SPECIFICATION

OF

LIQUID CRYSTAL DISPLAY MODULE

14-Feb-2019

CUSTOMER : **URT-STD**

Model No. : **UMOH-P155MD-T(REVD)**

Model version : **0**

Document Revision : **3**

CUSTOMER APPROVED SIGNATURE			

This specification need to be signed by purchaser or customer as a specification of products production and delivery from URT. Without signature of this specification , any purchase order for this model no. will be treated and considered that this specification is automatically acknowledged and accepted by purchaser or customer.

U.R.T.   **UNITED RADIANT TECHNOLOGY CORPORATION**

Joe Wu	**Ashin Chiu**	**Jenny Wang**	**Feb-14-2019**
APPROVED	CHECKED	PREPARED	Date

Revision record				
Document Revision	Model No. Version No.	Description		Revision by
0	UMOH-P155MD-T Version No. 0	7.0" TFT.		C.K.T Chen Titan Lo 12-Sep-2017
1	UMOH-P155MD-T Version No. 1	Modify the outline dimension.		C.K.T Chen Titan Lo 19-Sep-2017
2	UMOH-P155MD-T Version No. 2	Add LED life time.		C.K.T Chen Titan Lo 06-Feb-2018
3	UMOH-P155MD-T(REVD) Version No. 0	1. Change the LCD supplier 2. Modify the module number from UMOH-P155MD-T to UMOH-P155MD-T(REVD).		C.K.T Chen Titan Lo 14-Feb-2019

CONTENTS:

1. BASIC SPECIFICATION

1.1 Mechanical specifications

Items	Nominal Dimension	Unit
Active screen size	7.0" diagonal	--
Dot Matrix	1024 x RGB x 600	Pixel
Module Size (W x H x T)	164.80 x 99.80 x 5.65	mm.
Active Area (W x H)	154.21 x 85.92	mm.
Pixel Size (W×H)	-	mm.
Color depth	16.7M	color
Interface	LVDS - 18-bit / 24bit	--
Driving IC Package	COG	--
Module weight	TBD	g

1.2 Display specification

Display	Descriptions	Note
LCD Type	a-Si TFT	--
LCD Mode	Normally black	--
Polarizer Mode	Transmissive	--
Polarizer Surface	Normal	--
Pixel arrangement	RGB-stripe	--
Backlight Type	LED	--
Viewing Direction (Gray inversion)	Free	--

1.3 Outline dimension

| PIN	SYMBOL
1	VCOM
2	VDD
3	VDD
4	NC
5	RESET
6	STBYB
7	GND
8	RXIN0+
9	RXIN0-
10	GND
11	RXIN1-
12	RXIN1+
13	GND
14	RXIN2-
15	RXIN2+
16	GND
17	RXCLKIN-
18	RXCLKIN+
19	GND
20	RXIN3-
21	RXIN3+
22	GND
23	NC
24	NC
25	GND
26	NC
27	DIMO
28	SELBKHSD)
29	AVDD
30	GND
31	LED-
32	LED-
33	L/R
34	U/D
35	VGL
36	NC
37	VGH
38	VGH
39	LED+
40	LED+
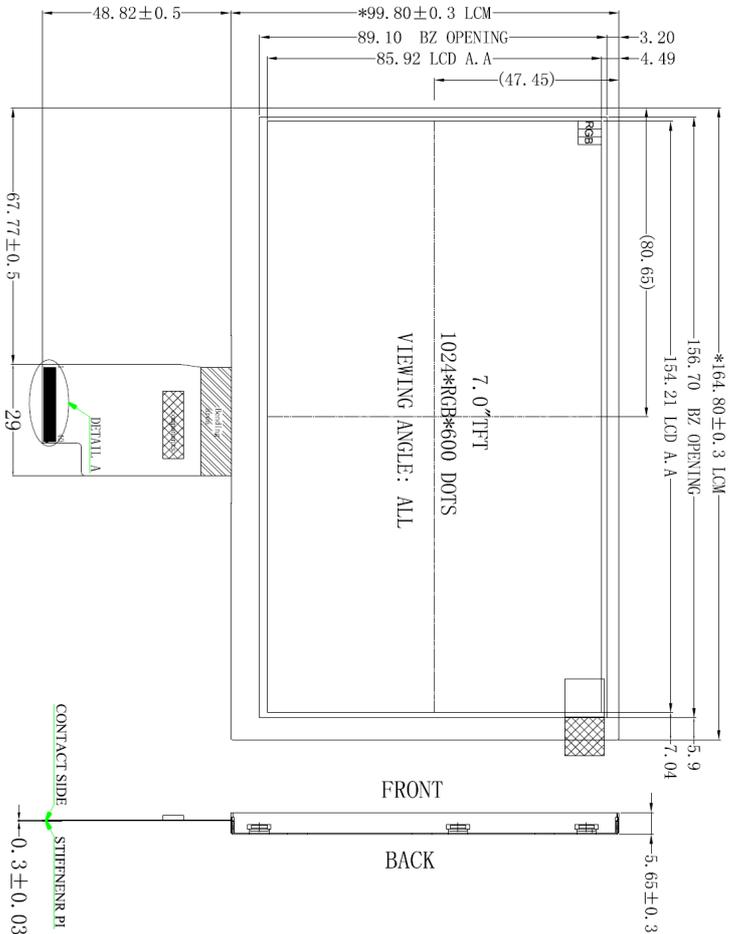
NOTES:
1. DISPLAY TYPE: 7.0TFT, NORMALLY BLACK
2. VIEWING DIRECTION : U/L/D/R 80/80/80/80
3. Driver IC : EK79001ECGA/EK73215BCGA OR EQU
4. Top : -20°C ~ 70°C, Tst : -30°C ~ 80°C
5. GENERAL TOLERANCE: ±0.2
6. LCM Luminance:500cd/m²(Typical)

*99.80±0.3 LCM
89.10 BZ OPENING
85.92 LCD A.A
(47.45)
48.82±0.5
3.20
4.49
RGB
7.0"TFT
1024*RGB*600 DOTS
VIEWING ANGLE: ALL
67.77±0.5
(80.65)
*164.80±0.3 LCM
156.70 BZ OPENING
154.21 LCD A.A
5.9
7.04
29
DETAIL A
CONTACT SIDE
STIFFNENR PI
0.3±0.03
FRONT
BACK
5.65±0.3

