INCOMING INSPECTION STANDARD

Model : HSD 8-inch WVGA(MDL) Series

Accepted by:	
Signature	Date
Proposed by: Technical Service Division	
Signature	Date

Note:1.Please contact HannStar Display Corp. before designing your product based on this module specification.

2.The information contained herein is presented merely to indicate the characteristics and performance of our products. No responsibility is assumed by HannStar for any intellectual property claims or other problems that may result from application based on the module described herein.

Record of Revisions

Rev.	Date	Description of change
1.0		IIS of HSD 8-inch WVGA(MDL) Series was first established.

Content

1.0 PURPOSE:

This Incoming Inspection Standards shall be apply to TFT-LCD Module

2.0 VISUAL INSPECTION CRITERIA

2.1.Inspection condition is as followings

- Viewing distance is approximately 30 cm
- Viewing angle is referred to the CAS .
- Ambient temperature is in the room temperature
- Ambient illumination is 300±50 Lux.

Defect type			Criteria	
Electrical defect	Area (Note 2)		I	O
	Bright Dots (Note 3)		N ≦ 0	N ≦ 2
	Dark Dots (Note 4)		N ≦ 2	N ≦ 4
	Bright Dot- 2 Adjacent (Note 5)		N ≦ 0	
	Dark Dots- 2 Adjacent (Note 6)		N ≦ 0	
	Dark or Bright Dots- 3 and More Adjacent (Note 6)		N ≦ 0	
	Total Bright and Dark Dots		N ≦ 4	
	Minimum Distance Between Bright Dots		5 mm	
	Minimum Distance Between Dark Dots		5 mm	
	Minimum Distance Between Dark And Bright Dots		5 mm	
Visual defect	Foreign Material	Circular Foreign Material ： Dark/ Bright Spot	Visible under：ND5% 1.D≦0.15mm：No count 2.0.15mm＜D≦0.5mm, N≦4 3.D＞0.5mm：Not allowable	
		Linear Foreign Material ： Bright or Dark Line	Invisible under ND5% 0.1mm＜W≦0.5mm, 0.3mm＜L≦1.5mm,N≦4	
			Visible under ND5% 0.05mm≦W≦0.1mm, 0.3mm≦L≦0.7mm,N≦4	
	Polarizer	Linear Scratch	0.05mm≦W≦0.2mm, 1.0mm≦L≦5.0mm,N≦4	
		Bubble/ Peeling	0.15mm≦D＜0.5mm,N≦4	
	Mura & Leak		ND5%	

D: diameter , N: number , W: horizontal width , L: vertical height

2.2. Others

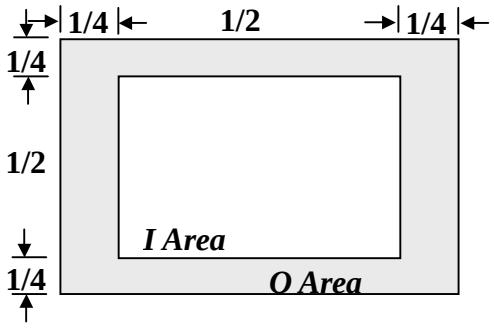
Note(1) a. Every dot herein means sub-pixel(Each Red, Green, Blue Color).

b. Damaged less than half size of sub-pixel is not counted as defect.

c. Extraneous substances which can be wiped out are not considered as defect.

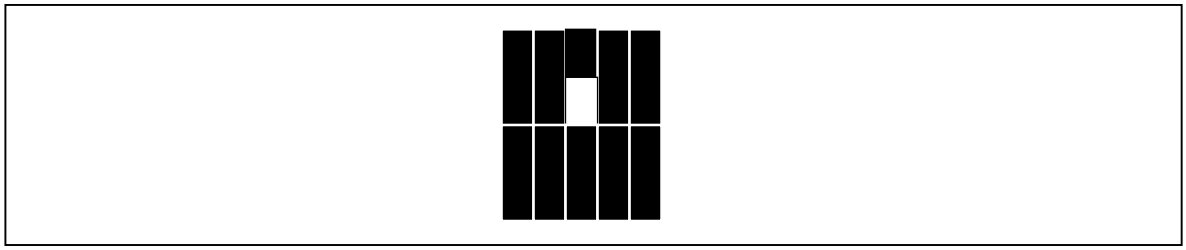
d. Defects which is on the Black Matrix(Outside of Active Area) are not considered as defect.

