

SOUND & VISION

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in the lab

	MITSUBISHI WS-48315	PANASONIC PT-50LC14	LG RU-52SZ61D
COLOR TEMPERATURE (before/after calibration)	Low 6500K setting	Warm setting	Warm setting
Low window	NA/6,480 K	7,590/6,842 K	6,485/6,541 K
High window	6,302/6,520 K	6,513/6,520 K	6,585/6,465 K
BRIGHTNESS (before/after calibration)	37.8/34.6 fTL	31.1/27.0 fTL	38.1/36.7 fTL

Although each HDTV measured close to the NTSC standard with its warm color-temperature preset selected, they all benefited from grayscale calibration. Grayscale tracking was excellent on the Mitsubishi and LG, varying no more than ± 100 K. The Panasonic had a ± 400 K deviation throughout most of its grayscale except on a 20-IRE window pattern, where it spiked toward blue. A +15% red error displayed by the Mitsubishi's color decoder was easily fixed via the Perfect Color menu. And the LG displayed a -30% green error, which I couldn't fix even in the service menu. (Calibration needs to be performed by a qualified technician with specialized equipment, so discuss it with your dealer before purchase, or call the Imaging Science Foundation at 561-997-9073.)

DC restoration, or the ability of the set to hold a constant level of black, was very good on all the TVs. Focus and geometry were generally good, although the Mitsubishi's 5% picture overscan surpassed the 3% average of the other sets, and the LG displayed a degree of "bowing" distortion at the extreme right and left sides of its image — a problem visible only on test patterns. The performance of each set's 3-D digital comb filter was excellent. Both the Panasonic and LG displayed uniform screen brightness even at off-center seating positions, but light falloff from the Mitsubishi's screen started at 30° from the center axis and was fairly severe in the vertical dimension. A small amount of luminance noise could also be seen in full-field gray test patterns on the Mitsubishi. — A.G.