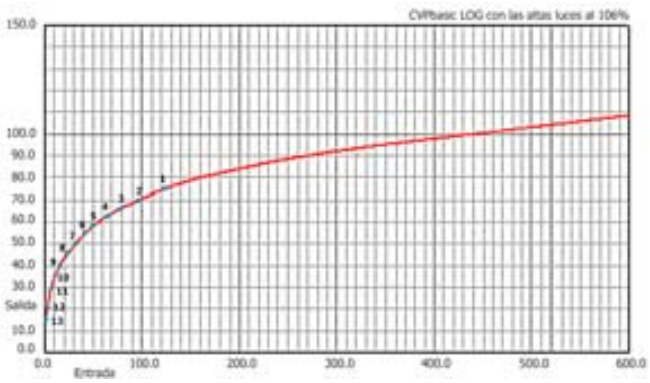
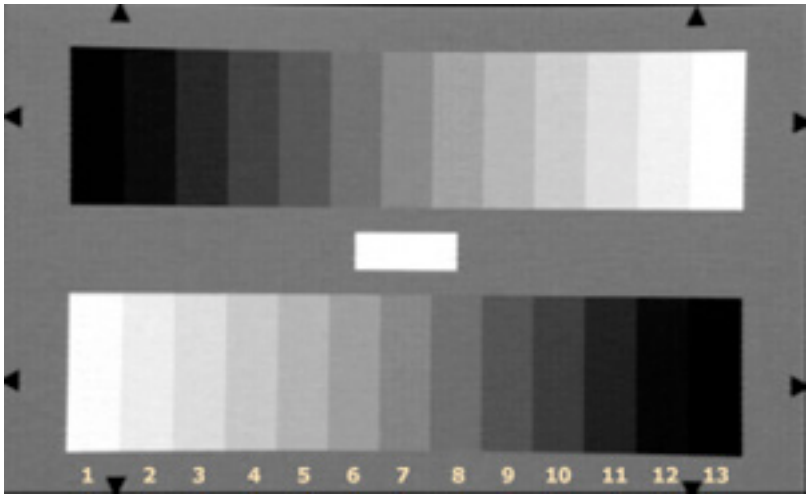
Gamma curves for HD Sony F900/3 camara. (II)





In this article we test the five curves developped by Digital Praxis for Sony's F-900 camera, based on Cineon's logarithmic system using CVOFile editor.

The main tools in the study of the curves were the grey card as well as the still life as can be seen in the images.



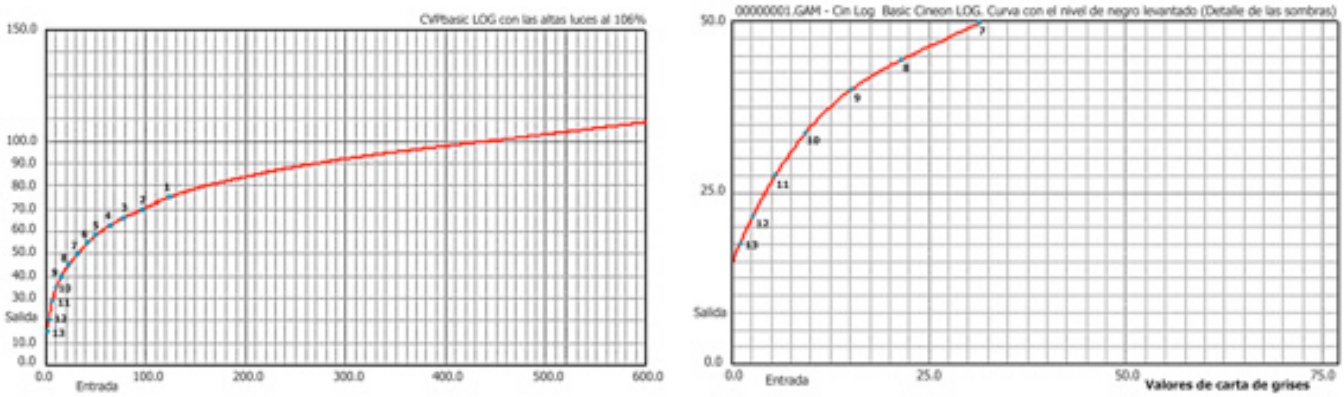
carta gris
En esta carta gris tenemos marcado el número de gris para luego ver



bodegón
En la imagen se pueden ver los valores medidos de luz reflejada en f Stops respecto del gris medio 18%

