

# 《What's New》

## JEITA Test Chart

JEITA : Japan Electronics and Information Technology Industries Association

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2nd Sales Division  
Fine Optronics Operations  
Dai Nippon Printing Co., Ltd.

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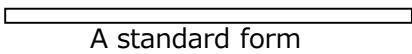
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# Test Chart Forms

## Sectional Views

### 1) Reflection Type

a. Photographic Paper (Opaque)



A standard form

Paper Thickness  
0.23 mmt

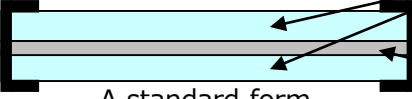
b. Photographic Paper +Veneer Board



Board Thickness  
3.0 mmt

### 2) Transmission Type

a. Slide Type



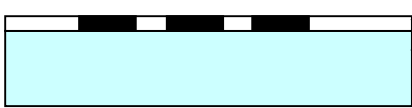
A standard form

Bareglass Thickness  
1.3, 2.0, 3.2 mmt

Film Thickness  
0.175 mmt

Fixing paper tape

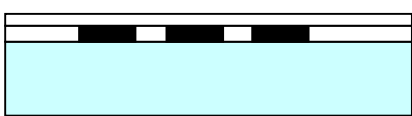
b. Glass Board



Emulsion Layer Thickness  
4 ~ 8 μm

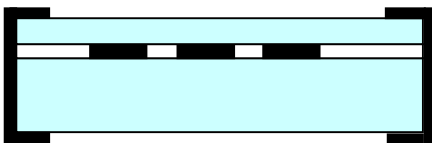
A Glass Board Thickness  
5.0, 3.0, 1.6 mmt

