

OPTIMO ULTRA 12X |
Configuration S35

DEPTH-OF-FIELD TABLES
DISTANCE IN METERS

| **Angénieux**[®]

REFERENCE : 321261 - A

DEPTH-OF-FIELD TABLES

F = 24 - 290 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 = 24 - 290 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 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		19.628	14.481	10.516	7.504	5.575	3.962	2.993
30 meters	Far	∞	∞	∞	∞	∞	∞	∞
	Near	12.052	9.938	7.936	6.126	4.803	3.578	2.783
10 meters	Far	19.636	30.796	203.47	∞	∞	∞	∞
	Near	6.798	6.102	5.319	4.477	3.757	2.994	2.438
8 meters	Far	13.001	16.997	31.404	∞	∞	∞	∞
	Near	5.842	5.33	4.733	4.065	3.473	2.82	2.329
5 meters	Far	6.459	7.255	8.888	13.645	44.883	∞	∞
	Near	4.108	3.862	3.556	3.186	2.829	2.401	2.053
4 meters	Far	4.838	5.251	6.018	7.773	12.522	∞	∞
	Near	3.429	3.263	3.05	2.783	2.517	2.184	1.901

F = 24 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		19.628	14.481	10.516	7.504	5.575	3.962	2.993
3 meters	Far	3.412	3.598	3.915	4.532	5.7	10.438	∞
	Near	2.687	2.591	2.464	2.298	2.124	1.896	1.692
2.5 meters	Far	2.762	2.875	3.061	3.402	3.976	5.654	12.462
	Near	2.291	2.224	2.135	2.016	1.888	1.715	1.554
2 meters	Far	2.148	2.21	2.308	2.478	2.739	3.361	4.753
	Near	1.875	1.834	1.778	1.702	1.617	1.498	1.383
1.5 meters	Far	1.569	1.596	1.639	1.709	1.809	2.015	2.361
	Near	1.439	1.418	1.389	1.349	1.303	1.235	1.167
1.22 meters	Far	1.258	1.273	1.296	1.332	1.382	1.479	1.625
	Near	1.185	1.173	1.156	1.132	1.104	1.062	1.018

F = 24 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		27.33	20.113	14.555	10.335	7.633	5.374	4.017
30 meters	Far	∞	∞	∞	∞	∞	∞	∞
	Near	14.495	12.227	9.97	7.834	6.209	4.656	3.621
10 meters	Far	15.338	19.152	30.351	297.32	∞	∞	∞
	Near	7.472	6.85	6.114	5.275	4.518	3.67	3.022
8 meters	Far	11.002	12.792	16.863	32.977	∞	∞	∞
	Near	6.322	5.88	5.339	4.699	4.099	3.4	2.845
5 meters	Far	5.954	6.41	7.232	9.003	13.134	64.312	∞
	Near	4.325	4.125	3.867	3.538	3.205	2.783	2.418
4 meters	Far	4.56	4.812	5.24	6.068	7.612	13.619	15449.768
	Near	3.572	3.44	3.265	3.037	2.797	2.482	2.197

F = 30 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		27.33	20.113	14.555	10.335	7.633	5.374	4.017
3 meters	Far	3.281	3.4	3.593	3.934	4.481	5.9	9.839
	Near	2.769	2.694	2.593	2.456	2.307	2.101	1.906
2.5 meters	Far	2.68	2.754	2.872	3.072	3.374	4.066	5.484
	Near	2.346	2.295	2.225	2.129	2.022	1.871	1.722
2 meters	Far	2.103	2.144	2.208	2.314	2.465	2.778	3.306
	Near	1.909	1.878	1.835	1.775	1.706	1.605	1.503
1.5 meters	Far	1.548	1.567	1.595	1.641	1.704	1.823	1.999
	Near	1.456	1.44	1.419	1.388	1.351	1.296	1.238
1.22 meters	Far	1.247	1.257	1.272	1.297	1.329	1.389	1.472
	Near	1.195	1.186	1.173	1.155	1.134	1.1	1.064

F = 30 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		48.428	35.544	25.627	18.099	13.279	9.251	6.83
30 meters	Far	77.541	187.49	∞	∞	∞	∞	∞
	Near	18.704	16.457	14.01	11.467	9.366	7.206	5.677
10 meters	Far	12.404	13.616	15.905	21.372	37.915	∞	∞
	Near	8.396	7.935	7.347	6.617	5.892	4.997	4.243
8 meters	Far	9.434	10.103	11.284	13.725	18.917	53.149	∞
	Near	6.958	6.644	6.235	5.71	5.172	4.481	3.875
5 meters	Far	5.49	5.697	6.031	6.622	7.563	9.972	16.428
	Near	4.595	4.464	4.287	4.046	3.783	3.42	3.074
4 meters	Far	4.294	4.414	4.603	4.925	5.404	6.473	8.564
	Near	3.747	3.663	3.547	3.387	3.208	2.953	2.701

