

2.1053 Field Strength of Spurious Radiation

Definition:

Emissions from the equipment when connected into a non-radiating load on a frequency or frequencies which are outside an occupied band sufficient to ensure transmission of information of required quality for the class of communication desired. The reduction in the level of these spurious emissions will not affect the quality of the information being transmitted.

Test Method: Per TIA /EIA 603.

Connect the equipment and follow the procedure described in paragraph 2.2.1.1 and paragraph 5.0. Measure the amplitude of each spurious radiated signal through the 10th harmonic. The spurious signals are then measured on the 3 meter range. First the EUT is measured using a tuned reference dipole below 1GHz and a double ridge guide Horn antenna above 1GHz. If the DRG antenna is used the appropriate gain factor for the antenna is subtracted from the final measurement. Then a dipole to dipole (or drg to drg) measurement is conducted to determine the actual power at each harmonic being generated by the EUT. If no noticeable emission can be observed the ground floor is recorded in the data sheets.

Test Results: All readings were at the spectrum analyzer ground floor above the fundamental.

All radiated spurious emissions are below the FCC Specifications.

	5969 Robinson Avenue Riverside, CA 92503 (909) 637-2630 FAX (909) 637-2704	Radiated Spurious	
DNB Job Number:	38004	Date: 2 August 2002	Conformance Standards
Customer:	TPL Communications		
Model Number:	PA3-1AE	Serial Number: 1000	
Description:	RF Amplifier		
			[X] FCC Part 15
			[X] FCC Part 90

Fundamental Freq In MHz	Rated Output Power In Watts	Channel Spacing In kHz	Modulation
160	150	12.5 , 25	FM

Freq (MHz)	Antenna	Horn Gain	Meter	Power	Corrected	Limit (dBm)	
						12.5kHz BW	25.0kHz BW
320	Dipole - Hz	N/A	-36.7	-24.8	-27.5	-13	-20
480	Dipole - Hz	N/A	-51.3	-40.4	-55.6	-13	-20
640	Dipole - Hz	N/A	-49.7	-36.8	-48.9	-13	-20
800	Dipole - Hz	N/A	-55.8	-41.9	-48.9	-13	-20
960	Dipole - Hz	N/A	-52.9	-36.9	-28.7	-13	-20
1120	Horn - Hz	6.3	-53.4	-36.8	-43.1	-13	-20
1280	Horn - Hz	7.1	-51.6	-33.8	-40.9	-13	-20
1440	Horn - Vt	7.8	-58.1	-39.5	-47.3	-13	-20
1600	Horn - Hz	7.9	-56.0	-34.8	-42.7	-13	-20