c. Glass Board +Top Coat

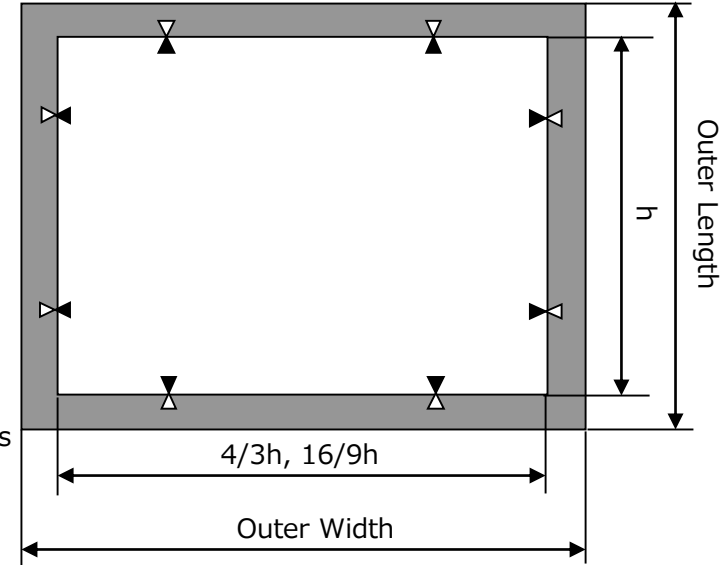


Top Coat Thickness  
Approx. 1μm

d. Glass Board +Bareglass

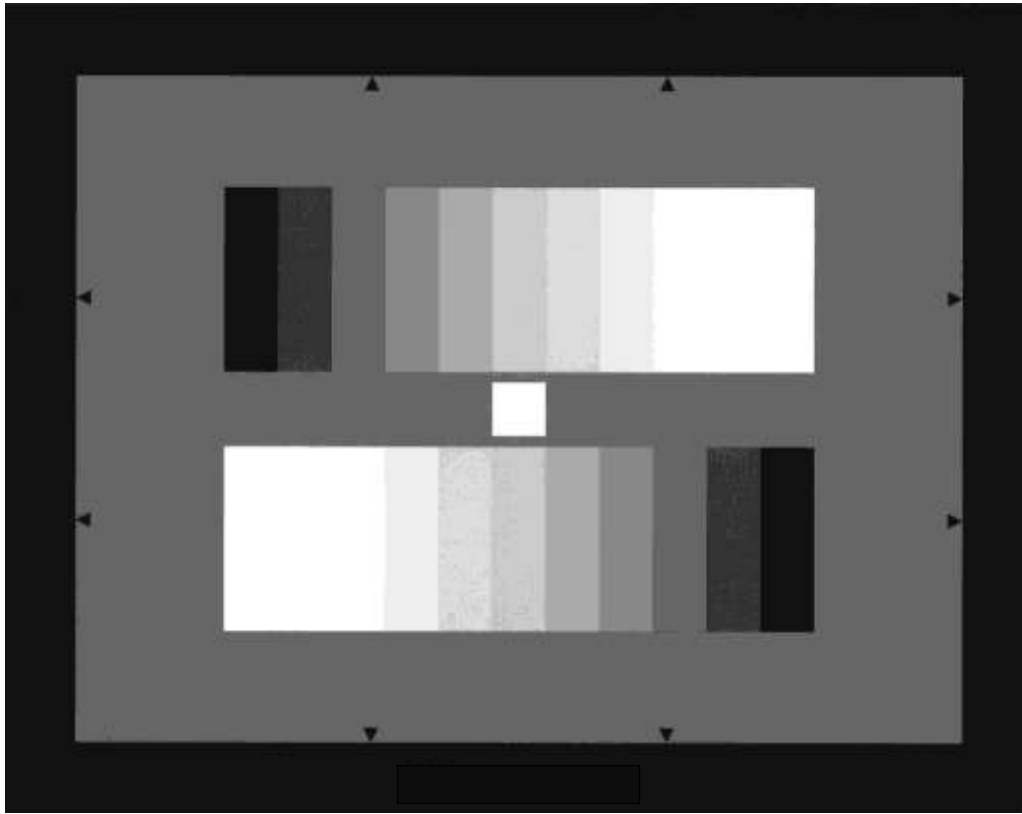


## Chart Overall Size



	Aspect ratio	Valid area	Outer size
Reflection Type	4 : 3	180×240	220×280
	16 : 9	288×512	350×570
Transmission Type	4 : 3	180×240	290×320
	16 : 9	153×272	200×310

# JEITA Test Chart I (1) (Grayscale Chart $\gamma = 2.2$ )

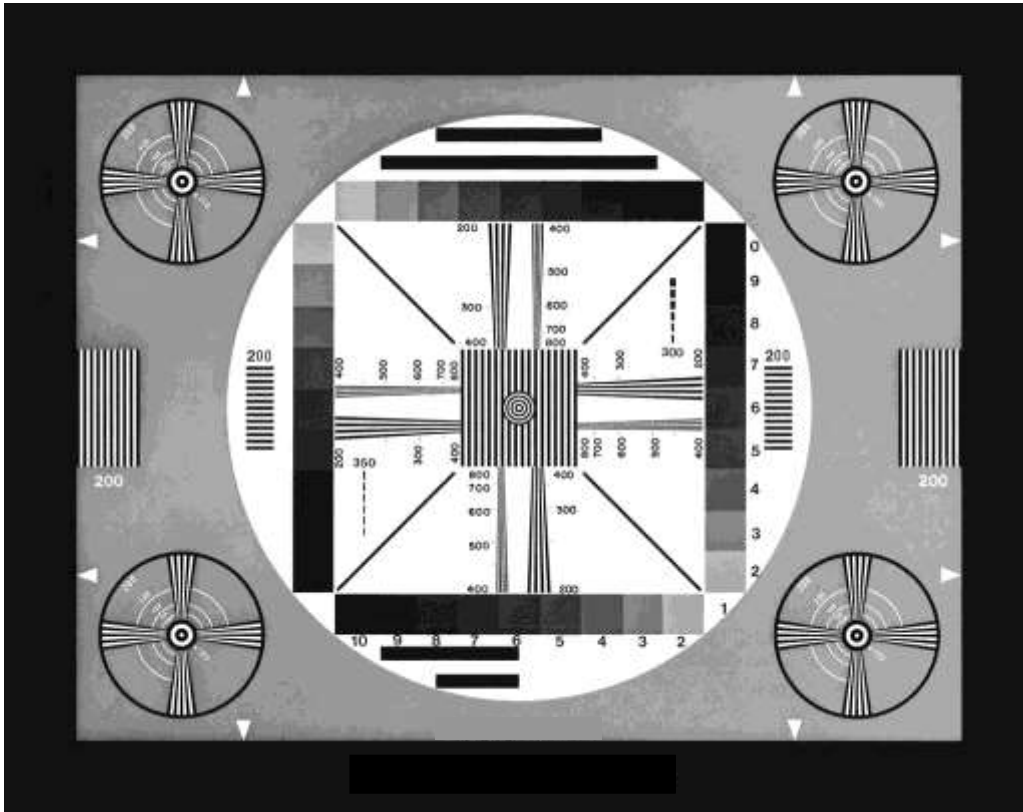


	Valid area	Outer size
Transmission Type	180×240	290×320
Reflection Type	180×240	220×280