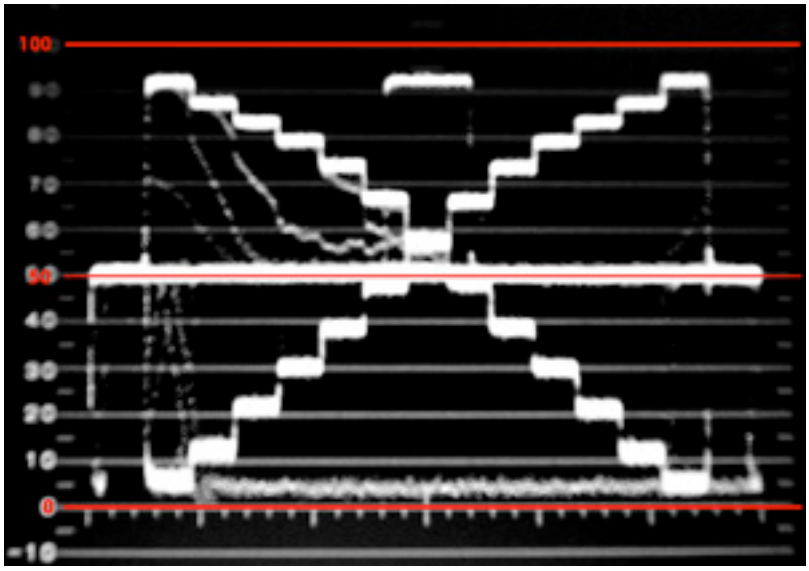
Curva 1 Cin Log

This curve is a transcript of the standard Cineon curve, with some white clipping occuring given that the curve cuts at 106%. It has a black point adjusted to the standard Cineon profile, a profile that requires some degree of correction for colours and blacks in post-production as well as some correction in the mid-tones.

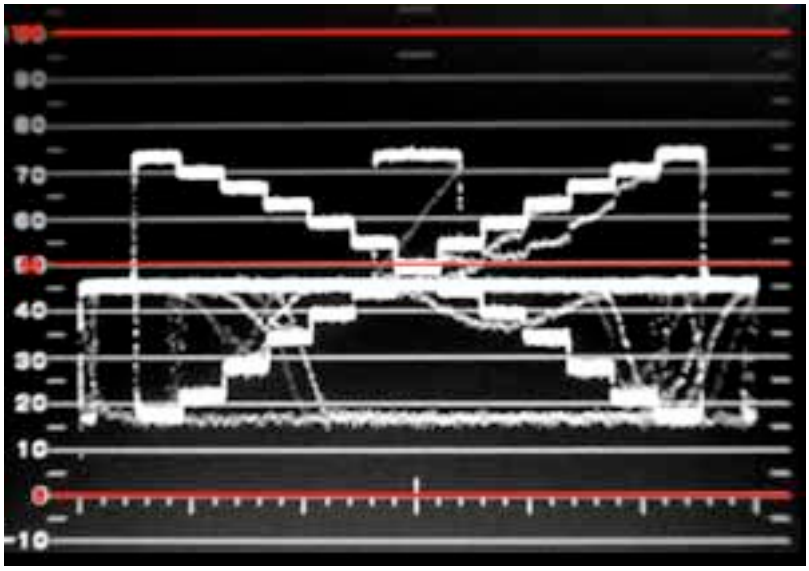


En la curva grafica de la izquierda se pueden ver los valores de grises y en la derecha un detalle de la zona de sombras con los valores indicados

In the monitor view of the grey card we can see how the gamma curve raises the blacks above the usual value as well as increasing the range in high lights. In general the image is softer than usual. We can see how the camera's sensibility hardly changes with this curve. The curve's latitude provides close to 9 f-stops, with a contrast ratio of 500:1. This is particularly notorious in high lights, achieving over three more f stops above average density, which causes it to lose detail very softly.



