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OPTIMO ULTRA 12X

Configuration FF/VV

DEPTH-OF-FIELD TABLES
DISTANCE IN FEET

| **Angénieux**[®]

REFERENCE : 321263 - A





DEPTH-OF-FIELD TABLES **F = 36 - 435 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 = 36 - 435 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 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		97,646	77,303	54,92	40,471	28,343	21,039	14,941
50 feet	Far	99,668	136,884	544,703	∞	∞	∞	∞
	Near	33,707	31,044	26,887	23,075	18,748	15,4	12,002
30 feet	Far	42,093	47,311	62,955	109,105	∞	∞	∞
	Near	23,459	22,185	20,054	17,928	15,289	13,059	10,605
20 feet	Far	24,45	26,034	29,919	36,973	62,114	410,225	∞
	Near	16,996	16,349	15,215	14,015	12,419	10,969	9,252
16 feet	Far	18,605	19,472	21,476	24,73	33,419	59,48	∞
	Near	14,084	13,653	12,881	12,041	10,883	9,79	8,442
13 feet	Far	14,584	15,087	16,205	17,901	21,816	29,987	88,098
	Near	11,758	11,469	10,943	10,355	9,522	8,708	7,664

Distance in feet | Confusion circle : 0.025 mm

F = 36 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		97,646	77,303	54,92	40,471	28,343	21,039	14,941
11 feet	Far	12,059	12,385	13,093	14,125	16,33	20,271	35,225
	Near	10,134	9,928	9,548	9,116	8,49	7,862	7,033
9 feet	Far	9,648	9,841	10,252	10,831	11,988	13,826	18,919
	Near	8,448	8,313	8,062	7,771	7,339	6,892	6,283
7 feet	Far	7,343	7,442	7,65	7,932	8,466	9,237	10,992
	Near	6,695	6,619	6,475	6,305	6,045	5,768	5,375
5 feet	Far	5,138	5,177	5,256	5,361	5,551	5,804	6,307
	Near	4,872	4,839	4,776	4,701	4,582	4,45	4,254
4 feet	Far	4,251	4,273	4,319	4,378	4,484	4,621	4,881
2 inches	Near	4,094	4,074	4,036	3,99	3,917	3,834	3,708

Distance in feet | Confusion circle : 0.013 mm

F = 36 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		136,169	107,646	76,281	56,039	39,051	28,821	20,28
50 feet	Far	77,398	90,97	139,994	445,099	∞	∞	∞
	Near	37,131	34,76	30,887	27,137	22,631	18,945	15,011
30 feet	Far	37,693	40,521	47,663	61,43	120,881	∞	∞
	Near	25,002	23,944	22,108	20,188	17,669	15,415	12,788
20 feet	Far	22,97	23,938	26,135	29,587	38,169	59,415	1675,808
	Near	17,751	17,237	16,309	15,288	13,864	12,498	10,786
16 feet	Far	17,768	18,318	19,526	21,311	25,238	32,653	66,46
	Near	14,578	14,243	13,626	12,932	11,933	10,942	9,649
13 feet	Far	14,087	14,415	15,118	16,116	18,153	21,502	31,579
	Near	12,085	11,864	11,451	10,977	10,279	9,565	8,6

Distance in feet | Confusion circle : 0.013 mm

F = 45 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		136,169	107,646	76,281	56,039	39,051	28,821	20,28
11 feet	Far	11,732	11,948	12,405	13,037	14,274	16,162	20,952
	Near	10,365	10,209	9,915	9,573	9,06	8,523	7,778
9 feet	Far	9,451	9,581	9,853	10,22	10,912	11,903	14,117
	Near	8,597	8,496	8,305	8,078	7,732	7,361	6,832
7 feet	Far	7,24	7,309	7,448	7,634	7,971	8,428	9,352
	Near	6,779	6,722	6,614	6,484	6,282	6,059	5,73
5 feet	Far	5,097	5,124	5,179	5,25	5,376	5,538	5,84
	Near	4,908	4,884	4,837	4,781	4,69	4,588	4,432
4 feet	Far	4,227	4,243	4,274	4,315	4,386	4,476	4,64
2 inches	Near	4,115	4,101	4,073	4,039	3,984	3,921	3,822