## 1. Factor (Transmittance or Reflectance) of Grayscale.

Step Number	1	2	3	4	5	6	7	8	9	10	11	Back-ground
Factor (%)	89.9	77.3	63.0	48.6	37.8	27.9	19.8	13.0	8.1	4.5	2.0	18.0
Concentration	0.05	0.11	0.20	0.31	0.42	0.55	0.70	0.89	1.09	1.35	1.70	0.74

# JEITA Test Chart II (2) (Resolution Chart)

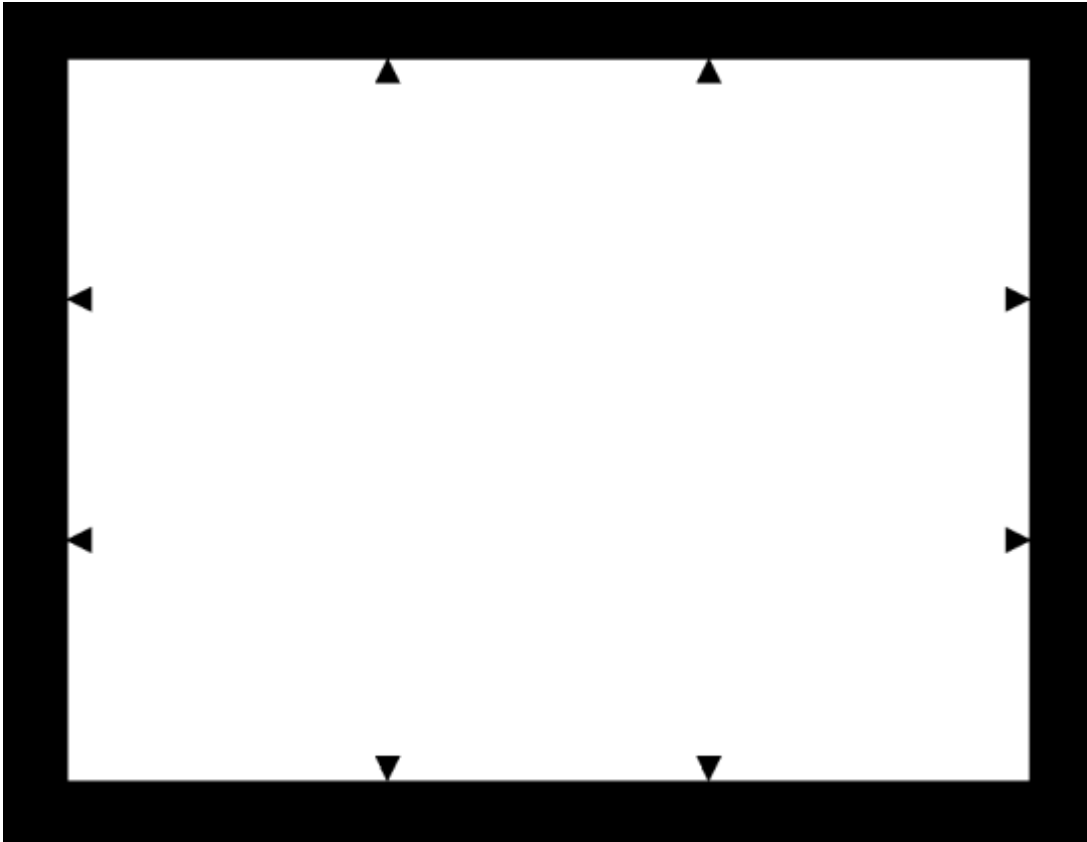


1. Specification of this Test Chart is the same as of ITE Resolution Chart.
2. You can evaluate ... (1)Resolution (2)Streaking (3)Linking (4)Interlace scan (5)Shading (6)Linearity of scan (7)Aspect ratio of scan (8)Alignment (9)Graduation sequence
3. Transmittance or Reflectance of main parts  
 (1) 60% or more, inside white of the big circle  
 (2)  $40 \pm 5\%$ , outside background of the big circle  
 (3) Grayscale Chart: see the table below

	Valid area	Outer size
Transmission Type	180×240	290×320
Reflection Type	180×240	220×280

Step Number	1	2	3	4	5	6	7	8	9	10
Transmittance / Reflectance	60% Or more	60.0%	41.0%	28.2%	19.5%	13.5%	9.2%	6.3%	4.4%	3.0%

