



OPTIMO 45 - 120

DEPTH-OF-FIELD TABLES
DISTANCE IN METERS

Angénieux®





DEPTH-OF-FIELD TABLES

ZOOM 35 mm → F = 45 - 120 mm

The depths of field tables are provided for information purposes only and are estimated with a circle of confusion of 0.025mm (1/1000inch). 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

ZOOM 35 mm → F = 45 - 120 mm

Les tables de profondeur de champs sont fournies à titre indicatif pour un cercle de confusion moyen de 0,025mm (1/1000inch).

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 des 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 : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		32.182	23.327	16.56	11.758	8.363	5.958	4.257
40 m	Far	∞	∞	∞	∞	∞	∞	∞
	Near	17.884	14.782	11.754	9.123	6.946	5.208	3.865
20 m	Far	52.782	142.842	∞	∞	∞	∞	∞
	Near	12.383	10.818	9.11	7.452	5.94	4.626	3.539
10 m	Far	14.437	17.409	25.173	69.212	∞	∞	∞
	Near	7.666	7.042	6.283	5.455	4.605	3.782	3.029
7 m	Far	8.897	9.932	12.031	17.221	44.759	∞	∞
	Near	5.779	5.421	4.963	4.436	3.862	3.27	2.696
5 m	Far	5.886	6.316	7.093	8.603	12.355	33.03	∞
	Near	4.351	4.147	3.877	3.551	3.177	2.77	2.351
4 m	Far	4.541	4.79	5.219	5.983	7.564	12.182	102.061
	Near	3.578	3.44	3.254	3.024	2.751	2.443	2.114



F = 45 mm



Distance in meters | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		32.182	23.327	16.56	11.758	8.363	5.958	4.257
3 m	Far	3.288	3.415	3.623	3.969	4.594	5.936	10.258
	Near	2.76	2.679	2.567	2.424	2.248	2.042	1.811
2 m	Far	2.119	2.169	2.248	2.372	2.573	2.931	3.664
	Near	1.894	1.857	1.804	1.735	1.647	1.537	1.407
1,5 m	Far	1.563	1.589	1.63	1.691	1.787	1.945	2.23
	Near	1.442	1.421	1.391	1.351	1.299	1.232	1.15
1,25 m	Far	1.292	1.309	1.336	1.375	1.436	1.533	1.698
	Near	1.211	1.196	1.176	1.148	1.111	1.064	1.004
1 m	Far	1.025	1.036	1.051	1.074	1.109	1.163	1.251
	Near	0.976	0.967	0.954	0.937	0.913	0.883	0.843
0,94 m	Far	0.962	0.971	0.984	1.004	1.034	1.08	1.154
	Near	0.919	0.911	0.9	0.885	0.864	0.837	0.802



F = 45 mm



Distance in meters | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		38.654	28.014	19.88	14.107	10.026	7.134	5.089
40 m	Far	∞	∞	∞	∞	∞	∞	∞
	Near	19.709	16.525	13.325	10.468	8.049	6.08	4.535
20 m	Far	41.348	70.081	∞	∞	∞	∞	∞
	Near	13.226	11.719	10.021	8.322	6.723	5.298	4.09
10 m	Far	13.432	15.471	20.025	34.494	∞	∞	∞
	Near	7.978	7.409	6.699	5.902	5.058	4.214	3.419
7 m	Far	8.508	9.276	10.725	13.797	23.301	1763.4	∞
	Near	5.953	5.633	5.217	4.724	4.172	3.585	2.997
5 m	Far	5.715	6.047	6.623	7.664	9.875	16.828	∞
	Near	4.448	4.269	4.028	3.731	3.382	2.99	2.574
4 m	Far	4.44	4.635	4.963	5.518	6.565	9.015	19.447
	Near	3.642	3.523	3.359	3.152	2.901	2.611	2.291



F = 50 mm



Distance in meters | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		38.654	28.014	19.88	14.107	10.026	7.134	5.089
3 m	Far	3.236	3.337	3.5	3.762	4.212	5.082	7.228
	Near	2.798	2.728	2.63	2.504	2.346	2.155	1.936
2 m	Far	2.098	2.139	2.202	2.299	2.453	2.714	3.203
	Near	1.911	1.88	1.834	1.774	1.696	1.598	1.478
1,5 m	Far	1.552	1.573	1.606	1.655	1.73	1.851	2.057
	Near	1.451	1.434	1.408	1.374	1.328	1.27	1.196
1,25 m	Far	1.285	1.299	1.32	1.352	1.4	1.476	1.599
	Near	1.217	1.205	1.188	1.164	1.132	1.09	1.037
1 m	Far	1.021	1.029	1.042	1.061	1.089	1.131	1.199
	Near	0.98	0.972	0.962	0.947	0.927	0.9	0.865
0,94 m	Far	0.958	0.966	0.977	0.993	1.017	1.053	1.11
	Near	0.923	0.916	0.907	0.894	0.876	0.852	0.822



