meters	Far	2.005	2.007	2.009	2.013	2.018	2.027	2.037
	Near	1.995	1.993	1.991	1.987	1.982	1.974	1.964
1.5 meters	Far	1.503	1.503	1.504	1.506	1.509	1.513	1.518
	Near	1.497	1.497	1.496	1.494	1.491	1.488	1.483
1.24 meters	Far	1.242	1.242	1.243	1.244	1.245	1.247	1.25
	Near	1.238	1.238	1.237	1.236	1.235	1.233	1.23

F = 135 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		739.322	603.271	433.874	304.911	222.219	153.036	111.439
30 meters	Far	31.235	31.529	32.17	33.187	34.557	37.117	40.746
	Near	28.86	28.614	28.107	27.377	26.514	25.191	23.768
10 meters	Far	10.126	10.155	10.218	10.313	10.434	10.644	10.908
	Near	9.877	9.849	9.792	9.706	9.601	9.431	9.235
8 meters	Far	8.079	8.097	8.136	8.195	8.27	8.398	8.559
	Near	7.923	7.905	7.869	7.815	7.748	7.639	7.513
5 meters	Far	5.029	5.035	5.049	5.071	5.098	5.143	5.199
	Near	4.971	4.965	4.952	4.931	4.906	4.865	4.817
4 meters	Far	4.018	4.022	4.03	4.043	4.06	4.087	4.121
	Near	3.982	3.979	3.97	3.958	3.942	3.917	3.887

F = 165 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		739.322	603.271	433.874	304.911	222.219	153.036	111.439
3 meters	Far	3.009	3.011	3.016	3.022	3.031	3.045	3.063
	Near	2.991	2.989	2.984	2.978	2.97	2.956	2.94
2.5 meters	Far	2.506	2.507	2.51	2.515	2.52	2.529	2.541
	Near	2.494	2.493	2.49	2.486	2.48	2.471	2.461
2 meters	Far	2.003	2.004	2.006	2.009	2.012	2.017	2.024
	Near	1.997	1.996	1.994	1.992	1.988	1.983	1.977
1.5 meters	Far	1.502	1.502	1.503	1.504	1.506	1.508	1.511
	Near	1.498	1.498	1.497	1.496	1.495	1.492	1.489
1.24 meters	Far	1.241	1.241	1.242	1.242	1.243	1.245	1.246
	Near	1.239	1.239	1.238	1.238	1.237	1.235	1.234

F = 165 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		1640.089	1357.961	976.737	686.219	500.033	344.296	250.65
30 meters	Far	30.544	30.66	30.926	31.336	31.865	32.79	33.975
	Near	29.475	29.368	29.129	28.775	28.344	27.653	26.868
10 meters	Far	10.057	10.068	10.095	10.136	10.188	10.276	10.384
	Near	9.944	9.933	9.906	9.867	9.819	9.739	9.645
8 meters	Far	8.035	8.043	8.06	8.085	8.118	8.172	8.239
	Near	7.965	7.958	7.941	7.917	7.886	7.835	7.776
5 meters	Far	5.013	5.016	5.022	5.031	5.043	5.063	5.086
	Near	4.987	4.984	4.978	4.969	4.958	4.939	4.917
4 meters	Far	4.008	4.01	4.013	4.019	4.026	4.038	4.053
	Near	3.992	3.99	3.987	3.981	3.974	3.963	3.949

F = 250 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		1640.089	1357.961	976.737	686.219	500.033	344.296	250.65
3 meters	Far	3.004	3.005	3.007	3.01	3.014	3.02	3.027
	Near	2.996	2.995	2.993	2.99	2.986	2.98	2.973
2.5 meters	Far	2.503	2.503	2.505	2.506	2.509	2.513	2.518
	Near	2.497	2.497	2.495	2.494	2.491	2.487	2.482
2 meters	Far	2.002	2.002	2.003	2.004	2.005	2.008	2.01
	Near	1.998	1.998	1.997	1.996	1.995	1.993	1.99
1.5 meters	Far	1.501	1.501	1.501	1.502	1.502	1.504	1.505
	Near	1.499	1.499	1.499	1.498	1.498	1.496	1.495
1.24 meters	Far	1.24	1.241	1.241	1.241	1.241	1.242	1.243
	Near	1.24	1.239	1.239	1.239	1.239	1.238	1.237

F = 250 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		2370.134	2174.91	1563.663	1098.501	800.308	551.008	401.128
30 meters	Far	30.375	30.409	30.572	30.821	31.139	31.684	32.365
	Near	29.635	29.602	29.45	29.223	28.943	28.49	27.963
10 meters	Far	10.039	10.043	10.059	10.085	10.117	10.171	10.236
	Near	9.961	9.958	9.941	9.917	9.886	9.835	9.775
8 meters	Far	8.024	8.027	8.037	8.053	8.073	8.107	8.147
	Near	7.976	7.973	7.963	7.948	7.928	7.896	7.858
5 meters	Far	5.009	5.01	5.014	5.019	5.027	5.039	5.054
	Near	4.991	4.99	4.986	4.981	4.974	4.962	4.948
4 meters	Far	4.005	4.006	4.008	4.012	4.016	4.024	4.033
	Near	3.995	3.994	3.992	3.988	3.984	3.977	3.968

F = 320 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 3.1	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		2370.134	2174.91	1563.663	1098.501	800.308	551.008	401.128
3 meters	Far	3.003	3.003	3.004	3.006	3.009	3.012	3.017
	Near	2.997	2.997	2.996	2.994	2.992	2.988	2.983
2.5 meters	Far	2.502	2.502	2.503	2.504	2.506	2.508	2.511
	Near	2.498	2.498	2.497	2.496	2.494	2.492	2.489
2 meters	Far	2.001	2.001	2.002	2.002	2.003	2.005	2.006
	Near	1.999	1.999	1.998	1.998	1.997	1.995	1.994
1.5 meters	Far	1.501	1.501	1.501	1.501	1.502	1.502	1.503
	Near	1.499	1.499	1.499	1.499	1.498	1.498	1.497
1.24 meters	Far	1.24	1.24	1.24	1.241	1.241	1.241	1.242
	Near	1.24	1.24	1.24	1.239	1.239	1.239	1.238

F = 320 mm