Distance in feet | Confusion circle : 0.013 mm

F = 45 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		241,632	190,725	134,776	98,68	68,392	50,154	34,929
50 feet	Far	62,304	66,753	77,798	98,374	177,671	9936,437	∞
	Near	41,831	40,083	37,033	33,823	29,582	25,754	21,256
30 feet	Far	33,855	35,076	37,784	41,87	51,214	70,332	192,843
	Near	26,963	26,254	24,959	23,513	21,456	19,44	16,85
20 feet	Far	21,555	22,019	23,002	24,378	27,114	31,405	42,973
	Near	18,667	18,341	17,73	17,023	15,969	14,876	13,378
16 feet	Far	16,94	17,214	17,786	18,565	20,046	22,201	27,167
	Near	15,167	14,959	14,565	14,102	13,397	12,646	11,584
13 feet	Far	13,585	13,753	14,099	14,561	15,413	16,595	19,083
	Near	12,468	12,334	12,076	11,77	11,296	10,78	10,03

Distance in feet | Confusion circle : 0.013 mm

F = 60 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		241,632	190,725	134,776	98,68	68,392	50,154	34,929
11 feet	Far	11,397	11,509	11,739	12,044	12,594	13,335	14,815
	Near	10,633	10,539	10,359	10,143	9,803	9,429	8,874
9 feet	Far	9,246	9,315	9,455	9,639	9,964	10,39	11,204
	Near	8,769	8,709	8,593	8,453	8,231	7,982	7,605
7 feet	Far	7,132	7,169	7,243	7,338	7,505	7,718	8,108
	Near	6,874	6,841	6,777	6,698	6,572	6,429	6,206
5 feet	Far	5,054	5,069	5,098	5,136	5,201	5,282	5,425
	Near	4,948	4,934	4,907	4,873	4,819	4,756	4,656
4 feet	Far	4,202	4,21	4,228	4,25	4,287	4,333	4,414
2 inches	Near	4,139	4,131	4,115	4,095	4,062	4,024	3,963

Distance in feet | Confusion circle : 0.013 mm

F = 60 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		376,511	296,996	209,617	153,25	105,954	77,474	53,701
50 feet	Far	57,22	59,543	64,76	72,802	92,005	135,222	653,832
	Near	44,432	43,145	40,812	38,228	34,591	31,07	26,607
30 feet	Far	32,354	33,055	34,539	36,611	40,717	47,119	64,143
	Near	27,978	27,482	26,553	25,475	23,867	22,198	19,904
20 feet	Far	20,967	21,244	21,817	22,584	24,002	25,979	30,171
	Near	19,124	18,902	18,479	17,976	17,199	16,356	15,133
16 feet	Far	16,588	16,755	17,095	17,544	18,355	19,442	21,601
	Near	15,455	15,316	15,047	14,724	14,218	13,657	12,824
13 feet	Far	13,368	13,471	13,68	13,953	14,437	15,07	16,273
	Near	12,654	12,564	12,391	12,181	11,847	11,472	10,903

Distance in feet | Confusion circle : 0.013 mm

F = 75 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		376,511	296,996	209,617	153,25	105,954	77,474	53,701
11 feet	Far	11,25	11,32	11,461	11,643	11,963	12,374	13,135
	Near	10,762	10,7	10,579	10,433	10,197	9,93	9,519
9 feet	Far	9,156	9,199	9,285	9,397	9,59	9,835	10,277
	Near	8,85	8,811	8,734	8,64	8,489	8,315	8,042
7 feet	Far	7,084	7,107	7,153	7,212	7,313	7,439	7,662
	Near	6,918	6,897	6,855	6,803	6,718	6,62	6,464
5 feet	Far	5,034	5,044	5,062	5,086	5,126	5,176	5,261
	Near	4,966	4,957	4,94	4,918	4,882	4,84	4,772
4 feet	Far	4,19	4,196	4,207	4,22	4,244	4,272	4,321
2 inches	Near	4,15	4,145	4,134	4,121	4,1	4,075	4,033

