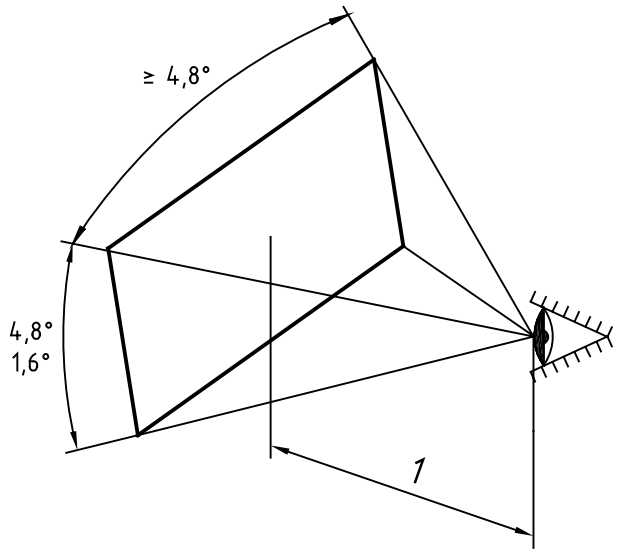

Key

1 Design viewing distance

Figure 10 — Small-size panel

NOTE 1 Smaller panels will not hold more than 40 complying Latin characters and are outside the scope of the standard. The definition is used in screening and selecting measurement locations only. See *8.4.2* Standard measurement locations.

NOTE 2 For a viewing distance of 500 mm, 1,6∀= 14 mm; 4,8∀= 42 mm.

3.4.12
subpixel
a separately addressed internal structure in a pixel that extends the pixel function

NOTE Examples include primary colour subpixels used in some multicolour flat panels and multiple-size subpixels, used to create half-tone-like gray scale effects. Microstructure within primary subpixels is sometimes used to minimize anisotropy or to minimize fault visibility by adding redundancy in flat panels. Such microstructures are still called subpixels in this part of ISO 13406. Display engineering literature often uses the term “dot” which is not used in this part of ISO 13406.

3.4.13
pixel faults
local defects of types 1, 2 or 3

See Tables 2 and 3.

Table 2 — Pixel faults

Fault type	Description
Type 1 fault	Pixel in stuck high state (when system command = minimum luminance) ($L > 0{,}75\ L_X + 0{,}25\ L_N$)
Type 2 fault	Pixel in stuck low state (when system command = maximum luminance) ($L < 0{,}75\ L_N + 0{,}25\ L_X$)
Type 3 fault	Pixel or subpixel is abnormal, but not of type 1 or 2. For example, a stuck subpixel or intermittent fault.
Fault cluster	Two or more pixels or subpixels with faults within a 5 × 5 block of pixels.

L is the measured luminance of the pixel.

L_X is the average pixel response to a maximum luminance command (e.g. white).

L_N is the average pixel response to a minimum luminance command (e.g. black).

Table 3 — Definition of fault classes, $Class_{Pixel}$

Maximum number of faults per type per million pixels					
Class	**Type 1**	**Type 2**	**Type 3**	Cluster with more than one type 1 or type 2 faults	Cluster of type 3 faults
I	0,000	0,000	0,000	0,000	0,000
II	2,000	2,000	5,000	0,000	2,000
III	5,000	15,00	50,00	0,000	5,000
IV	50,00	150,0	500,0	5,000	50,00

3.4.14
transflective display
display device that modulates light from an external source by reflection and from another source by transmission through a semitransmissive reflector

[*2.15*, IEC/SC 47C (Central Office) 3]

3.4.15
transmissive display
display that modulates light from an external source by transmission

NOTE If the display has a built-in light source, this part of ISO 13406 treats the display as emissive, not transflective, and not transmissive.

[*2.16*, IEC SC 47C (Central Office) 3]

3.4.16
viewing area
active area plus any contiguous areas that display permanent visual information or display background

[*2.18*, IEC SC 47C (Central Office) 3]