Escala de grises Estándar 4

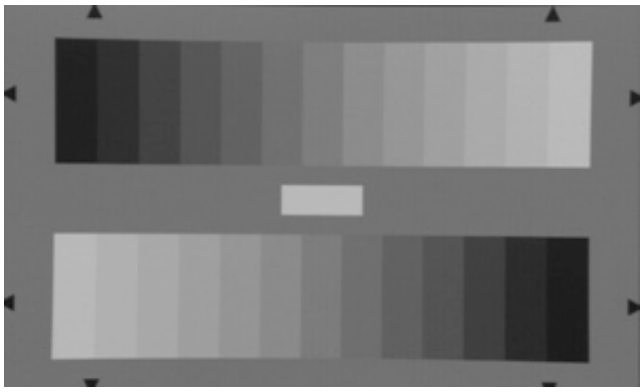


Curva Cin Log

We can see in the image from the grey card how the blacks get darker and we attain more detail in the whites.



Escala de grises Estándar 4



Curva 1 Cin Log

In the still life image we can see how in fact the washed out image contains details in the shadow and allows for more intense whites.

After colour grading we can see how the curve maintains the detail in high-lights and shadows. Compare the level of detail of the lemons in this curve to the one of the Standard curve.



Estándar 4 T 5.6 1/3 Gris18 45%



Curva Cin Log T 5.6 1/3 Gris18 45%

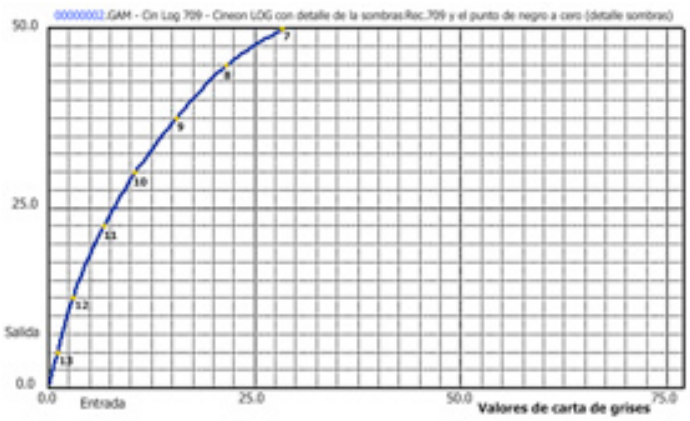


Fotograma original de cámara



Fotograma etalonado

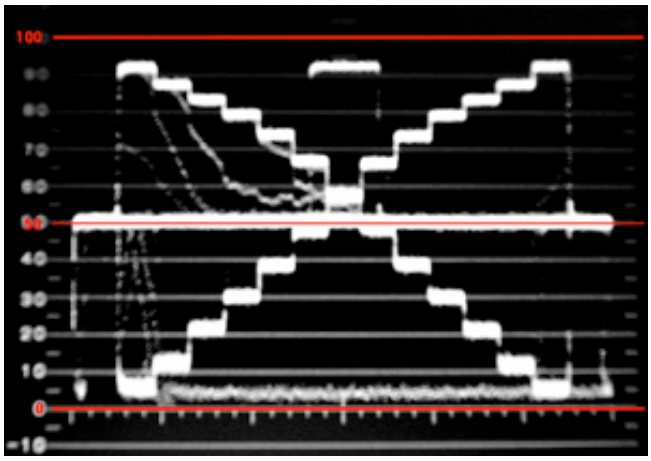
In this curve the shadow area in Cin Log has been replaced by the one that adjusts to the Rec. 709 Video Standard, which requires less work in post-production although mid-tones need to be adjusted. White clipping may occur in this curve, just as in the Cin Log.

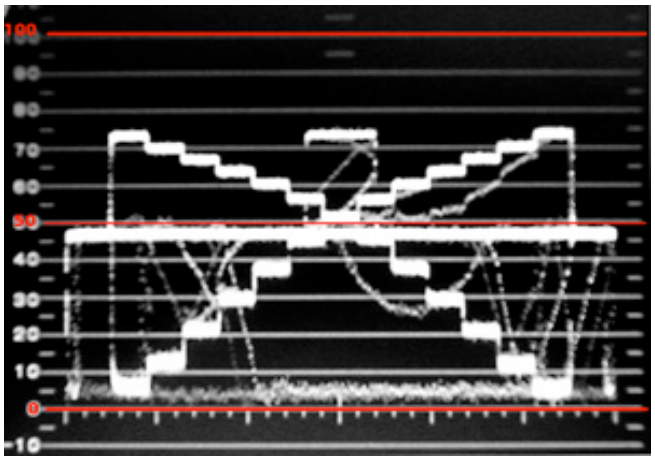


Escala de grises Estándar 4

Curva Cin Log 709
En la curva grafica se ve como se ha ajustado el negro a la norma Rec 709

