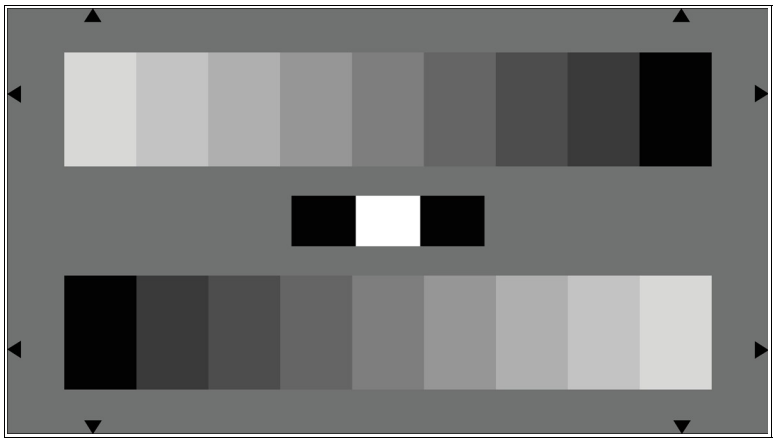
9-STEP GRAY SCALE TEST CHART 16:9 / GAMMA 0,45

REFLECTIVE



Two 9-graduated counter current gray scales are arranged on a gray background (D = 0.66), the gray scales are graduated according to a gamma of 0.45 (related to the densities).

Related to the reflection values (brightness): gamma = 2.2, that being exactly the reciprocal value of gamma=0.45.

The output of an optimally gamma-corrected camera yields two 9-graduated counter current linear step signals. The contrast range of the gray scales is 40:1.

The values of the 9-graduated gray scales are as follows:

Step	Density	Remission in %	Output signal in %
1	0.15	71	100
2	0.25	56	89.8
3	0.37	43	79.5
4	0.50	31	69.3
5	0.66	22	59.1
6	0.84	14	48.8
7	1.07	9	38.6
8	1.37	4	28.4
9	1.80*	1.6*	18.1*

*The maximum printed optical density is about 1.64. The target value for the darkest step is 1.80. Therefore the 9th step is build by a different material that delivers an optical density between 1.75 and 1,85.

The density values are based on a density of $BaSO_4$ = 0. Two black fields and a white field are located between the gray scales. The density of the black field is D > 3.0 (remission < 0.1 %). The density of the white field is D = 0.05 (remission = 90%).