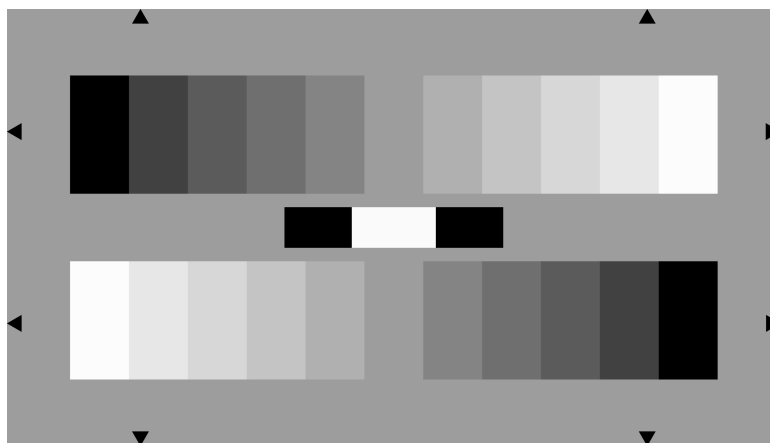




11-STEP GRAY SCALE TEST CHART 16:9 / BT.709

REFLECTIVE



Two 11-graduated counter current gray scales are arranged on a gray background ($D \approx 0.56$), the gray scale corresponds to the ITU recommendation BT.709.

The output signal of an optimally gamma-corrected camera according to BT.709 generates two counter current, linear step signals.

The contrast range of the gray scale is 40 : 1.

The values of the 11-graduated gray scale are as follows:

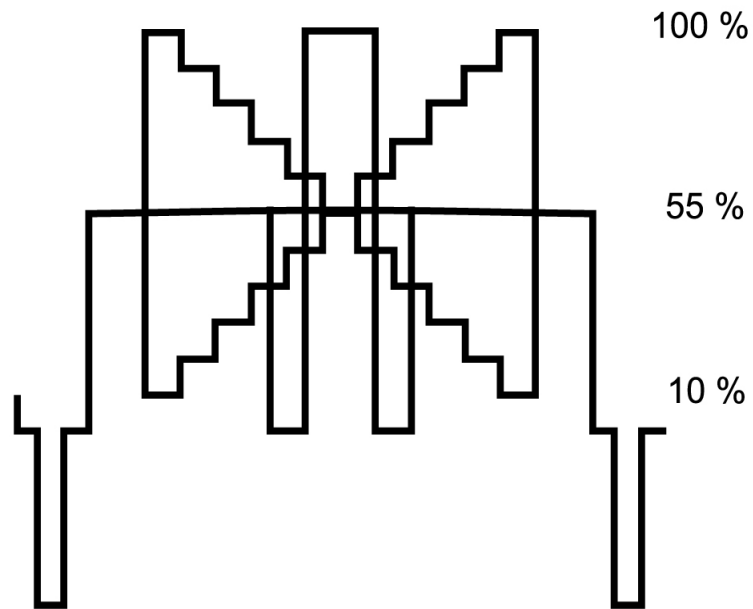
Step	Density	Remission in %	Video signal for BT.709 in %	Video signal for gamma 0.45 in %
1	0.05	89	100	100
2	0.13	74	91	92
3	0.22	60	82	84
4	0.32	48	73	75
5	0.43	37	64	67
6	0.56	28	55	59
7	0.70	20	46	51
8	0.88	13	37	43
9	1.08	8	28	35
10	1.34	5	19	26
11	1.64*	2	11	19

*The production process for reflective charts allow a maximum printed density of 1.64. The target value for the darkest step is 1.70. Therefore the distance of the last step differ slightly.

Two black fields and a white field are located between the gray scales. The density of the black fields in the middle is $D > 3$ (remission $< 0.1\%$), the white field between has a density of 0.05 (remission 89.9%).

**Recommended usage:**

Adjust the aperture until the lightest patch reaches 100% video signal at the waveform monitor. With an optimally corrected camera according to ITU recommendation BT.709 the darkest patch will reach 10% signal level.



When using this chart with a gamma correction of 0.45 the video signal level for each step will change as listed in the table above.