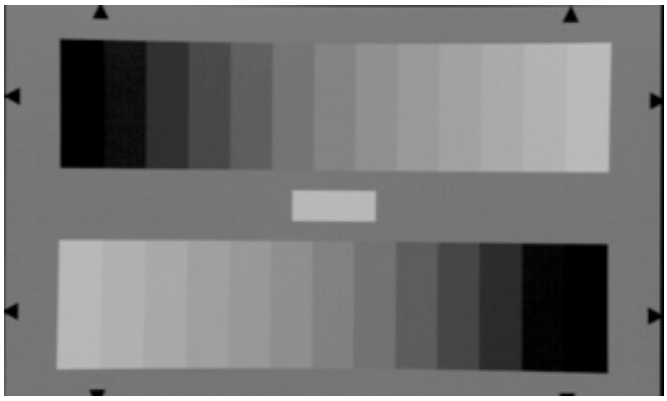
Curva Cin Log Chan







Escala de grises Estándar 4



Curva 2 Cin log 709



Estándar 4 T 5.6 1/3 Gris18 45%



Curva Cin Log 709 T 5.6 1/3 Gris18 45%

In the still life image we can see an improvement in the capture of high lights (the lemons and the jug) whereas the blacks have more density and are closer to the standard.



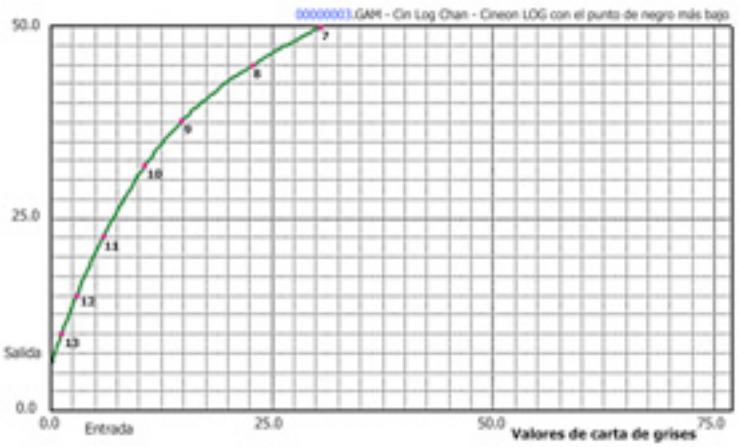


Fotograma original de cámara

Fotograma etalonado

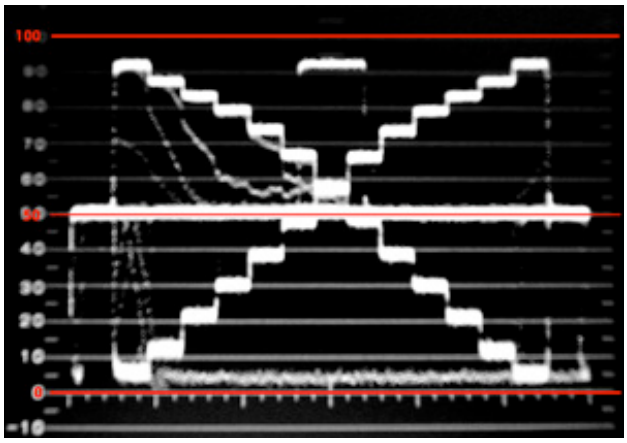
Curva 3 Cin Log Chan

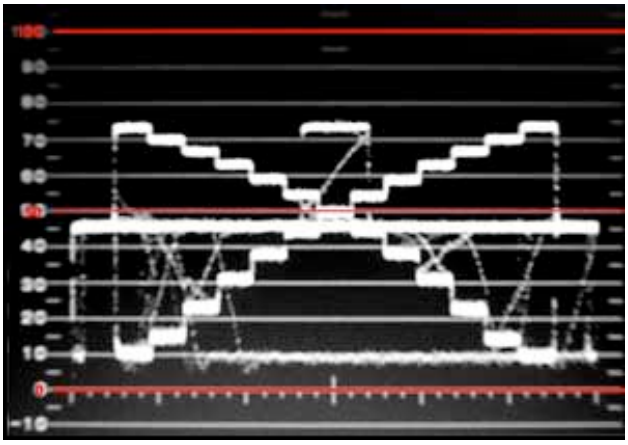
The curve is based on Cin Log, with the black point brought down slightly but not as much as with curve 2 (Cin Log 709).



