

SPURIOUS EMISSIONS AT ANTENNA TERMINALS
SECTION 2.1051

MEASUREMENT: 4**Section 2.1051****Spurious Emissions at Antenna Terminals**

Spurious Emissions at the RF Power output terminal of PCBR was investigated over the frequency range of 0 MHz to the 10th harmonic of the carrier frequency. The test setup was as described in Figure 4A. Measurements were made using a Rohde & Schwarz FSEK Spectrum Analyzer and a HP Model 520 DeskJet Printer. The RF output from the transmitter was reduced (to an amplitude usable by the spectrum analyzer) by using a calibrated attenuator. The RF power level was continuously monitored via RF Power Meter as shown in the test setup in Figure 4A. The required emission limitation specified in Section 22.917 of the Code was applied to these tests. The applied signal met the recommended characteristics per IS-97 as defined below. All measurements were made for 0.0126 Watts (11 dBm) output at PCBR RF Power output terminal.

Based upon the criterion given in Section 22.917 of the Code the required emission limitation is equal to -24.0 dBc or - 13 dBm. The magnitude of spurious emissions that are attenuated more than 20 dB below the permissible value need not specified (Section 2.1051 and 2.1057 (a) and (c)) in the report.

IS 97 channel allocation consists of following channel Blocks:

Block	FCC Cellular Frequency Bands Per FCC 22.905 MHz	Valid CDMA Channels & Frequency Range	
		Channel No.	MHz
A" (1 MHz)	869.000 - 870.000	1013 -1023	869.700 – 870.000
A (10 MHz)	870.000 - 880.000	0001- 0311	870.030 – 879.330
B (10 MHz)	880.000 - 890.000	0356 - 0644	880.680 – 889.320
A' (1.5 MHz)	890.000 - 891.500	0689 - 0694	890.670 – 890.820
B' (2.5 MHz)	891.500 - 894.000	0739 - 0777	892.170 – 893.310

Per FCC out of band is any frequency < 869.000 MHz and > 894.000 MHz

The edge channels are 1013 and 0777.

The frequencies and channels used were tabulated on the bottom of each plot. Output signals were plotted at each frequency block/bands. Plots were made for Left Edge, and Right Edge of cellular bands A", A', and B'. Plots were also made for Left Edge, Center and Right Edge of each cellular bands A and B (Blocks that are 10 MHz wide).

Type	Number of Channels	Fraction of Power (Linear)	Fraction of Power (dB)	Comments
Pilot	1	0.2000	-7.0	Walsh 0
Sync	1	0.0471	-13.3	Walsh 32, always 1/8 rate
Paging	1	0.1882	-7.3	Walsh 1, full rate only
Traffic	6	0.09412 each	-10.3 each	Variable Walsh Assignments, full rate only

TABLE 4.1 Base Station Test Model, Nominal**RESULTS:**

The magnitude of spurious emissions that are attenuated more than 20 dB below the permissible value need not be specified in the FCC report (Section 2.1051 and 2.1057 (a) and (c)). The spectral plot document showed that the spurious emissions at PCBR RF power output terminal were less than -33 dBm. Therefore plots are kept in our files and not submitted to FCC.

Figure 4A. TEST CONFIGURATION FOR CONDUCTED SPURIOUS

