



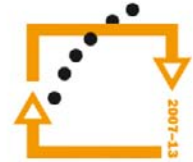
evropský
sociální
fond v ČR



EVROPSKÁ UNIE



MINISTERSTVO ŠKOLSTVÍ,
MLÁDEŽE A TĚLOVÝCHOVY



OP Vzdělávání
pro konkurenceschopnost

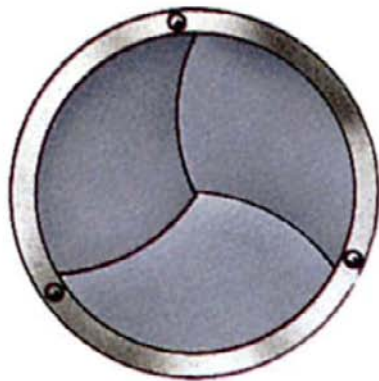
INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

projekt

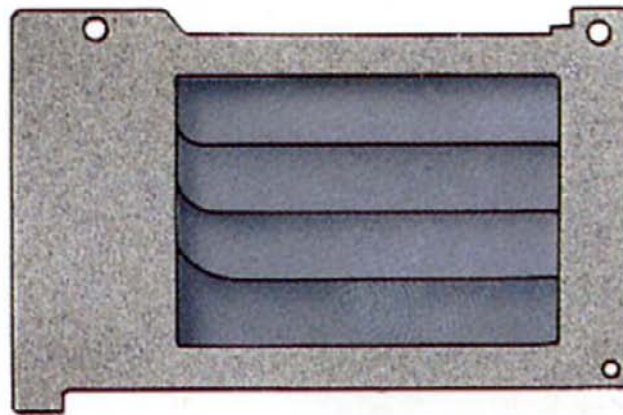
Nová media ve vědě a výzkumu

Stupnice citlivosti podle ISO

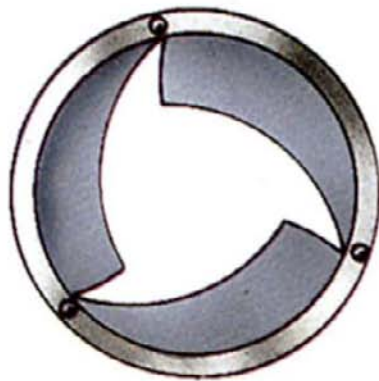
S	S°
3200	36°
2500	35°
2000	34°
1600	33°
1250	32°
1000	31°
800	30°
640	29°
500	28°
400	27°
320	26°
250	25°
200	24°
160	23°
125	22°
100	21°
80	20°
64	19°
50	18°
40	17°
32	16°
25	15°
20	14°
16	13°
12	12°