Note (2) Definition of Area



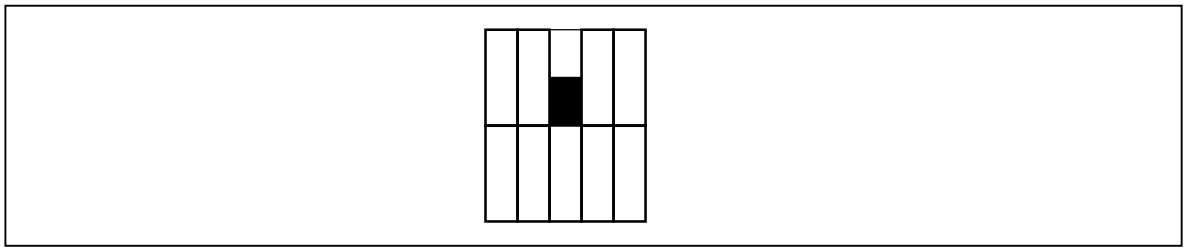
Note (3) Bright dot defect definition

-bright area is more than 50% of one dot .All bright dot defect must be visible through 5% ND filter.



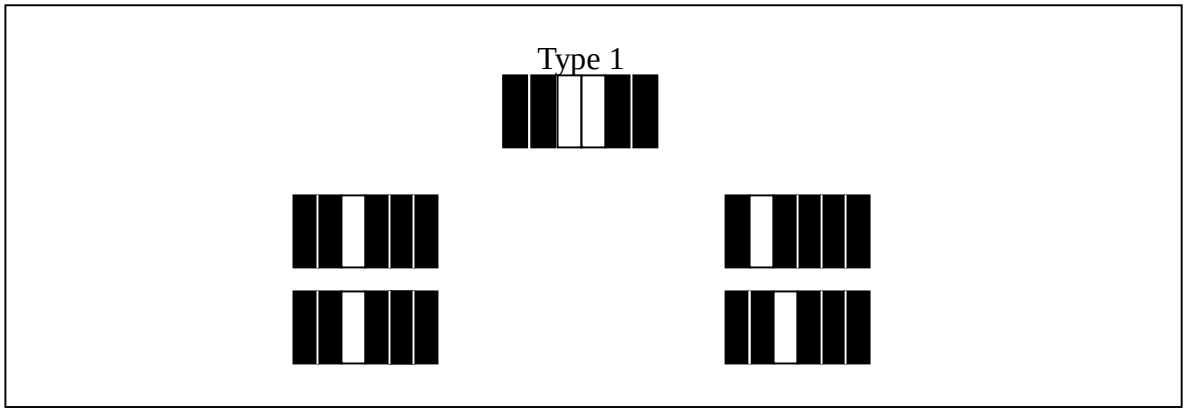
Note (4) Dark dot defect definition

-Dark area is more than 50% of one dot . All bright dot defect must be visible through 5% ND filter.



