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## 10. COSMETIC SPECIFICATION FOR HELMET VISORS

### 10.1 SCOPE

This specification defines the conditions by which Zytronic inspects and qualifies manufactured helmet visor products for cosmetic and aesthetic functionality.

### 10.2 TEST PROCEDURE

The visor to be inspected shall be placed in front of the inspectors face, representing the outside view of the person who is wearing the visor.

When viewing the visor the inspector must direct his/her vision to a point not less than 0.5 metres on the other side of the visor, thus ensuring that it is looked through as is the practice when wearing the visor, and the vision is not concentrated on the surface.

The visor must be viewed without the use of any visual aids other than spectacles, which are used for normal visual correction.

### 10.3 ACCEPTANCE CRITERIA

The visor shall be checked for distortion, by the inspector moving the visor slowly up and down, and by the inspector moving his/her head from side to side. Any distortion detected shall deem the visor unacceptable.

Any defects which are not readily visible (in the vision area) when the visor is viewed are classed as cosmetically acceptable. Any defects in the non-vision area are to be ignored and deemed acceptable. For defects that are visible, the following allowances are acceptable:

- 1) Opaque inclusions <1.0mm.
- 2) Black specs <1.0mm.
- 3) Surface digs <1.0mm.
- 4) Hairline scratches <0.15 x 25mm.

Defects must be separated by a minimum of 100mm, with no more than 3-defects per visor from any combination of 1-4.

The table below indicates the general dimensional tolerances:

Radius of lugs (usually critical)	±0.5mm
General radius	+2, -1mm
Visor face height	+2, -1mm
Visor length on plan view	±1mm
Chord	±2.5mm with autoclave lug constraint
Chord	±5mm without autoclave lug constraint
Hole Ø	±0.2mm
Lug hole position from edge	±0.5mm
Lug hole position, hole to hole	±0.2mm
Pins hole position	±1mm

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