Chunghwa Picture Tubes, Ltd.
Inspection Specification

To :
Date : **2007/12/19**

CPT TFT-LCD
Incoming Inspection Standards

Model : CLAA150XP01Q Z

ACCEPTED BY :

APPROVED BY	CHECKED BY	PREPARED BY
JOY CHOU	**Tristan**	**Product Planning Management General Division**

Prepared by : Product Planning Management General Division TFT Business Unit
CHUNGHWA PICTUER TUBES, LTD.
1127 Hopin Rd., Padeh, Taoyuan, Taiwan 334, R.O.C.

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INCOMING INSPECTION STANDARDS

Incoming Inspection Clause

(1) The Incoming Inspection Standard will be agreed and signed by both sides(Customer and CPT) before CPT receives the PO(Purchase Order) *forward 7days*.

(2) If there are any external fail statuses on the LCD Panel after Customer assembled, it will be judged to *Customer Responsibility*.

Warranty Period:

The warranty period is 2 month after arriving customer's factory.

DOA (Dead on Arrival):

DOA case is to be closed within ETA 30days or it shall not be traced back. (for further handling)

1. Inspection conditions is as follows:

(1) Viewing distance is approximately 35 ~ 40 cm

(1-1)Viewing distance is close for inspection of adjacent dots and distance between defect dots.

(2) Viewing angle is normal to the LCD panel as Fig _1(10°)

(3) Ambient temperature is approximately 25 ± 5℃

(4) Ambient humidity is 60 ± 5% RH

(5) Ambient illuminance is from 300 ~ 500 Lux.

(6) Input signal timing should be typical value.

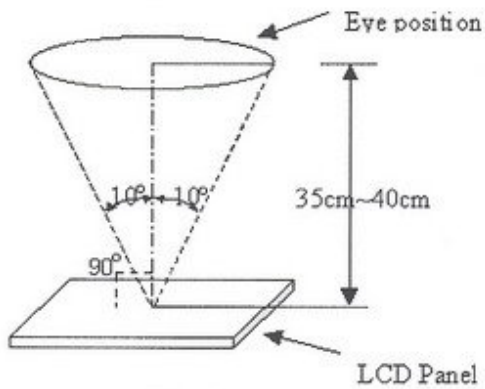


Fig _ 1

2. Special condition

(1) Viewing distance is close for inspection of adjacent dots and distance between defect dots.

(2) Viewing condition of "Shot block non-uniformity from oblique angle" is as Fig _2.

(3) Exceptional case: View angle ± 40° while inspected image-sticking.

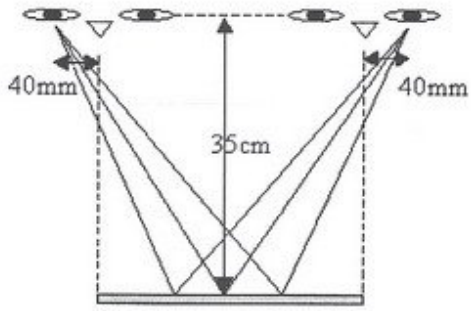


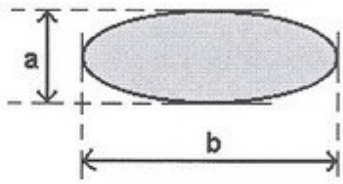
Fig _ 2

2. Inspection Criteria

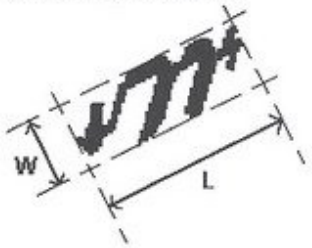
DEFECT TYPE			LIMIT		Note
VISUAL DEFECT	SCRATCH		0.1mm≦W≦0.3mm L≦20mm	N≦8	-
	INTERNAL	SPOT	1.5mm≦φ≦10mm	N≦8	Note1
		FIBER	W≦3mm, L≦30mm	N≦6	Note1
		POLARIZER BUBBLE	φ≦10mm	N≦8	Note1
		TOTAL	N≦16		-
ELECTRICAL DEFECT	BRIGHT DOT & DARK DOT		N≦16		Note2
	TOTAL DOT		Not limited		Note2
	TEN OR MORE ADJACENT DOT		≦10 PAIRS		-
	LINE DEFECT		NOT ALLOWED		-

One pixel consists of 3 sub-pixels, including R,G, and B dot.(Sub-pixel = Dot)

[Note1] W : Width[mm], L : Length[mm], N : Number, φ : Average Diameter

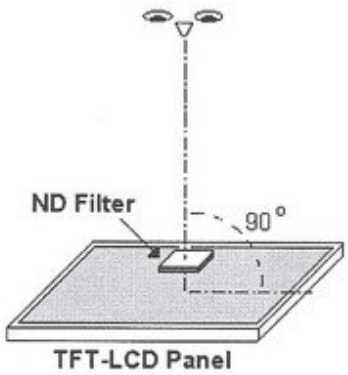


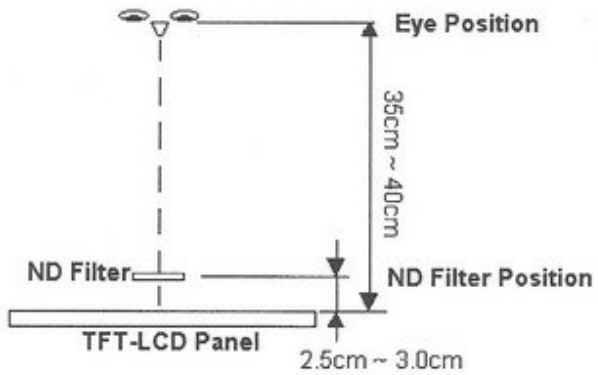
1. (White, black) Spot
2. Polarizer Bubble