DETAIL A(2:1)
20.5±0.10
0.3±0.03
0.5±0.03
3.5±0.30
P0.5*39=19.5±0.05
0.5±0.08

20.5±0.1
5±0.3

LED CIRCUIT DIAGRAM:
10*3=30EA If=200mA
A
K
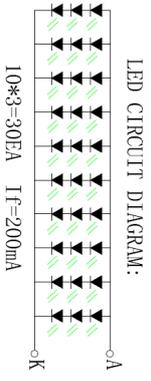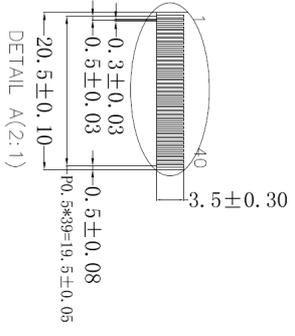
1.4 Block diagram:
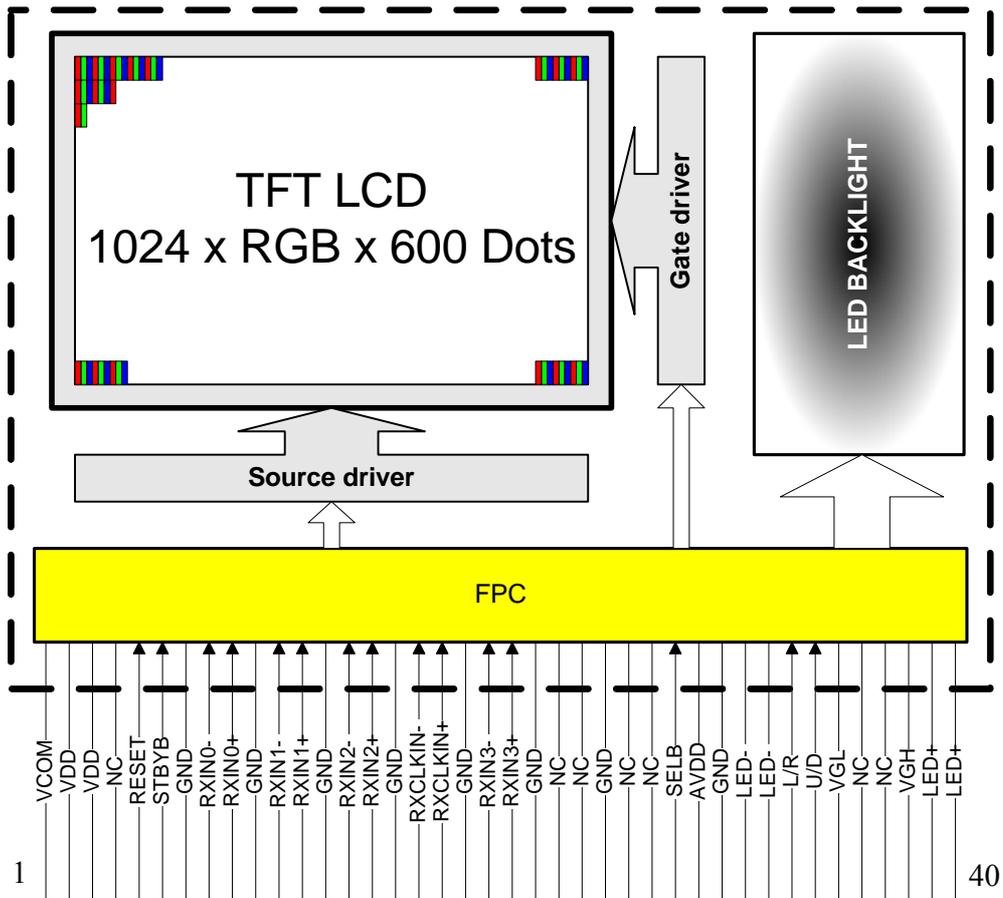
1.5 Interface Pin Connection:

Pin No.	Pin Symbol	I/O	Description	Remark
1	VCOM	P	Common Voltage.	
2~3	VDD	P	Power Voltage for digital circuit.	
4	NC	-	No connection.	
5	RESET	I	Global reset pin.	
6	STBYB	I	Standby mode, Normally pulled high. STBYB = "1", normal operation STBYB = "0", timing controller, source driver will turn off, all output are High-Z	
7	GND	P	Ground	
8~9	RXIN0- / RXIN0+	I	LVDS differential data input	
10	GND	P	Ground	
11~12	RXIN1- / RXIN1+	I	LVDS differential data input	
13	GND	P	Ground	
14~15	RXIN2- / RXIN2+	I	LVDS differential data input	
16	GND	P	Ground	
17~18	RXCLKIN- / RXCLKIN+	I	LVDS differential clock input	
19	GND	P	Ground	
20~21	RXIN3- / RXIN3+	I	LVDS differential data input	
22	GND	P	Ground	
23~24	NC	-	No connection.	
25	GND	P	Ground	
26	NC	-	No connection.	
27	NC	-	No connection.	
28	SELB	I	6bit/8bit mode select	Note1
29	AVDD	P	Power for Analog Circuit	
30	GND	P	Ground	
31~32	LED-	P	LED Cathode	
33	L/R	I	Horizontal inversion	Note2
34	U/D	I	Vertical inversion	Note2
35	VGL	P	Gate OFF Voltage	
36~37	NC	-	No connection.	
38	VGH	P	Gate ON Voltage	
39~40	LED+	P	LED Anode	

I: input, O: output, P: Power
Note1: If LVDS input data is 6 bits ,SELB must be set to High;
   If LVDS input data is 8 bits ,SELB must be set to Low.
Note2: When L/R="0", set right to left scan direction.
   When L/R="1", set left to right scan direction.
   When U/D="0", set top to bottom scan direction.
   When U/D="1", set bottom to top scan direction.

2. ELECTRICAL CHARACTERISTICS

2.1 Absolute Maximum Ratings

Items	Symbol	Min.	Max.	Unit
Power supply voltage	VDD	-0.3	3.6	V
Operate temperature range	T_{OP}	-20	70	℃
Storage temperature range	T_{ST}	-30	80	℃

Notes:

1. If the module is above these absolute maximum ratings. It may become permanently damaged. Using the module within the following electrical characteristic conditions are also exceeded, the module will malfunction and cause poor reliability.

2. $V_{CC} > V_{SS}$ must be maintained.

