



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

ACD-SA190-2931

PRODUCT DATA SHEET

08/09/2018

19.0" SXGA LED BACKLIT TFT DISPLAY

Sunlight Readability/1000:1 dimming/Cool operation

GENERAL DESCRIPTION

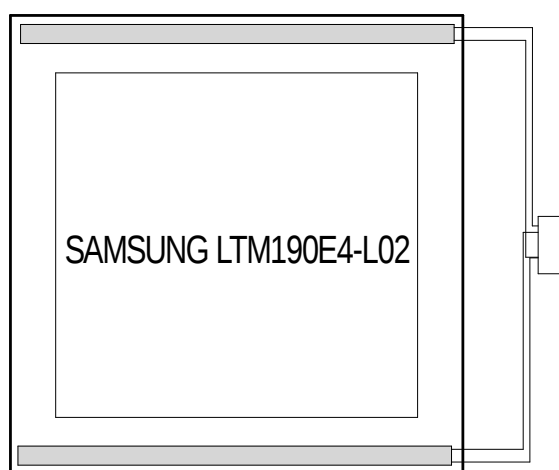
The ACD-SA190-2931 consists of the Samsung LTM190E4-L02 SXGA TFT display modified with a high performance LED backlight.

Performance at given brightness levels

800 cd/m² with 35.8 watts LED power

Display outline identical to standard LED equipped panel

For many applications, satisfies sunlight readability goals



LCD PANEL HIGHLIGHTS

19.0" TFT Active Matrix Color

376.32 (H) mm x 301.056 (V) mm viewable area

SXGA 1280 x 1024 pixels, 16.7M colors

1500:1 typical contrast ratio

72% color gamut (NTSC color space)

Display Mode Normally Black; Haze 44% 3H Hard Coating

For complete LCD specification (standard panel), refer to Samsung LTM190E4-L02 data sheet.

LED BACKLIGHT FEATURES

White LED edge-light rail

Four wire connection (Typically 11 inches long), 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-F100400-2561 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)	0 to +50	Deg-C
Tled	Operating temperature of LED edge light (light rail contact)	-30 to +75	Deg-C
Tstg ¹	Display storage temperature	-20 to +60	Deg-C
Ifwd	Maximum LED edge-light forward current (DC)	80	mA

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

¹ Per Manufacture's Specification

PANEL/BACKLIGHT OPTICAL CHARACTERISTICS

Ifwd = 33.3mA per bank, LED rail ACR-0966-2607, 6 banks per rail, 2 rail per display, Ta = +25Deg-C, moving air (36.0 CFM), min 2hr soak

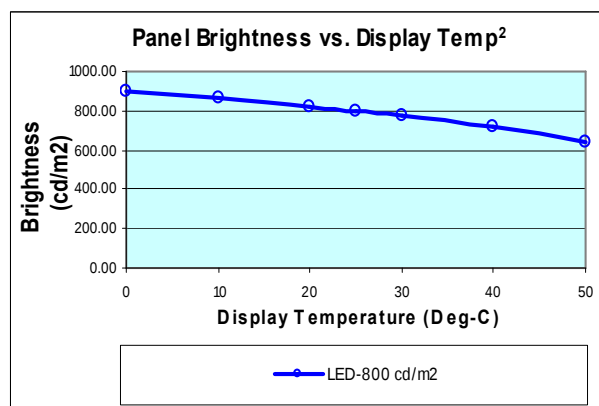
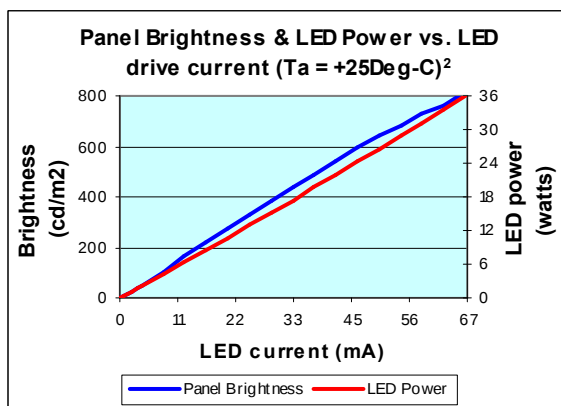
Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Bp	Panel Brightness		720	800	880	cd/m ²
X	White X coordinate			0.269		-
Y	White Y coordinate			0.284		-

LED EDGE-LIGHT ELECTRICAL CHARACTERISTICS

Ifwd = 66.7mA per bank, 6 banks per rail, 1 rail per display, Top = +25Deg-C

Symbol	Parameter	Test Conditions	Min	Typ	Max	Unit
Vfwd	LED rail forward voltage drop		81	90	99	Vdc

TYPICAL LCD/LED BACKLIGHT PERFORMANCE GRAPHS



² Moving air (36.0 CFM)