F = 50 mm



Distance in meters | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		46.732	33.863	24.023	17.039	12.1	8.602	6.127
40 m	Far	280.461	∞	∞	∞	∞	∞	∞
	Near	21.603	18.389	15.057	11.991	9.326	7.109	5.337
20 m	Far	34.874	48.793	121.225	∞	∞	∞	∞
	Near	14.049	12.621	10.964	9.251	7.587	6.058	4.727
10 m	Far	12.675	14.125	17.042	24.142	59.252	∞	∞
	Near	8.267	7.756	7.103	6.349	5.526	4.675	3.848
7 m	Far	8.201	8.778	9.813	11.792	16.535	38.916	∞
	Near	6.111	5.83	5.456	5.004	4.482	3.91	3.319
5 m	Far	5.576	5.834	6.268	7.011	8.431	11.869	28.587
	Near	4.535	4.38	4.168	3.902	3.581	3.21	2.804
4 m	Far	4.356	4.51	4.763	5.174	5.9	7.381	11.528
	Near	3.699	3.597	3.454	3.271	3.045	2.775	2.47



F = 55 mm



Distance in meters | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		46.732	33.863	24.023	17.039	12.1	8.602	6.127
3 m	Far	3.192	3.273	3.401	3.602	3.933	4.527	5.779
	Near	2.831	2.771	2.687	2.577	2.437	2.264	2.06
2 m	Far	2.08	2.113	2.164	2.24	2.359	2.553	2.893
	Near	1.926	1.899	1.861	1.809	1.742	1.655	1.547
1,5 m	Far	1.543	1.56	1.587	1.626	1.685	1.777	1.929
	Near	1.46	1.445	1.423	1.394	1.355	1.304	1.238
1,25 m	Far	1.279	1.29	1.308	1.333	1.371	1.43	1.523
	Near	1.223	1.213	1.198	1.178	1.151	1.115	1.068
1 m	Far	1.017	1.024	1.035	1.05	1.072	1.106	1.158
	Near	0.983	0.977	0.968	0.956	0.939	0.916	0.885
0,94 m	Far	0.955	0.961	0.97	0.983	1.002	1.031	1.075
	Near	0.926	0.92	0.912	0.901	0.886	0.866	0.84



F = 55 mm



Distance in meters | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		75.571	54.75	38.819	27.506	19.508	13.84	9.832
40 m	Far	84.904	148.815	∞	∞	∞	∞	∞
	Near	26.202	23.163	19.751	16.348	13.157	10.321	7.924
20 m	Far	27.14	31.434	41.176	73.607	∞	∞	∞
	Near	15.848	14.689	13.245	11.63	9.926	8.229	6.637
10 m	Far	11.497	12.195	13.414	15.635	20.436	36.335	∞
	Near	8.852	8.482	7.985	7.374	6.657	5.855	5.009
7 m	Far	7.695	7.999	8.501	9.334	10.841	14.079	24.541
	Near	6.422	6.227	5.957	5.613	5.191	4.695	4.139
5 m	Far	5.34	5.483	5.712	6.071	6.667	7.75	10.089
	Near	4.702	4.597	4.45	4.258	4.013	3.713	3.361
4 m	Far	4.213	4.3	4.438	4.649	4.987	5.562	6.658
	Near	3.809	3.741	3.644	3.515	3.348	3.139	2.886



F = 70 mm

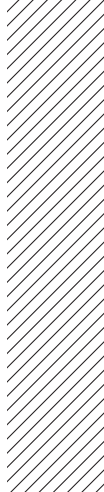


Distance in meters | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		75.571	54.75	38.819	27.506	19.508	13.84	9.832
3 m	Far	3.116	3.162	3.235	3.344	3.512	3.782	4.249
	Near	2.893	2.854	2.798	2.723	2.624	2.496	2.336
2 m	Far	2.049	2.068	2.098	2.141	2.206	2.306	2.465
	Near	1.954	1.937	1.912	1.877	1.831	1.77	1.691
1,5 m	Far	1.526	1.537	1.552	1.575	1.608	1.659	1.736
	Near	1.475	1.465	1.452	1.433	1.407	1.372	1.326
1,25 m	Far	1.268	1.274	1.285	1.3	1.322	1.355	1.404
	Near	1.233	1.227	1.217	1.204	1.187	1.162	1.13
1 m	Far	1.011	1.015	1.021	1.03	1.043	1.062	1.091
	Near	0.99	0.986	0.98	0.972	0.961	0.946	0.925
0,94 m	Far	0.949	0.953	0.958	0.966	0.977	0.994	1.018
	Near	0.931	0.928	0.923	0.916	0.906	0.893	0.875