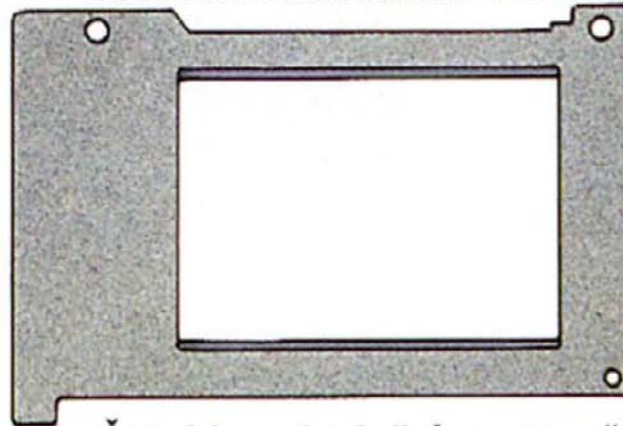
Centrální závěrka - zavřená



Štěrbínová závěrka - zavřená



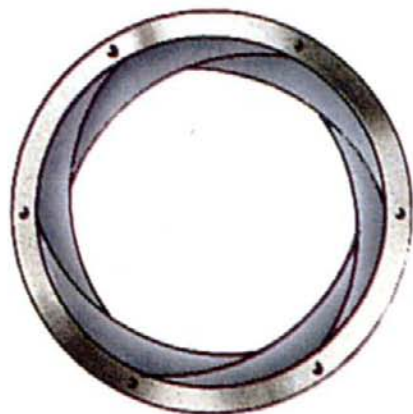
Centrální závěrka - otevřená



Štěrbínová závěrka - otevřená

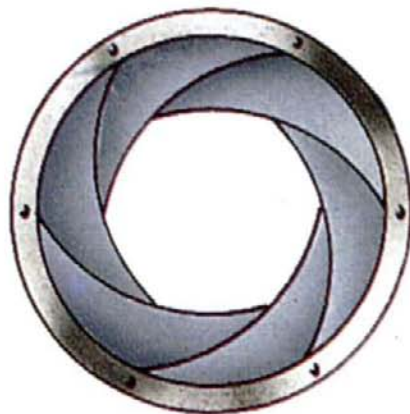


f/2,8



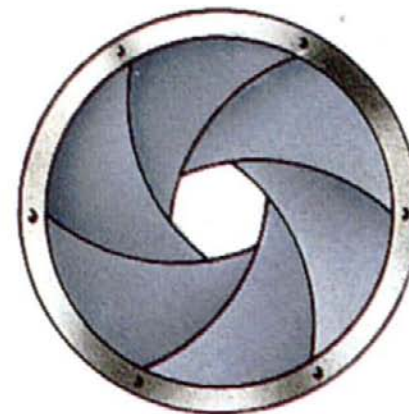
Plný otvor

f/5,6



Střední otvor

f/11



Největší zaclonění

1,4 - 2 - 2,8 - 4 - 5,6 - 8 - 11 - 16 - 22 - 32 - 45 - 64

2,8 - 4 - 5,6 - 8 - 11 - 16 - 22
1000 500 250 125 60 30

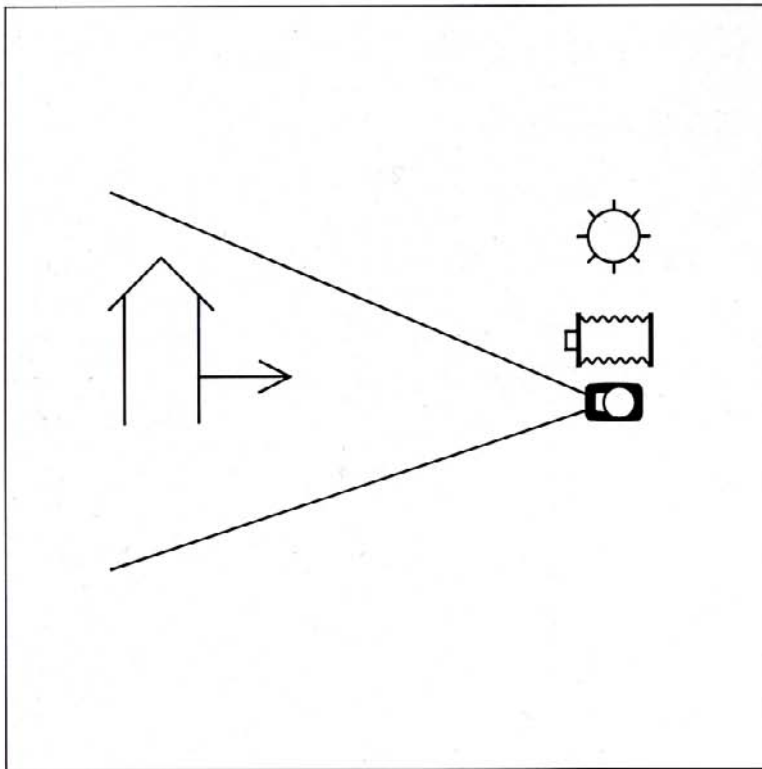


Fig. 8.1 Gegenstandsmessung

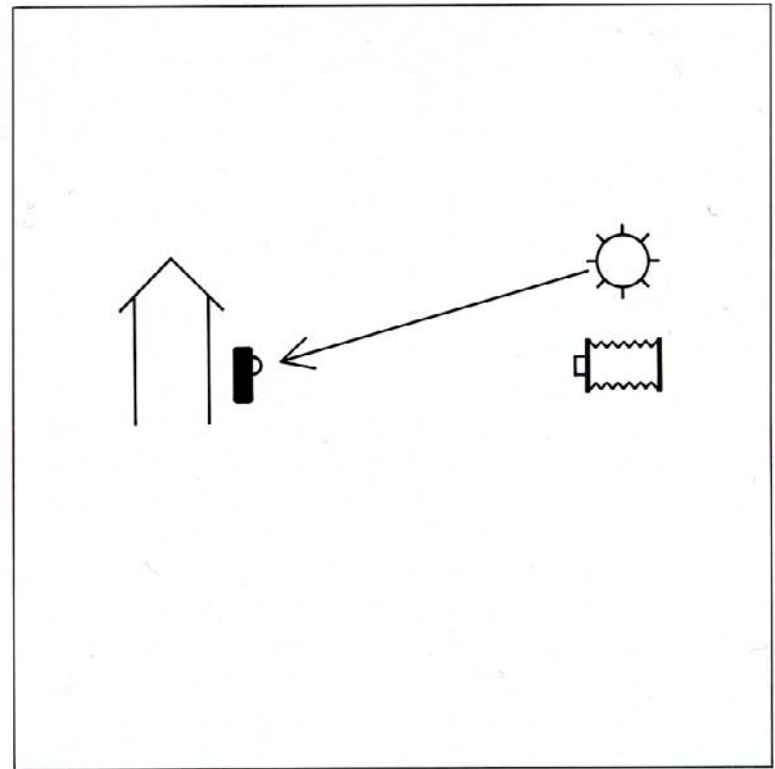


Fig. 8.2 Lichtmessung

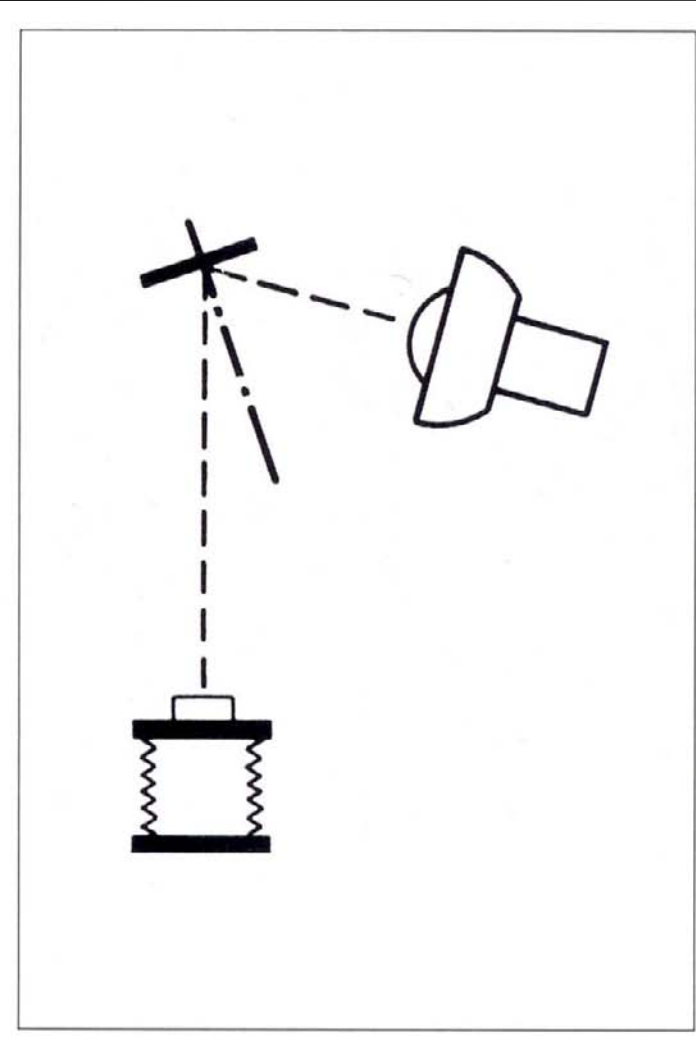





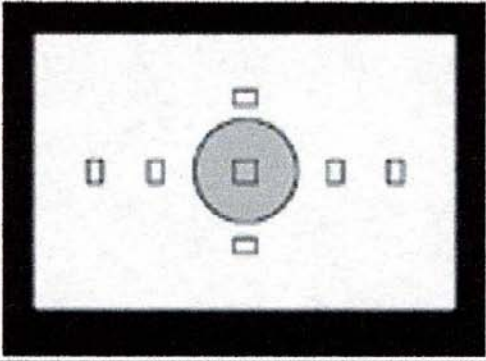
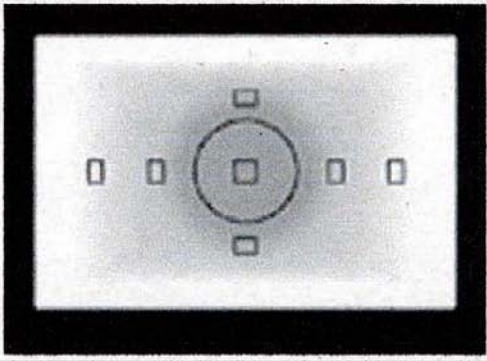
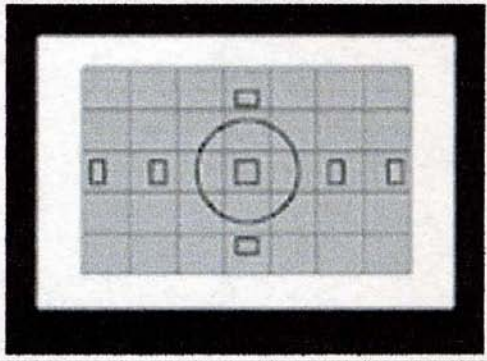
↔ mit weißem Hintergrund

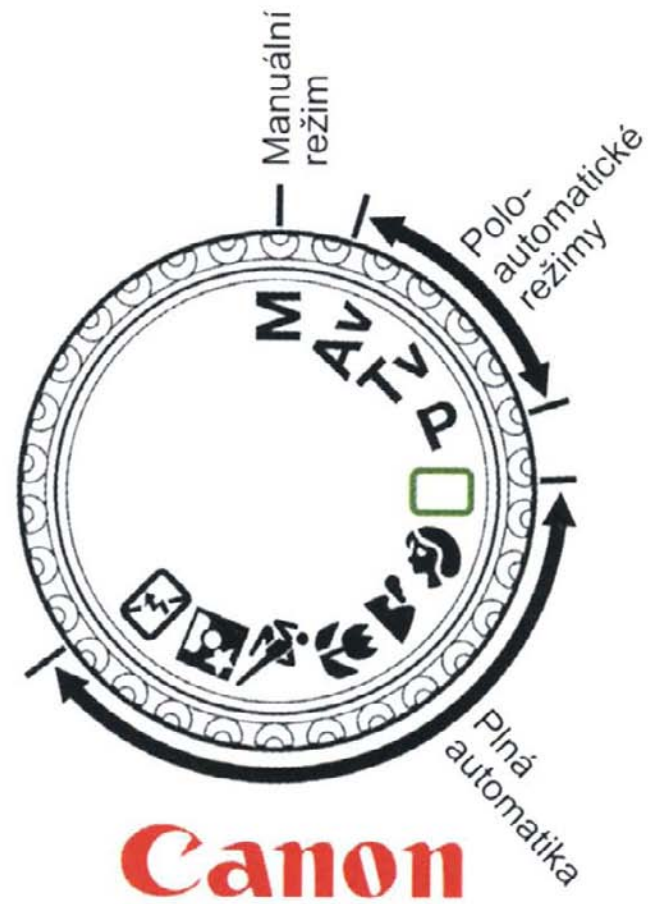
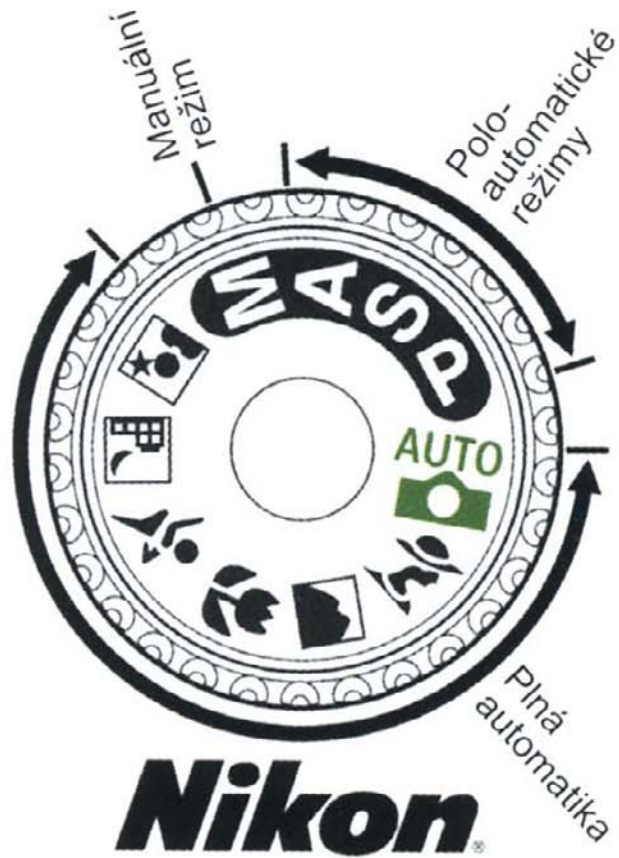