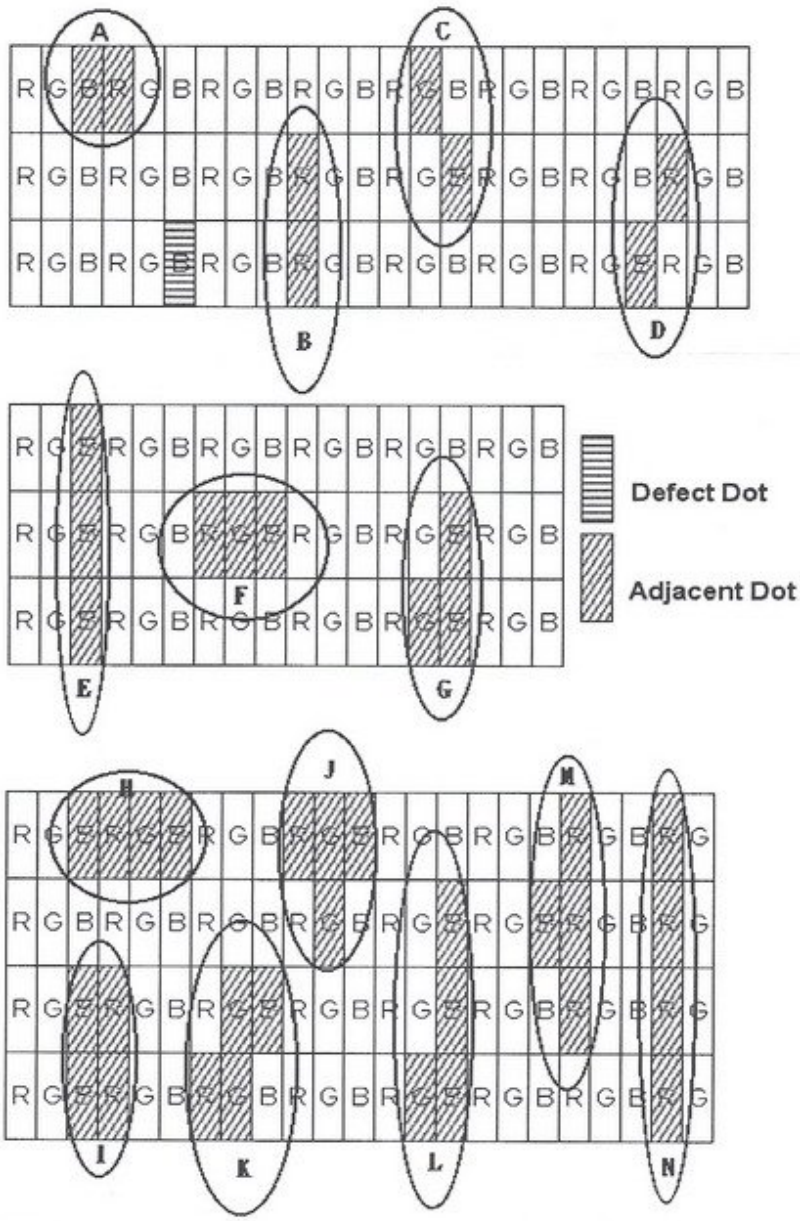
1. Fiber

[Note2] Bright dot is defined through 5% transmission ND Filter as following.





[Note3] Judge defect dot and adjacent dot as following. Allow below (A and B status) adjacent dot, including bright and dart adjacent dot. And they will be counted 2 defect dots in total quantity.



Allow above (as E, F and G status) three adjacent defect dots, including bright and dart dot. And they will be counted 3 defect dots in total quantity. Allow above (as H, I, J, K, L, M and N status) four adjacent defect dots, including bright and dart dot. And they will be counted 4 defect dots in total quantity.

[Note4] Other

(1) The defects that are not defined above and considered to be problem shall be reviewed and discussed by both parties.

(2) Defects on the Black Matrix, out of Display area, are not considered as a defect or counted.

(3) The performance of display isn't judged.

3. Mechanical :

Regarding the mechanical dimension, please refer the Technical Specification.

a. The tolerance of mechanical dimension is ± 0.5mm.

b. And the tolerance of length of lamp cable is ± 5.0mm.

4. Handling precaution

(1) Don't disassemble and reassemble the module by self. (禁止自行拆解。)

(2) Acid, alkali, alcohol or touched directly by hand will damage the display.
(酸性、鹼性、酒精或手的直接接觸將會損傷顯示面。)

(3) Static electricity will damage the module. Please configure grounding device.
(靜電會損傷模組。請裝配接地設備。)

(4) The strong vibration, shock, twist or bend will cause material damage, even module broken.
(強烈的衝擊、震動、扭轉或彎曲將會造成原材損傷，甚至面板破裂)

(5) It is easy to cause image sticking while displaying the same pattern for very long time.
(長期顯示同一畫面亦造成影像殘留。)

(6) The response time, brightness and performance will vary from different temperature.
(反應時間、亮度與均勻性會因溫度而有所變化)