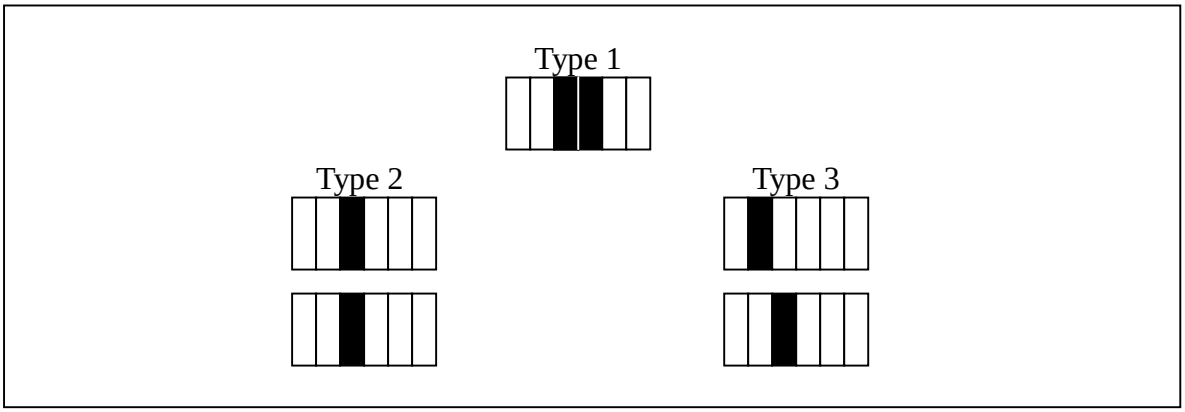
Note (5) Bright dot defect description

- Two adjacent



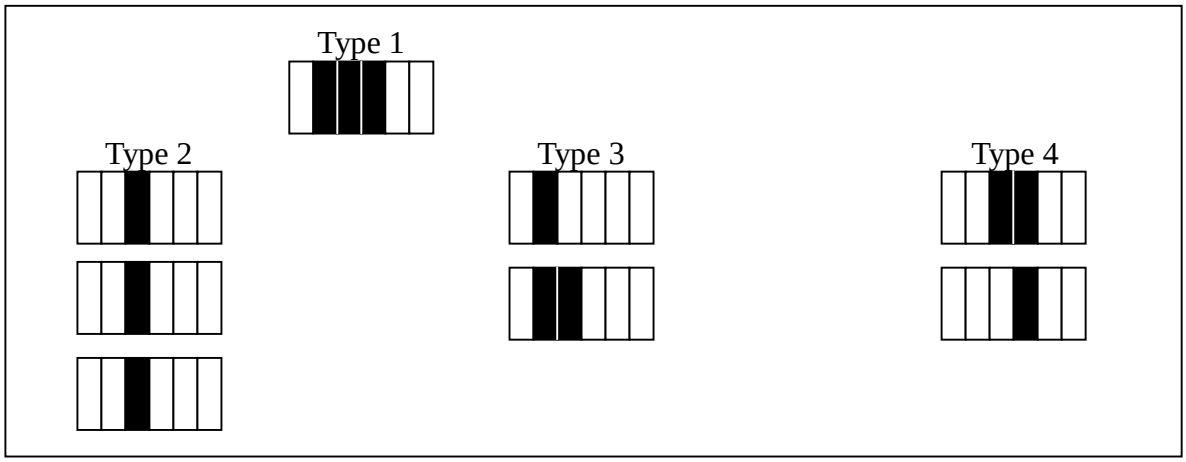
Note (6) Dark dot defect description

- Two adjacent



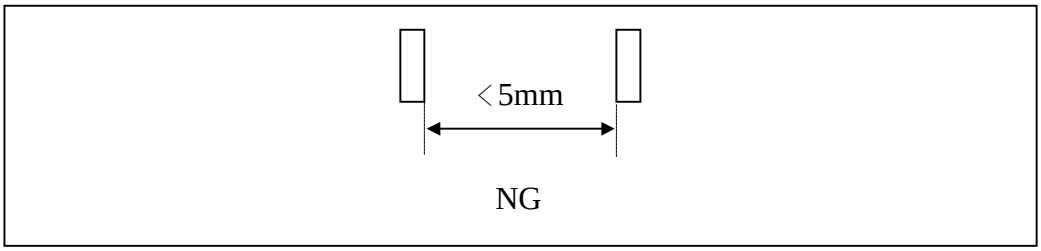
Note (7) Dark dot defect description

- Three adjacent

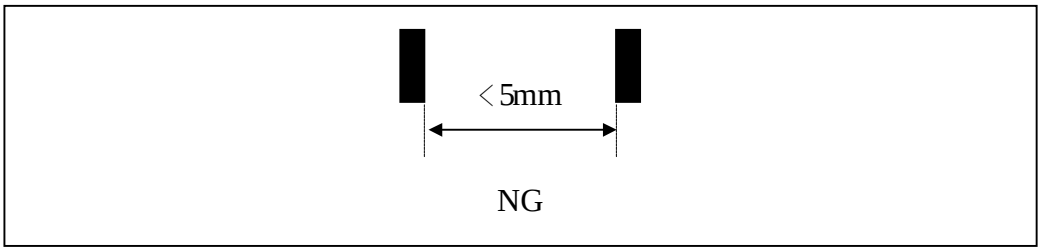


Note (8) Minimum distance between dot defects

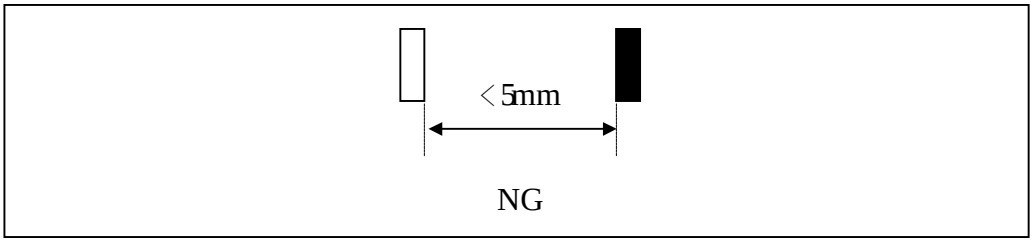
Bright dot to bright dot



Dark dot to dark dot

