

# Chunghwa Picture Tubes, Ltd. Inspection Specification

To: YIH HSING ENTERPRISE CO.,LTD.

Date: 2003.07.07

CPT TFT-LCD
Incoming Inspection Standards

Model: CLAA150XG 08D

ACCEPTED BY:		

APPROVED BY	CHECKED BY	PREPARED BY
		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. TEL: +886-3-3675151 FAX: +886-3-377-3001

Doc.No	CLAA150XG08 D-Yih Hsing-Ver:1-2003/07/07	Issue Date	2003/07/07
--------	--	------------	------------

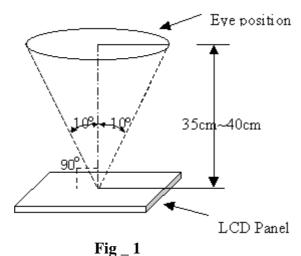
# INCOMING INSPECTION STANDARDS

## **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) The Customer shall notify CPT inspection result within 30 day, and CPT will execute RMA. Otherwise goods will be deemed accepted by Customer.
- (3) If there are any external fail statuses on the LCD Panel after Customer assembled, it will be judged to *Customer Responsibility*.
- (4) Guarantee period: From <u>CPT delivers panels to Customer</u> to <u>Customer ships or delivers</u> finished products(Monitor, NB, TV set...) out of Customer's factory.
- (5) There are not any CPT's brand, label or mark on the LCD Panel, even on the packing box.

#### 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  $25 \pm 5$
- (4) Ambient humidity is  $60 \pm 5\%$  RH
- (5) Ambient illuminance is from 300 ~ 500 Lux.
- (6) Input signal timing should be typical value.

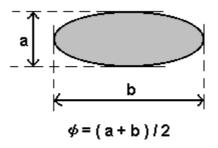


## 2. Inspection Criteria

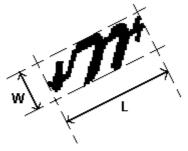
DEFECT TYPE		LIMIT			Note		
VISUAL DEFECT	SC	CRATCH	0.08mm V L 10	V 0.2mm Omm	N	7	-
		SPOT	0.8mm	1.5mm	N	7	Note1
	INTERNIAL	FIBER	W 0.2mm,	L 3.0mm	N	5	Note1
	INTERNAL	POLARIZER BUBBLE	0.8mm	1.5mm	N	7	Note1
		TOTAL		N 12			-
ELECTRICAL DEFECT	BRI	GHT DOT		N 15			Note2
	DARK DOT		N 10			-	
	TO	TAL DOT		N 25			Note2
	TWO AD	DJACENT DOT		7 PAIRS			Note3
	THREE A	DJACENT DOT		3 PAIRS			Note3
	FOUR AI	DJACENT DOT		2 PAIRS			Note3
		OR MORE ACENT DOT	NO	T ALLOWED	)		-
	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, : Average Diameter

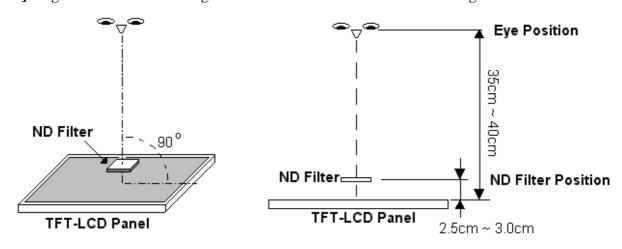


- 1. (White, black) Spot
- 2. Polarizer Bubble

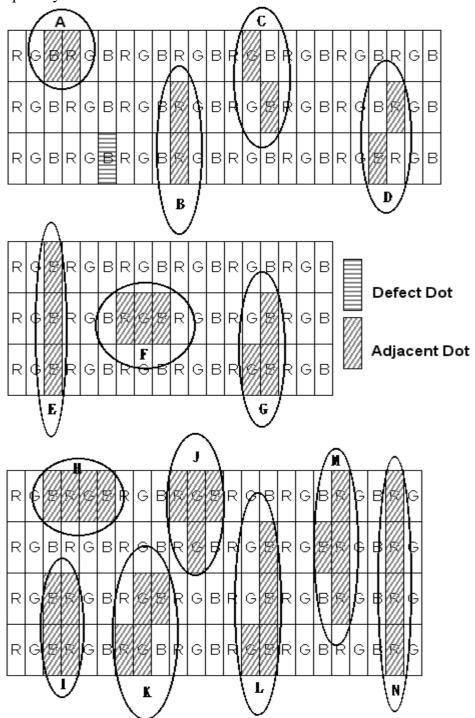


1. Fiber

# [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) The performance of display was judged by 1% transmission ND Filter, and the method as Note 2.

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

#### 3. Mechanical:

Regarding the mechanical dimension, please refer the Technical Specification.

- a. The tolerance of mechanical dimension is  $\pm 0.5$ mm.
- b. And the tolerance of length of lamp cable is  $\pm$  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發留。)
- (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)