Detalle de la zona de sombras
Vemos como el punto de negro esta en un punto intermedio entre la curva 1 y la 2.

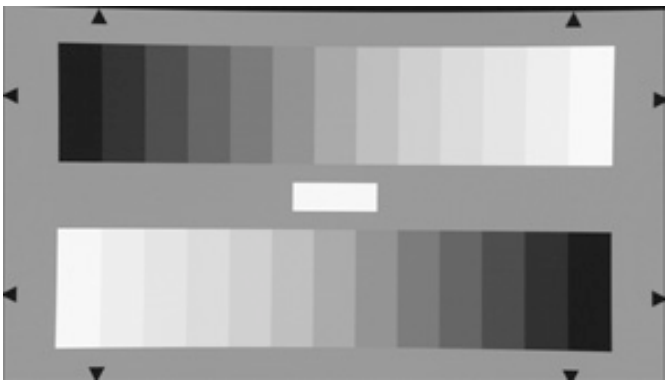
In the wave monitor we can see how the level of whites remains the same while the level of detail in the blacks rises, although not as much as with curve 1.



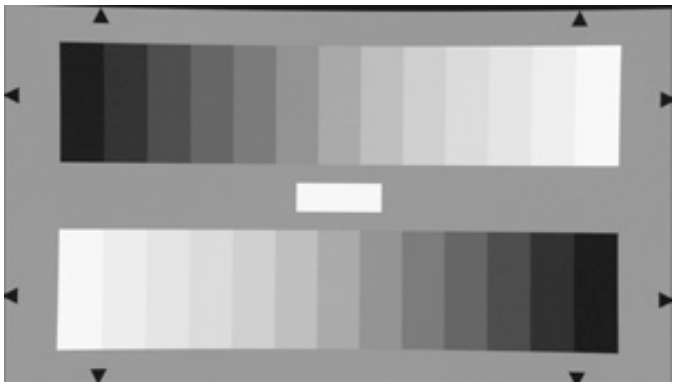


Escala de grises Estándar 4

Curva Cin Log Chan



Escala de grises Estándar 4



Curva 3 Cin Log Chan



Estándar 4 T 5.6 1/3 Gris18 45%



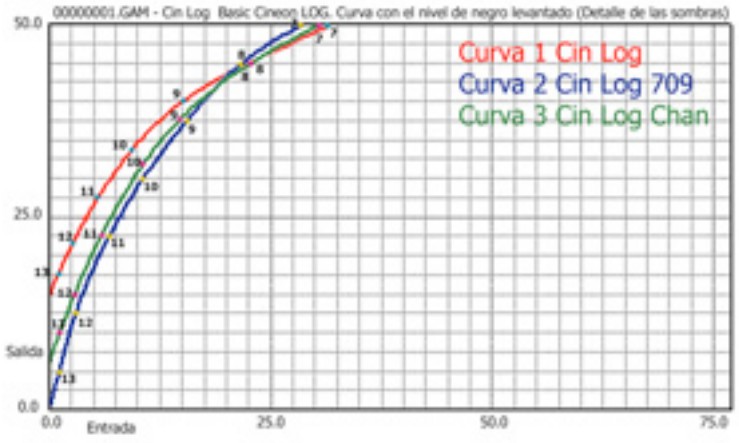
Curva Cin Log Chan T 5.6 1/3 Gris18 45%



Fotograma original de cámara



Fotograma etalonado

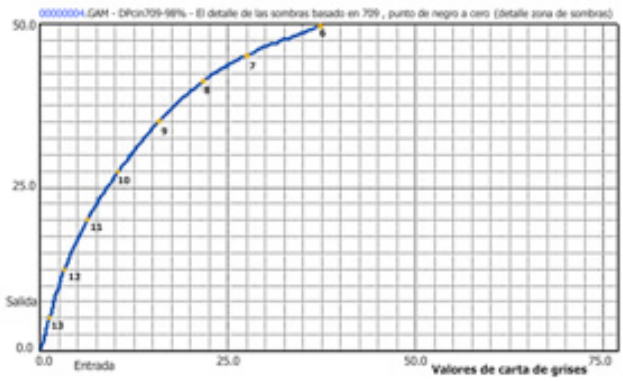


En grafico podemos ver comparadas las tres curvas.