F = 40 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		48.428	35.544	25.627	18.099	13.279	9.251	6.83
3 meters	Far	3.15	3.21	3.302	3.452	3.663	4.089	4.771
	Near	2.865	2.819	2.754	2.664	2.559	2.404	2.245
2.5 meters	Far	2.597	2.635	2.693	2.786	2.914	3.16	3.526
	Near	2.411	2.38	2.336	2.274	2.202	2.093	1.977
2 meters	Far	2.056	2.078	2.11	2.162	2.231	2.358	2.537
	Near	1.947	1.929	1.903	1.865	1.82	1.751	1.676
1.5 meters	Far	1.527	1.537	1.552	1.575	1.605	1.66	1.732
	Near	1.475	1.466	1.453	1.434	1.411	1.375	1.336
1.22 meters	Far	1.235	1.24	1.249	1.261	1.278	1.307	1.344
	Near	1.206	1.201	1.193	1.182	1.169	1.148	1.124

F = 40 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		75.43	55.299	39.805	28.044	20.516	14.223	10.441
30 meters	Far	49.296	64.616	119	∞	∞	∞	∞
	Near	21.615	19.619	17.29	14.681	12.364	9.811	7.888
10 meters	Far	11.412	12.039	13.097	15.107	18.738	31.538	190.05
	Near	8.907	8.566	8.114	7.518	6.891	6.056	5.299
8 meters	Far	8.86	9.225	9.82	10.884	12.609	17.216	31.072
	Near	7.298	7.072	6.766	6.355	5.909	5.296	4.717
5 meters	Far	5.302	5.423	5.611	5.922	6.367	7.292	8.863
	Near	4.732	4.642	4.516	4.34	4.139	3.845	3.548
4 meters	Far	4.183	4.255	4.364	4.542	4.788	5.27	6.007
	Near	3.834	3.777	3.696	3.582	3.449	3.251	3.044

F = 50 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		75.43	55.299	39.805	28.044	20.516	14.223	10.441
3 meters	Far	3.094	3.131	3.186	3.272	3.389	3.606	3.91
	Near	2.912	2.881	2.837	2.774	2.699	2.584	2.46
2.5 meters	Far	2.561	2.585	2.62	2.675	2.747	2.879	3.058
	Near	2.442	2.422	2.392	2.35	2.299	2.219	2.132
2 meters	Far	2.036	2.049	2.069	2.1	2.14	2.212	2.307
	Near	1.966	1.954	1.936	1.911	1.88	1.831	1.776
1.5 meters	Far	1.517	1.523	1.532	1.547	1.565	1.597	1.638
	Near	1.484	1.478	1.469	1.457	1.441	1.417	1.389
1.22 meters	Far	1.229	1.233	1.238	1.246	1.256	1.273	1.295
	Near	1.211	1.207	1.203	1.195	1.187	1.172	1.156

F = 50 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		147.514	108.056	77.68	54.622	39.861	27.522	20.107
30 meters	Far	37.468	41.237	48.381	65.521	118.135	∞	∞
	Near	25.032	23.604	21.788	19.531	17.295	14.535	12.213
10 meters	Far	10.673	10.943	11.365	12.069	13.087	15.243	19.04
	Near	9.409	9.211	8.935	8.55	8.115	7.482	6.846
8 meters	Far	8.416	8.58	8.832	9.242	9.815	10.954	12.743
	Near	7.625	7.496	7.316	7.061	6.767	6.33	5.877
5 meters	Far	5.15	5.207	5.293	5.429	5.609	5.941	6.399
	Near	4.859	4.81	4.74	4.638	4.516	4.328	4.124
4 meters	Far	4.091	4.126	4.177	4.258	4.363	4.553	4.805
	Near	3.913	3.882	3.838	3.774	3.696	3.575	3.439

F = 70 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		147.514	108.056	77.68	54.622	39.861	27.522	20.107
3 meters	Far	3.047	3.065	3.092	3.132	3.185	3.278	3.397
	Near	2.954	2.938	2.914	2.88	2.837	2.77	2.694
2.5 meters	Far	2.531	2.542	2.559	2.586	2.619	2.678	2.752
	Near	2.47	2.459	2.444	2.421	2.392	2.347	2.295
2 meters	Far	2.018	2.025	2.034	2.05	2.069	2.102	2.143
	Near	1.982	1.976	1.967	1.953	1.936	1.909	1.878
1.5 meters	Far	1.509	1.512	1.516	1.523	1.532	1.548	1.566
	Near	1.492	1.489	1.484	1.477	1.469	1.456	1.44
1.22 meters	Far	1.225	1.227	1.229	1.233	1.238	1.246	1.257
	Near	1.215	1.214	1.211	1.207	1.203	1.195	1.186

