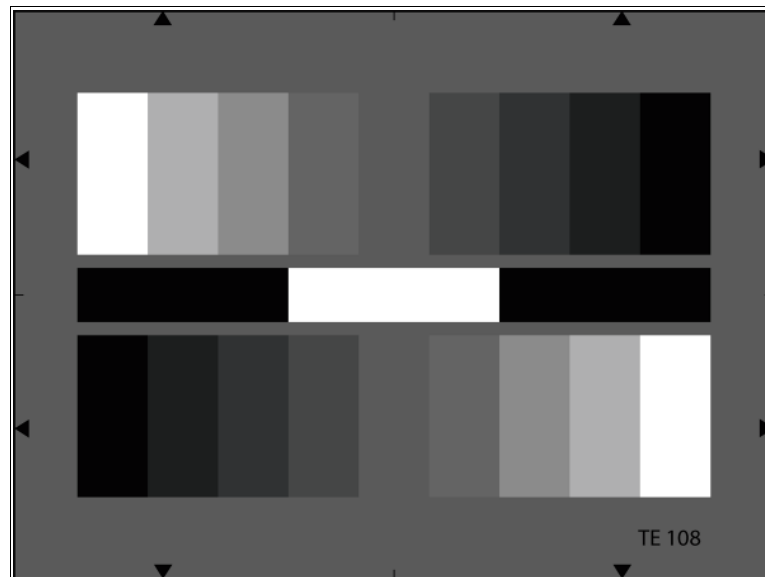




LOGARITHMIC GRAY SCALE TEST CHART

TRANSPARENCY



Two 9-graduated counter current gray scales are arranged on a gray background ($D=0.65$), the gray scales being graduated logarithmically. Related to the densities of the gray scales: $\gamma = 0.45$; related to the transmission 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 scale are as follows:

| Step | Density | Transmission in % | Output voltage in % |
|------|---------|-------------------|---------------------|
| 1 | 0.15 | 71 | 100 |
| 2 | 0.25 | 56 | 88.75 |
| 3 | 0.37 | 43 | 77.5 |
| 4 | 0.50 | 32 | 66.25 |
| 5 | 0.65 | 22 | 55 |
| 6 | 0.83 | 15 | 43.75 |
| 7 | 1.05 | 9 | 32.5 |
| 8 | 1.34 | 5 | 21.25 |
| 9 | 1.75 | 2 | 10 |

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