3. Please be sure users are grounded when handing LCD Module.

2.2 DC Characteristics

Typical Operation Conditions

Items	Symbol	Min.	Typ.	Max.	Unit	Condition
Supply v ltage	VDD	3.0	3.3	3.6	V	
	AVDD	9.0	9.5	10.1	V	-
	VGH	17	18	19	V	-
	VGL	-7	-6	-5	V	-
Input signal voltage	VCOM	2.7	2.9	3.2	V	
Input Voltage	V_{IH}	0.7VDD	-	VDD	V	
	V_{IL}	0	-	0.3VDD	V	

Current Consumption

Items	Symbol	Min.	Typ.	Max.	Unit	Condition
Current for Driver	I_{VDD}	-	10	-	mA	VDD = 3.3V
	I_{AVDD}	-	25	-	mA	AVDD = 9.5V
	I_{VGH}	-	5.5	-	mA	VGH = 18V
	I_{VGL}	-	8.0	-	mA	VGL = -6V

2.3 Back-light only Specification :

PARAMETER	SYMBOL	MIN	TYP	MAX	Unit	Test Condition	Remark
Voltage for LED backlight	VL	-	9	-	V	Ta=25℃	
Current for LED backlight	IL	-	200	-	mA	Ta=25℃	-
LED life time	Lf	-	30000	-	hrs	Ta=25℃	

Note: The "LED life time" is defined as the module brightness decrease to 50% original brightness at Ta=25℃ and If =200mA. The LED lifetime could be decreased if operating If is lager than 200 mA.

2.4 Timing Characteristics:

DE mode

Parameter	Symbol	Spec.			Unit
		Min.	Typ.	Max.	
DCLK Frequency	fclk	40.8	51.2	67.2	MHz
Horizontal Display Area	thd		1024		DCLK
HSD Period	th	1114	1344	1400	DCLK
HSD Blanking	thb+ thfp	90	320	376	DCLK
Vertical Display Area	tvd		600		T_H
VSD Period	tv	610	635	800	T_H
VSD Blanking	tvbp+ tvfp	10	35	200	T_H

DE mode (1024x600)

HV mode

Horizontal timing

Parameter	Symbol	Spec.			Unit
		Min.	Typ.	Max.	
DCLK Frequency	fclk	44.9	51.2	63	MHz
Horizontal Display Area	thd		1024		DCLK
HSD Period	th	1200	1344	1400	DCLK
HSD Pulse Width	thpw	1	-	140	DCLK
HSD Back Porch	thbp		160		DCLK
HSD Front Porch	thfp	16	160	216	DCLK

HV mode horizontal timing (1024x600)

Vertical Timing

Parameter	Symbol	Spec.			Unit
		Min.	Typ.	Max.	
Vertical Display Area	tvd		600		T_H
VSD Period	tv	624	635	750	T_H
VSD Pulse Width	tvpw	1	-	20	T_H
VSD Back Porch	tvbp		23		T_H
VSD Front Porch	tvfp	1	12	127	T_H

HV Mode Vertical Timing (1024x600)

2.5 LVDS mode AC electrical characteristics:

Parameter	Symbol	Spec. Min.	Spec. Typ.	Spec. Max.	Unit	Condition
Clock frequency	R_{XFCLK}	20	-	71	MHz	-
Input data skew margin	T_{RSKM}	500	-	-	pS	$\lvert V_{ID} \rvert$=400mV R_{XVCM}=1.2V R_{XFCLK}=71MHz
Clock high time	T_{LVCH}	-	$4/(7* R_{XFCLK})$	-	ns	-
Clock low time	T_{LVCL}	-	$3/(7* R_{XFCLK})$	-	ns	-
PLL wake-up time	T_{emPLL}	-	-	150	µs	-

LVDS mode AC electrical characteristics

T_{RSKM} : Receiver strobe margin
R_{SPOS} : Receiver strobe position
T_{SW} : Strobe width (Internal data sampling window)
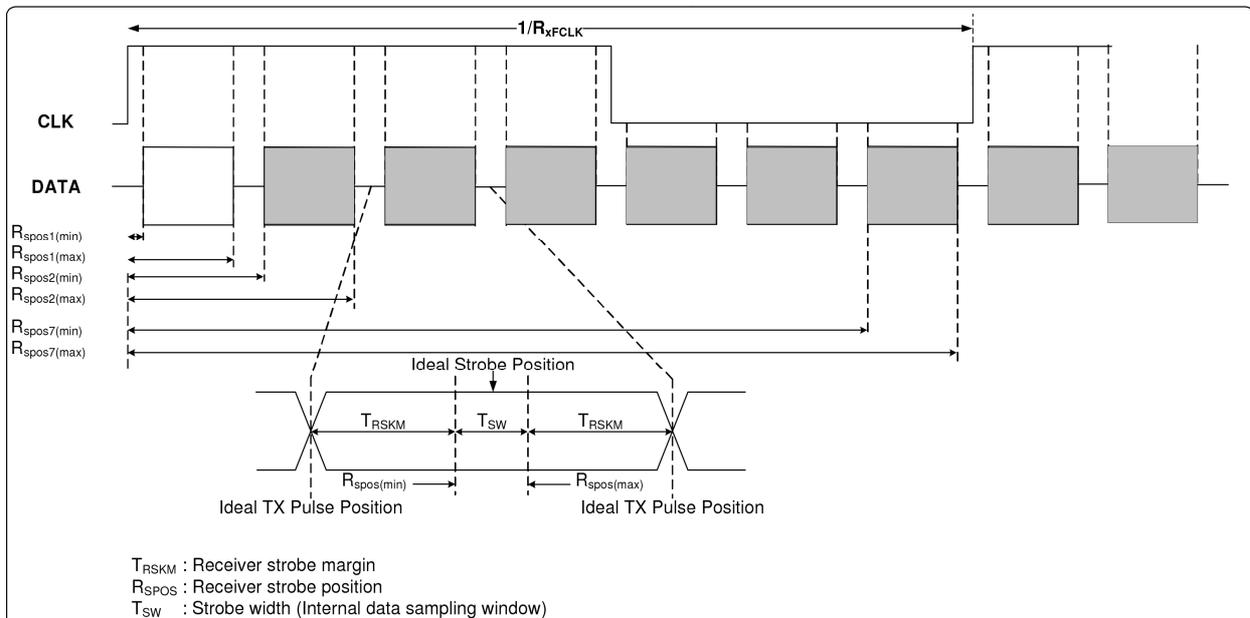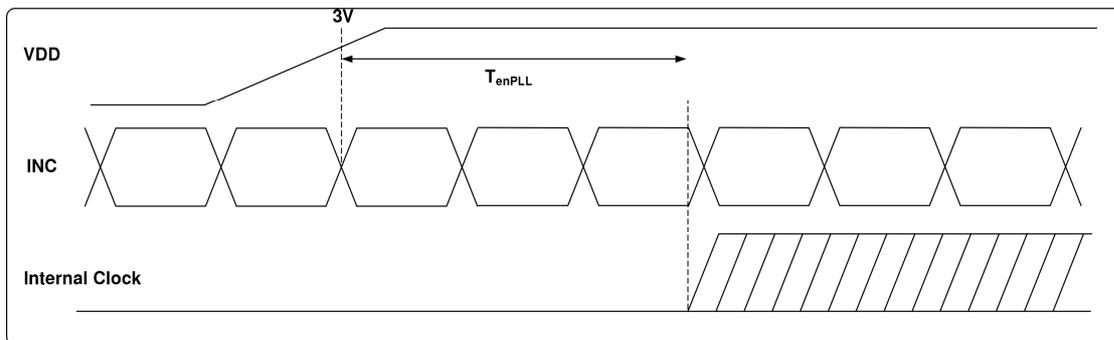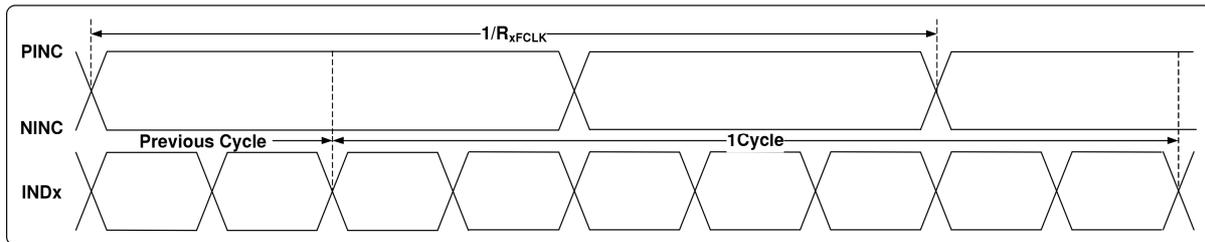
2.6 Power Sequence