F = 70 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		243.891	178.614	128.347	90.186	65.753	45.33	33.056
30 meters	Far	34.106	35.907	38.923	44.567	54.483	86.81	305.092
	Near	26.783	25.773	24.425	22.645	20.754	18.223	15.905
10 meters	Far	10.396	10.549	10.781	11.153	11.656	12.609	13.987
	Near	9.634	9.507	9.327	9.069	8.765	8.303	7.811
8 meters	Far	8.246	8.34	8.482	8.705	9.003	9.549	10.302
	Near	7.769	7.687	7.572	7.404	7.204	6.895	6.558
5 meters	Far	5.089	5.123	5.173	5.25	5.35	5.527	5.756
	Near	4.914	4.883	4.839	4.774	4.695	4.57	4.428
4 meters	Far	4.055	4.075	4.105	4.152	4.211	4.315	4.448
	Near	3.947	3.928	3.9	3.86	3.81	3.73	3.639

F = 90 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		243.891	178.614	128.347	90.186	65.753	45.33	33.056
3 meters	Far	3.028	3.039	3.055	3.078	3.109	3.161	3.227
	Near	2.972	2.962	2.948	2.926	2.899	2.856	2.806
2.5 meters	Far	2.519	2.525	2.536	2.551	2.571	2.604	2.646
	Near	2.482	2.475	2.466	2.451	2.434	2.405	2.371
2 meters	Far	2.011	2.015	2.021	2.03	2.041	2.06	2.084
	Near	1.989	1.985	1.98	1.971	1.961	1.944	1.924
1.5 meters	Far	1.505	1.507	1.51	1.514	1.519	1.528	1.539
	Near	1.495	1.493	1.49	1.486	1.481	1.473	1.463
1.22 meters	Far	1.223	1.224	1.225	1.228	1.231	1.236	1.242
	Near	1.217	1.216	1.215	1.212	1.209	1.205	1.199

F = 90 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		432.188	316.471	227.349	159.689	116.366	80.149	58.384
30 meters	Far	32.185	33.067	34.451	36.77	40.159	47.472	60.793
	Near	28.095	27.458	26.575	25.349	23.965	21.968	19.974
10 meters	Far	10.219	10.302	10.426	10.618	10.869	11.317	11.907
	Near	9.79	9.716	9.608	9.452	9.262	8.964	8.63
8 meters	Far	8.137	8.188	8.265	8.383	8.535	8.803	9.149
	Near	7.868	7.82	7.752	7.652	7.53	7.335	7.114
5 meters	Far	5.05	5.068	5.096	5.138	5.191	5.283	5.398
	Near	4.951	4.933	4.908	4.87	4.823	4.747	4.659
4 meters	Far	4.031	4.042	4.059	4.084	4.116	4.171	4.24
	Near	3.97	3.959	3.943	3.92	3.89	3.843	3.787

F = 120 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		432.188	316.471	227.349	159.689	116.366	80.149	58.384
3 meters	Far	3.016	3.022	3.031	3.044	3.06	3.089	3.123
	Near	2.984	2.978	2.97	2.958	2.942	2.917	2.887
2.5 meters	Far	2.51	2.514	2.52	2.528	2.539	2.558	2.58
	Near	2.49	2.486	2.48	2.472	2.462	2.445	2.425
2 meters	Far	2.006	2.008	2.012	2.017	2.023	2.033	2.046
	Near	1.994	1.992	1.989	1.984	1.978	1.968	1.956
1.5 meters	Far	1.503	1.504	1.506	1.508	1.511	1.516	1.522
	Near	1.497	1.496	1.495	1.492	1.489	1.485	1.479
1.22 meters	Far	1.222	1.222	1.223	1.224	1.226	1.229	1.232
	Near	1.218	1.218	1.217	1.216	1.214	1.211	1.208

F = 120 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		676.381	495.262	355.733	249.824	182.012	125.321	91.248
30 meters	Far	31.36	31.889	32.697	33.996	35.777	39.206	44.314
	Near	28.754	28.324	27.717	26.851	25.84	24.315	22.708
10 meters	Far	10.139	10.191	10.268	10.386	10.538	10.802	11.137
	Near	9.865	9.816	9.746	9.642	9.516	9.311	9.078
8 meters	Far	8.087	8.119	8.167	8.24	8.334	8.494	8.696
	Near	7.915	7.884	7.84	7.774	7.693	7.562	7.41
5 meters	Far	5.032	5.044	5.061	5.087	5.12	5.177	5.247
	Near	4.969	4.957	4.941	4.916	4.885	4.835	4.776
4 meters	Far	4.019	4.027	4.037	4.053	4.073	4.108	4.15
	Near	3.981	3.974	3.964	3.948	3.929	3.898	3.861