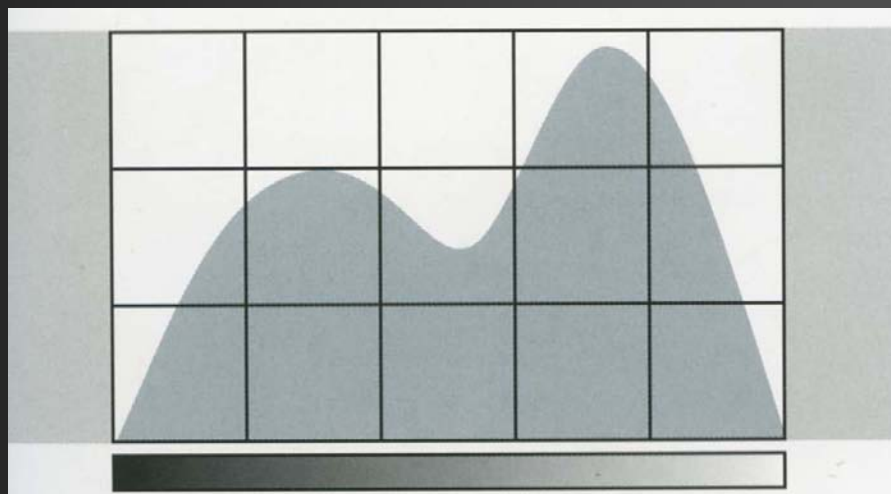
↔ mit schwarzem Hintergrund

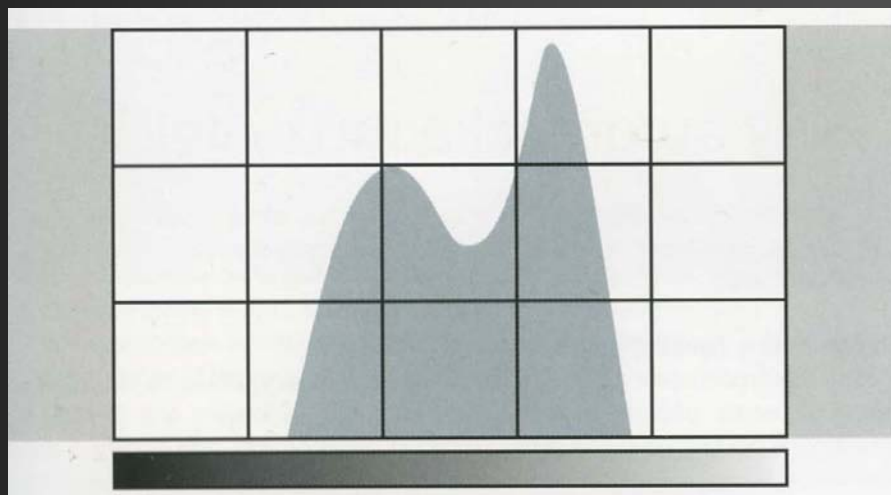


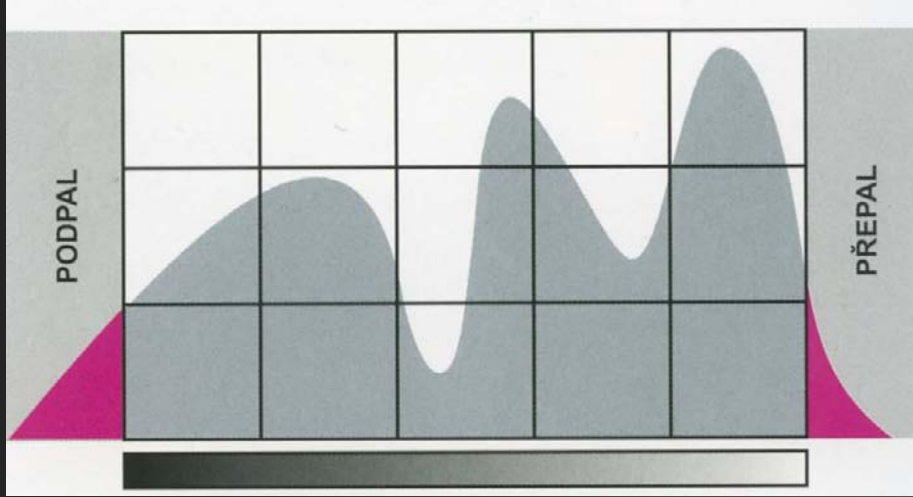


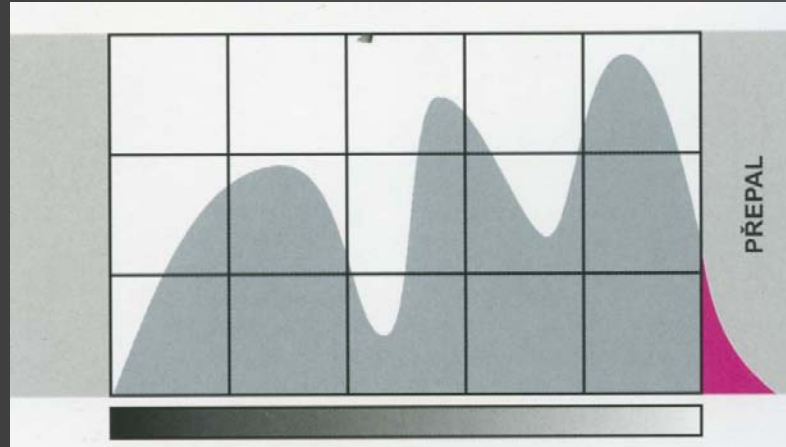
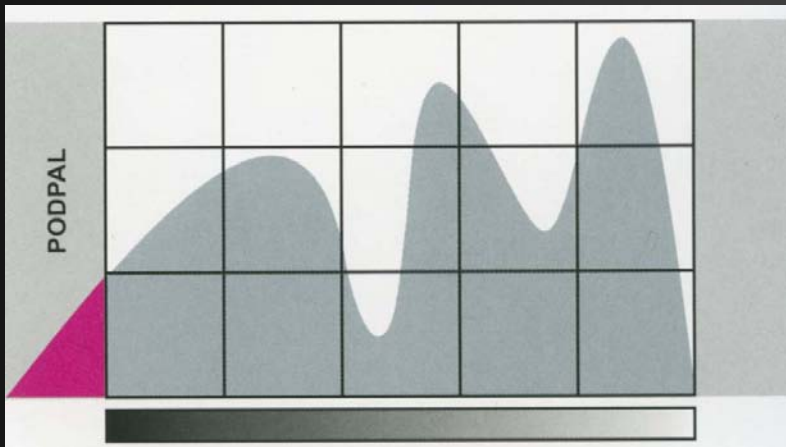
<p>Částečné (Partial)</p>	<p>zdůrazněným středem (Center-weighted Average)</p>	<p>Poměrové (Evaluative)</p>
<p>Bodové (Spot)</p>	<p>Integrální</p>	<p>Zónové, maticové (Multi-zone, Multi- segment, Matrix)</p>
		
		