Distance in feet | Confusion circle : 0.013 mm

F = 75 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		736,303	580,559	409,371	298,929	206,257	150,453	103,87
50 feet	Far	53,435	54,443	56,557	59,462	65,061	73,397	93,491
	Near	46,989	46,242	44,833	43,184	40,691	38,062	34,379
30 feet	Far	31,155	31,482	32,149	33,031	34,621	36,755	40,994
	Near	28,931	28,657	28,13	27,497	26,503	25,404	23,77
20 feet	Far	20,481	20,615	20,885	21,235	21,848	22,636	24,094
	Near	19,542	19,423	19,192	18,909	18,456	17,943	17,15
16 feet	Far	16,295	16,376	16,539	16,749	17,114	17,575	18,406
	Near	15,717	15,642	15,498	15,32	15,032	14,702	14,186
13 feet	Far	13,185	13,236	13,337	13,468	13,691	13,971	14,467
	Near	12,821	12,773	12,681	12,567	12,381	12,166	11,826

Distance in feet | Confusion circle : 0.013 mm

F = 105 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		736,303	580,559	409,371	298,929	206,257	150,453	103,87
11 feet	Far	11,126	11,161	11,23	11,318	11,468	11,655	11,982
	Near	10,877	10,844	10,781	10,702	10,573	10,423	10,182
9 feet	Far	9,079	9,1	9,143	9,197	9,29	9,404	9,602
	Near	8,923	8,902	8,862	8,812	8,73	8,634	8,479
7 feet	Far	7,043	7,054	7,077	7,106	7,155	7,216	7,319
	Near	6,958	6,947	6,925	6,898	6,853	6,799	6,713
5 feet	Far	5,017	5,022	5,032	5,043	5,063	5,088	5,129
	Near	4,983	4,978	4,969	4,958	4,939	4,916	4,88
4 feet	Far	4,18	4,183	4,189	4,195	4,207	4,221	4,245
2 inches	Near	4,16	4,157	4,152	4,145	4,134	4,12	4,098

Distance in feet | Confusion circle : 0.013 mm

F = 105 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		1217,062	959,542	676,401	493,708	340,396	248,073	171,002
50 feet	Far	52,021	52,592	53,763	55,311	58,111	61,883	69,424
	Near	48,134	47,657	46,74	45,638	43,913	42,009	39,186
30 feet	Far	30,687	30,878	31,262	31,758	32,626	33,735	35,77
	Near	29,344	29,173	28,84	28,433	27,779	27,034	25,881
20 feet	Far	20,288	20,367	20,525	20,727	21,075	21,509	22,277
	Near	19,721	19,647	19,503	19,325	19,036	18,7	18,167
16 feet	Far	16,177	16,225	16,321	16,444	16,653	16,913	17,366
	Near	15,827	15,782	15,692	15,581	15,4	15,187	14,847
13 feet	Far	13,111	13,141	13,202	13,278	13,408	13,568	13,845
	Near	12,891	12,862	12,805	12,734	12,618	12,482	12,261

Distance in feet | Confusion circle : 0.013 mm

F = 135 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		1217,062	959,542	676,401	493,708	340,396	248,073	171,002
11 feet	Far	11,076	11,097	11,138	11,19	11,278	11,386	11,571
	Near	10,925	10,905	10,866	10,818	10,737	10,643	10,489
9 feet	Far	9,047	9,06	9,086	9,118	9,173	9,239	9,353
	Near	8,953	8,941	8,916	8,885	8,835	8,775	8,676
7 feet	Far	7,026	7,033	7,046	7,064	7,093	7,129	7,189
	Near	6,975	6,968	6,954	6,938	6,91	6,877	6,823
5 feet	Far	5,011	5,013	5,019	5,026	5,038	5,052	5,077
	Near	4,99	4,987	4,981	4,974	4,963	4,949	4,926
4 feet	Far	4,176	4,178	4,181	4,185	4,192	4,201	4,215
2 inches	Near	4,164	4,162	4,159	4,155	4,148	4,14	4,126

