



OPTIMO 45 - 120



DEPTH-OF-FIELD TABLES
DISTANCE IN FEET



Angenieux®





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.



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		105.583	76.532	54.33	38.576	27.438	19.547	13.966
60 feet	Far	138.688	279.87	∞	∞	∞	∞	∞
	Near	38.413	33.797	28.679	23.639	18.972	14.868	11.432
30 feet	Far	41.695	49.05	66.679	136.836	∞	∞	∞
	Near	23.477	21.687	19.482	17.041	14.499	11.996	9.676
20 feet	Far	24.536	26.881	31.374	41.2	74.455	∞	∞
	Near	16.905	15.967	14.751	13.323	11.733	10.055	8.388
16 feet	Far	18.749	20.075	22.456	27.03	38.097	92.406	∞
	Near	13.971	13.33	12.478	11.449	10.264	8.966	7.627
14 feet	Far	16.045	17.001	18.667	21.7	28.245	49.814	∞
	Near	12.43	11.923	11.241	10.404	9.422	8.323	7.162
12 feet	Far	13.458	14.118	15.238	17.181	21.003	30.852	95.314
	Near	10.837	10.452	9.929	9.275	8.493	7.596	6.625

Distance in feet | Confusion circle : 0.025 mm

F = 45 mm



Distance in feet | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		105.583	76.532	54.33	38.576	27.438	19.547	13.966
10 feet	Far	10.98	11.409	12.121	13.303	15.455	20.126	35.678
	Near	9.188	8.913	8.534	8.052	7.462	6.769	5.995
8 feet	Far	8.603	8.86	9.275	9.938	11.068	13.227	18.403
	Near	7.481	7.301	7.049	6.723	6.313	5.818	5.246
6 feet	Far	6.322	6.455	6.666	6.991	7.514	8.417	10.183
	Near	5.712	5.61	5.464	5.272	5.024	4.715	4.343
5 feet	Far	5.216	5.304	5.441	5.65	5.978	6.52	7.502
	Near	4.803	4.733	4.631	4.496	4.319	4.094	3.817
4 feet	Far	4.131	4.184	4.266	4.388	4.575	4.873	5.377
	Near	3.878	3.834	3.769	3.683	3.568	3.419	3.231
3 feet	Far	3.156	3.185	3.229	3.294	3.391	3.542	3.783
1 inch	Near	3.015	2.99	2.953	2.903	2.835	2.746	2.631

F = 45 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		126.819	91.909	65.223	46.283	32.893	23.406	16.697
60 feet	Far	113.562	172.819	791.092	∞	∞	∞	∞
	Near	40.876	36.461	31.418	26.293	21.399	16.973	13.176
30 feet	Far	39.122	44.296	55.236	85.237	376.356	∞	∞
	Near	24.364	22.742	20.693	18.362	15.858	13.314	10.882
20 feet	Far	23.632	25.403	28.617	34.91	50.828	146.55	∞
	Near	17.354	16.524	15.427	14.107	12.596	10.953	9.268
16 feet	Far	18.221	19.247	21.019	24.195	30.828	50.764	722.612
	Near	14.274	13.712	12.955	12.019	10.913	9.667	8.34
14 feet	Far	15.659	16.406	17.669	19.844	24.065	34.607	93.491
	Near	12.668	12.227	11.624	10.869	9.962	8.919	7.784
12 feet	Far	13.188	13.709	14.572	16.007	18.618	24.296	43.265
	Near	11.016	10.683	10.224	9.64	8.925	8.085	7.148

Distance in feet | Confusion circle : 0.025 mm

F = 50 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		126.819	91.909	65.223	46.283	32.893	23.406	16.697
10 feet	Far	10.801	11.144	11.7	12.596	14.138	17.144	24.692
	Near	9.315	9.078	8.748	8.322	7.79	7.15	6.415
8 feet	Far	8.495	8.702	9.031	9.545	10.388	11.893	15.019
	Near	7.563	7.409	7.192	6.906	6.542	6.092	5.559
6 feet	Far	6.265	6.373	6.543	6.8	7.204	7.873	9.086
	Near	5.758	5.671	5.547	5.381	5.164	4.887	4.548
5 feet	Far	5.178	5.25	5.361	5.528	5.785	6.197	6.903
	Near	4.835	4.775	4.689	4.573	4.419	4.22	3.971
4 feet	Far	4.108	4.152	4.218	4.317	4.465	4.697	5.075
	Near	3.898	3.86	3.806	3.732	3.633	3.503	3.336
3 feet	Far	3.143	3.167	3.203	3.256	3.334	3.453	3.64
1 inch	Near	3.026	3.005	2.974	2.931	2.874	2.796	2.695