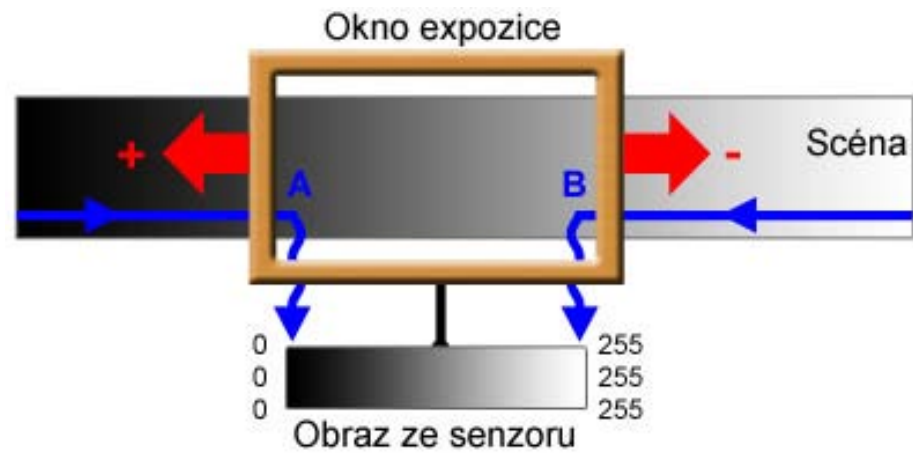


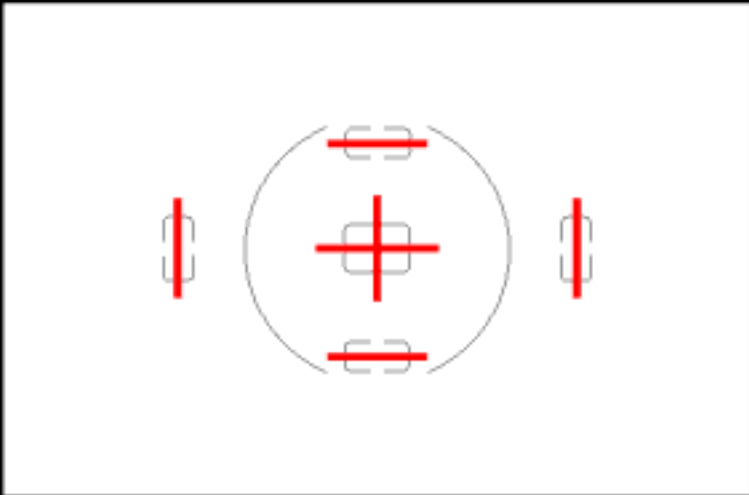












- | Citlivé na horizontální hrany
- Citlivé na vertikální hrany



MAJOS
DEL GLO
ET
IGNA

MAJOS
DEL GLO
ET
IGNA





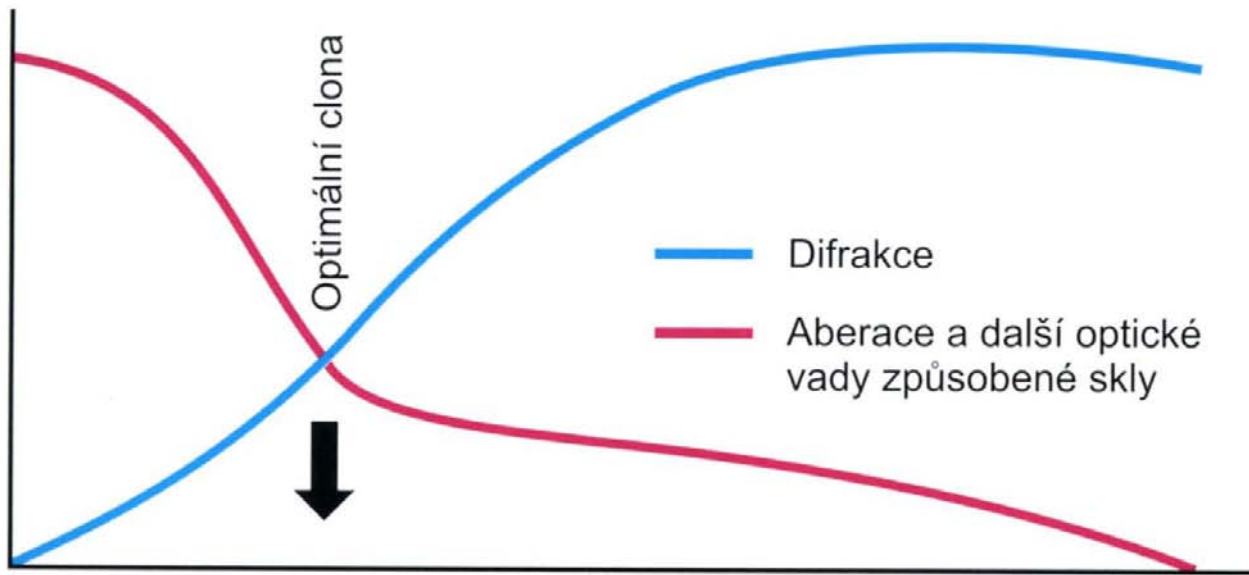


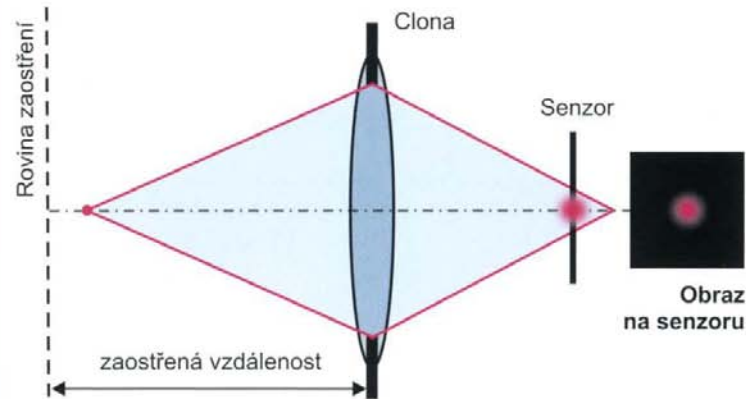
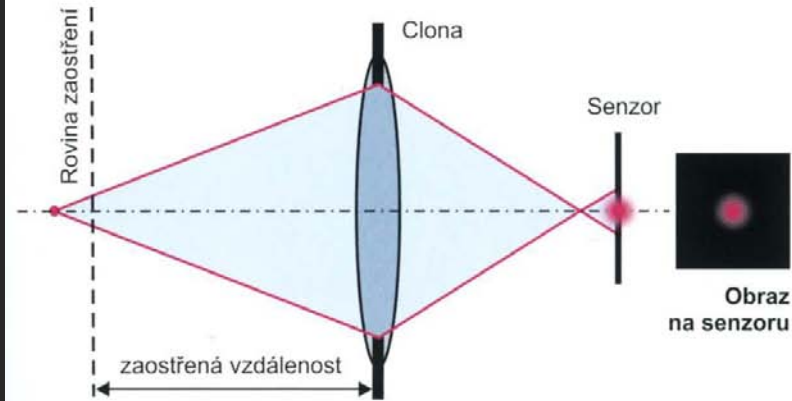
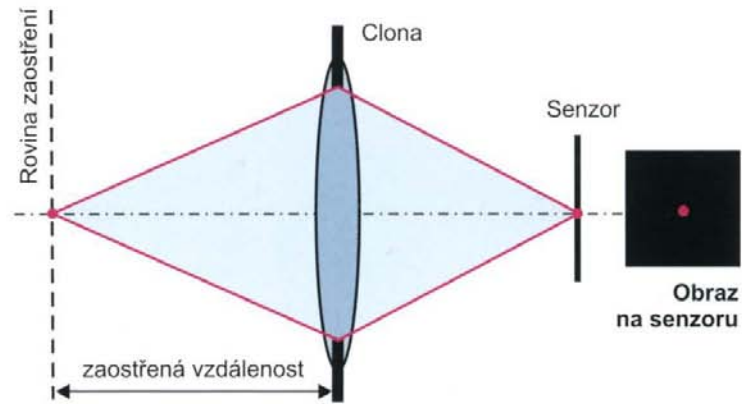
Nedostatky obrazu

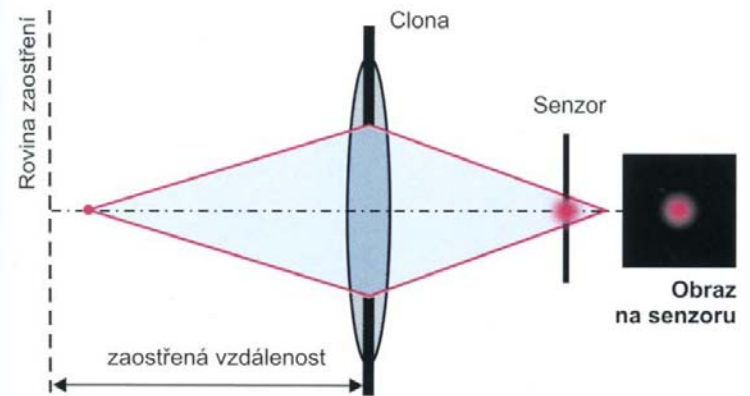
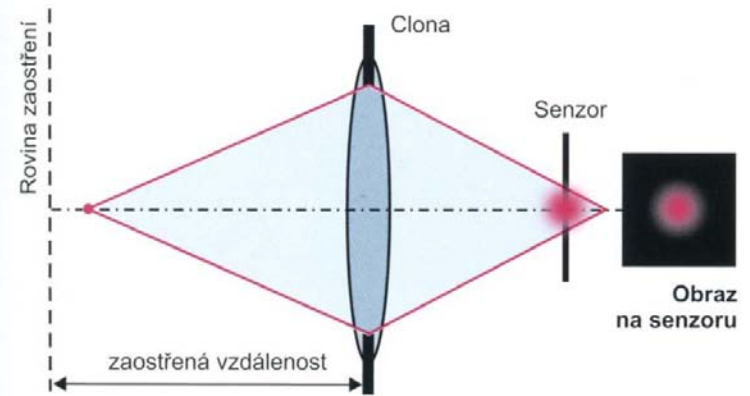
Optimální clona

— Difrakce

— Aberace a další optické vady způsobené skly









f2



f8



f16

1,5 m

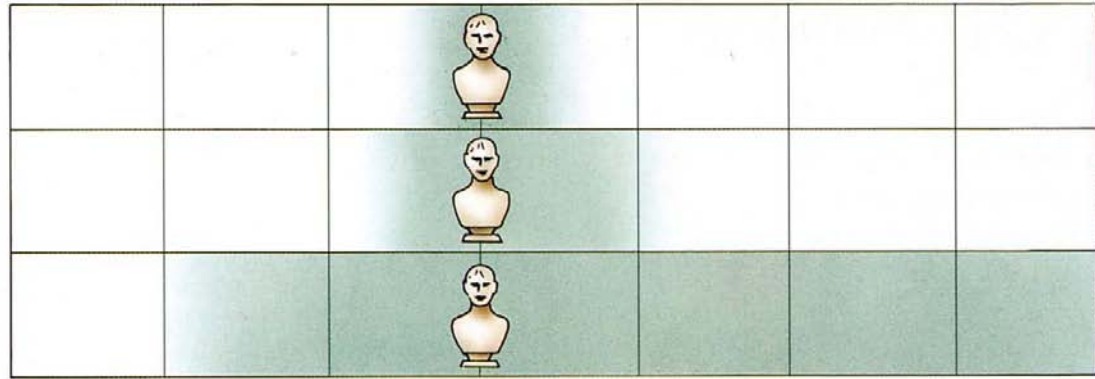
3 m

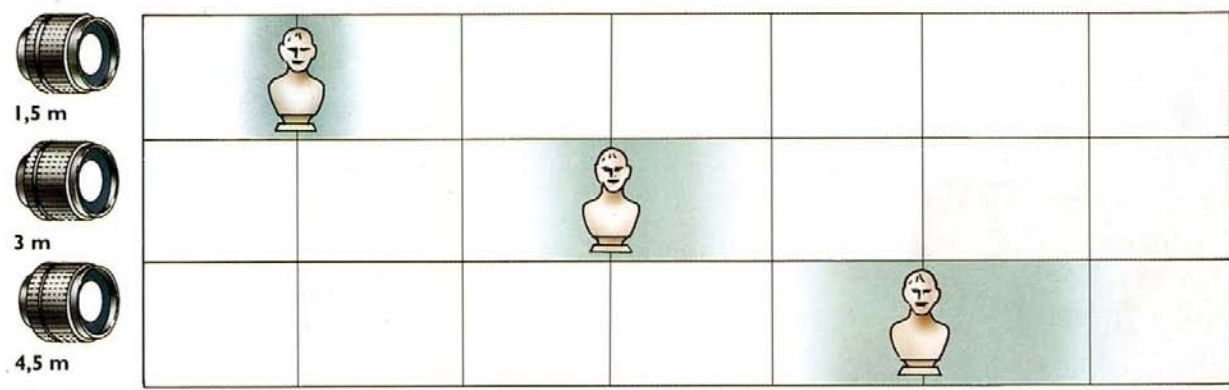
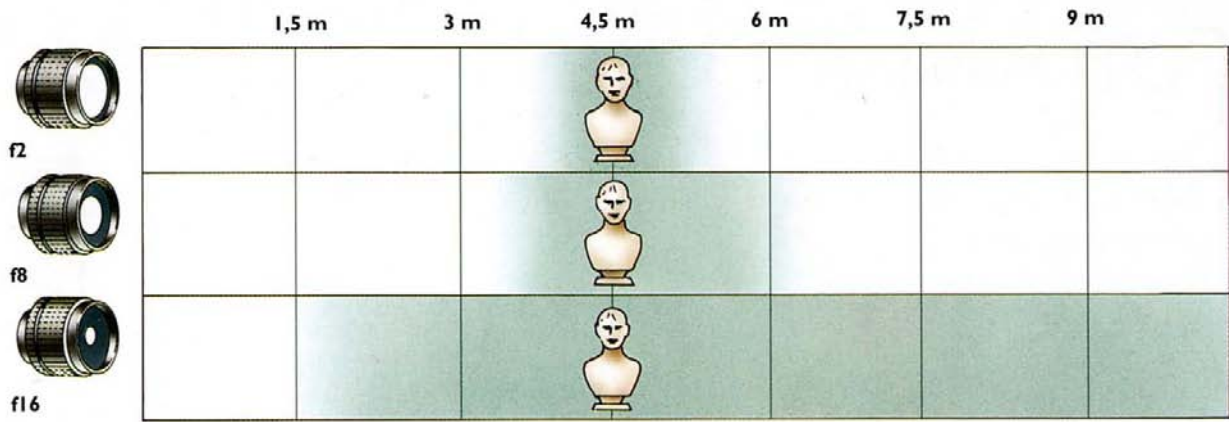
4,5 m