Distance in feet | Confusion circle : 0.013 mm

F = 135 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		2156,043	1699,764	1197,974	874,199	602,474	438,832	302,217
50 feet	Far	51,12	51,43	52,054	52,861	54,267	56,06	59,338
	Near	48,929	48,65	48,105	47,44	46,369	45,146	43,248
30 feet	Far	30,384	30,489	30,699	30,966	31,425	31,994	32,994
	Near	29,626	29,527	29,334	29,094	28,704	28,248	27,522
20 feet	Far	20,161	20,205	20,293	20,403	20,592	20,823	21,22
	Near	19,841	19,799	19,716	19,613	19,443	19,244	18,92
16 feet	Far	16,099	16,126	16,18	16,247	16,362	16,502	16,741
	Near	15,902	15,876	15,825	15,761	15,655	15,53	15,327
13 feet	Far	13,062	13,079	13,113	13,155	13,227	13,314	13,462
	Near	12,938	12,922	12,889	12,849	12,781	12,702	12,571

Distance in feet | Confusion circle : 0.013 mm

F = 180 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		2156,043	1699,764	1197,974	874,199	602,474	438,832	302,217
11 feet	Far	11,043	11,054	11,077	11,106	11,155	11,214	11,314
	Near	10,958	10,946	10,924	10,896	10,85	10,795	10,705
9 feet	Far	9,027	9,034	9,048	9,066	9,097	9,133	9,195
	Near	8,973	8,966	8,952	8,935	8,906	8,871	8,814
7 feet	Far	7,014	7,018	7,026	7,036	7,052	7,072	7,105
	Near	6,986	6,982	6,974	6,965	6,949	6,93	6,899
5 feet	Far	5,006	5,008	5,011	5,015	5,021	5,029	5,043
	Near	4,994	4,993	4,989	4,985	4,979	4,971	4,958
4 feet	Far	4,173	4,174	4,176	4,179	4,183	4,187	4,195
2 inches	Near	4,167	4,166	4,164	4,161	4,158	4,153	4,145

Distance in feet | Confusion circle : 0.013 mm

F = 180 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		3374,002	2660,02	1874,474	1367,708	942,437	686,311	472,475
50 feet	Far	50,71	50,904	51,293	51,79	52,643	53,706	55,581
	Near	49,31	49,129	48,772	48,333	47,616	46,784	45,46
30 feet	Far	30,244	30,31	30,442	30,61	30,894	31,243	31,844
	Near	29,76	29,696	29,571	29,415	29,158	28,856	28,366
20 feet	Far	20,103	20,131	20,186	20,256	20,374	20,517	20,762
	Near	19,898	19,871	19,818	19,751	19,641	19,51	19,296
16 feet	Far	16,063	16,08	16,114	16,157	16,229	16,317	16,465
	Near	15,937	15,921	15,888	15,846	15,778	15,697	15,563
13 feet	Far	13,04	13,051	13,072	13,099	13,144	13,199	13,291
	Near	12,96	12,95	12,929	12,903	12,859	12,808	12,723

Distance in feet | Confusion circle : 0.013 mm

F = 225 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		3374,002	2660,02	1874,474	1367,708	942,437	686,311	472,475
11 feet	Far	11,027	11,035	11,049	11,067	11,098	11,136	11,198
	Near	10,973	10,966	10,951	10,933	10,904	10,868	10,809
9 feet	Far	9,017	9,022	9,031	9,042	9,061	9,085	9,124
	Near	8,983	8,979	8,97	8,958	8,94	8,917	8,88
7 feet	Far	7,009	7,012	7,017	7,023	7,033	7,046	7,067
	Near	6,991	6,988	6,983	6,977	6,967	6,955	6,935
5 feet	Far	5,004	5,005	5,007	5,009	5,014	5,019	5,027
	Near	4,996	4,995	4,993	4,991	4,986	4,981	4,973
4 feet	Far	4,172	4,173	4,174	4,176	4,178	4,181	4,186
2 inches	Near	4,168	4,167	4,166	4,165	4,162	4,159	4,154

