

Filter	Blue filters			Amber filters			
	Exposure increase	Conversion	Mired	Filter	Exposure increase	Conversion	Mired
80A	2	3200K to 5500K	-131	81	1/3	3300K to 3200K	+9
80B	1 1/3	3400K to 5500K	-112	81A	1/3	3400K to 3200K	+18
80C	1	3800K to 5500K	-81	81B	1/3	3500K to 3200K	+27
80D	2/3	4200K to 5500K	-56	81C	1/3	3600K to 3200K	+35
82C	2/3	2800K to 3200K	-45	81D	1/3	3700K to 3200K	+42
82B	2/3	2900K to 3200K	-32	81EF	1/3	3850K to 3200K	+53
82A	1/3	3000K to 3200K	-21	85C	2/3	5500K to 3800K	+81
82	1/3	3100K to 3200K	-10	85	2/3	5500K to 3400K	+112
				85B	2/3	5500K to 3200K	+131







As you can see, these filters are designed with daylight (5500K) and type B tungsten balanced films in mind. However, they are

A very useful concept is the *mired* shift. Mathematically, this is defined as

$$1000 * (1000/T2 - 1000/T1)$$

Color Correcting Filters

Color correcting filters typically come in the primary colors and their anti-colors as shown below, and in varying strengths from perhaps 2.5% absorption to 50%.

Color	Name	Effect
	Cyan	Absorbs Red
	Yellow	Absorbs Blue
	Magenta	Absorbs Green
	Red	Absorbs Blue and Green
	Green	Absorbs Red and Blue
	Blue	Absorbs Red and Green

The filters are usually labeled like $CCmX$ where m is the peak absorption and X is the first letter of the color. So $CC10C$ is a pale cyan filter while $CC50B$ is dark blue.

As we have discussed for photography we only need to control the amount of green once the color temperature has been adjusted. This means that as a photographer you only need to carry a set of green ($CC--G$) and magenta ($CC--M$) filters in addition to your color temperature filters. This is simpler than having to carry six sets.

This does not imply that the other color correcting filters have no use; indeed they are often employed in the printing of images. However that is not our main focus here so we'll leave that for another article.