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OPTIMO 42 - 420 A2S

DEPTH-OF-FIELD TABLES
DISTANCE IN FEET

Angénieux®

REFERENCE : 323468



DEPTH-OF-FIELD TABLES
ZOOM 35 mm → F = 42 - 420 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.

* : data given for information only



TABLES DE PROFONDEUR DE CHAMP
ZOOM 35 mm → F = 42 - 420 mm

Les tables de profondeur de champ 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 les essais filmés dans des conditions de tournage vous permettront de définir les bornes de cette profondeur de champ avec un maximum de précision.

** : information donnée à titre indicatif*





APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		43,534	34,832	24,967	18,014	13,106	9,638	7,187
60 feet	Far	∞	∞	∞	∞	∞	∞	∞
	Near	25,777	22,561	18,095	14,25	11,08	8,563	6,621
30 feet	Far	92,949	213,546	∞	∞	∞	∞	∞
	Near	18,304	16,678	14,184	11,782	9,593	7,7	6,135
25 feet	Far	56,241	84,731	∞	∞	∞	∞	∞
	Near	16,401	15,101	13,055	10.382	9,103	7,401	5,96
17 feet	Far	26,602	31,365	49,825	364,923	∞	∞	∞
	Near	12,676	11,918	10,655	9,309	7,953	6,667	5,512
12 feet	Far	15,785	17,246	21,328	32,657	156,909	∞	∞
	Near	9,781	9,348	8,594	7,741	6,826	5,901	5,018

Distance in feet | Confusion circle : 0.025 mm

F = 42 mm



APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		43,534	34,832	24,967	18,014	13,106	9,638	7,187
10 feet	Far	12,369	13,209	15,366	20,195	37,965	∞	∞
	Near	8,464	8,151	7,593	6,943	6,224	5,471	4,727
8 feet	Far	9,341	9,78	10,833	12,859	17,812	43,052	∞
	Near	7,041	6,836	6,462	6,011	5,494	4,929	4,347
6 feet	Far	6,638	6,832	7,272	8,026	9,485	13,096	32,489
	Near	5,498	5,384	5,173	4,908	4,59	4,225	3,827
5 feet	Far	5,392	5,508	5,763	6,18	6,92	8,452	12,912
	Near	4,676	4,601	4,458	4,277	4,053	3,788	3,489
4'1 feet	Far	4,307	4,37	4,508	4,725	5,085	5,745	7,192
	Near	3,891	3,845	3,757	3,643	3,498	3,321	3,113

Distance in feet | Confusion circle : 0.025 mm

F = 42 mm



APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		85,317	68	48,378	34,553	24,794	17,899	13,026
60 feet	Far	198,43	508,845	∞	∞	∞	∞	∞
	Near	35,772	32,436	27,339	22,447	18,007	14,18	11,025
30 feet	Far	45,148	52,101	76,062	225,036	∞	∞	∞
	Near	22,626	21,293	19,048	16,618	14,132	11,736	9,553
25 feet	Far	34,493	38,341	49,674	86,455	∞	∞	∞
	Near	19,726	18,719	16,986	15,053	13,011	10,978	9,067
17 feet	Far	20,704	21,968	25,103	31,587	50,527	422,617	∞
	Near	14,482	13,955	13,008	11,889	10,627	9,282	7,927
12 feet	Far	13,619	14,122	15,276	17,309	21,448	33,036	170,071
	Near	10,756	10,479	9,966	9,331	8,577	7,723	6,808

Distance in feet | Confusion circle : 0.025 mm

F = 60 mm





APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		85,317	68	48,378	34,553	24,794	17,899	13,026
10 feet	Far	11,049	11,364	12,067	13,244	15,425	20,333	38,657
	Near	9,154	8,96	8,597	8,138	7,58	6,93	6,209
8 feet	Far	8,613	8,791	9,178	9,798	10,861	12,911	17,952
	Near	7,481	7,359	7,127	6,827	6,453	6,002	5,483
6 feet	Far	6,301	6,385	6,564	6,84	7,283	8,044	9,521
	Near	5,733	5,669	5,544	5,38	5,168	4,903	4,584
5 feet	Far	5,188	5,239	5,348	5,513	5,769	6,189	6,937
	Near	4,83	4,788	4,706	4,598	4,455	4,273	4,049
4'1 feet	Far	4,191	4,221	4,282	4,373	4,511	4,729	5,093
	Near	3,983	3,958	3,909	3,843	3,755	3,64	3,495