Distance in feet | Confusion circle : 0.013 mm

F = 225 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		7443,894	5970,506	4207,366	3069,151	2114,49	1539,633	1059,654
50 feet	Far	50,319	50,398	50,568	50,782	51,143	51,585	52,339
	Near	49,685	49,608	49,446	49,243	48,909	48,513	47,869
30 feet	Far	30,11	30,137	30,195	30,269	30,392	30,541	30,793
	Near	29,891	29,864	29,807	29,736	29,619	29,479	29,249
20 feet	Far	20,046	20,058	20,082	20,113	20,165	20,227	20,332
	Near	19,954	19,942	19,918	19,888	19,838	19,778	19,68
16 feet	Far	16,029	16,036	16,051	16,07	16,101	16,139	16,204
	Near	15,972	15,965	15,95	15,931	15,9	15,863	15,802
13 feet	Far	13,018	13,022	13,032	13,044	13,064	13,088	13,128
	Near	12,982	12,978	12,968	12,957	12,937	12,914	12,875

Distance in feet | Confusion circle : 0.013 mm

F = 340 mm





APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		7443,894	5970,506	4207,366	3069,151	2114,49	1539,633	1059,654
11 feet	Far	11,012	11,015	11,022	11,03	11,044	11,06	11,087
	Near	10,988	10,985	10,978	10,97	10,957	10,941	10,914
9 feet	Far	9,008	9,01	9,014	9,019	9,027	9,037	9,055
	Near	8,992	8,99	8,986	8,981	8,973	8,963	8,946
7 feet	Far	7,004	7,005	7,007	7,01	7,015	7,02	7,03
	Near	6,996	6,995	6,993	6,99	6,985	6,98	6,971
5 feet	Far	5,002	5,002	5,003	5,004	5,006	5,008	5,012
	Near	4,998	4,998	4,997	4,996	4,994	4,992	4,988
4 feet	Far	4,171	4,171	4,172	4,172	4,174	4,175	4,177
2 inches	Near	4,169	4,169	4,168	4,168	4,166	4,165	4,163

Distance in feet | Confusion circle : 0.013 mm

F = 340 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		10726,185	9537,26	6719,037	4900,845	3375,777	2457,898	1691,604
50 feet	Far	50,221	50,249	50,354	50,487	50,71	50,981	51,439
	Near	49,781	49,754	49,651	49,523	49,311	49,058	48,643
30 feet	Far	30,076	30,086	30,122	30,168	30,244	30,337	30,492
	Near	29,924	29,915	29,879	29,834	29,76	29,672	29,525
20 feet	Far	20,032	20,036	20,051	20,071	20,103	20,142	20,207
	Near	19,968	19,964	19,949	19,93	19,898	19,861	19,798
16 feet	Far	16,02	16,022	16,032	16,043	16,063	16,087	16,127
	Near	15,98	15,978	15,968	15,957	15,937	15,914	15,875
13 feet	Far	13,012	13,014	13,02	13,027	13,04	13,055	13,08
	Near	12,988	12,986	12,98	12,973	12,96	12,946	12,921

Distance in feet | Confusion circle : 0.013 mm

F = 435 mm



APERTURE		T 4.2	T 5.60	T 8.00	T11.00	T16.00	T22.00	T32.00
HYPERFOCAL DISTANCE		10726,185	9537,26	6719,037	4900,845	3375,777	2457,898	1691,604
11 feet	Far	11,009	11,01	11,014	11,019	11,027	11,037	11,055
	Near	10,991	10,99	10,986	10,981	10,973	10,963	10,946
9 feet	Far	9,005	9,006	9,009	9,012	9,017	9,023	9,034
	Near	8,995	8,994	8,991	8,988	8,983	8,977	8,966
7 feet	Far	7,003	7,003	7,005	7,006	7,009	7,013	7,018
	Near	6,997	6,997	6,995	6,994	6,991	6,987	6,982
5 feet	Far	5,001	5,001	5,002	5,003	5,004	5,005	5,008
	Near	4,999	4,999	4,998	4,997	4,996	4,995	4,992
4 feet	Far	4,171	4,171	4,171	4,172	4,172	4,173	4,174
2 inches	Near	4,169	4,169	4,169	4,168	4,168	4,167	4,166

Distance in feet | Confusion circle : 0.013 mm

F = 435 mm