a. Power on:
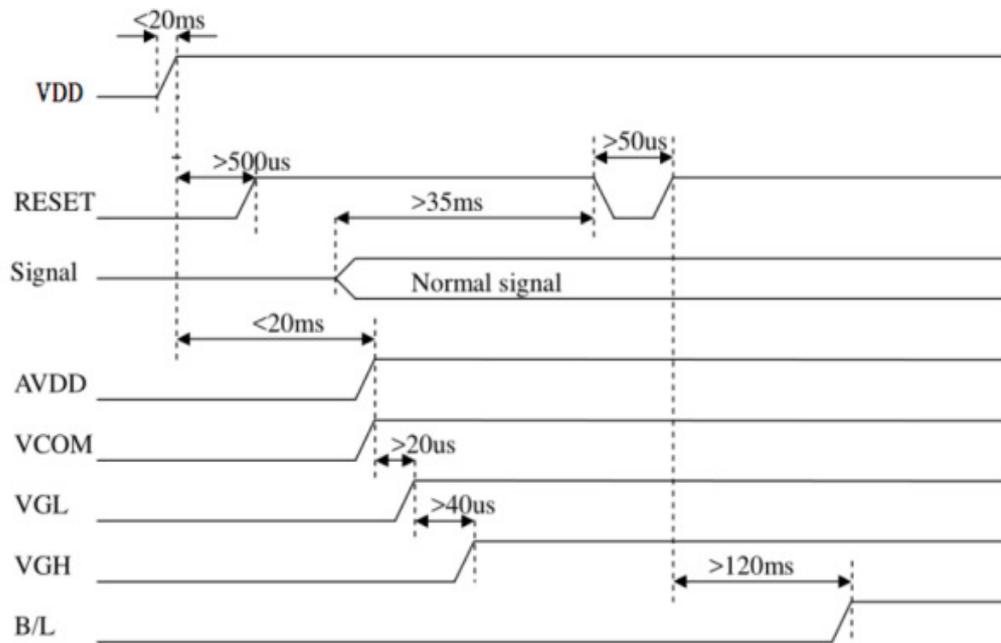
b. Power off:
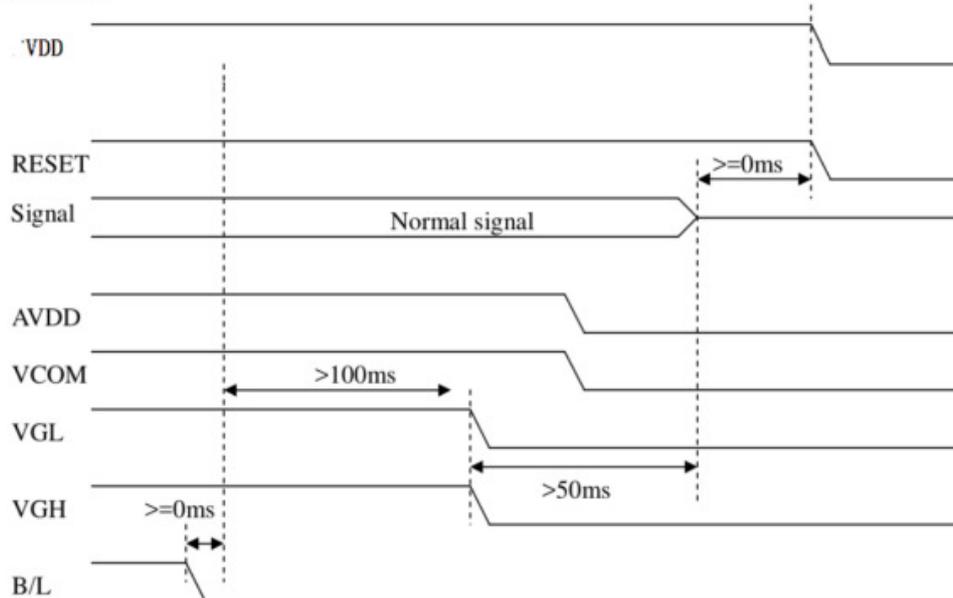
3. OPTICAL CHARACTERISTICS

