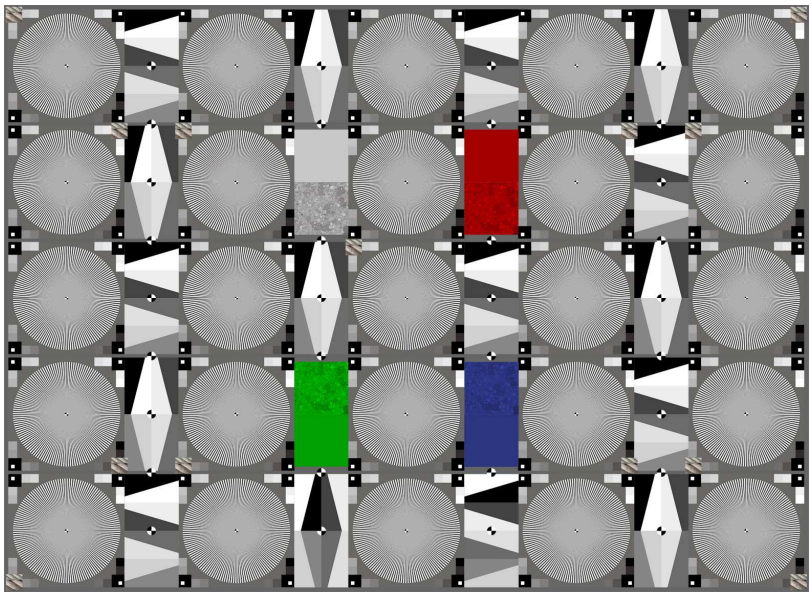
CERTIFICATE

LENS RESOLUTION TEST CHART

REFLECTIVE



Reflectance of the gray patches of the center star:

Step	Measured Reflectance	Reference Reflectance	Deviation
1		1.00	
2		0.93	
3		0.87	
4		0.80	
5		0.73	
6		0.67	
7		0.60	
8		0.53	
9		0.47	
10		0.40	
11		0.33	
12		0.27	
13		0.20	
14		0.13	
15		0.07	
16		0.00	

Serial Number:

○ 4:3 ○ 3:2 ○ A460 ○ A1066

Date: Signature :

The test chart TE268 is designed for resolution and sharpness measurements. The chart can be analyzed automatically with the iQ-Analyzer.

Five different structures in the chart allow a numerical and visual analysis:

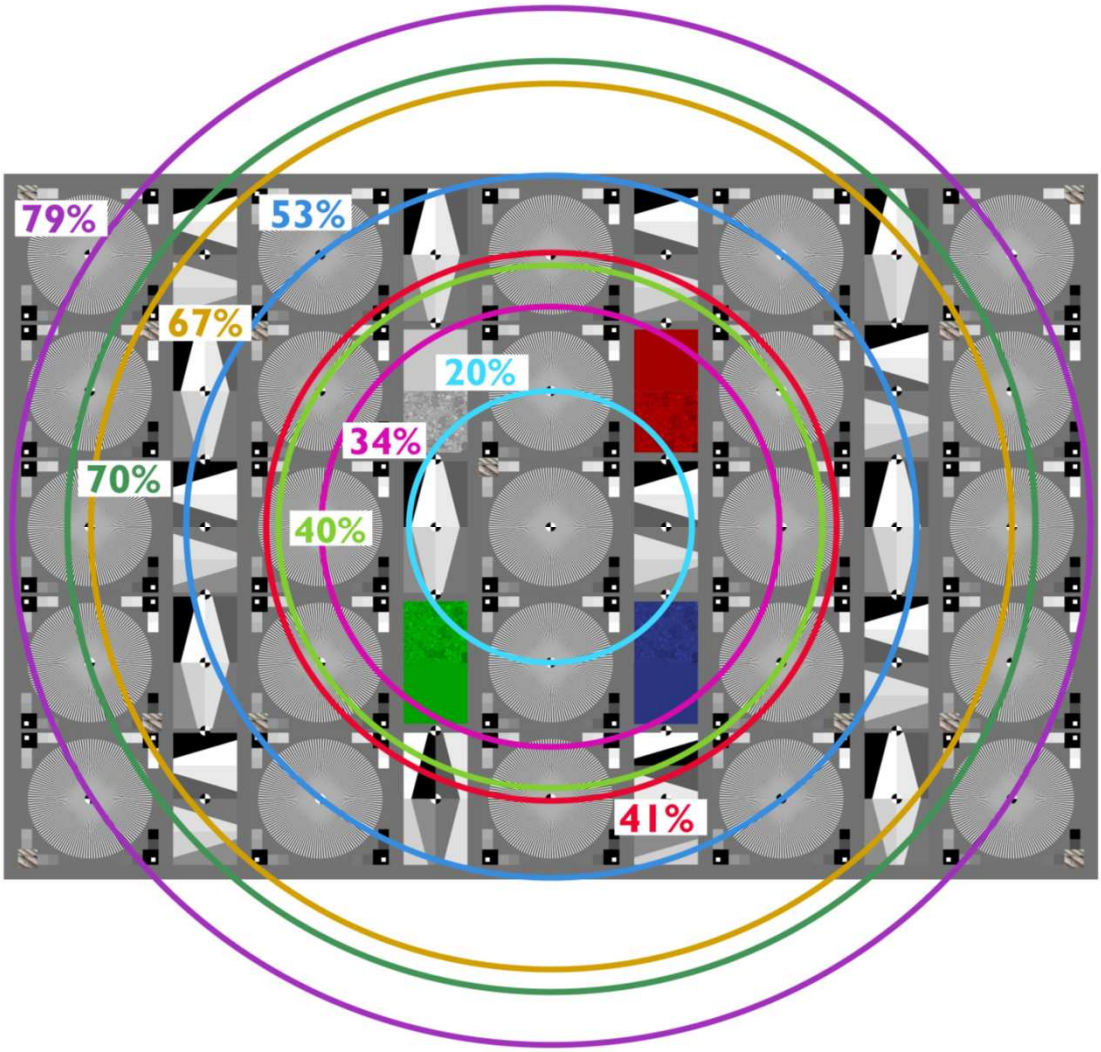
- 25 sinusoidal Siemens stars are placed at the chart. The stars have a gray value which changes sinusoidal when walking on a circle around the center of the star.
- Each star is surrounded by 16 gray patches to do an OECF measurement. This information can be used to linearize the image data.
- 16 slanted edges with a contrast of 100, 80, 60 and 40 percent are placed between the stars.
- Four dead leaf patterns (gray, red green, blue) with reference patches are placed close to the center of the image.
- Images of ropes in the four corners and near the center

The chart structures follow the recommendation of ISO standard ISO12233.

According to ISO12233 the sixteen slanted edges can be used to determine the modulation and the limiting frequency. The analysis of the sharpening can also be done with these structures.

Dead leaves patches complete the resolution measurement. They are circular structures with random diameters and gray levels.The structures are constructed to do resolution measurements for different colors.

At the TE268 test chart the number of Siemens stars is increased from nine to twenty-five to get a more detailed information about the image area.The resolution could be determined at these image heights (in %): 0.00 – 0.20 – 0.34 – 0.41 – 0.53 – 0.67 – 0.70 – 0.79. So there is a definitely improved amount of information about the contrast behavior of the system at different image heights.



The maximum resolution of the TE268 A depends on chart size and diameter of the center mark:

chart name	size	number of cycles	diameter center mark	min. resolution	max. resolution
TE268-H	A1066	144	5 mm	8 MP	180 MP
TE268-A460-H	A460	144	5 mm	2 MP	35 MP

The chart is available in 4:3 and 3:2.