Distance in feet | Confusion circle : 0.025 mm

F = 60 mm



APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		230,673	183,402	129,862	92,151	65,536	46,733	33,443
60 feet	Far	80,367	88,2	109,964	169,472	746,767	∞	∞
	Near	47,982	45,627	41,525	36,877	31,885	26,825	21,99
30 feet	Far	34,165	35,452	38,39	43,521	53,788	81,324	312,185
	Near	26,774	26,052	24,71	23,047	21,063	18,806	16,375
25 feet	Far	27,778	28,609	30,461	33,55	39,233	51,83	96,654
	Near	22,751	22,235	21,265	20,039	18,544	16,797	14,857
17 feet	Far	18,182	18,519	19,242	20,375	22,245	25,617	32,794
	Near	15,973	15,728	15,257	14,643	13,861	12,901	11,771
12 feet	Far	12,542	12,692	13,007	13,484	14,229	15,453	17,643
	Near	11,508	11,388	11,153	10,84	10,429	9,906	9,262

Distance in feet | Confusion circle : 0.025 mm

F = 100 mm



APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		230,673	183,402	129,862	92,151	65,536	46,733	33,443
10 feet	Far	10,358	10,455	10,66	10,964	11,431	12,173	13,431
	Near	9,67	9,588	9,428	9,212	8,925	8,555	8,088
8 feet	Far	8,213	8,27	8,389	8,565	8,828	9,236	9,894
	Near	7,8	7,75	7,652	7,517	7,337	7,1	6,794
6 feet	Far	6,106	6,134	6,193	6,277	6,402	6,59	6,881
	Near	5,899	5,873	5,822	5,752	5,657	5,529	5,361
5 feet	Far	5,067	5,084	5,121	5,173	5,25	5,364	5,537
	Near	4,936	4,919	4,887	4,842	4,78	4,697	4,585
4'1 feet	Far	4,122	4,132	4,153	4,183	4,227	4,291	4,386
	Near	4,046	4,036	4,017	3,99	3,954	3,903	3,835

Distance in feet | Confusion circle : 0.025 mm

F = 100 mm



APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		329,839	262,14	185,469	131,468	93,356	66,432	47,402
60 feet	Far	72,879	77,207	87,781	108,979	166,141	664,725	INFINI
	Near	51,057	49,164	45,749	41,682	37,061	32,088	27,036
30 feet	Far	32,787	33,602	35,387	38,274	43,306	53,333	79,917
	Near	27,668	27,124	26,09	24,764	23,116	21,148	18,906
25 feet	Far	26,874	27,411	28,567	30,389	33,425	38,993	51,264
	Near	23,383	22,999	22,263	21,304	20,091	18,609	16,875
17 feet	Far	17,807	18,031	18,502	19,215	20,331	22,171	25,484
	Near	16,269	16,09	15,741	15,277	14,669	13,896	12,946
12 feet	Far	12,373	12,474	12,684	12,996	13,466	14,201	15,407
	Near	11,652	11,565	11,394	11,163	10,853	10,448	9,931

Distance in feet | Confusion circle : 0.025 mm

F = 120 mm



APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		329,839	262,14	185,469	131,468	93,356	66,432	47,402
10 feet	Far	10,247	10,313	10,451	10,652	10,953	11,413	12,146
	Near	9,767	9,708	9,592	9,434	9,221	8,938	8,572
8 feet	Far	8,147	8,186	8,267	8,385	8,558	8,819	9,221
	Near	7,859	7,824	7,753	7,656	7,523	7,345	7,111
6 feet	Far	6,074	6,093	6,133	6,19	6,274	6,398	6,584
	Near	5,929	5,911	5,874	5,824	5,755	5,661	5,536
5 feet	Far	5,046	5,059	5,083	5,119	5,171	5,247	5,36
	Near	4,955	4,943	4,92	4,888	4,844	4,783	4,701
4'1 feet	Far	4,11	4,117	4,132	4,152	4,182	4,225	4,289
	Near	4,057	4,05	4,037	4,018	3,991	3,955	3,906

Distance in feet | Confusion circle : 0.025 mm

F = 120 mm



APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		510,737	405,79	286,931	203,217	144,133	102,392	72,891
60 feet	Far	67,709	70,057	75,351	84,395	101,762	144,011	354,816
	Near	53,903	52,522	49,944	46,718	42,831	38,356	33,468
30 feet	Far	31,738	32,225	33,259	34,845	37,378	41,7	49,966
	Near	28,452	28,077	27,351	26,39	25,149	23,594	21,716
25 feet	Far	26,176	26,501	27,186	28,219	29,83	32,474	37,19
	Near	23,932	23,67	23,159	22,478	21,585	20,445	19,04
17 feet	Far	17,512	17,65	17,937	18,361	19	19,991	21,602
	Near	16,52	16,401	16,165	15,844	15,414	14,849	14,125
12 feet	Far	12,238	12,301	12,432	12,622	12,903	13,325	13,979
	Near	11,773	11,715	11,601	11,445	11,232	10,946	10,569

