

# ACD-2914

## PRODUCT DATA SHEET

02/16/2017

### 12.1" WXGA LED BACKLIT TFT DISPLAY

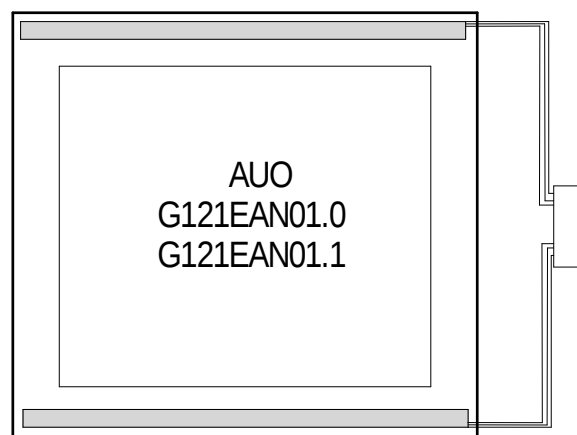
#### GENERAL DESCRIPTION

The ACD-2914 consists of the AUO G121EAN01.0/ G121EAN01.1 12.1" TFT displays modified with a high performance LED backlight

##### Customer Consigned Panel

##### Performance at given brightness levels

1200 cd/m<sup>2</sup> with 21.1 watts LED power



#### LCD PANEL HIGHLIGHTS

12.1" TFT Active Matrix Color

261.12 (H)mm x 163.2 (V)mm viewable area

WXGA 1280 x 800 pixels, 16.7M/262K colors

1000:1 typical contrast ratio

Display Mode Normally Black

Surface Treatment: Hardness 3H, AG

*For complete LCD specification (standard panel), refer to the AUO G121EAN01.0/G121EAN01.1 datasheet*

#### LED BACKLIGHT FEATURES

Day and NVIS LED edge-light rail

Three wire connection (Typically 11 inches long), allows simple interconnect with LED driver<sup>1</sup>

Projected lifetime > 75,000 hours

5000:1 or better dimming ratio (Day)<sup>1</sup>

<sup>1</sup> For best power transfer and control, use ACI ID5 LED Driver ACI-E090315-2912

### MAXIMUM RATINGS \*

| Symbol            | Parameter                                                    | Value       | Unit  |
|-------------------|--------------------------------------------------------------|-------------|-------|
| Top <sup>1</sup>  | Operating temperature of display (center of panel surface)   | -30 to +85  | Deg-C |
| Tled              | Operating temperature of LED edge light (light rail contact) | -30 to + 95 | Deg-C |
| Tstg <sup>1</sup> | Display storage temperature                                  | -30 to +85  | Deg-C |
| Ifwd              | LED forward current                                          | 95          | mA    |

\*Maximum Ratings are those values beyond which damage may occur

1 Per Manufacturer's Specification

### PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd(Day) = 78.75mA per bank, 2 banks per rail, 2 rails per display, LED rails: ACR-0672-2906 Ta = +25Deg-C, moving air (36.0 CFM) min 2hr soak

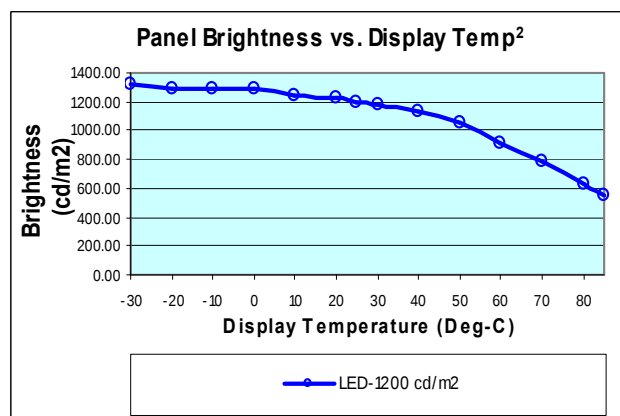
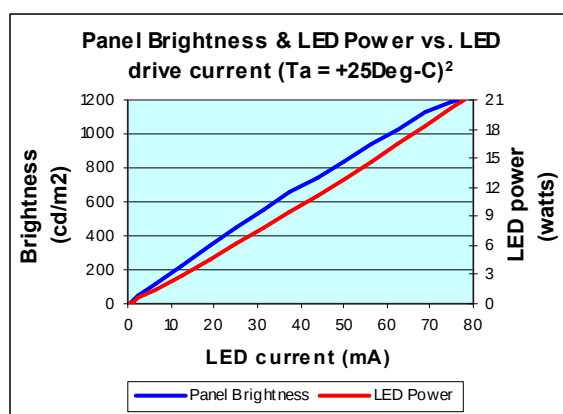
| Symbol | Parameter          | Test Conditions | Min  | Typ   | Max  | Unit              |
|--------|--------------------|-----------------|------|-------|------|-------------------|
| Bpd    | Panel Brightness   |                 | 1080 | 1200  | 1320 | cd/m <sup>2</sup> |
| u'd    | White X coordinate |                 |      | 0.205 |      | -                 |
| v'd    | White Y coordinate |                 |      | 0.464 |      | -                 |
| Rd     | White radius error |                 |      |       | 0.04 | -                 |

### LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd(Day) = 78.75mA, Top = +25Deg-C

| Symbol | Parameter                     | Test Conditions | Min | Typ | Max | Unit |
|--------|-------------------------------|-----------------|-----|-----|-----|------|
| Vfwd   | LED rail forward voltage drop |                 | 61  | 67  | 73  | Vdc  |

## TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS



<sup>2</sup> Moving air (36.0 CFM)