

●

OPTIMO ULTRA 12X

Configuration S35

DEPTH-OF-FIELD TABLES
DISTANCE IN FEET

| **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.





APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		64.396	47.511	34.5	24.618	18.29	13	9.821
50 feet	Far	216.268	∞	∞	∞	∞	∞	∞
	Near	28.773	24.999	21.03	17.058	13.887	10.726	8.546
30 feet	Far	54.086	77.479	218.712	∞	∞	∞	∞
	Near	21.014	18.991	16.679	14.151	11.959	9.601	7.861
20 feet	Far	27.927	32.816	44.422	98.217	∞	∞	∞
	Near	15.714	14.6	13.248	11.663	10.187	8.483	7.141
16 feet	Far	20.498	22.918	27.82	41.588	116.728	∞	∞
	Near	13.212	12.44	11.475	10.301	9.166	7.8	6.681
13 feet	Far	15.686	17.006	19.445	24.993	39.725	∞	∞
	Near	11.161	10.625	9.939	9.076	8.213	7.135	6.216

Distance in feet | Confusion circle : 0.025 mm

F = 24 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		64.396	47.511	34.5	24.618	18.29	13	9.821
11 feet	Far	12.779	13.606	15.057	18.031	24.254	61.967	∞
	Near	9.7	9.307	8.795	8.137	7.46	6.588	5.821
9 feet	Far	10.083	10.56	11.36	12.867	15.542	24.518	97.441
	Near	8.156	7.892	7.54	7.076	6.584	5.928	5.329
7 feet	Far	7.575	7.815	8.203	8.884	9.953	12.624	19.317
	Near	6.522	6.367	6.156	5.869	5.555	5.118	4.7
5 feet	Far	5.236	5.33	5.476	5.718	6.064	6.782	7.996
	Near	4.791	4.721	4.622	4.485	4.328	4.098	3.866
4 feet	Far	4.125	4.173	4.247	4.367	4.531	4.849	5.327
	Near	3.886	3.847	3.792	3.713	3.621	3.483	3.338

Distance in feet | Confusion circle : 0.013 mm

F = 24 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		89.664	65.988	47.753	33.908	25.042	17.632	13.178
50 feet	Far	109.935	198.918	∞	∞	∞	∞	∞
	Near	32.682	29.068	25.059	20.816	17.247	13.519	10.84
30 feet	Far	43.849	52.971	76.623	243.722	∞	∞	∞
	Near	22.951	21.166	19.024	16.548	14.277	11.694	9.688
20 feet	Far	25.042	27.64	32.669	45.324	90.275	∞	∞
	Near	16.724	15.795	14.619	13.169	11.744	10.002	8.549
16 feet	Far	18.95	20.348	22.849	28.159	40.145	153.265	∞
	Near	13.895	13.268	12.454	11.418	10.363	9.02	7.854
13 feet	Far	14.798	15.602	16.969	19.604	24.486	43.073	1105.786
	Near	11.625	11.199	10.635	9.897	9.123	8.1	7.178

Distance in feet | Confusion circle : 0.013 mm

F = 30 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		89.664	65.988	47.753	33.908	25.042	17.632	13.178
11 feet	Far	12.206	12.726	13.583	15.148	17.776	25.411	55.626
	Near	10.034	9.727	9.314	8.764	8.172	7.37	6.623
9 feet	Far	9.743	10.051	10.547	11.408	12.744	15.98	23.523
	Near	8.377	8.174	7.896	7.518	7.101	6.518	5.956
7 feet	Far	7.398	7.559	7.809	8.226	8.83	10.114	12.381
	Near	6.65	6.533	6.37	6.143	5.885	5.512	5.137
5 feet	Far	5.165	5.229	5.327	5.485	5.7	6.112	6.723
	Near	4.848	4.796	4.722	4.616	4.493	4.306	4.108
4 feet	Far	4.088	4.121	4.172	4.252	4.358	4.554	4.825
	Near	3.918	3.889	3.848	3.788	3.717	3.608	3.489

