

TEST REPORT

REPORT NO: SATEL-TR-0014-TaM
TEST PERIOD: 30. October 2001
TEST SITE: Satel / R&D Dept., Salo

DEVICE UNDER TEST: SATELLINE-3AS Epic

TESTS PERFORMED:

- Frequency Stability for temperature and voltage variations
 - #1: at 12.5 kHz channel spacing (page 2)
 - #2: at 25 kHz channel spacing (page 3)

TEST STANDARD: acc. to 47 CFR 2.1055.

TESTS PERFORMED BY:

Juha Heikkilä

TEST RESULTS

#1 Tests at 12.5 kHz channel spacing

RF frequency of the test sample = 458.600 MHz.

a) Frequency stability vs. voltage variations

Temperature	Voltage	Frequency
+20 °C	10,2 V	458,59993 MHz
+20 °C	12,0 V	458,59993 MHz
+20 °C	13,8 V	458,59993 MHz
+20 °C	20,4 V	458,59993 MHz
+20 °C	24,0 V	458,59993 MHz
+20 °C	27,6 V	458,59993 MHz

b) Frequency stability vs. temperature variations

Temperature	Voltage	Frequency
-30°C	+12,0 V	458,00051 MHz
-20°C	+12,0 V	458,60026 MHz
-10°C	+12,0 V	458,60021 MHz
± 0°C	+12,0 V	458,60010 MHz
+10°C	+12,0 V	458,59991 MHz
+20°C	+12,0 V	458,59991 MHz
+30°C	+12,0 V	458,59989 MHz
+40°C	+12,0 V	458,59981 MHz
+50°C	+12,0 V	458,59977 MHz

#1 Test at 25 kHz channel spacing

RF frequency of the test sample = 458.600 MHz.

a) Frequency stability vs. voltage variations

Temperature	Voltage	Frequency
+20 °C	10,2 V	458,59989 MHz
+20 °C	12,0 V	458,59989 MHz
+20 °C	13,8 V	458,59989 MHz
+20 °C	20,4 V	458,59989 MHz
+20 °C	24,0 V	458,59989 MHz
+20 °C	27,6 V	458,59989 MHz

b) Frequency stability vs. temperature variations

Temperature	Voltage	Frequency
-30°C	+12,0 V	458,60031 MHz
-20°C	+12,0 V	458,60029 MHz
-10°C	+12,0 V	458,60007 MHz
± 0°C	+12,0 V	458,59999 MHz
+10°C	+12,0 V	458,59993 MHz
+20°C	+12,0 V	458,59989 MHz
+30°C	+12,0 V	458,59975 MHz
+40°C	+12,0 V	458,59965 MHz
+50°C	+12,0 V	458,59957 MHz