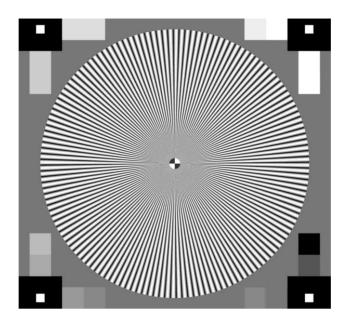
TE253 single A data sheet





Overview

| Product name | TE253 single |
|--------------|--|
| Principle | Test chart to determine the resolution of a digital camera based on a sinusoidal Siemens star. The Siemens star comply to ISO 12233. |

Features

Siemens stars

| Type of pattern | 1 sinusoidal Sien | nens star with 16 | 3 surrounding g | ray patches | |
|-----------------------------|--|-------------------|-----------------|---------------|--|
| Modulation | Н | ~91% | | | |
| | S | ~94% | | | |
| Cycles | 144 | | | | |
| Diameter stars | 250 mm | | | | |
| Diameter registration marks | Н | 5 mm | | | |
| | S | 12 mm | | | |
| Gray steps | The contrast of the gray scale complies to the contrast of the Siemens star. Please refer to Acceptance protocol for exact densities of each step. | | | | |
| Reference data | Individually meas | ured | | | |
| | Production tolerance: allowed variation of linearity of gray patches of 15% (remission) max. | | | | |
| Sample rate* [MP] | | minimum | maximum | | |
| | Н | 8 | 140 | (> 8K)** | |
| | S | 2 | 35 | (HDTV – 8K)** | |

TE253 single A data sheet



General description hardware

| Туре | Reflective (A) | | | |
|------------------------|---|------------------|---------------|--------|
| Aspect ratio | ~1:1 | | | |
| Chart size [W x H x D] | | W [mm] | H [mm] | D [mm] |
| | P280 | 334 | 271 | 2.1 |
| Picture size | | W [mm] | H [mm] | |
| | P280 | 290 | 271 | |
| Material | H: Photographic paper, matt finishing, resolution 9-10 LP/mm S: Specific matt paper, resolution 3-4 LP/mm | | | |
| Mounting | Polystyrene | | | |
| Edge protection | None | | | |
| Chart size tolerances | Up to +/- 0.5 mm as they are handmade in-house and no edge protection is used | | | |
| Service life | 3 years | | | |
| Storage | Dark, dry, and free from harmful gas (e.g., formaldehyde or ozone). 20 °C and 25 °C with a humidity of 60% – 65% and no direct sunlight at any time. | | | |
| Scope of delivery | test chart, cardboa | ard box, accepta | ance protocol | |

Miscellaneous

| Evaluation / Assessment | supported by iQ-Analyzer |
|------------------------------|--|
| Reference data iQ-Analyzer-X | Not applicable |
| Measurement device | X-Rite eXact (reflective charts) https://www.image-engineering.de/content/products/charts/IE_reference_data_accuracy.pdf |
| Standards | ISO 12233 Resolution and special frequency responses |
| Terms & Conditions | image-engineering.de/terms-and-conditions |



^{*} if chart fills 1/3 of the image height the chart can be used with a camera of minimum/maximum sample rate, stated in mega pixel (MP)

^{**} HDTV ~ 2.1 MP, 4K ~ 8.3 MP, 8K ~ 33 MP