Distance in feet | Confusion circle : 0.013 mm

F = 30 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		158.885	116.615	84.078	59.379	43.567	30.35	22.408
50 feet	Far	71.801	85.613	119.511	300.536	∞	∞	∞
	Near	38.487	35.521	31.941	27.767	23.906	19.476	16.007
30 feet	Far	36.404	39.525	45.244	58.012	90.394	1822.246	∞
	Near	25.568	24.267	22.596	20.49	18.374	15.717	13.443
20 feet	Far	22.526	23.631	25.471	28.892	34.83	53.564	159.345
	Near	18.009	17.381	16.542	15.431	14.248	12.658	11.197
16 feet	Far	17.519	18.157	19.186	20.995	23.848	31.02	49.318
	Near	14.74	14.33	13.773	13.019	12.192	11.044	9.947
13 feet	Far	13.944	14.328	14.936	15.964	17.492	20.891	27.475
	Near	12.186	11.916	11.543	11.028	10.451	9.625	8.811

Distance in feet | Confusion circle : 0.013 mm

F = 40 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		158.885	116.615	84.078	59.379	43.567	30.35	22.408
11 feet	Far	11.641	11.897	12.296	12.956	13.902	15.873	19.233
	Near	10.433	10.242	9.975	9.603	9.178	8.558	7.93
9 feet	Far	9.399	9.556	9.796	10.186	10.727	11.79	13.43
	Near	8.638	8.514	8.339	8.091	7.804	7.374	6.928
7 feet	Far	7.217	7.3	7.427	7.627	7.898	8.404	9.123
	Near	6.798	6.728	6.628	6.484	6.315	6.055	5.776
5 feet	Far	5.091	5.125	5.177	5.257	5.362	5.549	5.799
	Near	4.913	4.883	4.839	4.774	4.697	4.574	4.439
4 feet	Far	4.048	4.067	4.094	4.135	4.189	4.284	4.406
	Near	3.953	3.936	3.912	3.877	3.833	3.764	3.686

Distance in feet | Confusion circle : 0.013 mm

F = 40 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		247.475	181.428	130.594	92.01	67.309	46.662	34.255
50 feet	Far	62.024	68.056	79.412	106.282	185.565	∞	∞
	Near	41.942	39.617	36.653	32.962	29.297	24.759	20.928
30 feet	Far	33.796	35.449	38.196	43.276	52.009	78.891	213.804
	Near	26.995	26.044	24.772	23.085	21.283	18.856	16.617
20 feet	Far	21.543	22.173	23.17	24.862	27.388	33.056	44.225
	Near	18.674	18.234	17.628	16.792	15.857	14.524	13.211
16 feet	Far	16.938	17.312	17.892	18.85	20.215	23.031	27.745
	Near	15.167	14.885	14.492	13.94	13.31	12.387	11.448
13 feet	Far	13.587	13.817	14.17	14.739	15.527	17.065	19.41
	Near	12.466	12.282	12.023	11.655	11.228	10.588	9.919

Distance in feet | Confusion circle : 0.013 mm

F = 50 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		247.475	181.428	130.594	92.01	67.309	46.662	34.255
11 feet	Far	11.401	11.556	11.792	12.168	12.678	13.642	15.037
	Near	10.629	10.5	10.318	10.056	9.748	9.28	8.78
9 feet	Far	9.251	9.347	9.492	9.72	10.023	10.58	11.349
	Near	8.764	8.681	8.563	8.392	8.188	7.873	7.53
7 feet	Far	7.137	7.189	7.266	7.386	7.544	7.825	8.198
	Near	6.869	6.823	6.756	6.659	6.541	6.356	6.15
5 feet	Far	5.058	5.079	5.111	5.16	5.224	5.334	5.474
	Near	4.944	4.924	4.895	4.852	4.8	4.715	4.619
4 feet	Far	4.031	4.042	4.059	4.085	4.118	4.175	4.246
	Near	3.97	3.959	3.943	3.92	3.891	3.844	3.79