F = 70 mm



Distance in meters | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		98.634	71.458	50.655	35.88	25.432	18.03	12.795
40 m	Far	67.208	90.806	191.187	∞	∞	∞	∞
	Near	28.501	25.692	22.401	18.965	15.596	12.472	9.731
20 m	Far	25.043	27.713	32.969	45.131	94.607	∞	∞
	Near	16.657	15.661	14.38	12.889	11.246	9.533	7.851
10 m	Far	11.107	11.597	12.417	13.804	16.4	22.393	46.695
	Near	9.096	8.794	8.379	7.855	7.219	6.479	5.663
7 m	Far	7.52	7.74	8.093	8.655	9.599	11.363	15.391
	Near	6.549	6.392	6.172	5.885	5.524	5.084	4.572
5 m	Far	5.256	5.362	5.527	5.78	6.181	6.858	8.126
	Near	4.768	4.686	4.568	4.41	4.207	3.949	3.637
4 m	Far	4.161	4.226	4.326	4.478	4.713	5.092	5.751
	Near	3.852	3.798	3.721	3.617	3.48	3.304	3.085



F = 80 mm



Distance in meters | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		98.634	71.458	50.655	35.88	25.432	18.03	12.795
3 m	Far	3.088	3.123	3.176	3.256	3.376	3.563	3.867
	Near	2.917	2.887	2.843	2.783	2.703	2.597	2.462
2 m	Far	2.037	2.052	2.074	2.106	2.154	2.226	2.336
	Near	1.964	1.951	1.932	1.905	1.868	1.819	1.754
1,5 m	Far	1.52	1.528	1.54	1.557	1.582	1.618	1.674
	Near	1.481	1.473	1.463	1.448	1.427	1.4	1.362
1,25 m	Far	1.263	1.269	1.276	1.288	1.304	1.328	1.364
	Near	1.237	1.232	1.225	1.215	1.201	1.182	1.156
1 m	Far	1.008	1.011	1.016	1.023	1.033	1.047	1.068
	Near	0.992	0.989	0.985	0.978	0.97	0.958	0.942
0,94 m	Far	0.947	0.95	0.954	0.96	0.968	0.981	0.999
	Near	0.933	0.93	0.927	0.921	0.914	0.903	0.889



F = 80 mm



Distance in meters | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		202.797	155.258	110.033	77.895	55.163	39.057	27.667
3 m	Far	3.042	3.055	3.078	3.112	3.161	3.234	3.342
	Near	2.959	2.947	2.926	2.896	2.855	2.8	2.725
2 m	Far	2.018	2.023	2.033	2.047	2.068	2.097	2.141
	Near	1.982	1.977	1.968	1.955	1.937	1.912	1.878
1,5 m	Far	1.51	1.513	1.518	1.525	1.536	1.552	1.575
	Near	1.49	1.488	1.483	1.475	1.466	1.452	1.433
1,25 m	Far	1.256	1.258	1.262	1.267	1.274	1.285	1.3
	Near	1.244	1.242	1.238	1.233	1.227	1.217	1.205
1 m	Far	1.004	1.005	1.007	1.01	1.015	1.021	1.03
	Near	0.996	0.995	0.993	0.99	0.986	0.98	0.972
0,94 m	Far	0.943	0.944	0.946	0.949	0.953	0.958	0.966
	Near	0.937	0.936	0.934	0.931	0.928	0.923	0.916



F = 120 mm



Distance in meters | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		202.797	155.258	110.033	77.895	55.163	39.057	27.667
40 m	Far	49.789	53.832	62.786	82.197	146.173	∞	∞
	Near	33.438	31.839	29.375	26.474	23.236	19.812	16.404
20 m	Far	22.168	22.931	24.406	26.859	31.315	40.963	72.816
	Near	18.221	17.738	16.95	15.947	14.718	13.272	11.658
10 m	Far	10.509	10.675	10.981	11.447	12.177	13.391	15.599
	Near	9.539	9.406	9.182	8.883	8.492	7.995	7.385
7 m	Far	7.243	7.321	7.463	7.673	7.991	8.492	9.321
	Near	6.773	6.706	6.593	6.438	6.232	5.962	5.619
5 m	Far	5.121	5.16	5.229	5.33	5.48	5.708	6.066
	Near	4.884	4.85	4.791	4.71	4.6	4.453	4.261
4 m	Far	4.076	4.1	4.143	4.206	4.298	4.435	4.64
	Near	3.927	3.905	3.867	3.814	3.742	3.646	3.517



F = 120 mm

