BZ5MXI401UX
Application for Certification
Heterodyne Processor Input
500 Watt UHF Translator

Power Measurements

The translator's visual power meter circuit uses a detected sample from a directional coupler on the output. A peak detector provides the DC level to drive the translator's output level meter.

The translator was modulated with a sync and blanking signal only and the power output adjusted to 298 W average, corresponding to a peak envelope sync power of 500 W. The translator is capable of compliance with the specification for the range 50 W to 500 W and is capable of delivering rated power output at 10% above or below rated AC input voltage.

The aural carrier output power was measured unmodulated into the dummy load and is not less than 10% or more than 20% of the rated output power of the visual carrier. The tests were performed with aural power adjusted to 50 W and verified using a spectrum analyzer to compare the relative level with that of the visual carrier.

The power output of the transmitter is adjustable to at least 10 dB below rated power output.

	Measured Power (Thru-Line Meter)	TX Current Meter
Visual Carrier Only	298W	49.3 Amps
Visual + Aural Carrier	320W	51.5 Amps

The DC voltage across all output devices is 32 Volts