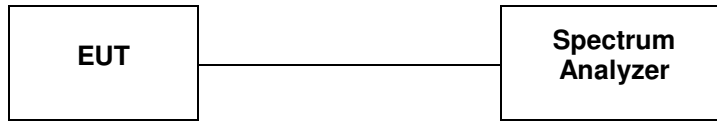


4.7. Spurious RF Conducted Emission

TEST CONFIGURATION



TEST PROCEDURE

The Spurious RF conducted emissions compliance of RF radiated emission should be measured by following the guidance in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization etc. Set RBW=100kHz and VBW= 300KHz to measure the peak field strength, and measure frequency range from 9KHz to 25GHz.

LIMIT

1. Below -20dB of the highest emission level in operating band.
2. Fall in the restricted bands listed in section 15.205. The maximum permitted average field strength is listed in section 15.209.

TEST RESULTS

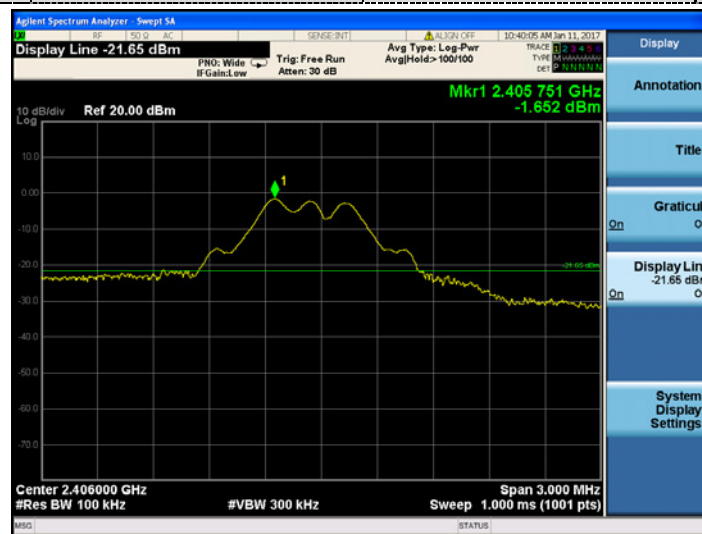
Remark: The measurement frequency range is from 9KHz to the 10th harmonic of the fundamental frequency. The lowest, middle and highest channels are tested to verify the spurious emissions and band edge measurement data.

Test Mode:

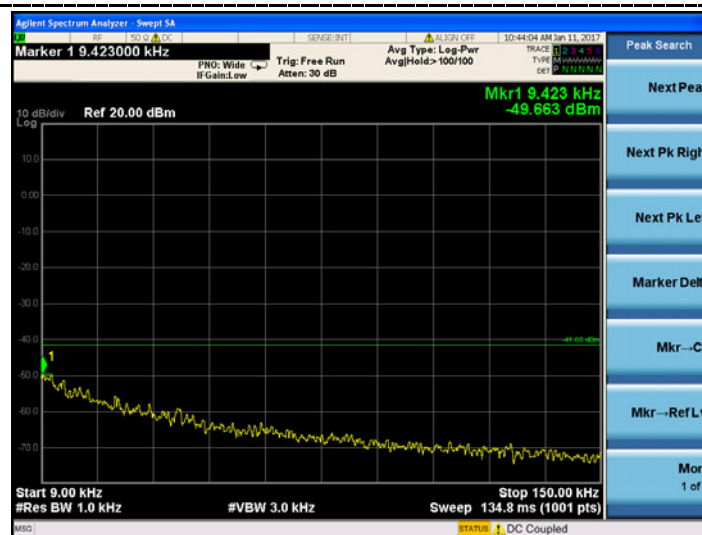
GFSK(ANT1)

Test channel :