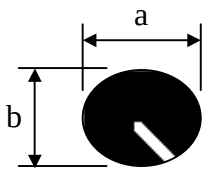


Bright dot to dark dot



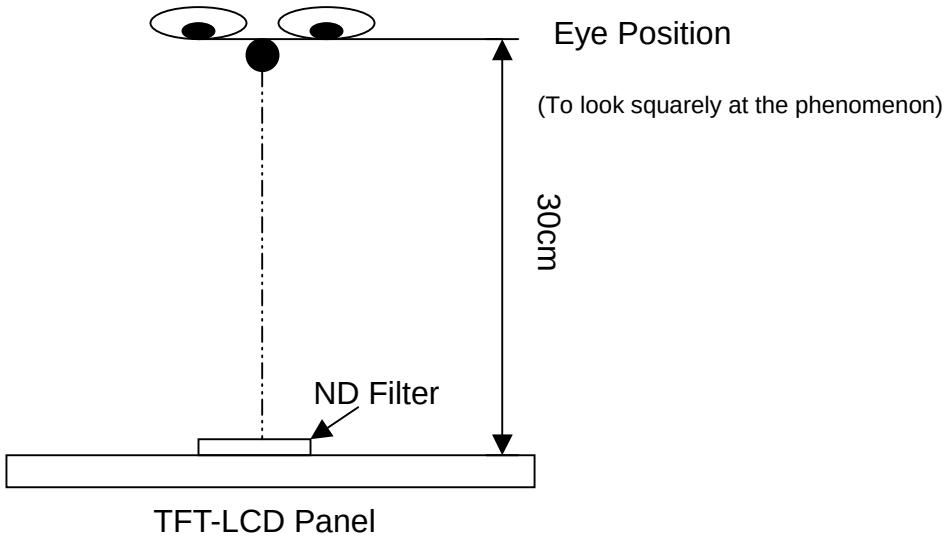
Note (9) “Average Diameter” description

Average Diameter = (a+b)/2



The defect that are not defined above and considered to be problem shall be reviewed and discussed by both parties.

Note (10) Bright dot, mura and leak are defined through transmission ND Filter as following.



Note (11) It doesn't matter whether silicon or EGC is used for frame spread, this product is always reliable.