

## **1. TEST STATEMENT**

### **2 . 1 TEST STATEMENT**

This letter is to explain the test condition of this project.  
The EUT be tested as the following status.

a. The data was shown in this report reflects the worst case data for the condition as listed above.

b. EUT conditions:

**1. Operating frequency : 72.01MHz — 72.99MHz**

**2. Four modes were tested : Mode 1 : 72.35MHz**  
**Mode 2 : 72.71MHz**  
**Mode 3 : 72.87MHz**  
**Mode 4 : 72.91MHz**

**3. Change operating frequency should change crystal.**

c. NVLAP logo is to be approved by management (it is according to NVLAP requirement if it need) before use.

### Temperature Test Results

Temperature Deg C	Frequency MHz	Frequency Increment Hz	Stability PPM
25	72.870 000	0.00	0.0
-30	72.870810	810.0	+11.1
-20	72.870 770	770.0	+10.6
-10	72.870 530	530.0	+7.3
0.0	72.870 410	410	+5.6
+10.0	72.870 290	290	+4.0
+20.0	72.870 170	170	+2.3
+30	72.870 040	40	+0.54
+40	72.869 870	-130	-1.8
+50	72.869 720	-280	-3.8

### Frequency Stability versus Voltage

Voltage VDC	Frequency MHz	Frequency Increment Hz	Stability PPM
13.8	72.870 110	100.0	1.4
10.2	72.869 200	800.0	-11.0
15.9	72.869 080	920.0	-12.6

### Spurious Emissions Measured per ANSI/TIA/EIA – 603-1992

Requirement:  $56 + 10 \log (P_o) = 56 + 10\log(0.0005) = 56 - 33.0 = 23.0 \text{ dBc}$

Frequency MHz	Attenuation dBc
72.35	0.0(Carrier)
36.18	-44.2
108.53	-41.3
144.73	-39.7
398.10	-38.2
542.63	-46.7
723.50	-55.3