6 m

7,5 m

9 m







f2



f8



f16

1,5 m

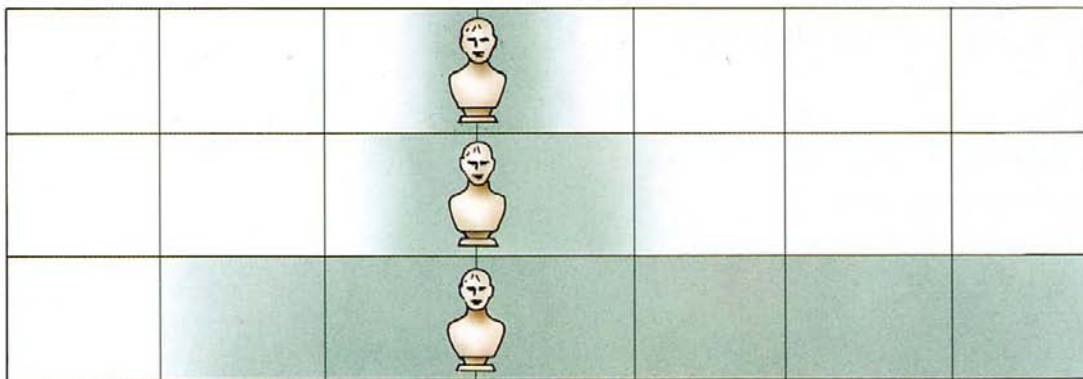
3 m

4,5 m

6 m

7,5 m

9 m



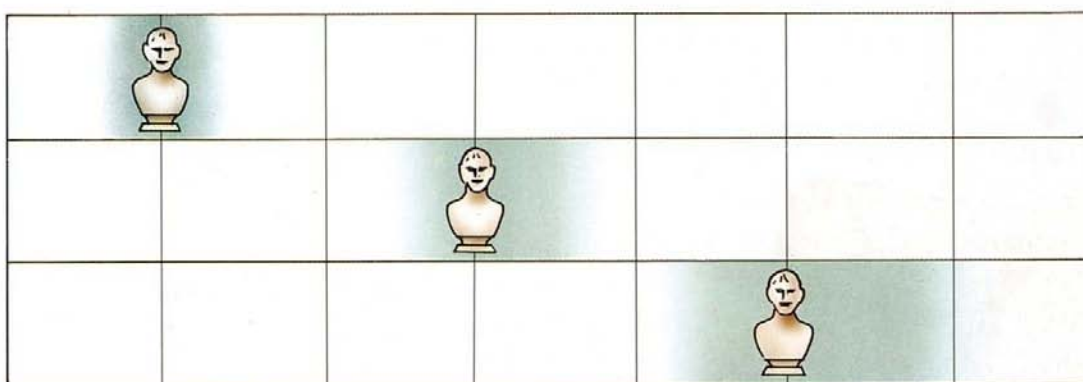
1,5 m



3 m



4,5 m



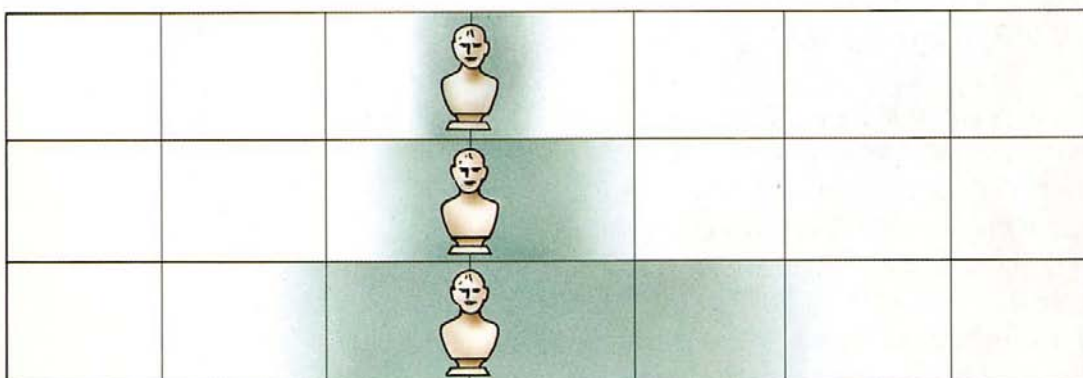
135mm

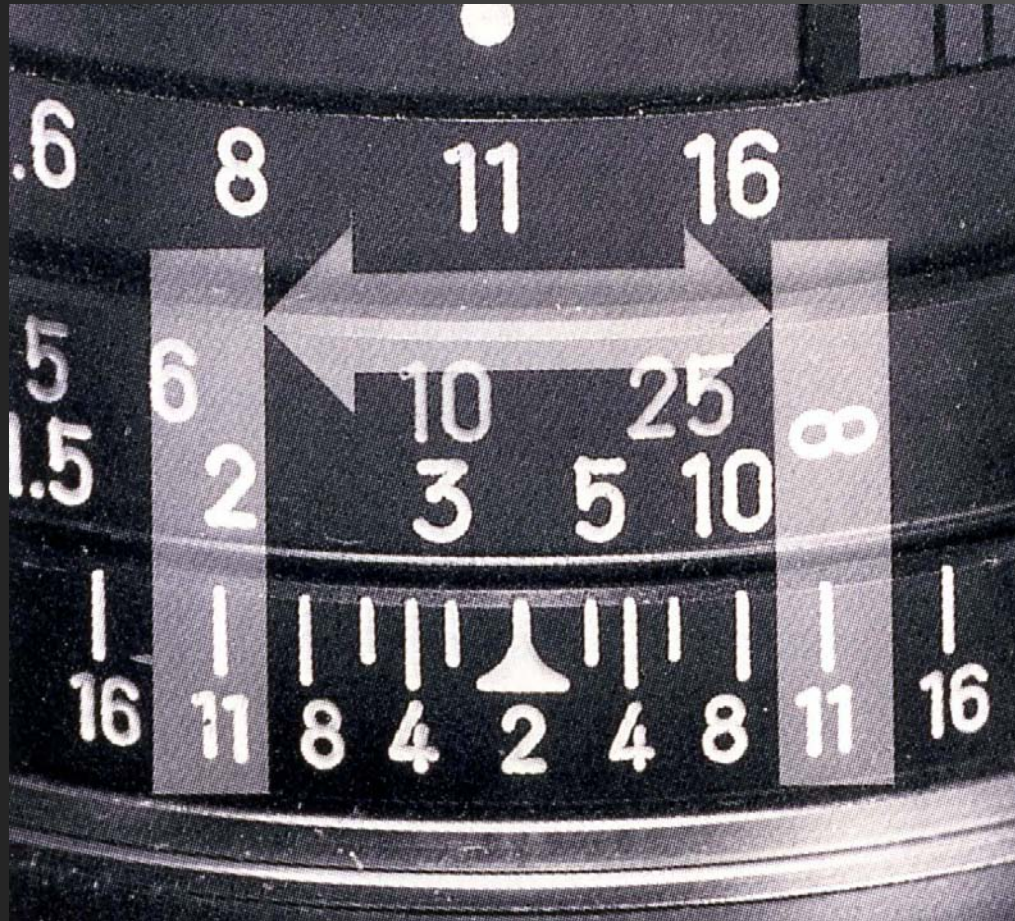