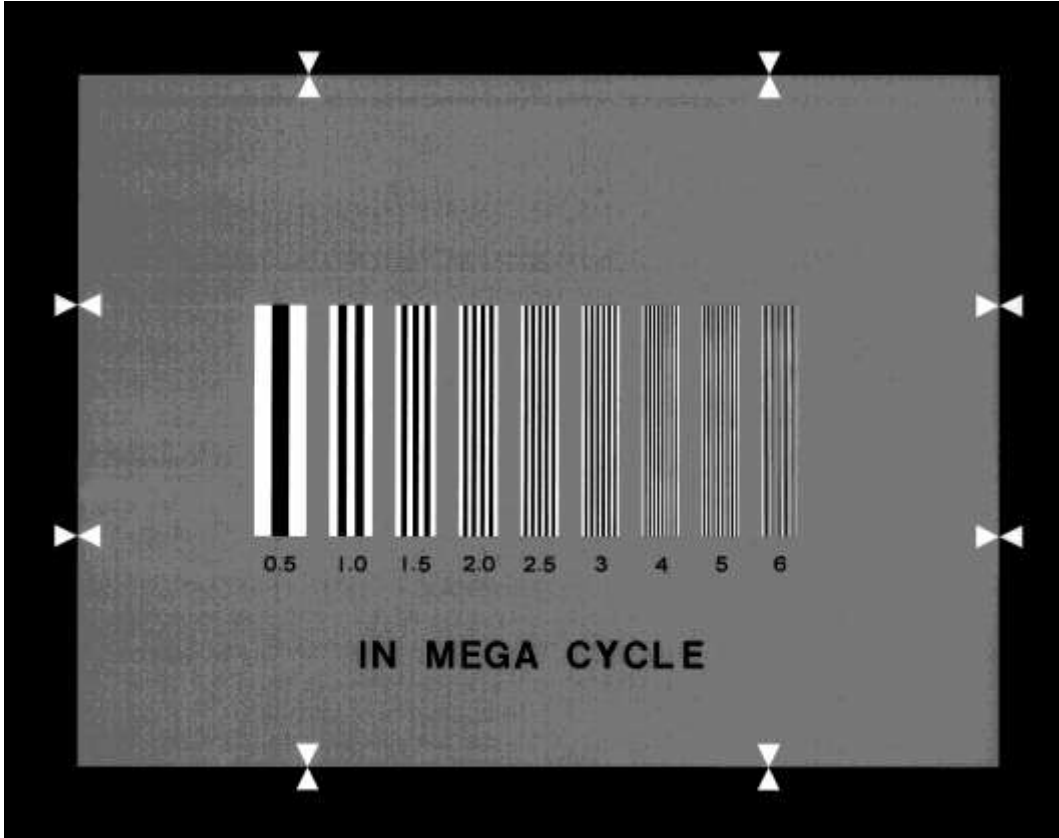
# JEITA Test Chart Ⅲ(3) (All-White Chart)



	Valid area	Outer size
Transmission Type	180×240	290×320
Reflection Type	180×240	220×280

