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Specification for indoor LED displays

室内LED显示屏规范

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1 Scope

This document specifies the classification, requirements, test methods, inspection rules, as well as marking, packaging, transportation and storage for indoor LED displays (hereinafter referred to as "displays").

This document applies to full-color large pixel pitch, meddle pixel pitch, fine pixel pitch, mini pixel pitch, and micro pixel pitch display products that display graphics, text, video and other information.

2 Normative references

GB/T 2423.1

GB/T 2423.2

GB/T 2423.3

GB/T 2423.10

GB/T 4208

GB/T 9254.1

GB 17625.1

GB/T 20147-2006

3.15 visual refresh ratio

The number of times the information displayed per second on the LED display.

4 Classification

4.1 According to the content played, displays can be divided into graphic displays and video displays.

4.2 According to the display dimension, displays can be divided into two-dimensional

(2D) displays and three-dimensional (3D) displays (or stereoscopic displays).

4.3 According to the usage, displays can be divided into fixed displays and non-fixed displays.

4.4 According to the installation method, displays can be divided into front installation

displays and rear installation displays.

4.5 According to the maintenance method, displays can be divided into front

maintenance displays and rear maintenance displays.

4.6 According to the pixel on centers, displays can be divided into large pixel pitch displays, middle pixel pitch displays, fine pixel pitch displays, mini pixel pitch displays and micro pixel pitch displays.

5.1.1 The display components shall be complete, firmly assembled, stable in structure,

with smooth transitions at the edges and corners, and without defects such as burrs or flash.

5.1.2 The enclosure and mounting connectors shall be free of obvious deformation,

dents, or other defects.

5.1.3 The color of the protective layer of the enclosure, including the control box and connectors, shall be uniform, and the base shall be free of exposed scratches, cracks and other defects.

6.1 Test conditions

6.1.1 Environmental conditions shall comply with the provisions of SJ/T 11281.

6.1.2 Test instrument shall comply with the provisions of SJ/T 11281.

6.2 Appearance

The appearance shall be inspected by visual inspection and manual touch.

6.3 Safety requirements

Safety requirements shall be tested in accordance with the provisions of SJ/T 11141.

6.4.1 Limits for harmonic current emissions shall be tested in accordance with GB

17625.1.

6.4.2 Limits for radio disturbance shall be tested in accordance with GB/T 9254.1, and the test pattern procedure is shown in Appendix B.

6.5 Structure

6.5.1 The mass of the display module shall be tested using an electronic weighing instrument.

6.5.2 Assembly accuracy shall be tested in accordance with the provisions of SJ/T

11281.

6.6 Degree of protection provided by enclosure

Degree of protection provided by enclosure shall be tested according to the corresponding IP level in GB/T 4208.

6.7.1 Maximum luminance

Maximum luminance shall be tested in accordance with the provisions of SJ/T 11281.

6.7.2 Angle of view

Angle of view shall be tested in accordance with the provisions of SJ/T 11281.

6.7.3 Luminance non-uniformity

e) Use the same method to measure and calculate the three primary colors of red, green