Distance in feet | Confusion circle : 0.025 mm

F = 150 mm





APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		510,737	405,79	286,931	203,217	144,133	102,392	72,891
10 feet	Far	10,158	10,2	10,286	10,41	10,592	10,863	11,275
	Near	9,848	9,81	9,733	9,627	9,482	9,285	9,023
8 feet	Far	8,094	8,119	8,17	8,243	8,35	8,507	8,741
	Near	7,909	7,885	7,839	7,774	7,685	7,563	7,399
6 feet	Far	6,047	6,06	6,085	6,121	6,173	6,249	6,361
	Near	5,954	5,942	5,918	5,885	5,839	5,776	5,69
5 feet	Far	5,03	5,038	5,053	5,076	5,109	5,156	5,225
	Near	4,971	4,963	4,948	4,927	4,898	4,857	4,802
4'1 feet	Far	4,101	4,105	4,114	4,128	4,146	4,173	4,213
	Near	4,066	4,062	4,053	4,041	4,023	3,999	3,966

Distance in feet | Confusion circle : 0.025 mm

F = 150 mm



APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		899,451	714,546	505,053	357,481	253,321	179,735	127,724
60 feet	Far	64,14	65,313	67,826	67,826	78,131	89,478	112,86
	Near	56,379	55,512	53,841	53,841	48,857	45,405	41,312
30 feet	Far	30,961	31,222	31,763	32,563	33,77	35,649	38,723
	Near	29,101	28,877	28,435	27,836	27,034	25,982	24,638
25 feet	Far	25,653	25,829	26,193	26,725	27,52	28,735	30,667
	Near	24,382	24,227	23,92	23,501	22,935	22,185	21,212
17 feet	Far	17,286	17,362	17,519	17,745	18,076	18,569	19,321
	Near	16,724	16,654	16,515	16,323	16,06	15,704	15,231
12 feet	Far	12,134	12,169	12,241	12,344	12,494	12,714	13,041
	Near	11,87	11,837	11,77	11,678	11,551	11,376	11,14

Distance in feet | Confusion circle : 0.025 mm

F = 200 mm



APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		899,451	714,546	505,053	357,481	253,321	179,735	127,724
10 feet	Far	10,089	10,112	10,16	10,228	10,327	10,47	10,681
	Near	9,913	9,891	9,846	9,784	9,698	9,58	9,419
8 feet	Far	8,053	8,067	8,095	8,136	8,194	8,279	8,402
	Near	7,948	7,934	7,907	7,87	7,818	7,745	7,646
6 feet	Far	6,027	6,034	6,048	6,068	6,097	6,138	6,199
	Near	5,974	5,967	5,953	5,934	5,908	5,871	5,819
5 feet	Far	5,017	5,021	5,03	5,043	5,061	5,087	5,124
	Near	4,983	4,979	4,97	4,958	4,941	4,918	4,885
4'1 feet	Far	4,093	4,096	4,101	4,108	4,119	4,134	4,155
	Near	4,074	4,071	4,066	4,059	4,049	4,035	4,016

Distance in feet | Confusion circle : 0.025 mm

F = 200 mm





APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		1386,741	1101,723	778,635	550,992	390,303	276,775	196,532
60 feet	Far	62,619	63,339	64,847	67,11	70,606	76,251	86,053
	Near	57,6	57,011	55,856	54,306	52,264	49,638	46,369
30 feet	Far	30,616	30,78	31,119	31,611	32,337	33,427	35,113
	Near	29,411	29,262	28,966	28,559	28,006	27,262	26,283
25 feet	Far	25,42	25,531	25,76	26,091	26,575	27,296	28,392
	Near	24,596	24,493	24,289	24,007	23,62	23,097	22,401
17 feet	Far	17,184	17,233	17,332	17,475	17,681	17,983	18,431
	Near	16,82	16,774	16,682	16,555	16,378	16,136	15,807
12 feet	Far	12,086	12,109	12,155	12,221	12,315	12,453	12,653
	Near	11,915	11,894	11,85	11,789	11,704	11,587	11,427

Distance in feet | Confusion circle : 0.025 mm

F = 250 mm





APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		1386,741	1101,723	778,635	550,992	390,303	276,775	196,532
10 feet	Far	10,057	10,072	10,103	10,147	10,209	10,299	10,43
	Near	9,944	9,929	9,9	9,859	9,802	9,723	9,614
8 feet	Far	8,034	8,043	8,062	8,088	8,125	8,178	8,255
	Near	7,966	7,957	7,94	7,915	7,881	7,833	7,766
6 feet	Far	6,017	6,022	6,031	6,044	6,062	6,089	6,127
	Near	5,983	5,979	5,97	5,957	5,94	5,915	5,881
5 feet	Far	5,011	5,014	5,019	5,028	5,039	5,056	5,08
	Near	4,989	4,986	4,981	4,973	4,962	4,946	4,925
4'1 feet	Far	4,09	4,091	4,095	4,099	4,106	4,116	4,13
	Near	4,077	4,075	4,072	4,068	4,061	4,052	4,039