1. Transmittance or Reflectance is more than 80% in the white area.

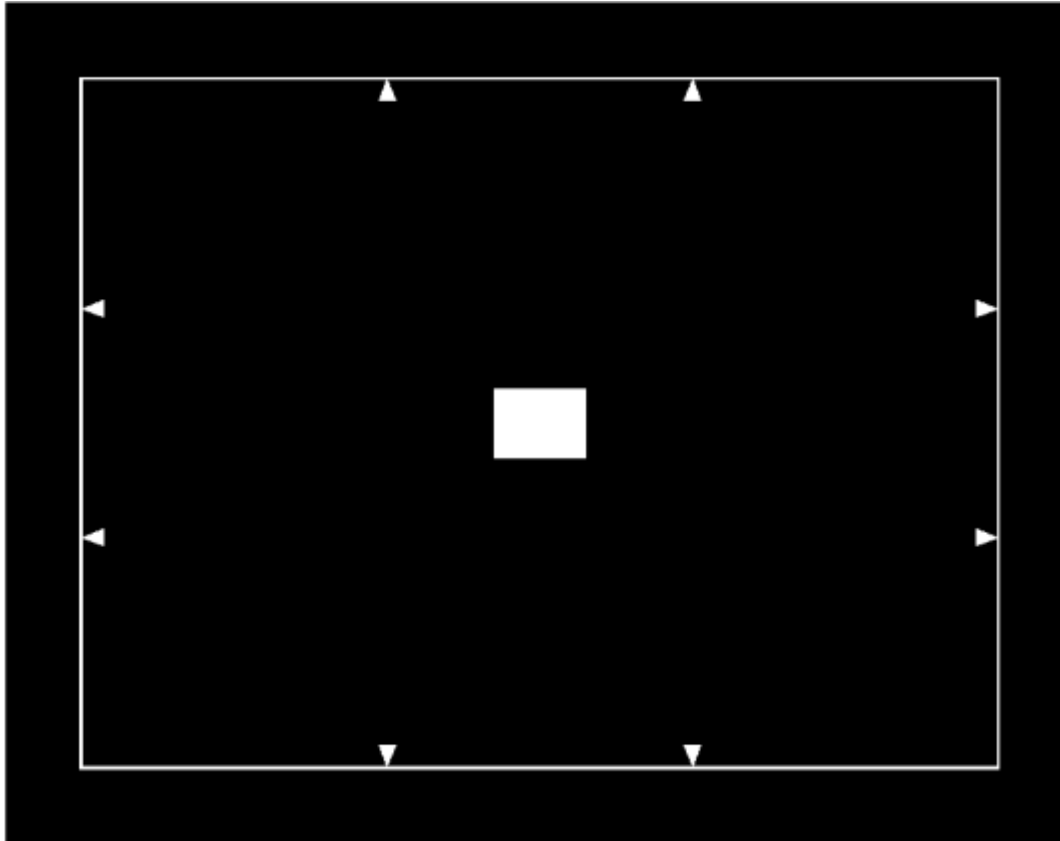
# JEITA Test Chart IV(4) (In mega Cycle Chart)



	Valid area	Outer size
Transmission Type	180×240	290×320
Reflection Type	180×240	220×280

1. This is a Test Chart to evaluate the Horizontal Resolution of an imaging device. In the Chart image, white and black fringes from 0.5MHz to 6MHz in image frequency line vertically. Background is 40% gray.

# JEITA Test Chart VII(7) (Blooming · Smear Chart)

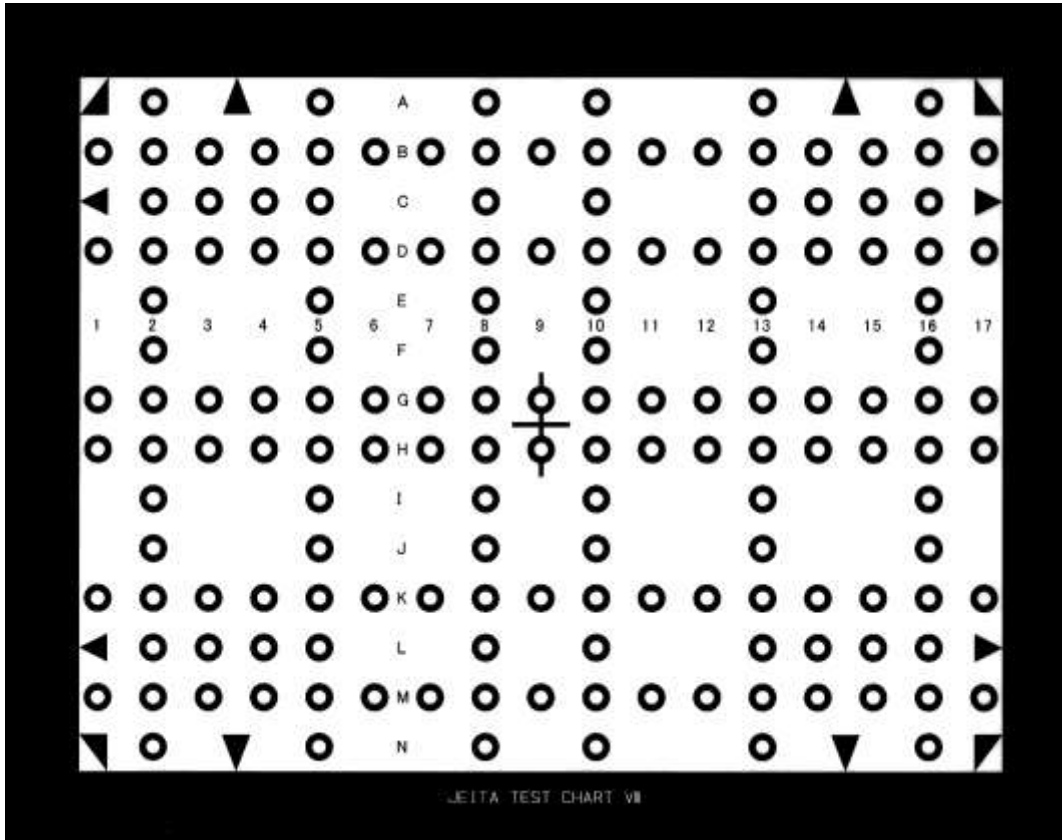


	Valid area	Outer size
Transmission Type	180×240	290×320
Reflection Type	180×240	220×280

