



Overview

Product name	TE295 A
Principle	A multipurpose test chart with different test patterns for resolution, sharpening, texture loss, color reproduction, and noise measurements. Designed for the VCX-WebCam Version 2023 specification.

Features

Siemens stars

Type/s of pattern	2 changeable sinusoidal Siemens star/s with 16 surrounding gray patches		
Modulation	96% (semi-matt paper)		
Cycles	72 and 144		
Diameter star	145 mm		
Diameter center mark	12 mm		
Gray steps	The contrast of the grayscale complies with the contrast of the Siemens star. Please refer to the Acceptance protocol for the exact reflection of each step.		
Reference data	Individually measured, production tolerance +/- 0.05 OD		
Sample rate [MP]		Minimum	Maximum
	144 cycles	2	30 (HDTV – 8K)*
	72 cycles	VGA	5 (HDTV)*
Calculated using the image height related to an A1066 chart size and if the Siemens Star fills approx. 1/3 of the image height.			



Slanted edges

Type/s of pattern	2 sub-charts of slanted edges, different contrasts		
Modulation	60%, 80%		
Size of sub-chart	27 mm x 90 mm		
Sample rate [MP]	Minimum	Maximum	
	---	120	(> 8K)*
No lower limit for slanted edges, small ROI increases variance, and ROI should be reproduced by at least 100 pixels.			

Dead Leaves

Type/s of pattern	Dead Leaves		
Modulation	20%		
Size of sub-chart	147 mm x 147 mm		
Sample rate [MP]	Minimum	Maximum	
	---	120	(> 8K)*
No lower limit for the Dead Leaves pattern; ROI should be reproduced by at least 128 by 128 pixels within 80% ROI, and the Dead Leaves pattern should fill approx. 1/3 of the image height.			

Color patches

Type/s of pattern	18 color patches and 6 gray patches, original X-Rite ColorChecker Classic		
Color values	Reflective charts with Munsell paper (default color values provided by X-Rite; individual measurement available on request). All default values are given at the end of this data sheet. Additional individually measured values are provided in a separate Acceptance Protocol.		
Size of sub-chart	290 mm x 240 mm		
Size of a color patch	40 x 40 mm		
Surface finish	The Munsell charts may show scratches or streaks in rare cases. This issue does not affect the test chart's function, as the scratches/streaks are not visible under standard illumination geometry.		



General description hardware

Type	Reflective
Chart size tolerances	+/- 2 mm as they are handmade in-house and depend on edge protection type
Chart size [W x H x D]	
Material	Semi-matt photographic paper, matt finishing, mounted on stable and even plates. + Original X-Rite ColorChecker Classic
Mounting	Basic plate: Steel, L-shaped Siemens stars: Aluminum composite panel (aluminum Dibond)
Service life	2 years Please check annually if a new reference measurement is necessary for color targets. We also recommend and offer a recalibration of the chart after 3 years of regular use.
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, a case for storing the chart safely (A charts)

Miscellaneous

Evaluation/Assessment	Visual appraisal, supported by iQ-Analyzer-X (since version 1.7.2)
Standards	VCX-WebCam Version 2023
Accessories	Chart case
Related products	iQ-Headturner
Terms & Conditions	image-engineering.de/terms-and-conditions

* HDTV ~ 2.1 MP, 4K ~ 8.3 MP, 8K ~ 33 MP