eGRAF®

SPREADERSHIELD™

SAMSUNG CCFL LCD DISPLAY

THERMAL SOLUTIONS FOR DISPLAYS

DIDs are located in airports, hospitals, train stations and retail stores.

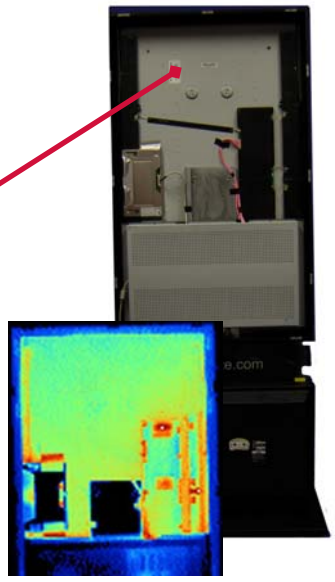
Located in a variety of highly visible public places, Samsung's new line of Digital Information Displays (DIDs) required the ultimate performance, lifetime and power consumption.

eGRAF thermal solutions offer a variety of results in order to achieve a superior quality display.

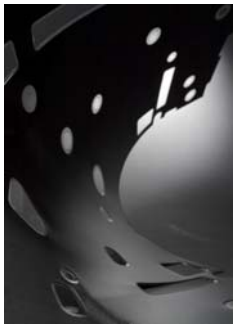
SPREADERSHIELD™ HEAT SPREADER
0.020" (0.508mm) 400 W/m-K was used to meet thermal goals and lifetime targets.

OVERALL RESULTS

- Improved light output and brightness levels
- Increased image uniformity
- Improved temperature uniformity across the screen
- Increased display lifetime
- Minimized thermal issues
- Decreased power consumption

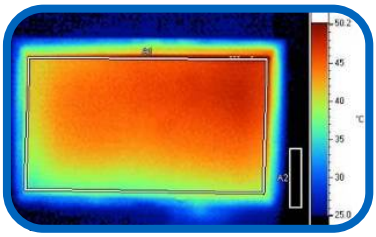


WITH SPREADERSHIELD

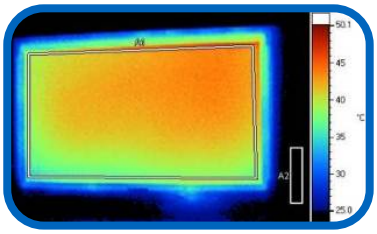


SPREADERSHIELD products are ideal for large-area LCD applications.

PROVEN RESULTS



AS RECEIVED (NO SPREADERSHIELD)
Max Temp: 49.8°C
Avg Temp: 43.5°C



WITH SPREADERSHIELD IN 400 W/M-K
Max Temp: 45°C — REDUCED BY 4.8°C!
Avg Temp: 41.3°C — REDUCED BY 2.2°C!

- After 2 hours of video operation
- Infrared distribution on front of IR camera
- 23.5°C Ambient temperature

Results based on a 40" CCFL Direct lit LCD TV.
(LED-based backlight testing had similar results.)

Email us at egraf@graftech.com to request a sample today!

GRAFTech International

PO Box 94637, Cleveland, OH 44101-4637
Phone: +1 (216) 529-3777 - Fax: +1 (216) 529-3888
www.egraf.com - Email: egraf@graftech.com

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