1. Transmittance is less than 1% in the black area and more than 90% in the central white area.



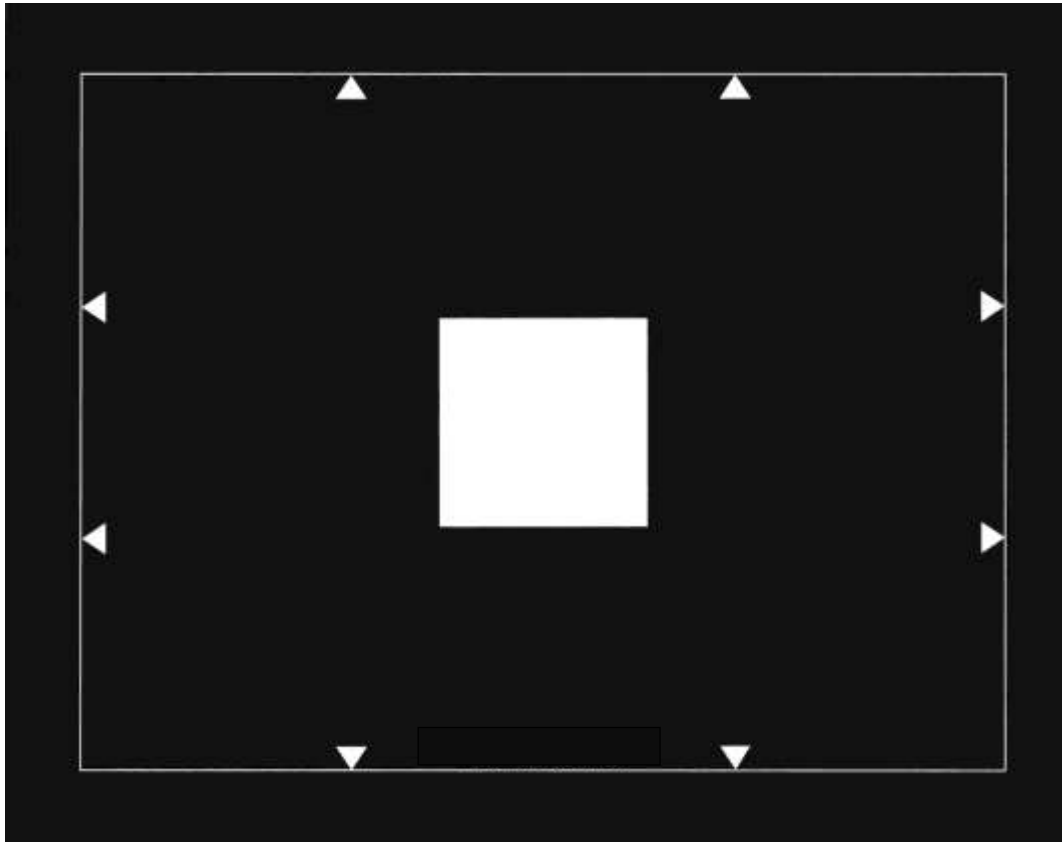
# JEITA JEITA Test Chart Ⅷ(8) (Ball chart)



	Valid area	Outer size
Transmission Type	180×240	290×320
Reflection Type	180×240	220×280

1. The circles size and the distance between the balls are stated as follows:
  - (1) Outer circle of the rings : Radius  $2/100 h$  (2%)
  - (2) Inner circle of the rings : Radius  $1/100 h$  (1%)
  - (3) The distance between the balls:
    - Horizontal direction    315 KHz (approx.  $2/25 h$ )
    - Vertical direction        900Hz (approx.  $1/14 h$ )

# JEITA Test Chart X II (12) (Window Chart)



	Valid area	Outer size
Transmission Type	180×240	290×320
Reflection Type	180×240	220×280

1. Transmittance or Reflectance is less than 3% in the black area and more than 80% in the white area.
2. The center of the Test Chart is identical to the center of the white square area (3/10 h).