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1. Operating Precautions

- 1) **Since** front polarizer is easily damaged, please be cautious and not to scratch it.
- 2) Be sure to turn off power supply when inserting or disconnecting from input connector.
- 3) Wipe off water drop immediately. Long contact with water may cause discoloration or spots.
- 4) When the panel surface is soiled, wipe it with absorbent cotton or soft cloth.
- 5) **Since** the panel is made of glass, it may be broken or cracked if dropped or bumped on hard surface.
- 6) To avoid ESD (Electro Static Discharge) damage, be sure to ground yourself before handling TFT-LCD Module.
- 7) Do not open nor modify the module assembly.
- 8) Do not press the reflector sheet at the back of the module to any direction.
- 9) **In case** if a module has to be put back into the packing container slot after it was taken out from the container, do not press the center of the LED light bar edge. Instead, press at the far ends of the LED light bar edge softly. Otherwise the TFT Module may be damaged.
- 10) At the insertion or removal of the Signal Interface Connector, be sure not to rotate nor tilt the Interface Connector of the TFT Module.
- 11) TFT-LCD Module is not allowed to be twisted & bent even **force** is added on module in a very short time. Please design your **display** product well to avoid external **force** applying to module by end-user directly.
- 12) Small amount of materials having no flammability grade is used in the LCD module. The LCD module should be **supplied** by power complied with requirements of Limited Power Source (IEC60950 or UL1950), or be applied exemption.
- 13) Severe temperature condition may result in different luminance, response time and lamp ignition voltage.
- 14) Continuous operating TFT-LCD **display** under low temperature environment may accelerate lamp exhaustion and reduce luminance dramatically.
- 15) The data on this specification sheet is applicable when LCD module is **placed** in landscape position.
- 16) Continuous **displaying** fixed pattern may induce image sticking. It's recommended to use screen saver or shuffle content periodically if fixed pattern is **displayed** on the screen.



2. General Description

G101EVN01.0 is a Color Active Matrix Liquid Crystal Display composed of a TFT LCD panel, a driver circuit, and LED backlight system. The screen format is intended to support the 16:10 WXGA, 1280(H) x800(V) screen and 262k colors (RGB 6-bits data driver) with LED backlight driving circuit. All input signals are LVDS interface compatible.

G101EVN01.0 is designed for a display unit of notebook style personal computer and industrial machine.

2.1 Display Characteristics

The following items are characteristics summary on the table under 25 °C condition:

Items	Unit	Specifications
Screen Diagonal	[inch]	10.1"
Active Area	[mm]	216.96(H) x 135.6(V)
Pixels H x V		1280 x 3(RGB) x 800
Pixel Pitch	[mm]	0.1695 X 0.1695
Pixel Arrangement		R.G.B. Vertical Stripe
Display Mode		MVA, Normally Black
Nominal Input Voltage VDD	[Volt]	3.3 (Typical)
Typical Power Consumption	[Watt]	3.4 max. (Include Logic and Blu power)
Weight	[Grams]	187g max.
Physical Size	[mm]	229.46(H) x 149.2(V) x 4.96(H)
Electrical Interface		LVDS
Surface Treatment		Anti-Reflection ▽ 1.5%, Hardness 3H Anti- Static
Support Color		262K colors (RGB 6-bit)
Temperature Range Operating Storage (Non-Operating)	°C °C	-20 to +60 -30 to +70
RoHS Compliance		RoHS Compliance

2.2 Optical Characteristics

The optical characteristics are measured under stable conditions at 25 °C (Room Temperature):

Item	Unit	Conditions	Min.	Typ.	Max.	Note
White Luminance	[cd/m ²]	I _{LED} = 25mA (5p average)	255	300		
Uniformity	%	5 points	80%			
Contrast Ratio			1000	1300	-	
Response Time	[msec]	Rising				
	[msec]	Falling				
	[msec]	Rising + Falling	---	25	35	
Viewing Angle	[degree]	Horizontal (Right) CR = 10 (Left)	80	85	---	
	[degree]		80	85	---	
	[degree]	Vertical (Upper) CR = 10 (Lower)	80	85	---	
	[degree]		80	85	---	
Color / Chromaticity Coordinates (CIE 1931)		Red x	0.549	0.579	0.609	
		Red y	0.308	0.338	0.368	
		Green x	0.295	0.325	0.355	
		Green y	0.53	0.56	0.59	
		Blue x	0.122	0.152	0.182	
		Blue y	0.095	0.125	0.155	
		White x	0.283	0.313	0.343	
		White y	0.299	0.329	0.359	
Color Gamut	%		-	45	-	