Distance in feet | Confusion circle : 0.013 mm

F = 50 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		483.968	354.515	254.856	179.207	130.777	90.295	65.968
50 feet	Far	55.476	57.801	61.588	68.351	79.297	108.429	195.184
	Near	45.525	44.084	42.134	39.51	36.661	32.743	29.045
30 feet	Far	31.82	32.545	33.671	35.526	38.17	43.615	52.711
	Near	28.383	27.835	27.071	26	24.776	22.98	21.154
20 feet	Far	20.757	21.05	21.494	22.202	23.161	24.969	27.573
	Near	19.299	19.055	18.709	18.213	17.629	16.739	15.788
16 feet	Far	16.464	16.642	16.909	17.329	17.887	18.909	20.313
	Near	15.563	15.409	15.19	14.871	14.493	13.905	13.263
13 feet	Far	13.293	13.403	13.569	13.828	14.167	14.774	15.582
	Near	12.721	12.622	12.48	12.273	12.024	11.631	11.196

Distance in feet | Confusion circle : 0.013 mm

F = 70 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		483.968	354.515	254.856	179.207	130.777	90.295	65.968
11 feet	Far	11.201	11.276	11.389	11.563	11.79	12.19	12.713
	Near	10.807	10.738	10.639	10.494	10.318	10.039	9.725
9 feet	Far	9.126	9.173	9.243	9.351	9.49	9.733	10.044
	Near	8.878	8.834	8.771	8.677	8.563	8.381	8.173
7 feet	Far	7.069	7.095	7.133	7.191	7.265	7.394	7.555
	Near	6.933	6.908	6.873	6.821	6.756	6.652	6.532
5 feet	Far	5.029	5.04	5.056	5.08	5.111	5.163	5.228
	Near	4.971	4.961	4.946	4.923	4.895	4.849	4.796
4 feet	Far	4.016	4.021	4.03	4.043	4.059	4.087	4.12
	Near	3.985	3.979	3.971	3.958	3.943	3.918	3.889

Distance in feet | Confusion circle : 0.013 mm

F = 70 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		800.167	586.002	421.087	295.887	215.727	148.721	108.453
50 feet	Far	53.17	54.435	56.404	59.657	64.313	73.974	90.337
	Near	47.193	46.244	44.922	43.071	40.961	37.876	34.747
30 feet	Far	31.073	31.487	32.112	33.105	34.441	36.935	40.468
	Near	29	28.651	28.156	27.442	26.599	25.306	23.916
20 feet	Far	20.45	20.621	20.876	21.272	21.792	22.72	23.95
	Near	19.57	19.417	19.198	18.878	18.492	17.884	17.208
16 feet	Far	16.277	16.381	16.536	16.776	17.086	17.632	18.338
	Near	15.733	15.637	15.499	15.297	15.051	14.659	14.216
13 feet	Far	13.175	13.241	13.338	13.487	13.679	14.012	14.437
	Near	12.83	12.769	12.68	12.55	12.39	12.133	11.84

Distance in feet | Confusion circle : 0.013 mm

F = 90 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		800.167	586.002	421.087	295.887	215.727	148.721	108.453
11 feet	Far	11.12	11.165	11.231	11.333	11.463	11.687	11.969
	Near	10.883	10.84	10.779	10.688	10.576	10.396	10.188
9 feet	Far	9.076	9.104	9.145	9.209	9.289	9.427	9.599
	Near	8.926	8.899	8.86	8.802	8.73	8.614	8.478
7 feet	Far	7.042	7.057	7.08	7.114	7.158	7.232	7.323
	Near	6.959	6.944	6.923	6.89	6.85	6.785	6.708
5 feet	Far	5.018	5.024	5.034	5.048	5.066	5.097	5.135
	Near	4.983	4.976	4.967	4.953	4.936	4.907	4.874
4 feet	Far	4.009	4.013	4.018	4.026	4.035	4.052	4.072
	Near	3.991	3.987	3.982	3.975	3.965	3.95	3.932