Distance in feet | Confusion circle : 0.025 mm

F = 50 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		153.32	111.099	78.816	55.901	39.699	28.221	20.102
60 feet	Far	98.299	130.173	252.958	∞	∞	∞	∞
	Near	43.259	39.112	34.231	29.106	24.052	19.339	15.183
30 feet	Far	37.157	40.9	48.163	64.461	124.273	∞	∞
	Near	25.182	23.734	21.863	19.675	17.252	14.71	12.199
20 feet	Far	22.908	24.261	26.615	30.88	39.996	69.21	∞
	Near	17.761	17.036	16.061	14.861	13.45	11.869	10.195
16 feet	Far	17.791	18.589	19.928	22.204	26.512	36.687	81.59
	Near	14.545	14.06	13.394	12.556	11.542	10.367	9.077
14 feet	Far	15.343	15.929	16.896	18.493	21.366	27.467	46.511
	Near	12.88	12.5	11.975	11.304	10.48	9.508	8.417
12 feet	Far	12.965	13.377	14.046	15.123	16.973	20.573	29.563
	Near	11.174	10.889	10.492	9.978	9.335	8.562	7.674

Distance in feet | Confusion circle : 0.025 mm

F = 55 mm



Distance in feet | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		153.32	111.099	78.816	55.901	39.699	28.221	20.102
10 feet	Far	10.653	10.926	11.363	12.049	13.18	15.223	19.576
	Near	9.426	9.225	8.942	8.57	8.097	7.515	6.83
8 feet	Far	8.404	8.571	8.832	9.233	9.871	10.952	12.992
	Near	7.635	7.505	7.319	7.073	6.753	6.351	5.862
6 feet	Far	6.217	6.305	6.441	6.645	6.958	7.461	8.324
	Near	5.799	5.725	5.62	5.478	5.29	5.047	4.743
5 feet	Far	5.146	5.204	5.294	5.428	5.629	5.945	6.466
	Near	4.863	4.813	4.74	4.641	4.509	4.335	4.115
4 feet	Far	4.089	4.124	4.178	4.258	4.376	4.556	4.843
	Near	3.915	3.884	3.838	3.776	3.691	3.579	3.433
3 feet	Far	3.133	3.152	3.181	3.224	3.287	3.382	3.527
1 inch	Near	3.036	3.018	2.992	2.956	2.907	2.841	2.754

F = 55 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		247.937	179.626	127.357	90.244	64.001	45.407	32.257
60 feet	Far	78.983	89.858	113.165	179.268	1047.3	∞	∞
	Near	48.414	45.102	40.931	36.199	31.135	26.011	21.13
30 feet	Far	34.045	35.897	39.076	44.703	56.185	88.614	502.253
	Near	26.826	25.789	24.384	22.641	20.571	18.226	15.712
20 feet	Far	21.699	22.428	23.615	25.535	28.866	35.457	52.588
	Near	18.553	18.057	17.364	16.471	15.36	14.027	12.505
16 feet	Far	17.059	17.503	18.211	19.322	21.152	24.454	31.461
	Near	15.068	14.742	14.281	13.676	12.908	11.961	10.845
14 feet	Far	14.799	15.13	15.652	16.461	17.762	20.017	24.446
	Near	13.286	13.033	12.673	12.198	11.586	10.822	9.906
12 feet	Far	12.577	12.813	13.183	13.746	14.634	16.118	18.844
	Near	11.476	11.288	11.02	10.661	10.195	9.603	8.88

Distance in feet | Confusion circle : 0.025 mm

F = 70 mm



Distance in feet | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		247.937	179.626	127.357	90.244	64.001	45.407	32.257
10 feet	Far	10.393	10.551	10.798	11.168	11.74	12.664	14.266
	Near	9.637	9.506	9.317	9.063	8.728	8.295	7.756
8 feet	Far	8.245	8.342	8.493	8.716	9.054	9.584	10.456
	Near	7.77	7.686	7.565	7.399	7.178	6.888	6.519
6 feet	Far	6.132	6.184	6.264	6.381	6.555	6.819	7.235
	Near	5.874	5.827	5.759	5.666	5.539	5.37	5.15
5 feet	Far	5.089	5.124	5.177	5.255	5.369	5.54	5.804
	Near	4.914	4.882	4.836	4.771	4.684	4.565	4.409
4 feet	Far	4.055	4.076	4.108	4.155	4.223	4.324	4.477
	Near	3.947	3.927	3.898	3.858	3.803	3.727	3.626
3 feet	Far	3.114	3.125	3.143	3.169	3.206	3.26	3.34
1 inch	Near	3.054	3.043	3.026	3.003	2.972	2.928	2.87