3.1 Characteristics

Electrical and Optical Characteristics

No.	Item			symbol / temp.		Min.	Typ.	Max.	Unit	Note
1	Response Time			Tr	θ=Φ=0°	-	10	-	ms	2
				Tf		-	10	-		
2	Viewing Angle	Hor.	Cr 10	θ₂₊	Φ= 180°	-	80	-	degree	3
				θ₂₋	Φ= 0°	-	80	-		
		Ver.		θ₁₊	Φ= 90°	-	80	-		
				θ₁₋	Φ= 270°	-	80	-		
3	Contrast Ratio			Cr	25	600	800	-	-	4
4	Red x-code			Rx	25	0.524	0.574	0.624	-	5
	Red y-code			Ry		0.294	0.344	0.394		
	Green x-code			Gx		0.275	0.325	0.375		
	Green y-code			Gy		0.517	0.567	0.617		
	Blue x-code			Bx		0.087	0.137	0.187		
	Blue y-code			By		0.025	0.075	0.125		
	White x-code			Wx		0.228	0.278	0.328		
	White y-code			Wy		0.255	0.305	0.355		
	Brightness			Y		450	500	-	cd/m^2	
5	Brightness Uniformity				25	75	-	-	%	6

3.2 Definition of optical characteristics

Measurement condition :

Transmissive and Transflective type

PHOTAL LCD-5000
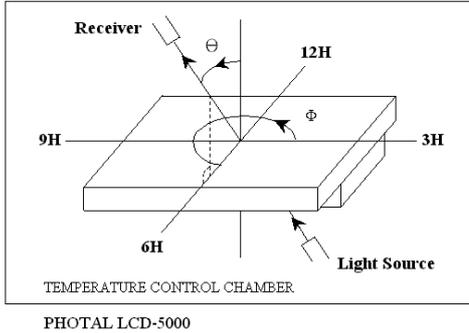
[Note 1] Definition of LCD Driving Vop and Waveform :
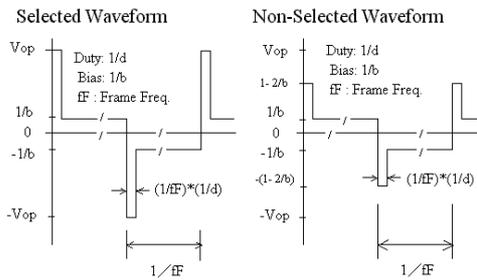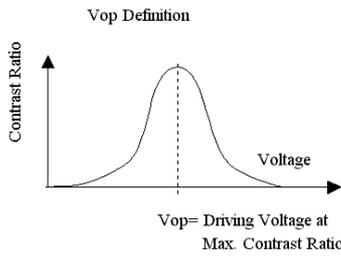

[Note 2] Definition of Response Time
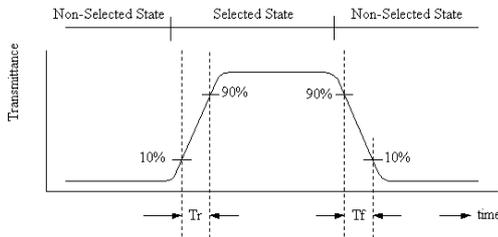

[Note 3] Definition of Viewing Angle :   [Note 4] Definition of Contrast Ratio :
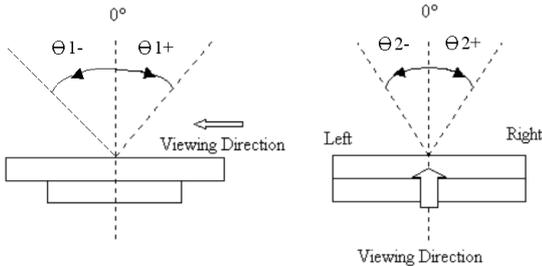
$$\text{Contrast Ratio} = \frac{TH}{TL}$$
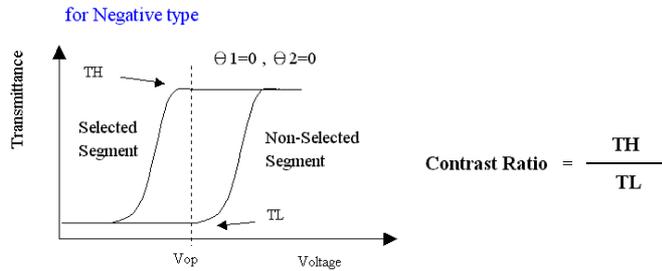
[Note 5] Definition of measurement of Color Chromaticity and Brightness

BM-7

500mm

LCD Module
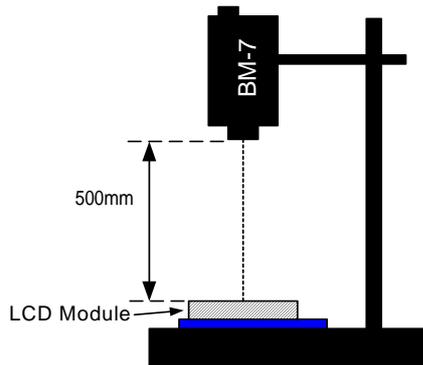
[Note 6] Definition of Brightness Uniformity

W / 4

Active Area Height : H

H / 4

① ② ③

④ ⑤ ⑥

⑦ ⑧ ⑨

Active Area Width : W
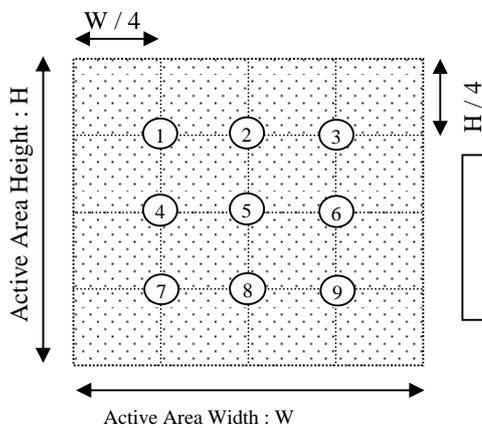
$$\text{Brightness Uniformity} = \frac{\text{Minimum Brightness of Point 1~9}}{\text{Maximum Brightness of Point 1~9}}$$

[Note 7] Definition of Measurement of Reflectance

BM-7

White Light Source
(Ring)

500mm

15 deg.