50mm



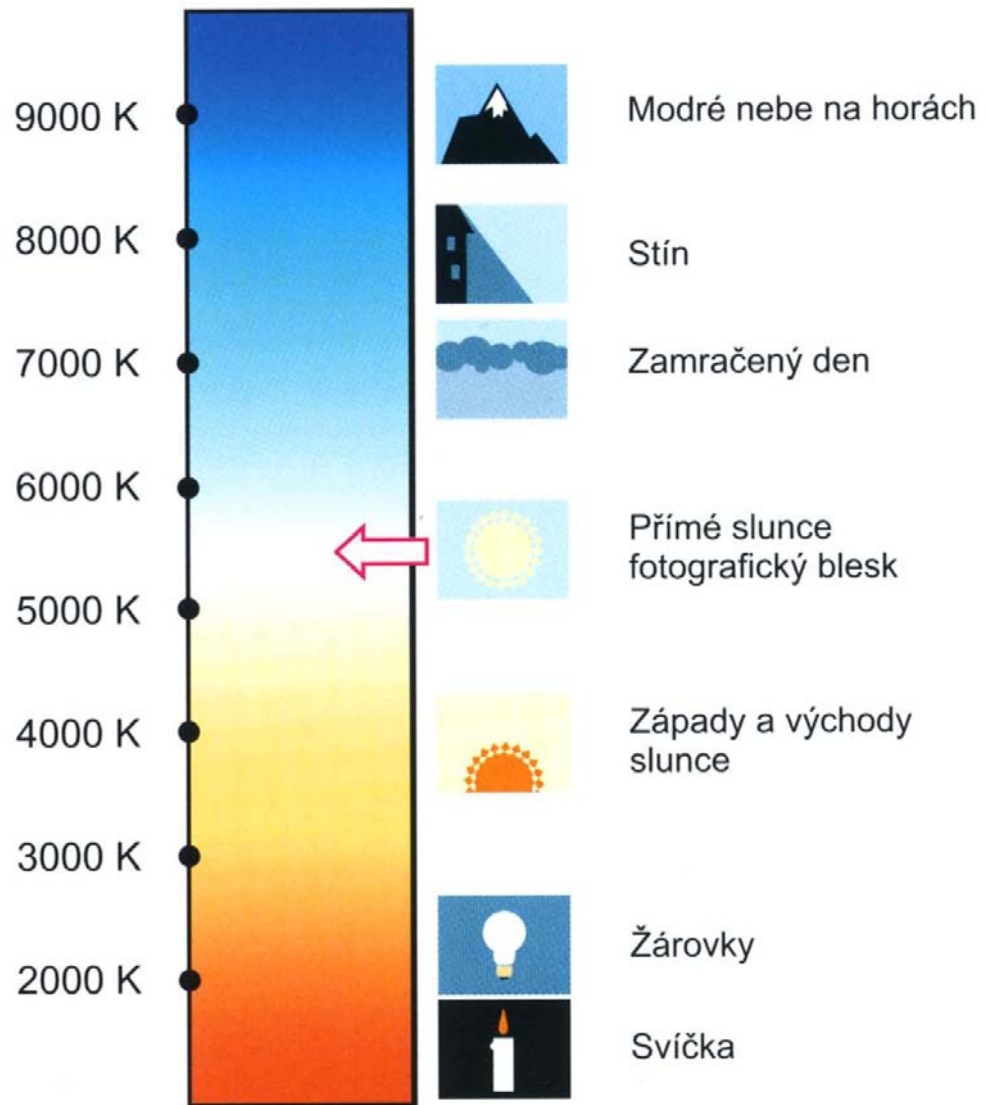
28mm

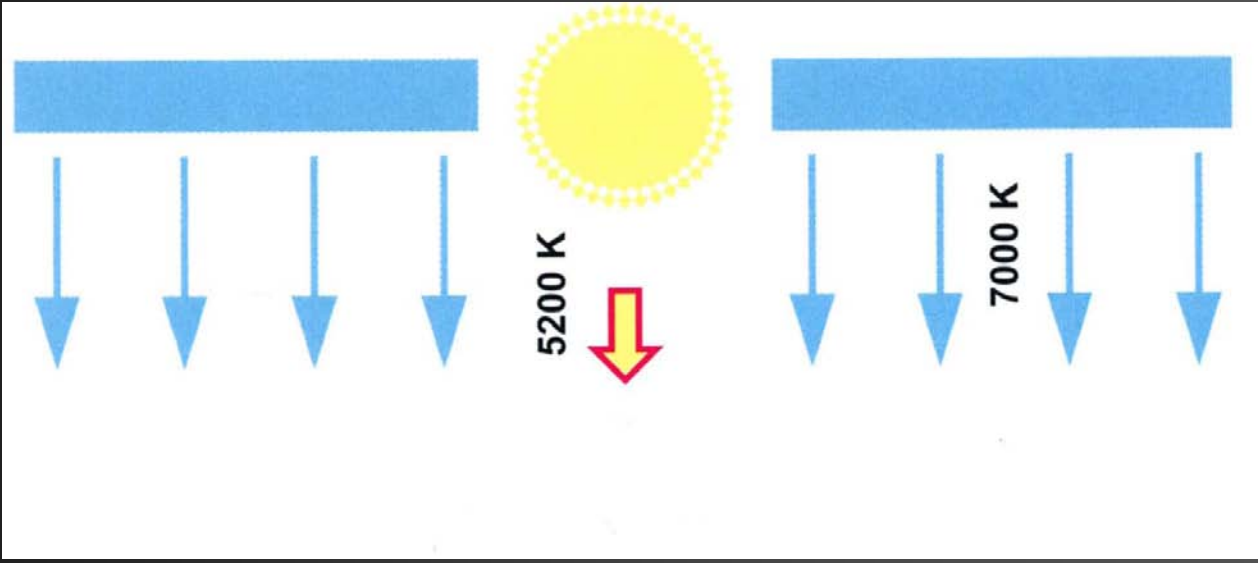


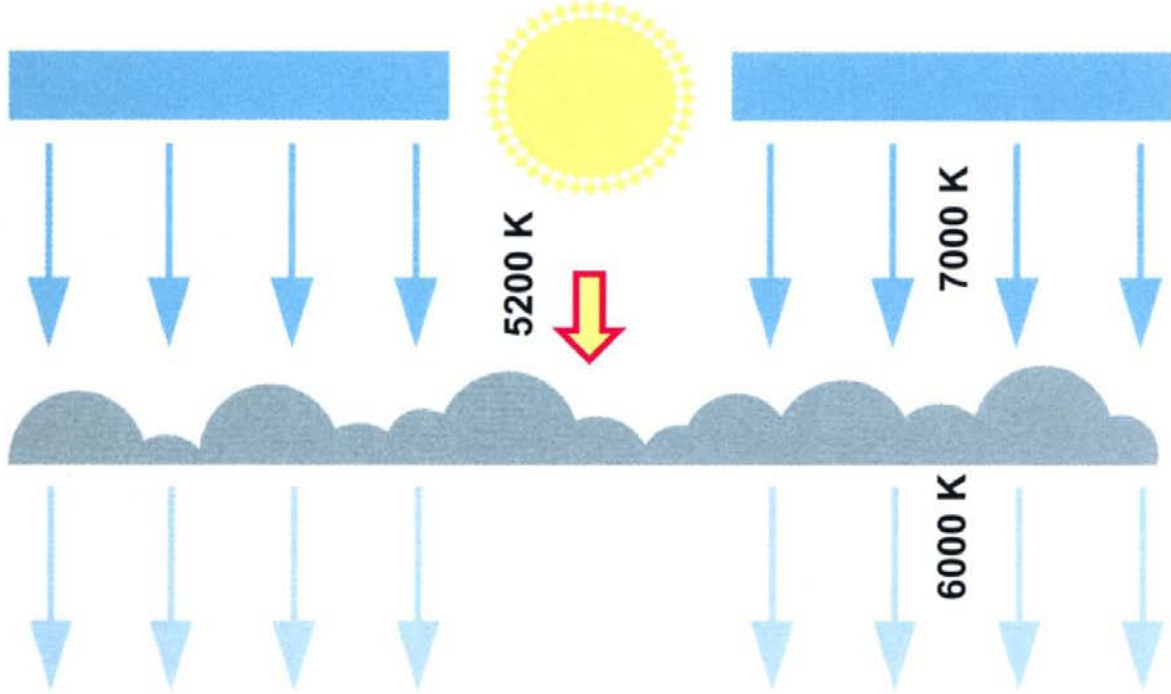


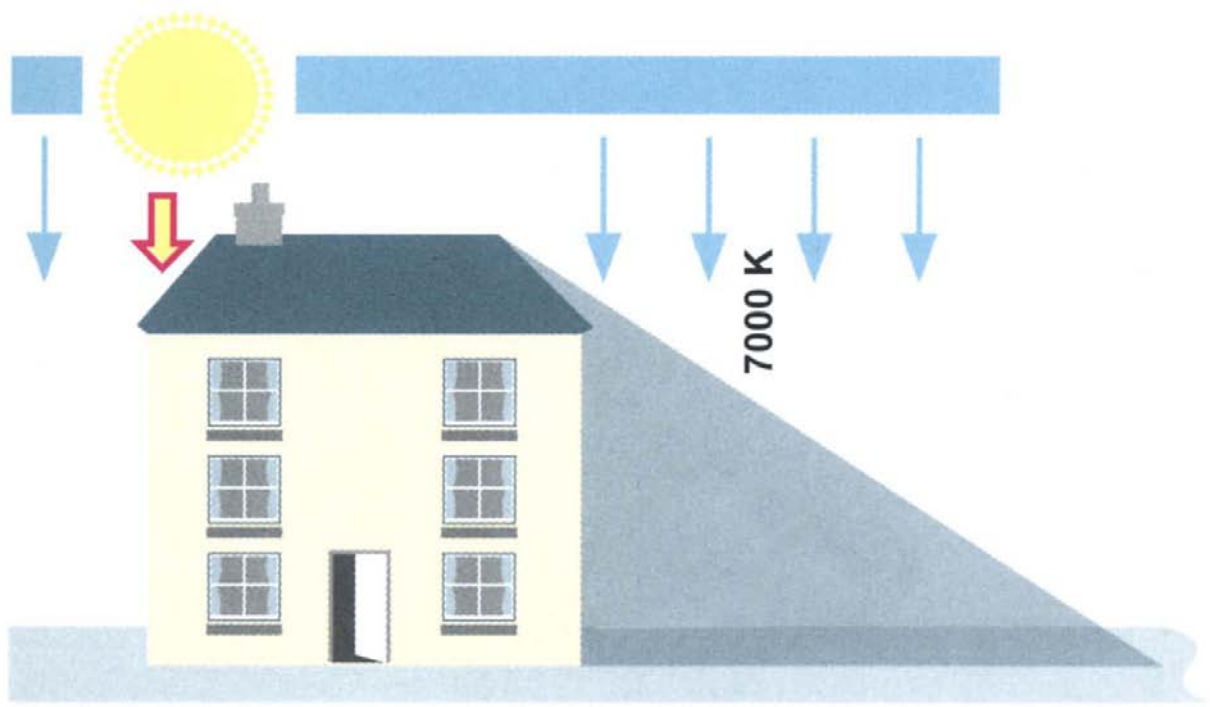
CoC=0,03mm (DSLR s velikostí senzoru stejnou, jako je film nebo filmová SLR)