F = 70 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		323.603	234.443	166.19	117.717	83.439	59.153	41.977
60 feet	Far	73.526	80.456	93.655	122.123	214.593	∞	∞
	Near	50.703	47.882	44.214	39.893	35.065	29.954	24.86
30 feet	Far	33.001	34.313	36.481	40.079	46.594	60.615	106.073
	Near	27.507	26.664	25.499	24.016	22.197	20.055	17.659
20 feet	Far	21.275	21.806	22.652	23.973	26.134	29.979	37.926
	Near	18.873	18.476	17.916	17.179	16.238	15.074	13.693
16 feet	Far	16.799	17.125	17.638	18.421	19.66	21.739	25.594
	Near	15.276	15.018	14.649	14.156	13.516	12.707	11.719
14 feet	Far	14.604	14.848	15.23	15.807	16.704	18.171	20.769
	Near	13.446	13.247	12.96	12.576	12.071	11.425	10.625
12 feet	Far	12.437	12.612	12.884	13.291	13.914	14.909	16.598
	Near	11.594	11.447	11.234	10.946	10.565	10.071	9.449

Distance in feet | Confusion circle : 0.025 mm

F = 80 mm



Distance in feet | Confusion circle : 0.025 mm

APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		323.603	234.443	166.19	117.717	83.439	59.153	41.977
10 feet	Far	10.298	10.416	10.599	10.869	11.277	11.914	12.955
	Near	9.72	9.617	9.468	9.266	8.994	8.638	8.181
8 feet	Far	8.186	8.259	8.372	8.536	8.781	9.155	9.746
	Near	7.823	7.758	7.662	7.531	7.354	7.118	6.811
6 feet	Far	6.101	6.14	6.2	6.287	6.415	6.606	6.898
	Near	5.903	5.867	5.814	5.74	5.64	5.504	5.324
5 feet	Far	5.068	5.094	5.134	5.193	5.277	5.402	5.591
	Near	4.934	4.909	4.873	4.823	4.754	4.659	4.533
4 feet	Far	4.042	4.058	4.082	4.117	4.168	4.243	4.353
	Near	3.959	3.944	3.922	3.89	3.847	3.787	3.707
3 feet	Far	3.106	3.115	3.129	3.148	3.176	3.216	3.275
1 inch	Near	3.061	3.052	3.039	3.022	2.997	2.963	2.916

F = 80 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		665.345	509.377	361.002	255.562	180.983	128.14	90.77
60 feet	Far	65.886	67.932	71.849	78.256	89.562	112.677	177.834
	Near	55.087	53.74	51.53	48.695	45.186	41.01	36.283
30 feet	Far	31.386	31.838	32.663	33.911	35.85	39.018	44.615
	Near	28.733	28.366	27.746	26.911	25.816	24.412	22.673
20 feet	Far	20.6	20.791	21.136	21.645	22.41	23.594	25.507
	Near	19.435	19.269	18.983	18.593	18.07	17.378	16.488
16 feet	Far	16.378	16.498	16.712	17.026	17.492	18.198	19.305
	Near	15.64	15.532	15.348	15.094	14.75	14.29	13.688
14 feet	Far	14.287	14.377	14.539	14.774	15.121	15.643	16.449
	Near	13.725	13.643	13.501	13.306	13.039	12.681	12.207
12 feet	Far	12.208	12.274	12.39	12.56	12.807	13.176	13.738
	Near	11.799	11.739	11.635	11.491	11.293	11.025	10.668

Distance in feet | Confusion circle : 0.025 mm

F = 120 mm



APERTURE		T 2.8	T 4	T 5.6	T 8	T11	T16	T22
HYPERFOCAL DISTANCE		665.345	509.377	361.002	255.562	180.983	128.14	90.77
10 feet	Far	10.142	10.187	10.266	10.381	10.547	10.793	11.163
	Near	9.862	9.82	9.748	9.648	9.51	9.321	9.068
8 feet	Far	8.089	8.117	8.166	8.237	8.34	8.49	8.713
	Near	7.913	7.887	7.841	7.777	7.689	7.567	7.402
6 feet	Far	6.049	6.064	6.09	6.128	6.183	6.263	6.379
	Near	5.952	5.938	5.913	5.878	5.828	5.761	5.667
5 feet	Far	5.033	5.043	5.061	5.086	5.123	5.176	5.254
	Near	4.968	4.958	4.941	4.917	4.883	4.837	4.773
4 feet	Far	4.02	4.026	4.037	4.053	4.075	4.107	4.154
	Near	3.98	3.974	3.964	3.949	3.928	3.899	3.859
3 feet	Far	3.094	3.098	3.104	3.113	3.125	3.143	3.168
1 inch	Near	3.072	3.069	3.063	3.055	3.043	3.027	3.004

Distance in feet | Confusion circle : 0.025 mm

F = 120 mm