

**FCC ID: NBZNRM-6835**

**Exhibit 2**

**Engineering Report  
e) Frequency Stability (2.1055)**

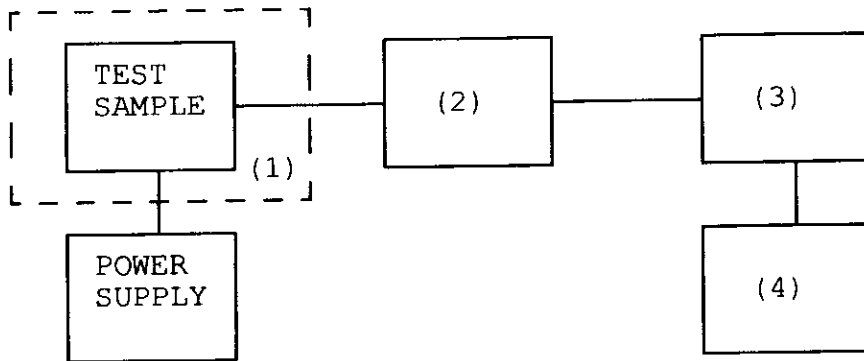
PAGE NO. 27 of 30.  
NAME OF TEST: Frequency Stability (Temperature Variation)  
SPECIFICATION: 47 CFR 2.1055(a)(1)  
GUIDE: EIA/IS-19-B-1988  
TIA/EIA/IS-137-A-1996  
TEST CONDITIONS: As Indicated  
TEST EQUIPMENT: As per previous page

MEASUREMENT PROCEDURE

1. The EUT and test equipment were set up as shown on the following page.
2. With all power removed, the temperature was decreased to  $-30^{\circ}\text{C}$  and permitted to stabilize for three hours. Power was applied and the maximum change in frequency was noted within one minute.
3. With power OFF, the temperature was raised in  $10^{\circ}\text{C}$  steps. The sample was permitted to stabilize at each step for at least one-half hour. Power was applied and the maximum frequency change was noted within one minute.
4. The temperature tests were performed for the worst case.
5. MEASUREMENT RESULTS: ATTACHED

TRANSMITTER TEST SET-UP

- TEST A. OPERATIONAL STABILITY
- TEST B. CARRIER FREQUENCY STABILITY
- TEST C. OPERATIONAL PERFORMANCE STABILITY
- TEST D. HUMIDITY
- TEST E. VIBRATION
- TEST F. ENVIRONMENTAL TEMPERATURE
- TEST G. FREQUENCY STABILITY: TEMPERATURE VARIATION
- TEST H. FREQUENCY STABILITY: VOLTAGE VARIATION



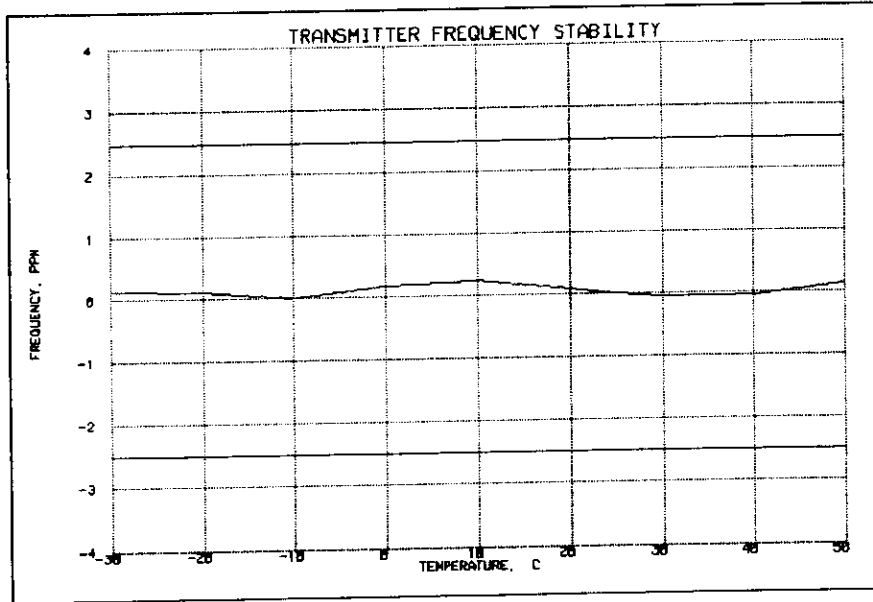
Asset Description s/n

<u>(1) TEMPERATURE, HUMIDITY, VIBRATION</u>		
<u>x</u>	i00027	Tenny Temp. Chamber 9083-765-234
---	i00	Weber Humidity Chamber
---	i00	L.A.B. RVH 18-100
<u>(2) COAXIAL ATTENUATOR</u>		
<u>x</u>	i00122	NARDA 766-10 7802
---	i00123	NARDA 766-10 7802A
---	i00113	SIERRA 661A-3D 1059
---	i00069	BIRD 8329 (30 dB) 10066
<u>(3) R.F. POWER</u>		
---	i00014	HP 435A POWER METER 1733A05839
<u>x</u>	i00039	HP 436A POWER METER 2709A26776
<u>x</u>	i00020	HP 8901A POWER MODE 2105A01087
<u>(4) FREQUENCY COUNTER</u>		
---	i00042	HP 5383A 1628A00959
---	i00019	HP 5334B 2704A00347
<u>x</u>	i00020	HP 8901A 2105A01087

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NAME OF TEST: Frequency Stability (Temperature Variation)  
g98b0333: 1998-Nov-24 Tue 12:44:00  
STATE: 0:General



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PAGE NO. 30 of 30.  
NAME OF TEST: Frequency Stability (Voltage Variation)  
SPECIFICATION: 47 CFR 2.1055 (b) (1)  
GUIDE: EIA/IS-19-B-1988  
 TIA/EIA/IS-137-A-1996  
TEST EQUIPMENT: As per previous page

MEASUREMENT PROCEDURE

1. The EUT was placed in a temperature chamber at 25±5°C and connected as for "Frequency Stability - Temperature Variation" test.
2. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
3. The variation in frequency was measured for the worst case.

RESULTS: Frequency Stability (Voltage Variation)  
 g98b0380: 1998-Nov-24 Tue 12:43:42  
 STATE: 0:General

LIMIT, ppm = 2.5  
 LIMIT, Hz = 2091  
 BATTERY ENDPOINT (Voltage) = 3.3

% of STV	Voltage	Frequency, MHz	Change, Hz	Change, ppm
85	3.06	836.400000	0	0.00
100	3.6	836.400000	0	0.00
115	4.14	836.400010	10	0.01
85	3.2	836.399930	-70	-0.08

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