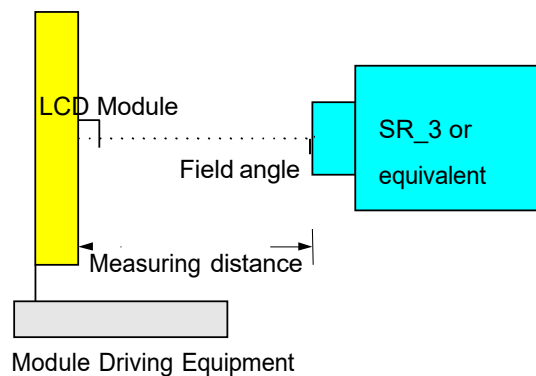
Note 1: Measurement method

Equipment Pattern Generator, Power Supply, Digital Voltmeter, Luminance meter (SR_3 or equivalent)

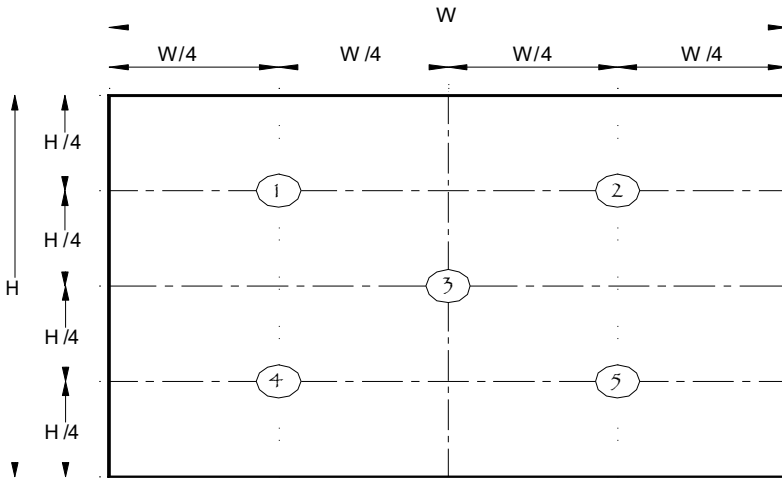
Aperture Field angle 2□with 50cm measuring distance

Test Point Follow Note 2 position

Environment < 1 lux



Note 2: Definition of 5 points position (Display active area: 216.96(H) x 135.6(V))



Note 3: The luminance uniformity of 5 points is defined by dividing the minimum luminance values by the maximum test point luminance

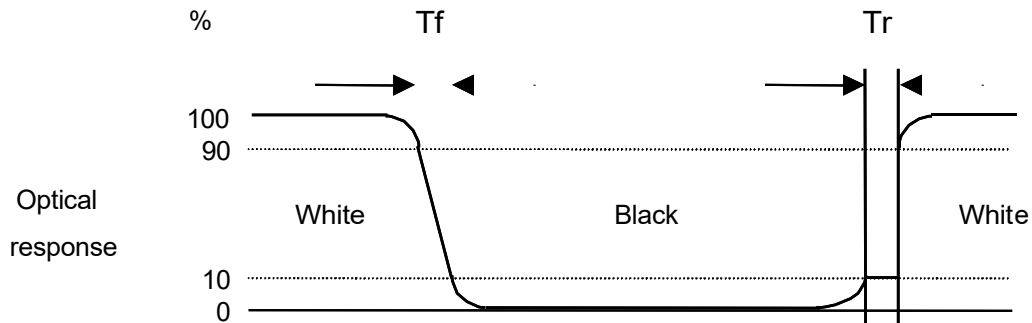
$$U_{w9} = \frac{\text{Minimum Brightness of five points}}{\text{Maximum Brightness of five points}}$$

Note 4: Definition of contrast ratio (CR):

$$\text{Contrast ratio (CR)} = \frac{\text{Brightness on the "White" state}}{\text{Brightness on the "Black" state}}$$

Note 5: Definition of response time:

The output signals of photo detector are measured when the input signals are changed from "White" to "Black" (falling time) and from "Black" to "White" (rising time), respectively. The response time interval is between 10% and 90% of amplitudes. Please refer to the figure as below.



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