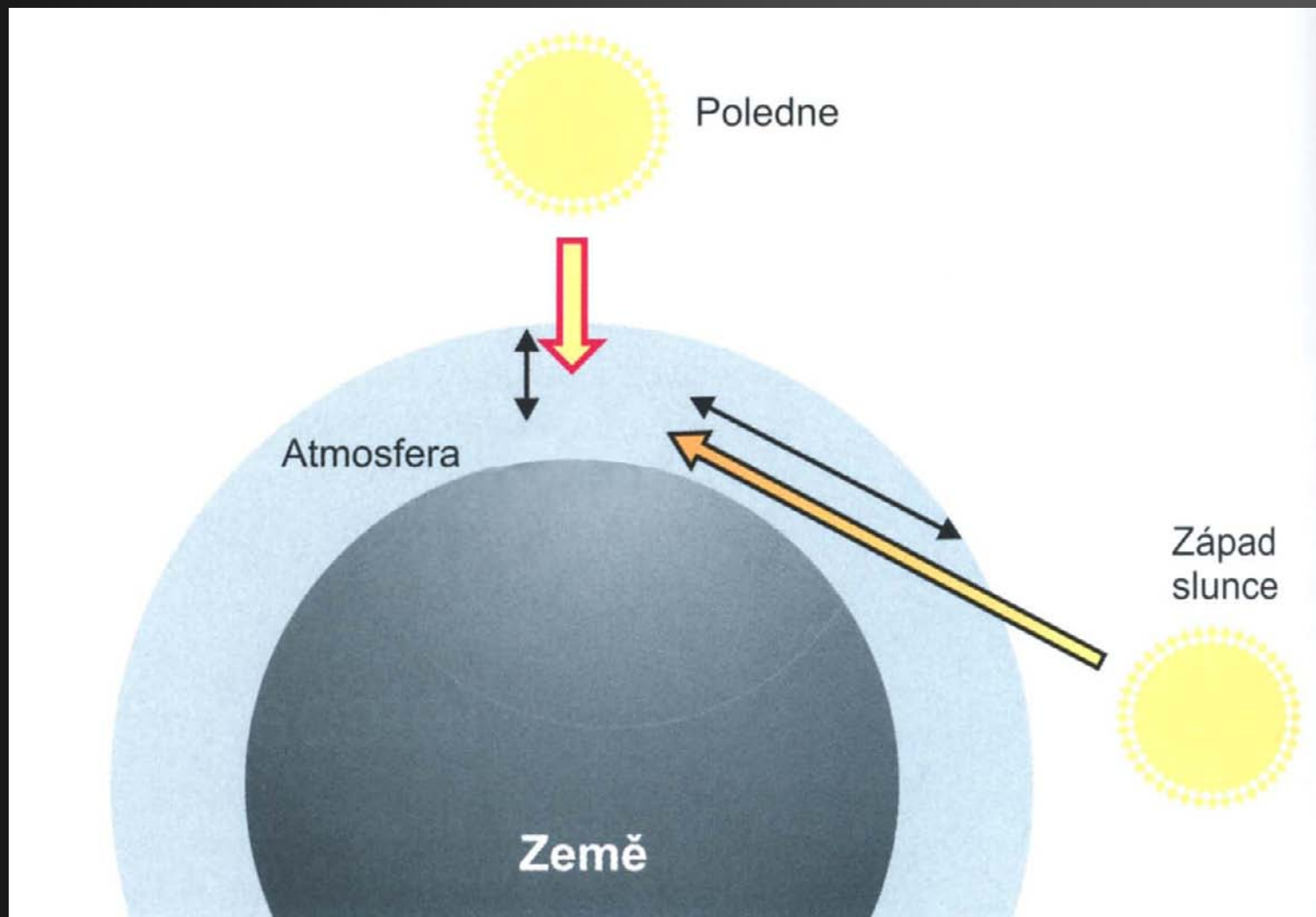
Clona	Vzdálenost [m]	15 mm		20 mm		28 mm		35 mm		50 mm		100 mm		200 mm		300 mm	
		Od	Do	Od	Do	Od	Do	Od	Do	Od	Do	Od	Do	Od	Do	Od	Do
f/2.8	0,5	0,42	0,61	0,45	0,56	0,47	0,53	0,48	0,52	0,49	0,51	0,50	0,50	0,50	0,50	0,50	0,50
	1	0,73	1,60	0,83	1,27	0,90	1,12	0,94	1,07	0,97	1,03	0,99	1,01	1,00	1,00	1,00	1,00
	2	1,15	7,89	1,41	3,45	1,65	2,55	1,76	2,32	1,87	2,14	1,97	2,03	1,99	2,01	2,00	2,00
	3	1,42	INF	1,84	8,11	2,27	4,42	2,49	3,78	2,73	3,34	2,93	3,08	2,98	3,02	2,99	3,01
	5	1,74	INF	2,44	INF	3,26	10,77	3,72	7,61	4,28	6,01	4,80	5,22	4,95	5,05	4,98	5,02
	8	2,01	INF	2,99	INF	4,31	56,00	5,17	17,72	6,31	10,94	7,50	8,58	7,87	8,14	7,94	8,06
	10	2,11	INF	3,23	INF	4,83	INF	5,93	31,82	7,49	15,06	9,23	10,92	9,79	10,21	9,91	10,09
	15	2,27	INF	3,61	INF	5,75	INF	7,39	INF	9,97	30,24	13,32	17,16	14,54	15,49	14,79	15,21
	20	2,36	INF	3,85	INF	6,36	INF	8,43	INF	11,96	60,98	17,12	24,04	19,19	20,88	19,63	20,38
	30	2,46	INF	4,11	INF	7,12	INF	9,81	INF	14,94	INF	23,96	40,11	28,22	32,02	29,18	30,86
	50	2,54	INF	4,35	INF	7,87	INF	11,29	INF	18,66	INF	35,21	86,21	45,25	55,87	47,77	52,45
f/4	0,5	0,39	0,68	0,43	0,59	0,46	0,54	0,48	0,53	0,49	0,51	0,50	0,50	0,50	0,50	0,50	0,50
	1	0,65	2,14	0,77	1,43	0,87	1,18	0,91	1,11	0,95	1,05	0,99	1,01	1,00	1,00	1,00	1,00
	2	0,97	INF	1,25	5,00	1,53	2,88	1,67	2,49	1,82	2,21	1,95	2,05	1,99	2,01	1,99	2,01
	3	1,15	INF	1,58	30,00	2,06	5,55	2,32	4,25	2,62	3,50	2,90	3,11	2,97	3,03	2,99	3,01
	5	1,36	INF	2,00	INF	2,83	21,30	3,36	9,80	4,03	6,58	4,72	5,32	4,93	5,08	4,97	5,03
	8	1,52	INF	2,35	INF	3,60	INF	4,49	36,98	5,78	12,99	7,30	8,85	7,81	8,20	7,92	8,09
	10	1,58	INF	2,50	INF	3,95	INF	5,05	490,00	6,76	19,23	8,93	11,36	9,71	10,31	9,87	10,14
	15	1,67	INF	2,73	INF	4,55	INF	6,07	INF	8,72	53,57	12,71	18,29	14,35	15,71	14,71	15,31
	20	1,71	INF	2,86	INF	4,92	INF	6,76	INF	10,20	500,00	16,13	26,32	18,87	21,28	19,48	20,55
	30	1,76	INF	3,00	INF	5,37	INF	7,62	INF	12,30	INF	22,06	46,88	27,52	32,97	28,85	31,25
	50	1,81	INF	3,13	INF	5,78	INF	8,48	INF	14,71	INF	31,25	125,00	43,48	58,82	46,88	53,57
f/5.6	0,5	0,36	0,80	0,41	0,63	0,45	0,56	0,47	0,54	0,48	0,52	0,50	0,50	0,50	0,50	0,50	0,50
	1	0,57	3,95	0,70	1,72	0,82	1,27	0,88	1,16	0,94	1,07	0,98	1,02	1,00	1,00	1,00	1,00
	2	0,80	INF	1,09	12,50	1,40	3,50	1,57	2,76	1,76	2,31	1,94	2,07	1,98	2,02	1,99	2,01
	3	0,93	INF	1,33	INF	1,83	8,40	2,13	5,10	2,50	3,76	2,86	3,16	2,96	3,04	2,98	3,02
	5	1,06	INF	1,61	INF	2,41	INF	2,97	15,91	3,74	7,53	4,61	5,46	4,90	5,11	4,95	5,05
	8	1,15	INF	1,83	INF	2,95	INF	3,81	INF	5,20	17,30	7,05	9,24	7,74	8,28	7,88	8,12
	10	1,18	INF	1,92	INF	3,18	INF	4,22	INF	5,98	30,49	8,56	12,02	9,60	10,44	9,82	10,19
	15	1,23	INF	2,05	INF	3,56	INF	4,91	INF	7,47	INF	11,98	20,05	14,11	16,01	14,59	15,43
	20	1,26	INF	2,13	INF	3,78	INF	5,34	INF	8,53	INF	14,97	30,12	18,45	21,83	19,28	20,78
	30	1,28	INF	2,21	INF	4,04	INF	5,87	INF	9,95	INF	19,95	60,48	26,64	34,33	28,41	31,78
	50	1,30	INF	2,27	INF	4,27	INF	6,36	INF	11,47	INF	27,17	312,50	41,32	63,29	45,73	55,15
f/8	0,5	0,33	1,07	0,38	0,71	0,43	0,59	0,46	0,55	0,48	0,53	0,49	0,51	0,50	0,50	0,50	0,50
	1	0,48	INF	0,63	2,50	0,77	1,44	0,84	1,24	0,91	1,11	0,98	1,02	0,99	1,01	1,00	1,00
	2	0,64	INF	0,91	INF	1,24	5,16	1,44	3,29	1,68	2,48	1,91	2,10	1,98	2,02	1,99	2,01
	3	0,71	INF	1,07	INF	1,56	36,75	1,89	7,28	2,33	4,21	2,80	3,23	2,95	3,06	2,98	3,02
	5	0,79	INF	1,25	INF	1,98	INF	2,53	245,00	3,38	9,62	4,46	5,68	4,85	5,15	4,93	5,07
	8	0,84	INF	1,38	INF	2,32	INF	3,12	INF	4,52	34,48	6,71	9,90	7,63	8,40	7,83	8,17
	10	0,86	INF	1,43	INF	2,46	INF	3,38	INF	5,10	250,00	8,06	13,16	9,43	10,64	9,74	10,27
	15	0,88	INF	1,50	INF	2,68	INF	3,81	INF	6,15	INF	11,03	23,44	13,76	16,48	14,42	15,63
	20	0,90	INF	1,54	INF	2,81	INF	4,07	INF	6,85	INF	13,51	38,46	17,86	22,73	18,99	21,13
	30	0,91	INF	1,58	INF	2,95	INF	4,36	INF	7,73	INF	17,44	107,14	25,42	36,59	27,78	32,61
	50	0,92	INF	1,61	INF	3,07	INF	4,63	INF	8,62	INF	22,73	INF	38,46	71,43	44,12	57,69
f/11	0,5	0,29	1,88	0,35	0,85	0,41	0,63	0,44	0,58	0,47	0,54	0,49	0,51	0,50	0,50	0,50	0,50
	1	0,41	INF	0,55	5,71	0,70	1,73	0,79	1,37	0,88	1,15	0,97	1,03	0,99	1,01	1,00	1,00
	2	0,51	INF	0,75	INF	1,09	12,65	1,30	4,34	1,58	2,72	1,88	2,14	1,97	2,03	1,99	2,01
	3	0,56	INF	0,86	INF	1,33	INF	1,66	15,64	2,15	4,97	2,73	3,33	2,93	3,08	2,97	3,03
	5	0,60	INF	0,98	INF	1,61	INF	2,13	INF	3,01	14,71	4,29	5,99	4,80	5,22	4,91	5,09
	8	0,63	INF	1,05	INF	1,83	INF	2,54	INF	3,89	INF	6,33	10,87	7,50	8,57	7,77	8,24
	10	0,64	INF	1,08	INF	1,92	INF	2,71	INF	4,31	INF	7,52	14,93	9,24	10,90	9,65	10,38
	15	0,65	INF	1,12	INF	2,05	INF	2,98	INF	5,03	INF	10,03	29,70	13,35	17,12	14,22	15,87
	20	0,66	INF	1,14	INF	2,12	INF	3,13	INF	5,49	INF	12,05	58,82	17,17	23,95	18,63	21,58
	30	0,67	INF	1,17	INF	2,20	INF	3,30	INF	6,05	INF	15,08	3000,00	24,05	39,87	27,03	33,71
	50	0,67	INF	1,18	INF	2,27	INF	3,46	INF	6,58	INF	18,87	INF	35,40	85,11	42,25	61,22
f/16	0,5	0,24	INF	0,31	1,25	0,38	0,72	0,42	0,62	0,46	0,55	0,49	0,51	0,50	0,50	0,50	0,50
	1	0,32	INF	0,45	INF	0,62	2,58	0,72	1,64	0,84	1,24	0,95	1,01	0,99	1,01	0,99	1,01
	2	0,38	INF	0,59	INF	0,90	INF	1,12	9,25	1,45	3,25	1,82	2,21	1,95	2,05	1,98	2,02
	3	0,41	INF	0,65	INF	1,06	INF	1,38	INF	1,90	7,08	2,62	3,50	2,90	3,11	2,95	3,05
	5	0,43	INF	0,71	INF	1,23	INF	1,69	INF	2,55	125,00	4,03	6,58	4,72	5,32	4,87	5,14

