

## Introduction

ZB-A brightness color tester is the professional instrument to test the object of the whiteness ,yellowness,chromatic aberration,opacity, transparency, light scattering coefficient,optical absorption coefficient, and ink absorption value.It is widely applied in paper, cardboard, textile, painting ,chemical building materials, plastic , cement ,food, salt, ceramics cosmetic etc.

The specific is the following:

1. Measure the color of object , report diffuse reflectance factor  $R_x$ ,  $R_y$ ,  $R_z$ ;stimulus value  $X_{10}$ ,  $Y_{10}$ ,  $Z_{10}$ ;chromaticity coordinate  $x_{10}$ ,  $y_{10}$ ,  $z_{10}$ ;lightness  $L^*$ ;chrominance  $a^*$ ,  $b^*$ ;chromaticity  $C^*ab$ ;hue angle  $h^*ab$ ;dominant wavelength  $\lambda_d$ , excited purity  $P_e$ , color difference  $\Delta E^*ab$ , lightness difference  $\Delta L^*$ , chromaticity difference  $\Delta C^*ab$ , hue difference  $\Delta H^*ab$ , Hunter system  $L$ ,  $a$ ,  $b$ .
- 2.Measure ISO(R457)and  $R_z$
3. Measure CIE ( $W_{10}$  and  $T_{w10}$ )
- 4.Measure .ceramic's whiteness
- 5.Measure the whiteness of building materials and non-metallic mineral products
- 6.Measure Yellowness  $YI$
7. Measure Hunter whiteness
- 8.Measure opacity  $op$
9. Measure transparency  $T$
10. Measure light scattering coefficient  $S$
11. Measure optical absorption coefficient  $A$
- 12.Measure ink absorption value

## Standards

ISO 2469 ISO 2470 ISO 2471 ISO 9416 ISO 11475 GB/T 7973 GB/T 7974 GB/T 7975 GB/T 2679 GB/T 1543 GB/T 10339 GB/T 12911 GB/T 22880 GB/T 24288 GB/T 3979 GB/T 2913 GB/T 13025.2 GB/T 5950 GB/T 8424.1 GB/T 8424.2 GB/T 8424.3 GB/T 9338 GB/T 9984.5 GB/T 13173.14 GB/T 13835.7 GB/T 4739 GB/T 6688 GB/T 11186 GB/T 11942 GB/T 22427.6 QB/T 1503 QB/T 2789 HG/T 3862

## Main features

- 1.Has excellent appearance and compact structure ,and advanced circuit design can ensure accurate and stable measurement data.
- 2.Simulate D65 illuminator to illuminate. Adopted CIE 1964 supplementary standard colorimetric system and CIE 1976 ( $L^*a^*b$ ) color space and color difference formula.
- 3.Adopted d/o illuminating--geometrical viewing conditions.Diameter of the globe of diffusion is 150mm and diameter of the testing hole is 30mm.Light absorber is provide to eliminate the effect of mirror reflection.
- 4.Adopted large-screen high resolution LCD modules.English display and prompt steps can show the results of measurement and statistics. Good human-machine interface makes the instrument easy to operate.
- 5.Added the printer and used the imported Thermal Printer , no need to use ink and colored tape, no noise and fast speed.
- 6.Equipped with RS232 interface ,can communicate with the computer software
- 7.Has power-off protection, Correct data would not lose

8. can store 9 reference samples ( sample or data)

### Main technical parameters

Power supply	220V±10%, 50HZ
Accuracy	chromaticity coordinate is 0.0001 others are 0.01
Stability	≤0.1 within 30min
Repeatability	Rx Ry and Rz s≤0.01 chromaticity coordinate s≤0.0010, R457 s≤0.10
Sample size	diameter ≥30mm thickness≤ 40mm
Dimension	360*264*400mm
Net Weight	23kg



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شرکت دقیق پرتو

تامین کننده تجهیزات آزمایشگاهی و کنترل کیفی

۰۲۱-۶۶۹۳۷۲۱۴