Distance in feet | Confusion circle : 0.025 mm

F = 250 mm



APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		2644,121	2100,551	1484,316	1050,127	743,637	527,093	374,037
60 feet	Far	61,345	61,705	62,446	63,526	65,123	67,534	71,29
	Near	58,717	58,394	57,752	56,871	55,675	54,073	51,972
30 feet	Far	30,32	30,404	30,576	30,823	31,18	31,701	32,474
	Near	29,688	29,608	29,449	29,227	28,919	28,497	27,925
25 feet	Far	25,218	25,276	25,392	25,56	25,801	26,151	26,667
	Near	24,786	24,732	24,622	24,469	24,256	23,963	23,564
17 feet	Far	17,096	17,121	17,173	17,246	17,35	17,501	17,72
	Near	16,905	16,881	16,832	16,763	16,668	16,535	16,352
12 feet	Far	12,045	12,057	12,081	12,115	12,163	12,233	12,333
	Near	11,955	11,944	11,921	11,888	11,843	11,78	11,692

Distance in feet | Confusion circle : 0.025 mm

F = 350 mm



APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		2644,121	2100,551	1484,316	1050,127	743,637	527,093	374,037
10 feet	Far	10,03	10,038	10,054	10,076	10,108	10,154	10,221
	Near	9,97	9,963	9,947	9,926	9,895	9,853	9,794
8 feet	Far	8,018	8,023	8,032	8,046	8,065	8,092	8,132
	Near	7,982	7,978	7,968	7,955	7,937	7,911	7,876
6 feet	Far	6,009	6,011	6,016	6,023	6,033	6,046	6,066
	Near	5,991	5,989	5,984	5,977	5,968	5,955	5,937
5 feet	Far	5,006	5,007	5,01	5,014	5,021	5,029	5,041
	Near	4,994	4,993	4,99	4,986	4,98	4,972	4,96
4'1 feet	Far	4,087	4,088	4,089	4,092	4,095	4,1	4,107
	Near	4,08	4,079	4,077	4,075	4,072	4,067	4,06

Distance in feet | Confusion circle : 0.025 mm

F = 350 mm



APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		3615.89	2977.56	2102.82	1487.33	1053.06	746.28	529.461
60 feet	Far	60,978	61,192	61,705	62,446	63,526	65,126	67,546
	Near	59,056	58,858	58,396	57,757	56,88	55,689	54,097
30 feet	Far	30,233	30,284	30,404	30,576	30,823	31,181	31,704
	Near	29,771	29,723	29,609	29,45	29,229	28,923	28,504
25 feet	Far	25,159	25,194	25,276	25,392	25,56	25,801	26,153
	Near	24,843	24,81	24,732	24,623	24,47	24,259	23,968
17 feet	Far	17,07	17,085	17,121	17,173	17,246	17,35	17,502
	Near	16,931	16,916	16,881	16,832	16,764	16,669	16,537
12 feet	Far	12,033	12,04	12,057	12,081	12,115	12,163	12,163
	Near	11,967	11,96	11,944	11,921	11,889	11,844	11,844

Distance in feet | Confusion circle : 0.025 mm

F = 420 mm





APERTURE		T4.5	T5.6	T8	T11	T16	T22	T32*
HYPERFOCAL DISTANCE		3615.89	2977.56	2102.82	1487.33	1053.06	746.28	529.461
10 feet	Far	10,022	10,027	10,038	10,054	10,076	10,108	10,155
	Near	9,978	9,974	9,963	9,947	9,926	9,896	9,853
8 feet	Far	8,013	8,016	8,023	8,032	8,046	8,065	8,092
	Near	7,987	7,984	7,978	7,968	7,955	7,937	7,912
6 feet	Far	6,007	6,008	6,011	6,016	6,023	6,033	6,046
	Near	5,993	5,992	5,989	5,984	5,978	5,968	5,955
5 feet	Far	5,004	5,005	5,007	5,01	5,014	5,021	5,029
	Near	4,996	4,995	4,993	4,99	4,986	4,98	4,972
4'1 feet	Far	4,086	4,086	4,088	4,089	4,092	4,095	4,1
	Near	4,081	4,08	4,079	4,077	4,075	4,072	4,067

Distance in feet | Confusion circle : 0.025 mm

F = 420 mm