Curva 4 DPcin709-98%

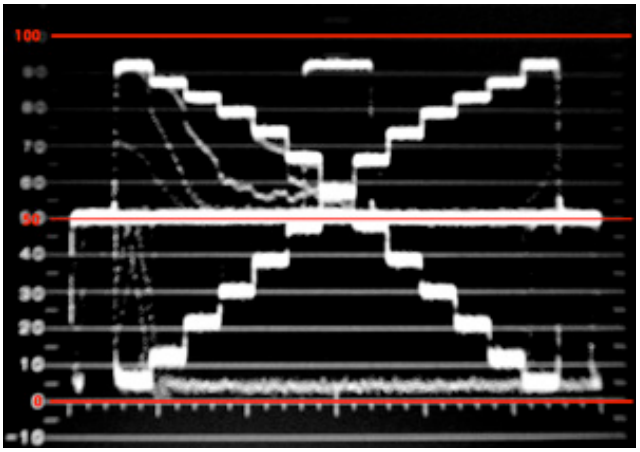
Esta curva es muy parecida a la número 2 (Cin Log 709) pero con el blanco recortado al 100% para entradas del 600%.



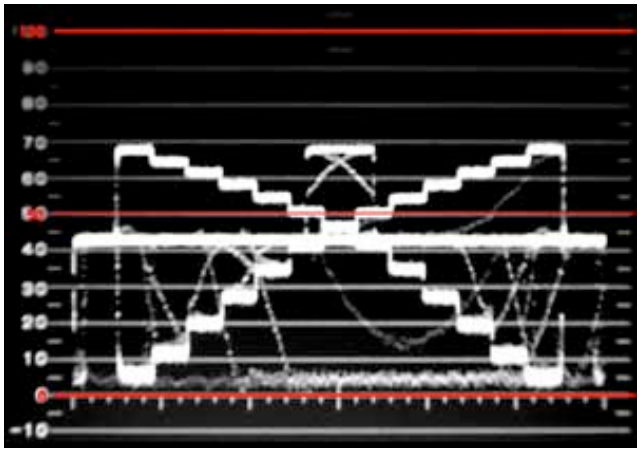


En la curva grafica de la izquierda se
pueden ver los valores de grises y en la derecha un detalle de la zona de sombras con los valores indicados.

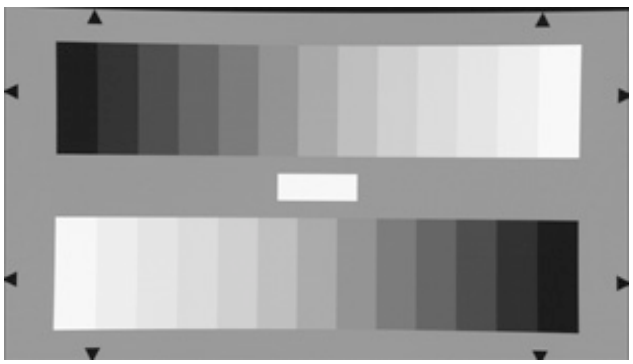
In the graph on the left we can see the values for the greys and on the right we can see in more detail the area of shadows with the corresponding values.



