

6a.5 Land Mobile Frequency Stability -- Pursuant 47 CFR 2.1055a (1) & 2.1055(d) 2

Frequency stability measurements were made as described in paragraph 7.4. Because of the transmitter's dependence on the stability of the base station oscillator, it is not possible to provide stability data for this transmitter as is commonly supplied for certification per 47 CFR 2.1055 for a radio with a locally stabilized oscillator. The following data was collected in a setup comprising of a base station simulator and it represents the absolute frequency error of the transceiver under test versus the base station frequency reference.

Frequency Stability in PPM at 813.5125MHz			
TEMP	Frequency Error (Hz)	Time of the Measurement	PPM
-30	16	12/8/2005 @ 2:44 PM	0.020
-20	20	12/8/2005 @ 2:44 PM	0.025
-10	5	12/8/2005 @ 2:44 PM	0.006
0	4	12/8/2005 @ 2:44 PM	0.005
10	33	12/8/2005 @ 2:44 PM	0.041
20	12	12/8/2005 @ 2:44 PM	0.015
30	39	12/8/2005 @ 2:44 PM	0.048
40	2	12/8/2005 @ 2:44 PM	0.002
50	36	12/8/2005 @ 2:44 PM	0.044
60	15	12/8/2005 @ 2:44 PM	0.018
70	36	12/8/2005 @ 2:44 PM	0.044

Table 6a-5.1. Transmitter Frequency Stability vs. Temperature in 800 MHz Band

Frequency Stability in PPM at 896.01875MHz			
TEMP	Frequency Error (Hz)	Time of the Measurement	PPM
-30	67	12/7/2005 @5:14 PM	0.074775
-20	56	12/7/2005 @5:14 PM	0.062499
-10	50	12/7/2005 @5:14 PM	0.055802
0	52	12/7/2005 @5:14 PM	0.058034
10	52	12/7/2005 @5:14 PM	0.058034
20	53	12/7/2005 @5:14 PM	0.059151
30	86	12/7/2005 @5:14 PM	0.09598
40	61	12/7/2005 @5:14 PM	0.068079
50	84	12/7/2005 @5:14 PM	0.093748
60	70	12/7/2005 @5:14 PM	0.078123
70	82	12/7/2005 @5:14 PM	0.091516

Table 6a-5.2. Transmitter Frequency Stability vs. Temperature in 900 MHz Band

Frequency Stability in PPM at 813.5125MHz			
Power Supply Output Voltage	Frequency Error in Hz	Date and Time of the Measurement	PPM
3.6	38	12/8/2005 @8:16 AM	0.047
3.7	4	12/8/2005 @8:16 AM	0.005
3.8	16	12/8/2005 @8:16 AM	0.020
3.9	20	12/8/2005 @8:16 AM	0.025
4	19	12/8/2005 @8:16 AM	0.023
4.1	1	12/8/2005 @8:16 AM	0.001
4.2	4	12/8/2005 @8:16 AM	0.005
4.3	8	12/8/2005 @8:16 AM	0.010

Table 6a-5.3. Transmitter Frequency Stability vs. Voltage in 800 MHz Band

Frequency Stability in PPM at 896.01875MHz			
Power Supply Output Voltage	Frequency Error in Hz	Date and Time of the Measurement	PPM
3.6	51.00	12/7/2005 @11:58 AM	0.057
3.7	72.00	12/7/2005 @11:58 AM	0.080
3.8	38.00	12/7/2005 @11:58 AM	0.042
3.9	82.00	12/7/2005 @11:58 AM	0.092
4	40.00	12/7/2005 @11:58 AM	0.045
4.1	38.00	12/7/2005 @11:58 AM	0.042
4.2	29.00	12/7/2005 @11:58 AM	0.032
4.3	33	12/7/2005 @11:58 AM	0.037

Table 6a-5.4: Transmitter Frequency Stability vs. Voltage in 900 MHz Band