F = 150 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		676.381	495.262	355.733	249.824	182.012	125.321	91.248
3 meters	Far	3.01	3.014	3.019	3.028	3.038	3.056	3.077
	Near	2.99	2.986	2.981	2.973	2.963	2.946	2.927
2.5 meters	Far	2.507	2.509	2.513	2.518	2.525	2.536	2.55
	Near	2.493	2.491	2.487	2.482	2.476	2.465	2.452
2 meters	Far	2.004	2.005	2.007	2.011	2.015	2.021	2.029
	Near	1.996	1.995	1.993	1.99	1.986	1.979	1.972
1.5 meters	Far	1.502	1.503	1.504	1.505	1.507	1.51	1.514
	Near	1.498	1.497	1.497	1.495	1.493	1.49	1.486
1.22 meters	Far	1.221	1.221	1.222	1.223	1.224	1.226	1.228
	Near	1.219	1.219	1.218	1.217	1.216	1.214	1.212

F = 150 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		1490.308	1110.301	797.404	559.847	407.818	280.732	204.343
30 meters	Far	30.601	30.813	31.144	31.657	32.323	33.5	35.033
	Near	29.422	29.23	28.938	28.51	27.992	27.168	26.242
10 meters	Far	10.063	10.084	10.117	10.168	10.233	10.342	10.476
	Near	9.938	9.917	9.885	9.837	9.778	9.681	9.567
8 meters	Far	8.039	8.053	8.074	8.105	8.145	8.213	8.295
	Near	7.961	7.948	7.928	7.898	7.86	7.798	7.726
5 meters	Far	5.014	5.019	5.027	5.038	5.053	5.077	5.107
	Near	4.986	4.981	4.973	4.962	4.948	4.925	4.898
4 meters	Far	4.009	4.012	4.016	4.024	4.032	4.047	4.065
	Near	3.991	3.988	3.984	3.977	3.968	3.954	3.937

F = 225 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		1490.308	1110.301	797.404	559.847	407.818	280.732	204.343
3 meters	Far	3.005	3.006	3.009	3.012	3.017	3.025	3.034
	Near	2.995	2.994	2.991	2.988	2.983	2.976	2.967
2.5 meters	Far	2.503	2.504	2.506	2.508	2.511	2.516	2.522
	Near	2.497	2.496	2.494	2.492	2.489	2.484	2.478
2 meters	Far	2.002	2.002	2.003	2.005	2.006	2.009	2.013
	Near	1.998	1.998	1.997	1.995	1.994	1.991	1.987
1.5 meters	Far	1.501	1.501	1.502	1.502	1.503	1.504	1.506
	Near	1.499	1.499	1.498	1.498	1.497	1.496	1.494
1.22 meters	Far	1.22	1.221	1.221	1.221	1.222	1.223	1.223
	Near	1.22	1.219	1.219	1.219	1.218	1.218	1.217

F = 225 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		2142.543	1768.758	1270.309	891.709	649.469	447.056	325.399
30 meters	Far	30.415	30.504	30.706	31.016	31.414	32.1	32.966
	Near	29.597	29.513	29.326	29.049	28.71	28.161	27.53
10 meters	Far	10.043	10.052	10.073	10.105	10.144	10.211	10.293
	Near	9.957	9.948	9.928	9.898	9.86	9.798	9.724
8 meters	Far	8.027	8.033	8.046	8.066	8.09	8.132	8.182
	Near	7.973	7.967	7.955	7.936	7.912	7.873	7.826
5 meters	Far	5.01	5.012	5.017	5.024	5.033	5.048	5.066
	Near	4.99	4.988	4.983	4.976	4.967	4.953	4.935
4 meters	Far	4.006	4.007	4.01	4.015	4.02	4.029	4.041
	Near	3.994	3.993	3.99	3.985	3.98	3.971	3.96

F = 290 mm

Distance in meters | Confusion circle : 0.013 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		2142.543	1768.758	1270.309	891.709	649.469	447.056	325.399
3 meters	Far	3.003	3.004	3.005	3.008	3.011	3.015	3.021
	Near	2.997	2.996	2.995	2.992	2.99	2.985	2.979
2.5 meters	Far	2.502	2.503	2.504	2.505	2.507	2.51	2.514
	Near	2.498	2.497	2.496	2.495	2.493	2.49	2.486
2 meters	Far	2.001	2.001	2.002	2.003	2.004	2.006	2.008
	Near	1.999	1.999	1.998	1.997	1.996	1.994	1.992
1.5 meters	Far	1.501	1.501	1.501	1.501	1.502	1.503	1.504
	Near	1.499	1.499	1.499	1.499	1.498	1.497	1.496
1.22 meters	Far	1.22	1.22	1.221	1.221	1.221	1.222	1.222
	Near	1.22	1.22	1.219	1.219	1.219	1.218	1.218

F = 290 mm