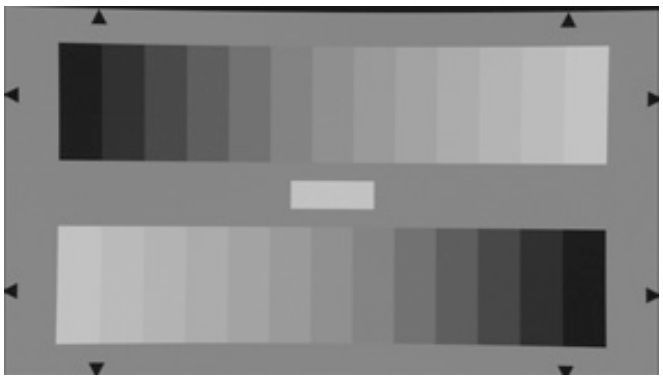
Escala de grises Estándar 4



Curva 4 DPcin709-98%



Escala de grises Estándar 4



Curva 4 DPcin709-98%



Estándar 4 T 5.6 1/3 Gris18 45%



Curva 4 DPcin709-98%T 5.6 1/3 Gris18 45%



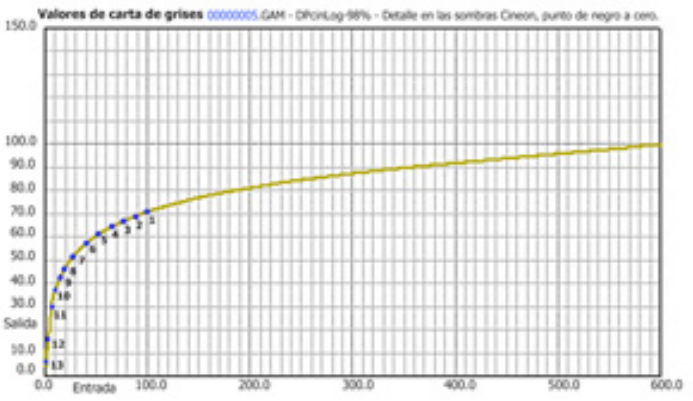
Fotograma original de cámara

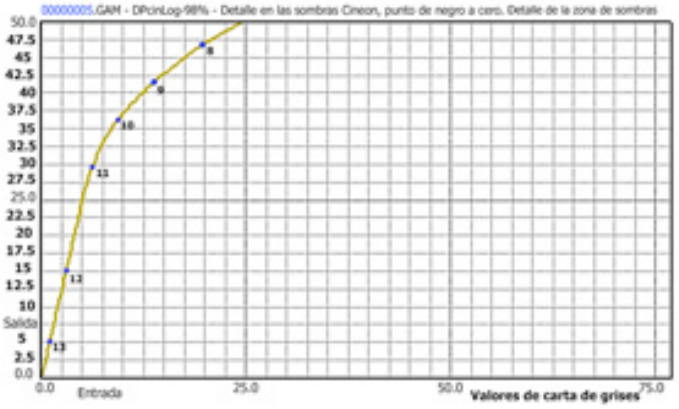


Fotograma etalonado

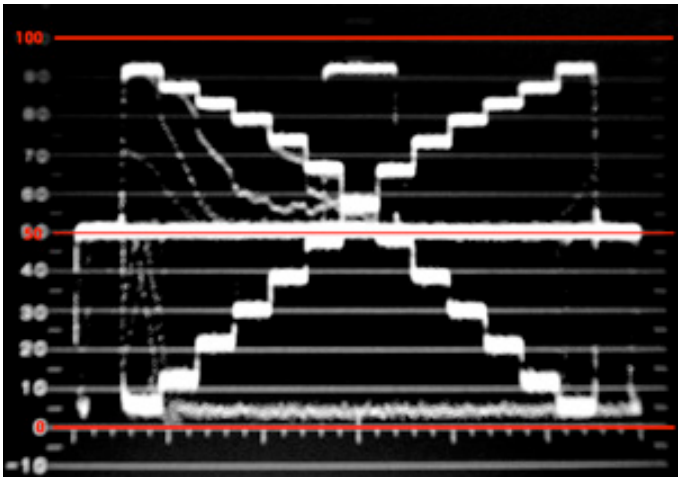
DPcinLog-98% curve 5

This curve is a perfect translation of the logarithmic cineon curve, except with a 0 value for the black point. This curve requires a lot of work in postproduction but delivers the biggest range of latitude in images with high contrast, without white clipping or compressing the blacks. Given the nature of the curve its possible that it offers an image with more values than those the HDcam system at 8bits can record; that's why digital praxis recommends using a VTR recorder without compression, or S.Two D.Mag disc recorders.