Distance in feet | Confusion circle : 0.013 mm

F = 90 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		1417.941	1038.289	745.897	523.914	381.778	262.958	191.547
50 feet	Far	51.74	52.407	53.418	55.017	57.162	61.145	66.742
	Near	48.376	47.808	47	45.834	44.455	42.334	40.045
30 feet	Far	30.596	30.82	31.155	31.673	32.348	33.542	35.102
	Near	29.427	29.223	28.93	28.499	27.978	27.151	26.222
20 feet	Far	20.252	20.345	20.484	20.697	20.971	21.444	22.043
	Near	19.755	19.667	19.539	19.35	19.119	18.746	18.317
16 feet	Far	16.155	16.213	16.298	16.428	16.594	16.879	17.235
	Near	15.848	15.793	15.713	15.595	15.449	15.213	14.939
13 feet	Far	13.098	13.135	13.188	13.27	13.374	13.551	13.77
	Near	12.903	12.868	12.817	12.742	12.648	12.495	12.317

Distance in feet | Confusion circle : 0.013 mm

F = 120 mm





APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		1417.941	1038.289	745.897	523.914	381.778	262.958	191.547
11 feet	Far	11.068	11.092	11.129	11.185	11.256	11.376	11.524
	Near	10.933	10.909	10.874	10.822	10.757	10.65	10.525
9 feet	Far	9.043	9.058	9.081	9.116	9.161	9.236	9.327
	Near	8.958	8.943	8.92	8.887	8.845	8.777	8.697
7 feet	Far	7.023	7.032	7.045	7.064	7.088	7.129	7.178
	Near	6.977	6.968	6.956	6.938	6.915	6.877	6.832
5 feet	Far	5.01	5.014	5.019	5.027	5.037	5.054	5.075
	Near	4.99	4.987	4.981	4.973	4.964	4.947	4.928
4 feet	Far	4.005	4.007	4.01	4.014	4.02	4.029	4.04
	Near	3.995	3.993	3.99	3.986	3.98	3.972	3.961

Distance in feet | Confusion circle : 0.013 mm

F = 120 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		2219.098	1624.877	1167.103	819.633	597.152	411.157	299.369
50 feet	Far	51.097	51.511	52.13	53.091	54.346	56.58	59.522
	Near	48.95	48.577	48.04	47.255	46.308	44.81	43.138
30 feet	Far	30.378	30.519	30.727	31.047	31.458	32.168	33.065
	Near	29.632	29.499	29.307	29.023	28.675	28.113	27.468
20 feet	Far	20.16	20.219	20.307	20.44	20.609	20.898	21.256
	Near	19.843	19.786	19.703	19.58	19.428	19.179	18.89
16 feet	Far	16.099	16.135	16.189	16.271	16.374	16.55	16.766
	Near	15.903	15.867	15.816	15.739	15.644	15.487	15.304
13 feet	Far	13.063	13.086	13.12	13.171	13.236	13.346	13.481
	Near	12.938	12.916	12.883	12.834	12.773	12.673	12.554

Distance in feet | Confusion circle : 0.013 mm

F = 150 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		2219.098	1624.877	1167.103	819.633	597.152	411.157	299.369
11 feet	Far	11.043	11.059	11.082	11.117	11.162	11.237	11.329
	Near	10.957	10.942	10.919	10.885	10.843	10.774	10.691
9 feet	Far	9.027	9.037	9.052	9.074	9.102	9.149	9.206
	Near	8.973	8.963	8.949	8.927	8.901	8.856	8.804
7 feet	Far	7.015	7.02	7.028	7.041	7.056	7.081	7.113
	Near	6.985	6.98	6.972	6.96	6.945	6.921	6.891
5 feet	Far	5.006	5.009	5.012	5.017	5.024	5.034	5.047
	Near	4.994	4.991	4.988	4.983	4.977	4.966	4.954
4 feet	Far	4.003	4.005	4.006	4.009	4.013	4.018	4.025
	Near	3.997	3.995	3.994	3.991	3.987	3.982	3.975