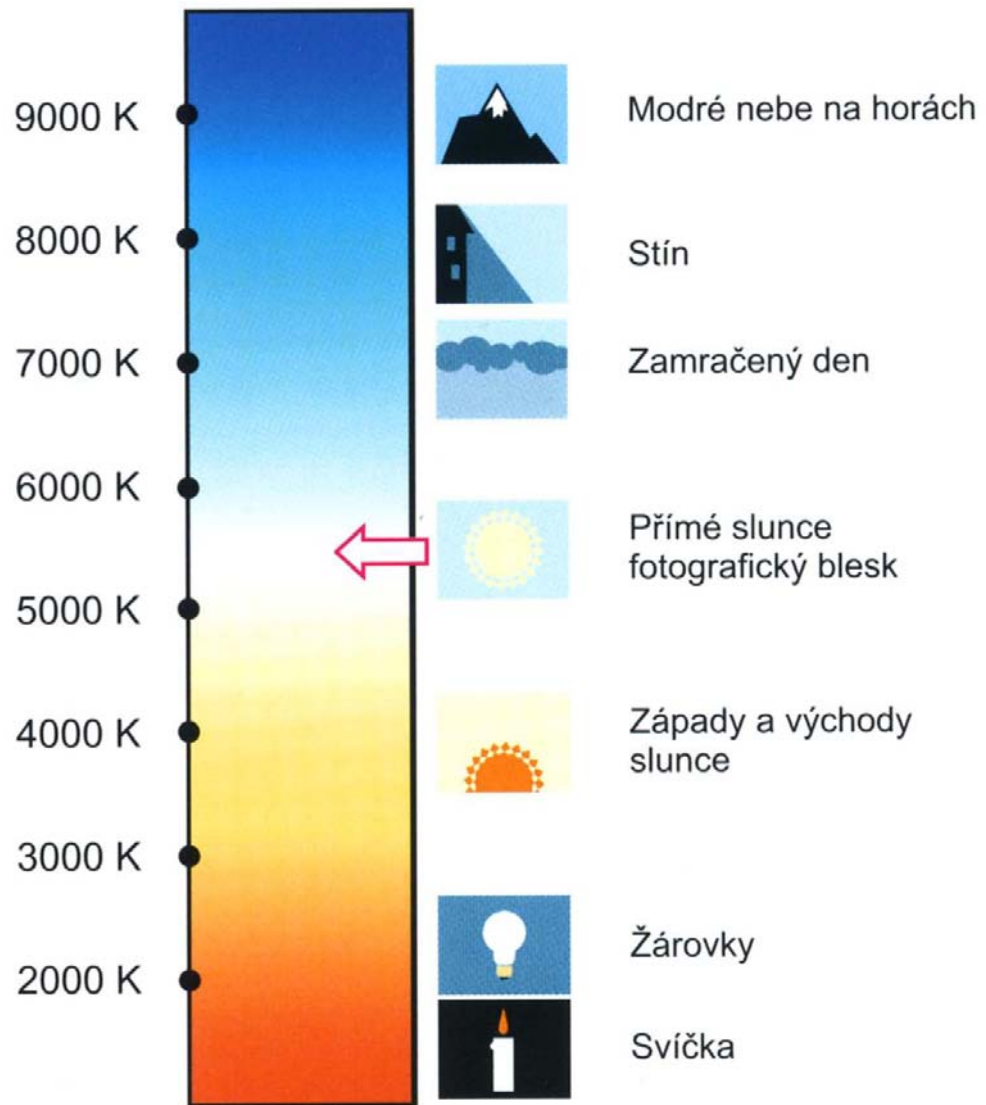













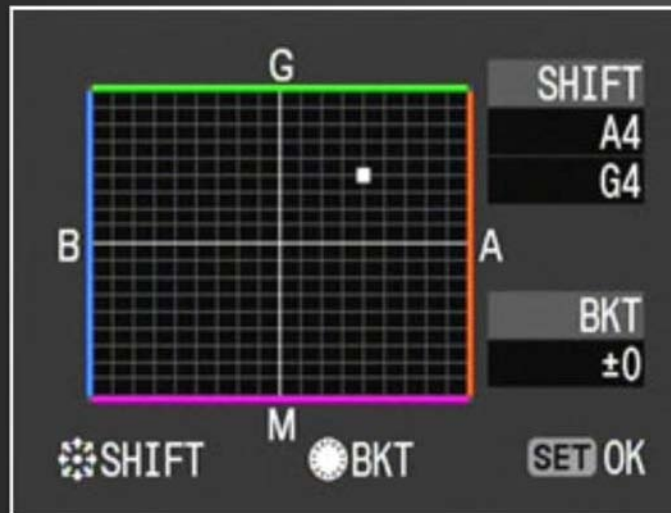













Ikona	Popis	Teplota v K
	Automatické vyvážení bílé	3000-7000
	Tungsten (halogenová žárovka)	3200
	Fluorescent (zářivka)	4000
	Sunny and daylight (slunné dny venku)	5200
	Cloudy and hazy days (zamračené a zamlžené dny)	6000
	Flash (pro blesk)	6000
	Shade (stinná místa venku)	7000
	Custom (ukáž mi bílou, já se na ní vyvážím)	2000-10000
	Kelvin (nastavení na K v kroku po 100 K)	2800-10000






Picture Style     

Standard	3, 0, 0, 0
Portrait	2, 0, 0, 0
Landscape	4, 0, 0, 0
Neutral	0, 0, 0, 0
Faithful	0, 0, 0, 0

JUMP Detail set. **SET** OK

Detail set. Standard

 Sharpness	
 Contrast	
 Saturation	
 Color tone	

Default set. **MENU** 