

## Exposure Criss-Cross Chart for Zone VI Enlarger

Type II Zone VI Enlarger with Zone VI Compensating Timer – 2 minutes<sup>††</sup> in Zone VI Developer 1:7  
 Exposure Multiplier based on: **10 sec**

Soft Setting (green light)	Hard Setting (blue light)	Ilford Multigrade IV		Ilford RC Cooltone		Ilford RC Warmtone		Kodak Polymax II RC		Zone VI Brilliant FB <sup>††</sup>		Seagull Select VC FB <sup>††</sup>	
		Grade <sup>†</sup>	Exposure Multiplier	Perceived Grade	Exposure Multiplier	Perceived Grade*	Exposure Multiplier	Perceived Grade	Exposure Multiplier	Perceived Grade	Exposure Multiplier	Perceived Grade	Exposure Multiplier
MAX	OFF	0-0+	3.40	0-0+****	3.00	0-0+	6.00	0-0	3.20	0-0+*****	5.30	00-+***	5.10
MAX	MIN	0-0	2.40	1	1.15	0-0	5.50	0	2.20	0-0	4.30	0-0+*****	4.60
H	A-1/2	0	2.20	2	1.05	0	5.00	1	2.00	0	3.80	0-0+	4.00
G-1/2	B-1/2	1/2	2.10	2-1/2	1.03	1/2	4.50	1-1/2	1.90	1/2	3.65	0-0+	3.65
F-1/2	C	1	2.00	3	1.00	1	4.00	2	1.80	1	3.50	0-0	3.30
F-1/2	D	1-1/2	1.90	3-1/4	0.98	1-1/2	3.70	2-1/2	1.80	1-1/2	3.35	0	3.10
E	D-1/2	2	1.80	3-1/2	0.96	2	3.40	3	1.80	2+	3.20	0-1/2	2.90
D	E	2-1/2	1.65	3-3/4	0.93	2-1/2	3.25	3-1/2	1.70	2-1/2	3.05	1	2.70
C 1/2	F	3	1.50	4	0.90	3	3.10	4	1.60	3	2.90	1-1/2	2.50
B-1/2	F-1/2	3-1/2	1.35	4-1/2	0.80	3-1/2	2.75	4-1/2	1.40	3-1/2	2.70	2	2.40
B-1/2	G-1/2	4	1.20	5	0.70	4	2.40	5	1.20	4	2.50	2-1/2	2.20
A	H	4-1/2	1.10	5-1/2	0.60	4-1/2	2.05	5-1/2	1.00	4-1/3	2.25	3	1.70
MIN	MAX	5	1.00	5+	0.50	5	1.70	5+**	0.80	4-2/3	2.00	3-1/2	1.90
OFF	MAX	5+	0.80	5+*****	0.30	5+	1.20	5+**	0.60	5**	1.80	4	1.30

† Contrast Grades for Ilford Multigrade are based on the original Zone VI chart from Calumet.

†† Fiber Based Papers were developed for 3.5–4 minutes in Zone VI Developer 1:7. The longer development time was required so the paper base could become saturated with the developer. Usually with these papers the image starts appearing 1.5–2 minutes and then the additional 2 minutes brings the blacks in line.

\* Ilford RC Warmtone produced prints that were identical to Ilford Multigrade IV in contrast. However, toning made them very warm/brown color.

\*\* Not as contrast as Ilford Multigrade IV

\*\*\* Much softer/grayer than Ilford Multigrade IV

\*\*\*\* Much more contrasty than Ilford Multigrade IV

\*\*\*\*\*Not as soft/gray as Ilford Multigrade IV

**Process Notes:** Everything was from the same negative at the same f-stop setting. All times were selected so prints would be developed for 2 minutes<sup>††</sup> with slow gentle constant agitation (rocking the tray) and exposure would result in prints having similar tonal characteristics - shadows not blocking up and whites (highlights) not burning out. Every 20 prints was a fresh batch of Zone VI developer (1:7). All prints were stopped in Kodak Indicator Stop Bath for 30 seconds and fixed in Zone VI fixer for 2-3 minutes. All were washed, toned for 20 minutes in Kodak Rapid Selenium 1:40 and then wash again. Ilford Multigrade IV was the standard used to judge contrast against. Its contrast numbers are based on the original chart from Calumet

**How to Use:** Say you have a good test print for exposure and contrast on Ilford Multigrade IV for 15 seconds with Soft Light at D and Hard Light E but you want to make the final print on Ilford RC Cooltone. Take your exposure time and divide it by 1.65 and then multiply it 1.03 (which is the exposure multiplier for Grade 2-1/2 for Cooltone). This gives you a new exposure reading of 9.5 seconds and use a Soft Light setting of H and Hard Light setting of A-1/2 which should give you compliment Grade 2-1/2 on Cooltone. This should give you a similar exposed and contrast print on Ilford RC Cooltone.