Distance in feet | Confusion circle : 0.013 mm

F = 150 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		4889.461	3642.72	2616.156	1836.77	1337.987	921.037	670.417
50 feet	Far	50.491	50.662	50.926	51.33	51.845	52.729	53.83
	Near	49.518	49.356	49.107	48.738	48.284	47.545	46.689
30 feet	Far	30.17	30.229	30.32	30.457	30.632	30.927	31.29
	Near	29.832	29.775	29.687	29.557	29.395	29.129	28.816
20 feet	Far	20.072	20.097	20.135	20.193	20.267	20.39	20.54
	Near	19.928	19.904	19.867	19.811	19.741	19.626	19.489
16 feet	Far	16.045	16.06	16.084	16.119	16.164	16.24	16.332
	Near	15.956	15.941	15.917	15.883	15.839	15.767	15.682
13 feet	Far	13.028	13.038	13.053	13.076	13.104	13.152	13.21
	Near	12.972	12.962	12.948	12.925	12.898	12.852	12.798

Distance in feet | Confusion circle : 0.013 mm

F = 225 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		4889.461	3642.72	2616.156	1836.77	1337.987	921.037	670.417
11 feet	Far	11.019	11.026	11.036	11.052	11.071	11.104	11.144
	Near	10.981	10.974	10.964	10.949	10.93	10.898	10.86
9 feet	Far	9.012	9.016	9.023	9.033	9.045	9.066	9.091
	Near	8.988	8.984	8.977	8.967	8.955	8.935	8.911
7 feet	Far	7.007	7.009	7.013	7.018	7.025	7.036	7.05
	Near	6.993	6.991	6.987	6.982	6.975	6.964	6.951
5 feet	Far	5.003	5.004	5.005	5.008	5.01	5.015	5.021
	Near	4.997	4.996	4.995	4.992	4.99	4.985	4.979
4 feet	Far	4.002	4.002	4.003	4.004	4.006	4.008	4.011
	Near	3.998	3.998	3.997	3.996	3.994	3.992	3.989

Distance in feet | Confusion circle : 0.013 mm

F = 225 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		7029.341	5803.011	4167.68	2925.556	2130.803	1466.72	1067.583
50 feet	Far	50.34	50.412	50.576	50.825	51.14	51.675	52.332
	Near	49.665	49.595	49.437	49.202	48.911	48.434	47.873
30 feet	Far	30.118	30.143	30.199	30.285	30.393	30.574	30.795
	Near	29.883	29.859	29.803	29.721	29.618	29.448	29.247
20 feet	Far	20.05	20.061	20.085	20.121	20.166	20.242	20.335
	Near	19.95	19.94	19.916	19.881	19.837	19.764	19.677
16 feet	Far	16.031	16.037	16.052	16.075	16.103	16.15	16.206
	Near	15.969	15.963	15.948	15.926	15.899	15.854	15.799
13 feet	Far	13.02	13.024	13.033	13.047	13.065	13.095	13.13
	Near	12.98	12.976	12.967	12.953	12.936	12.907	12.872

Distance in feet | Confusion circle : 0.013 mm

F = 290 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		7029.341	5803.011	4167.68	2925.556	2130.803	1466.72	1067.583
11 feet	Far	11.013	11.016	11.023	11.032	11.045	11.065	11.09
	Near	10.987	10.984	10.977	10.968	10.956	10.936	10.912
9 feet	Far	9.009	9.01	9.014	9.02	9.028	9.041	9.056
	Near	8.992	8.99	8.986	8.98	8.972	8.959	8.944
7 feet	Far	7.005	7.006	7.008	7.011	7.015	7.023	7.031
	Near	6.995	6.994	6.992	6.989	6.985	6.978	6.969
5 feet	Far	5.002	5.002	5.003	5.005	5.007	5.01	5.013
	Near	4.998	4.998	4.997	4.995	4.993	4.991	4.987
4 feet	Far	4.001	4.001	4.002	4.003	4.004	4.005	4.007
	Near	3.999	3.999	3.998	3.997	3.996	3.995	3.993

Distance in feet | Confusion circle : 0.013 mm

F = 290 mm