LCD Module
or referance
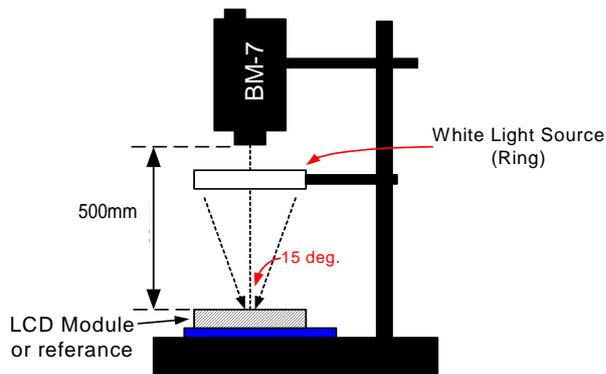
4. RELIABILITY :

Item No	Items	Condition	Note
1	High temperature operating	70 , 96 hours	1
2	Low temperature operating	-20 , 96 hours	1
3	High temperature storage	80 , 96 hours	1
4	Low temperature storage	-30 , 96 hours	1
5	High temperature & humidity storage	60 , 90%RH, 96 hours	2
6	Thermal Shock storage	-30 , 30min.<=> 80 , 30min. 5 Cycles	1

Note 1   The product move into the room temperature for at least 2 hours with no condensation.

Note 2   The product move into the room temperature for at least 24 hours with no condensation.

Note 3 : Please change the display picture (autorun) during operating mode. Avoid displaying static images to avoid image sticking , and the image sticking is accelerated by temperature.

  * One single product test for only one item.

  * Judgment after test : keep in room temperature for more than 2 hours.

    - Current consumption < 2 times of initial value

    - Contrast > 1/2 initial value

    - Function : work normally

5. PRODUCT HANDLING AND APPLICATION

PRECAUTION FOR HANDLING LCM

The LCD module contains a C-MOS LSI. People who operate the LCM should wear
ESD protection eguipement to prevent ESD hurt on products.

Do not input any signal before power is turned on.

Do not take LCM from its packaging bag until it is assembled.

Peel off the LCM protective film slowly since static electricity may be generated.

Pay attention to the humidity of the work shop, 50~60%RH is satisfactory.

Use a non-leak iron for soldering LCM.

Do not touch the display surface or connection terminals area with bare hands.Smudges on
the display surface reduce the insulation between terminals.

Cautions for soldering to LCM:

Condition for soldering I/O terminals:

Temperature at iron tip :350 ±15 .

Soldering time : 3~4sec./ terminals.

Type of solder : Eutectic solder(rosin flux filled).

PRECAUTION IN USE OF LCM

Do not contact or scratch the front surface and the contact pads of a LCM with hard
materials such as metal or glass or with one's nail.

To clean the surface , wipe it gently with soft cloth dampened by alcohol.

Do not attempt to wiped off the contact pads.

Keep LCM panels away from direct sunlight , also avoid them in high-temperature & high
humidity environment for a long period.

Do not drive LCM by DC voltage.

Do not expose LCM to organic solvent.

Liquid in LCM is hazardous substance. In case a contact with liquid crystal material is occured,
be sure to immediately wash such material away by soap and water.

The polarizer is easily damaged and should be handle with special care. Don't press or rub it
with hard objects.

PRECAUTION FOR STORING AND USE OF LCM

To avoid degradation of the device , do not store the module under the conditions of direct
sunlight , high temperature or high humidity . Keep the module in bags designed to prevent
static electricity charging under low temperature / normal humidity conditions(avoid high
temperature / high humidity and low temperature below 0)

Never use the LCD , LCM under 45 Hz , the liquid crystal will decomposition and cause permently
damage on display !!

USING ON MEDICAL CARE , SAFETY OR HAZARDOUS APPLICATION OR SYSTEM

For the application in medical care, safety and hazardous prodcuts or systems, an
authorization from URT is required. URT will not responsible for any damage or loss
which caused by the products without any authorization given by URT.

This product is not allowed to be designed and used for military application and/or purpose.

The delivery of this product to the countries and/or regions where the embargoes
are imposed by U.N. is prohibited.

The application and delivery of this product must comply with Startegic High-Tech Commodities (SHTC)
export control and the sales to the embargoed and/or sanctioned countries or regions are strictly prohibited.

6. DATE CODE OF PRODUCTS

Date code will be shown on each product :

YY MM DD - XXXX

Year Month Day - Serial no.

Example: 141108 - 0003 ==> Year 2014, November,8th , Serial no. 0003

Note   The lot no. attached on the packing box will be used for tracking once
the part is too small to print the date code.

7. LOT NO

Instruction of lot number:

LOT NO. : 0 0 0 8 3 5 2 5 (EX)

- Date
  - 01—1 st
  - 02—2 nd
  - | |
  - 31—31 th

- Week   1 ———— 7

- Week of Month   1 ———— 5

- Month
  - 01—January
  - 02—February
  - | |
  - 12—December

- Year
  - 00—2000
  - 01—2001

Lable of carton:

Carton Box

```
MODEL:XXXX—XXXXXX—XX
Q'TY:        PCS
LOT    NO.
N.W.      KGS.                    ↑
G.W.      KGS.                    UP
UNITED  RADIANT  TECHNOLOGY  CORP.
光聯科技股份有限公司
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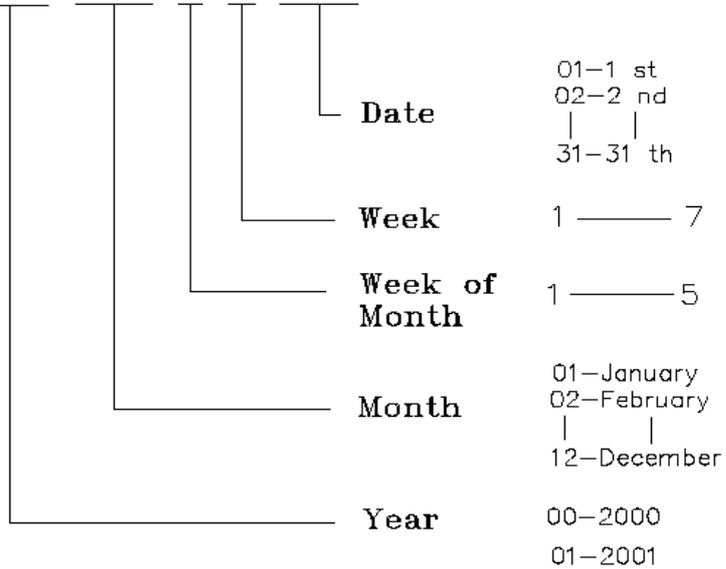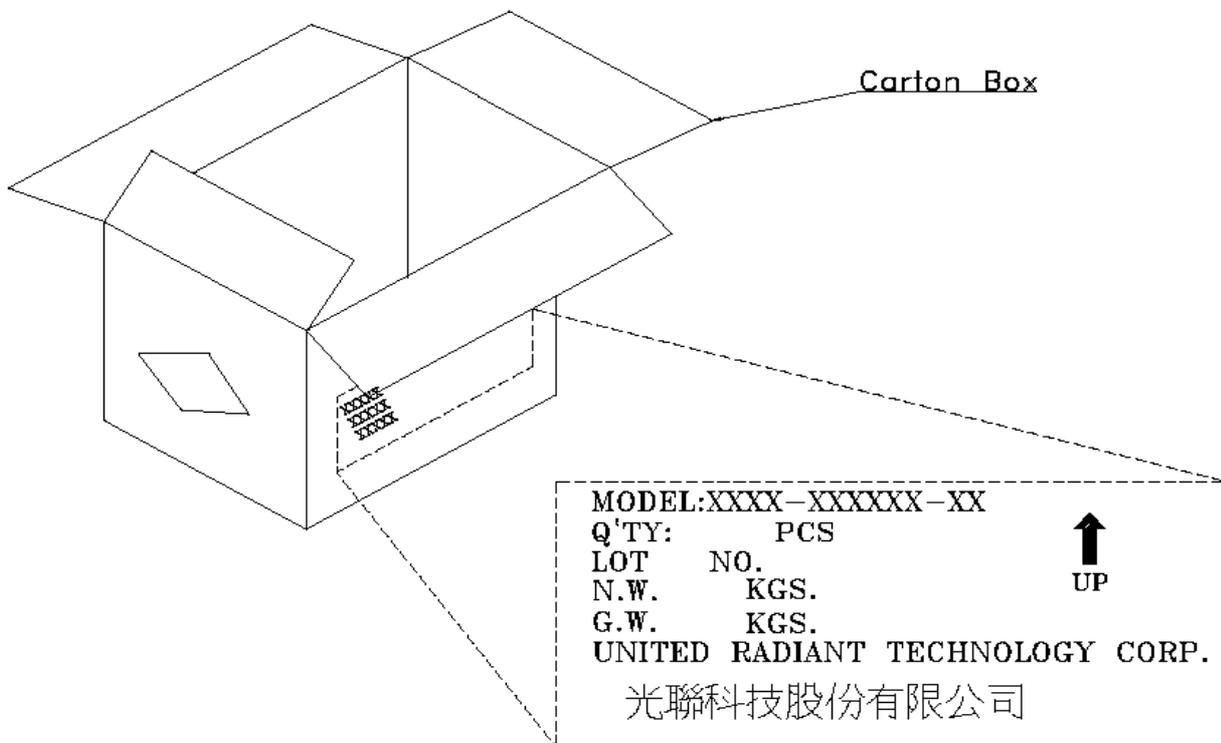
8. INSPECTION STANDARD

8.1. QUALITY :

THE QUALITY OF GOODS SUPPLIED TO PURCHASER SHALL COME UP TO THE FOLLOWING STANDARD.

8.1.1. THE METHOD OF PRESERVING GOODS

AFTER DELIVERY OF GOODS FROM U.R.T. TO PURCHASER. PURCHASER SHALL CONTROL THE LCM
AT -10   40   ,AND IT MIGHT BE DESIRABLE TO KEEP AT THE NORMAL ROOM TEMPERATURE
AND HUMIDITY UNTIL INCOMING INSPECTION OR THROWING INTO PROCESS LINE.

8.1.2. INCOMING INSPECTION

(A) THE METHOD OF INSPECTION

IF PURCHASER MAKE AN INCOMING INSPECTION ,   A SAMPLING PLAN SHALL BE
APPLIED ON THE CONDITION THAT QUALITY OF ONE   DELIVERY SHALL   BE
REGARDED AS ONE LOT.

(B) THE STANDARD OF QUALITY

ISO-2859-1 (SAME AS MIL-STD-105E) , LEVEL   SINGLE PLAN.

CLASS	AQL(%)
MAJOR	0.65 %
MINOR	1.5 %

EVERY ITEM SHALL BE INSPECTED ACCORDING TO THE CLASS.

(C) MEASURE

IF AS THE RESULT OF ABOVE RECEIVING INSPECTION , A LOT OUT IS DISCOVERED.
PURCHASER SHALL BE INFORM SELLER OF IT WITHIN SEVEN DAYS. BUT FIRST SHIPMENT
WITHIN FOURTEEN DAYS.

8.1.3. WARRANTY POLICY

U.R.T. WILL PROVIDE ONE-YEAR WARRANTY FOR THE PRODUCTS ONLY IF UNDER SPECIFICATION
OPERATING CONDITIONS. U.R.T. WILL REPLACE GOOD PRODUCTS FOR THESE DEFECT PRODUC'
WHICH UNDER WARRANTY PERIOD AND BELONG TO THE RESPONSIBILITY OF U.R.T.

8.2. CHECKING CONDITION

**8.2.1.** CHECKING DIRECTION SHALL BE IN THE 45 DEGREE AREA FROM VIEWING DIRECTION.

8.2.2. CHECKER SHALL SEE OVER 350±50 mm. WITH BARE EYES FAR FROM SAMPLE AND USING 2 PCS.
OF 20W FLUORESCENT LAMP.

8.3. INSPECTION PLAN :

CLASS	ITEM	JUDGEMENT	CLASS
PACKING & INDICATE	1. OUTSIDE AND INSIDE PACKAGE	"MODEL NO." , "LOT NO." AND "QUANTITY" SHOULD INDICATE ON THE PACKAGE.	Minor
	2. MODEL MIXED AND QUANTITY	OTHER MODEL MIXED...............REJECTED QUANTITY SHORT OR OVER......REJECTED	Critical
	3. PRODUCT INDICATION	"MODEL NO." SHOULD INDICATE ON THE PRODUCT	Major
ASSEMBLY	4. DIMENSION, LCD GLASS SCRATCH AND SCRIBE DEFECT.	ACCORDING TO SPECIFICATION OR DRAWING.	Major
APPEARANCE	5. POLARIZER EDGE OR LCD'S SEALING LINE IS VISABLE IN THE VIEWING AREA.	ACCORDING TO DRAWING REJECTED.	Minor
	6. BLEMISH BLACK SPOT WHITE SPOT IN THE LCD AND LCD GLASS CRACKS (INSIDE VIEWING AREA)	ACCORDING TO STANDARD OF VISUAL INSPECTION (INSIDE VIEWING AREA)	Minor
	7. BLEMISH BLACK SPOT WHITE SPOT AND SCRATCH ON THE POLARIZER (INSIDE VIEWING AREA)	ACCORDING TO STANDARD OF VISUAL INSPECTION (INSIDE VIEWING AREA)	Minor
	8. BUBBLE IN POLARIZER (INSIDE VIEWING AREA)	ACCORDING TO STANDARD OF VISUAL INSPECTION (INSIDE VIEWING AREA)	Minor
