

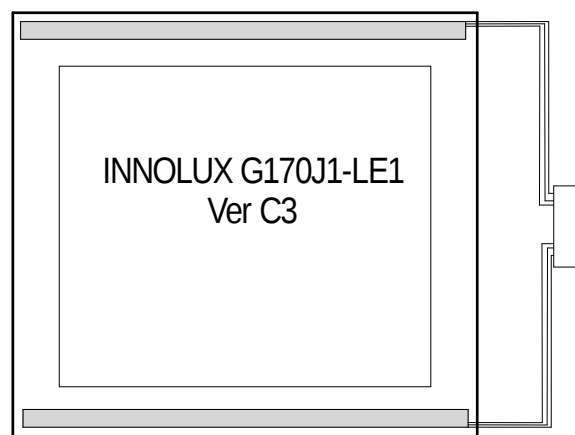
17.0" WUXGA LED BACKLIT TFT DISPLAY WITH NVIS CLASS B CAPABILITY

GENERAL DESCRIPTION

The ACD-NVIS170-2951 consists of the Innolux G170J1-LE1 Ver C3 TFT display modified with a high performance LED backlight capable of Day and NVIS Class B operation.

Performance at given brightness levels

565 cd/m² with 23.3 watts LED power (Day)
2.4 cd/m² with 3.0 watts LED power (NVIS)



LED BACKLIGHT FEATURES

Day and NVIS LED edge-light rail

Three wire connection (Typically 11 inches long), allows simple interconnect with LED driver¹

Projected lifetime > 75,000 hours

5000:1 or better dimming ratio (Day)¹

¹ For best power transfer and control, use ACI ID5 Dual Mode LED Driver ACI-2952.

LCD PANEL HIGHLIGHTS

17.0" TFT Active Matrix Color

365.76 (H)mm x 228.6 (V)mm viewable area

WUXGA 1920 x 1200 pixels, 16.7 M colors

2000:1 typical contrast ratio

Display Mode Normally Black

Physical Size 386.8(W)mm x 250.8(H)mm x 18.6(D)mm

For complete LCD specification (standard panel), refer to the Innolux G170J01-LE1 Ver C3 datasheet

MAXIMUM RATINGS *

Symbol	Parameter	Value	Unit
Top ¹	Operating temperature of display (center of panel surface)	-20 to +80	Deg-C
Tled	Operating temperature of LED edge light (light rail contact)	-30 to + 95	Deg-C
Tstg ¹	Display storage temperature	-40 to +90	Deg-C
Ifwd	LED forward current (Day)	84	mA
Ifwd	LED forward current (NVIS)	24	mA

*Maximum Ratings are those values beyond which damage may occur

1 Per Manufacturer's Specification

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd(Day) = 70mA per bank, 2 banks per rail, 2 rails per display, Ifwd(NVIS) = 20mA per bank, 1 bank per rail, 2 rails per display, LED rails: ACR-2763 Ta = +25Deg-C, moving air (36.0 CFM) min 2hr soak

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Bpd	Panel Brightness (Day)		509	565	662	cd/m ²
Bpn	Panel Brightness (NVIS)		2.1	2.4	2.7	cd/m ²
Xd	White X coordinate (Day mode)			0.267		-
Yd	White Y coordinate (Day mode)			0.310		-
XN	White X coordinate (NVIS)			0.270		-
YN	White Y coordinate (NVIS)			0.343		-

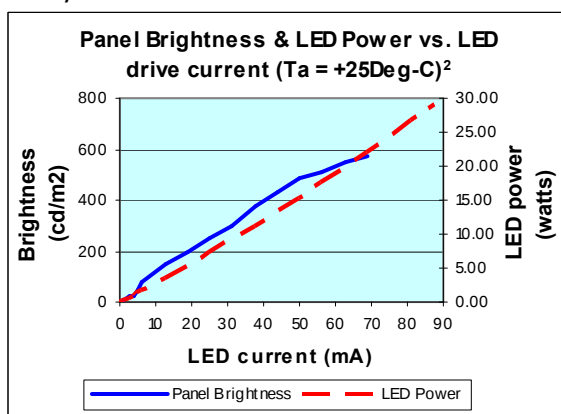
LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd(Day) = 70mA, Ifwd(NVIS) = 20mA, Top = +25Deg-C

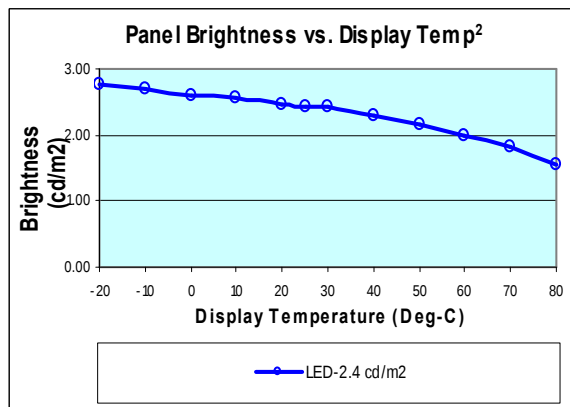
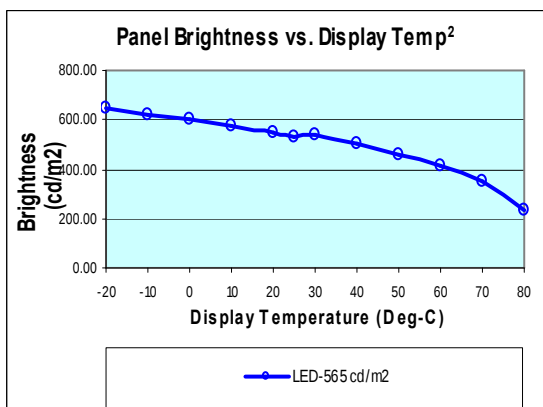
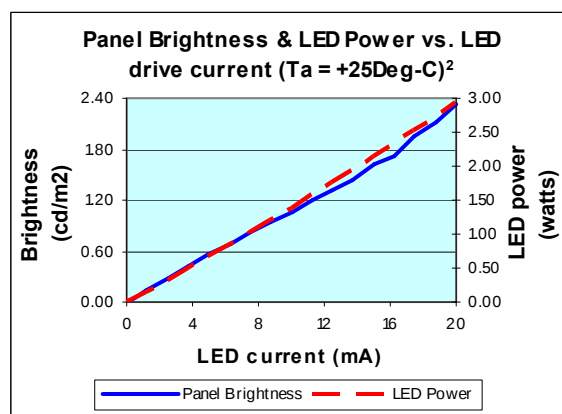
Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Vfwd	LED rail forward voltage drop (Day mode)		75	83	91	Vdc
Vfwd	LED rail forward voltage drop (NVIS)		67	75	83	Vdc

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS

Day



NVIS



² Moving air (36.0 CFM)