



397 Route 281
Tully, New York 13159
Phone: 315 696-6676
Fax: 315 696 9923
Email: sales@acipower.com
www.acipower.com

ACD-2739

PRODUCT DATA SHEET

10/6/2016

8.0" WVGA LED BACKLIT TFT DISPLAY

Sunlight Readability/1000:1 dimming/Cool operation

GENERAL DESCRIPTION

The ACD-2739 consists of the NLT NL8048AC21-01F WVGA TFT display modified with a high performance LED backlight.

Customer Consigned Panel

Performance at given brightness levels

2200 cd/m² with 12.6 watts LED power

Display outline identical to standard LED equipped panel

For many applications, satisfies sunlight readability goals



LCD PANEL HIGHLIGHTS

8.0" TFT Active Matrix Color

174.0 (H) mm x 104.4 (V) mm viewable area

WVGA 800 x 480 pixels, 262K colors

800:1 typical contrast ratio

70% color gamut (NTSC color space)

Display Mode Normally White

For complete LCD specification (standard panel), refer to NLT NL8048AC21-01F data sheet.

LED BACKLIGHT FEATURES

White LED edge-light rail

Flex Tail allows simple interconnect with LED driver¹

Projected lifetime > 75,000 hours

1000:1 or better dimming ratio, guaranteed¹

¹ For best power transfer and control, use ACI-2750 LED driver. Do not set the driver output current (Ifwd) higher than the value specified in the Maximum Ratings table of this document. Please contact the factory for more specific use LED driver solutions if required.

MAXIMUM RATINGS *

Symbol	Parameter	Value	Unit
Top ¹	Operating temperature of display (center of panel surface)	-30 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 +80	Deg-C
Ifwd	Maximum LED edge-light forward current (DC)	108	mA

* Maximum Ratings are those values beyond which damage to the driver may occur

¹ Per Manufacture's Specification

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 90mA per bank, LED rail ACR-2762, 2 banks per rail, 1 rail per display, Ta = +25Deg-C, moving air (36.0 CFM), min 2hr soak

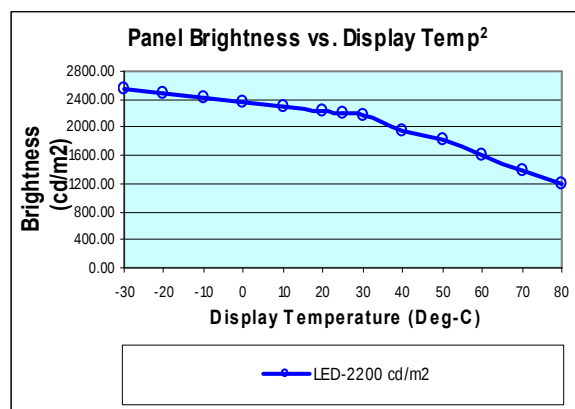
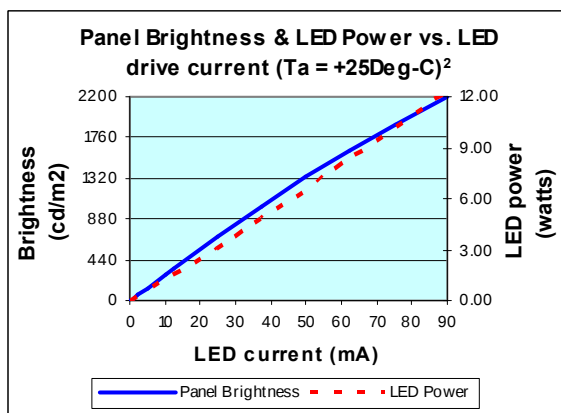
Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Bp	Panel Brightness		1980	2200	2420	cd/m ²
X	White X coordinate			0.267		-
Y	White Y coordinate			0.301		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 90mA per bank, 2 banks per rail, 1 rail per display, Top = +25Deg-C

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Vfwd	LED rail forward voltage drop		63	70	77	Vdc

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS



² Moving air (36.0 CFM)

MECHANICAL CHARACTERISTICS