	9. LCD'S RAINBOW COLOR (INSIDE VIEWING AREA)	STRONG DEVIATION COLOR (OR NEWTON RING) OF LCD......REJECTED. OR ACCORDING TO LIMITED SAMPLE (IF NEEDED, AND INSIDE VIEWING AREA)	Minor
ELECTRICAL	10. ELECTRICAL AND OPTICAL CHARACTERISTICS (CONTRAST VOP CHROMATICITY … ETC)	ACCORDING TO SPECIFICATION OR DRAWING . (INSIDE VIEWING AREA)	Critical
	11. MISSING LINE	MISSING DOT LINE CHARACTER ....REJECTED	Critical
	12. SHORT CIRCUIT WRONG PATTERN DISPLAY	NON DISPLAY WRONG PATTERN DISPLAY CURRENT CONSUMPTION OUT OF SPECIFICATION...... REJECTED	Critical
	13. PIN HOLE PATTERN DEFORMITY	ACCORDING TO STANDARD OF VISUAL INSPECTION	Minor

8.4. STANDARD OF VISUAL INSPECTION

NO.	CLASS	ITEM	JUDGEMENT
8.4.1	MINOR	BLACK AND WHITE SPOT FOREIGN MATERIEL DUST IN THE CELL BLEMISH SCRATCH (IN THE VIEWING AREA)	(A) ROUND TYPE: unit : mm. LINEAR TYPE table follows below

(A) ROUND TYPE: unit : mm.

DIAMETER (mm.)	ACCEPTABLE Q'TY
$\Phi \leqq 0.2$	DISREGARD
$0.2 < \Phi \leqq 0.5$	3 (Distance>5mm)
$0.5 < \Phi$	0

NOTE: Φ =(LENGTH+WIDTH)/2

(B) LINEAR TYPE: unit : mm.

LENGTH	WIDTH	ACCEPTABLE Q'TY
------	$W \leqq 0.03$	DISREGARD
$L \leqq 5.0$	$0.03 < W \leqq 0.07$	3 (Distance>5mm)
------	$0.07 < W$	FOLLOW ROUND TYPE

NO.	CLASS	ITEM	JUDGEMENT
8.4.2	MINOR	BUBBLE IN POLARIZER DENT ON POLARIZER (IN THE VIEWING AREA)	unit : mm.

DIAMETER	ACCEPTABLE Q'TY
$\Phi \leqq 0.2$	DISREGARD
$0.2 < \Phi \leqq 0.5$	3 (Distance>5mm)
$0.5 < \Phi$	0

NO.	CLASS	ITEM	JUDGEMENT
8.4.3	MINOR	Dot Defect	(table and notes below)

Items	ACC. Q'TY
Bright dot	$N \leqq 2$
Dark dot	$N \leqq 3$
Total dot	$N \leqq 4$

Pixel Define :
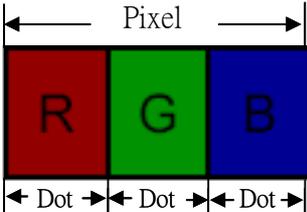
Note 1: The definition of dot: The size of a defective dot over 1/2 of whole dot is regarded as one defective dot.

Note 2: Bright dot: Dots appear bright and unchanged in size in which LCD panel is displaying under black pattern.

Note 3: Dark dot: Dots appear dark and unchanged in size in which LCD panel is displaying under pure red, green ,blue pattern.

Note 4：The bright dot defect must be visible through 2% ND filter
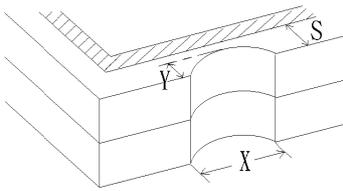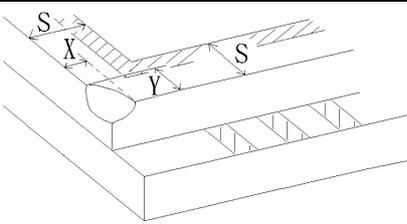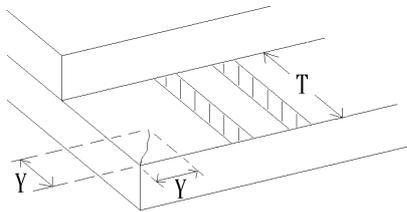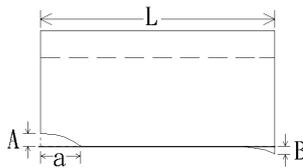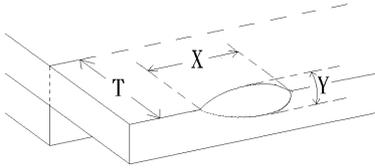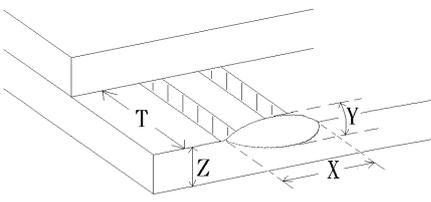
NO.	CLASS	ITEM	JUDGEMENT	
8.4.4	MINOR	LCD GLASS CHIPPING	$Y > S$	Reject
8.4.5	MINOR	LCD GLASS CHIPPING	X or $Y > S$	Reject
8.4.6	MAJOR	LCD GLASS GLASS CRACK	$Y > (1/2) T$	Reject
8.4.7	MAJOR	LCD GLASS SCRIBE DEFECT	1. $a > L/3$, $A > 1.5mm$. Reject 2. B : ACCORDING TO DIMENSION	
8.4.8	MINOR	LCD GLASS CHIPPING (ON THE TERMINAL AREA)	$= (x+y)/2 > 25mm$	Reject
8.4.9	MINOR	LCD GLASS CHIPPING (ON THE TERMINAL SURFACE)	$Y > (1/3) T$	Reject
8.4.10	MINOR	LCD GLASS CHIPPING	$Y > T$	Reject