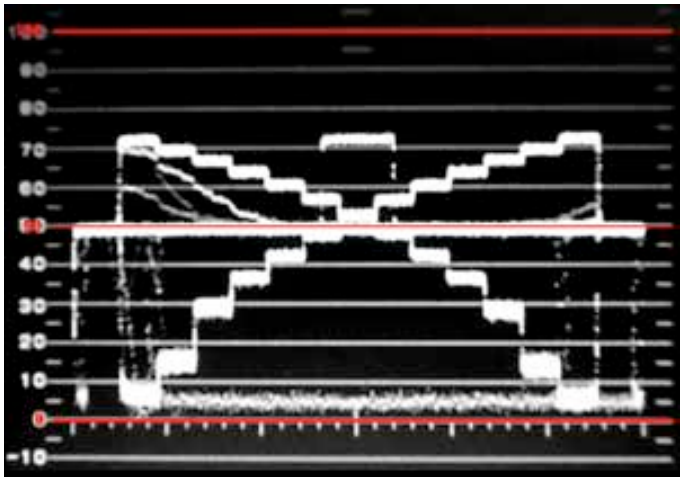




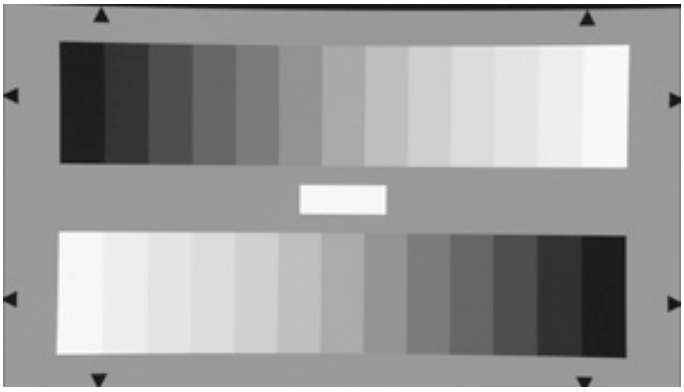
En la curva grafica de la izquierda se
pueden ver los valores de grises y en la derecha un detalle de la zona de sombras con los valores indicados.



Escala de grises Estándar 4



Curva 7D25L4VA44A



Escala de grises Estándar 4



Curva 5 DPcinLog-98%



Estándar 4 T 5.6 1/3 Gris18 45%



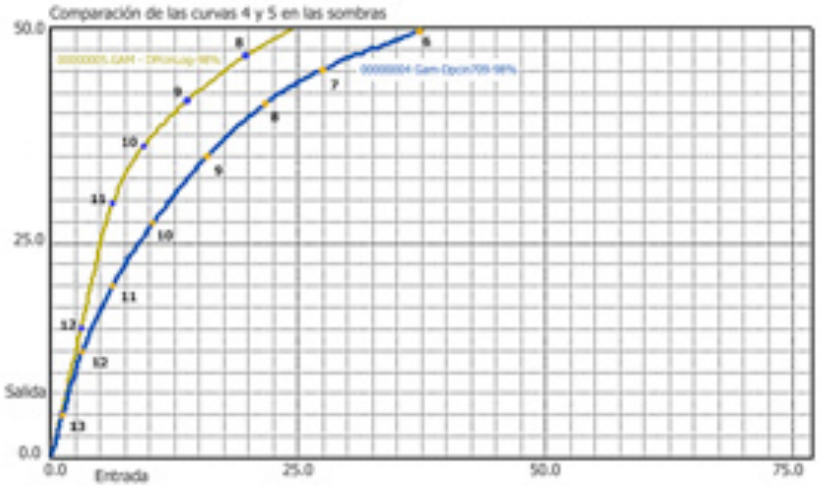
Curva 5 DPcinLog-98%T 5.6 1/3 Gris18 45%



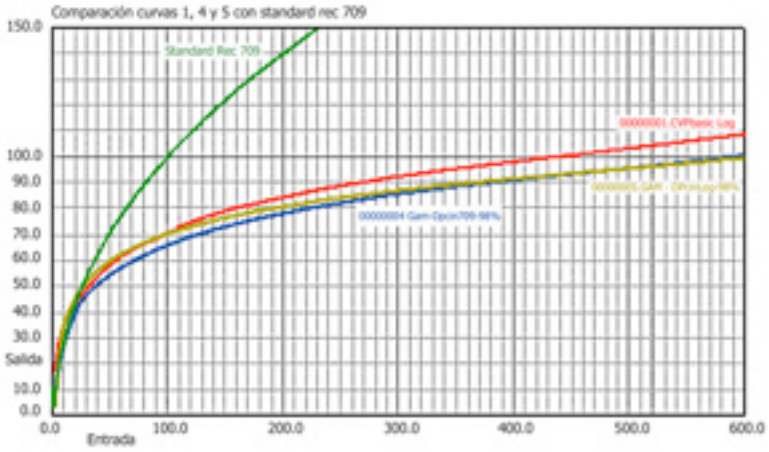
Fotograma original de cámara



Fotograma etalonado



En el grafico se puede observar la comparación en la zona de sombras de la curva 4 y cinco



En los siguientes graficos vemos la comparación de las curvas genericas con la curva estandar Rec 709