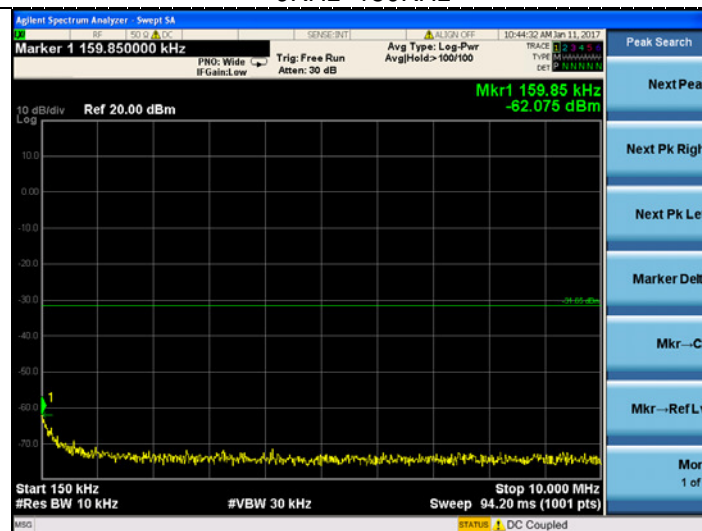
0



Channel 0



9KHz~150KHz



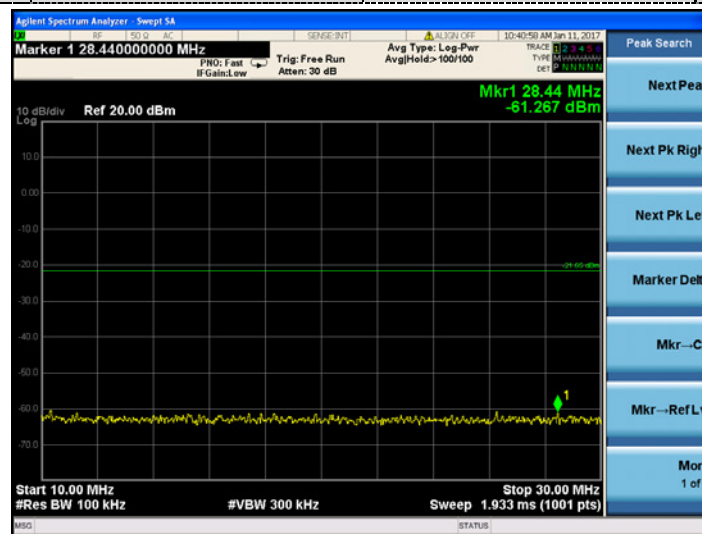
150KHz ~10MHz

Test Mode:

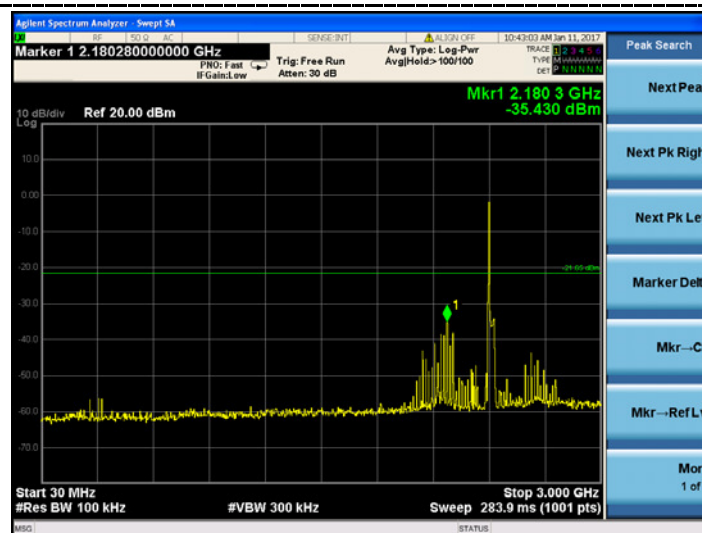
GFSK(ANT1)

Test channel :

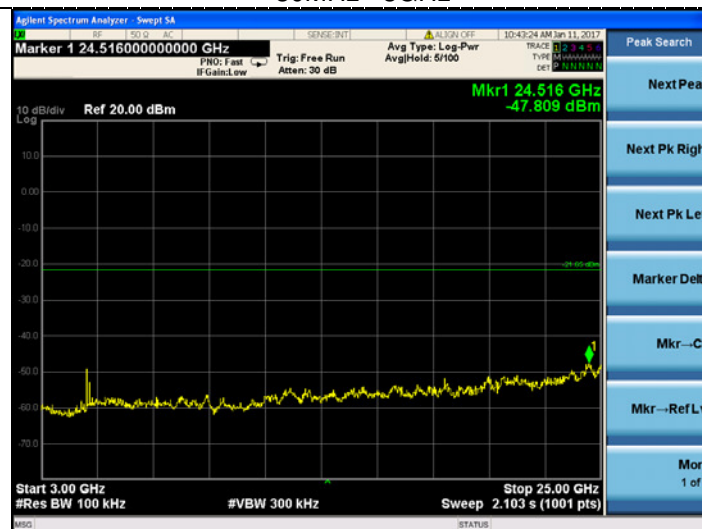
0



10MHz ~30MHz



30MHz ~3GHz



3GHz~25GHz

Test Mode:

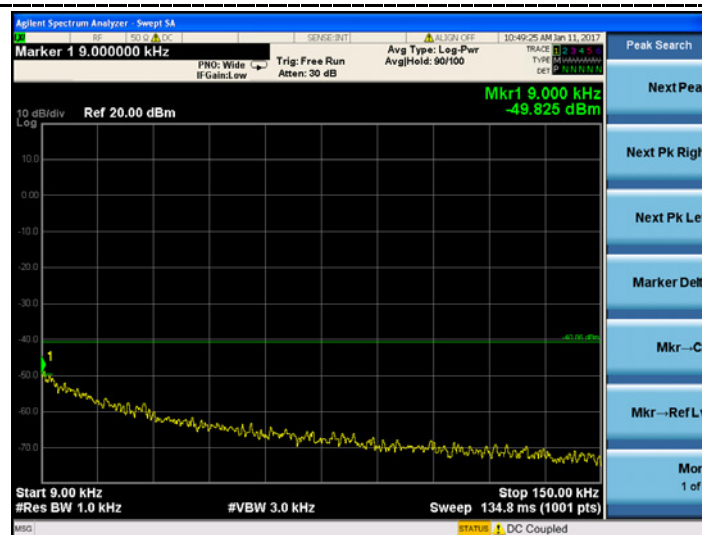
GFSK(ANT1)

Test channel :

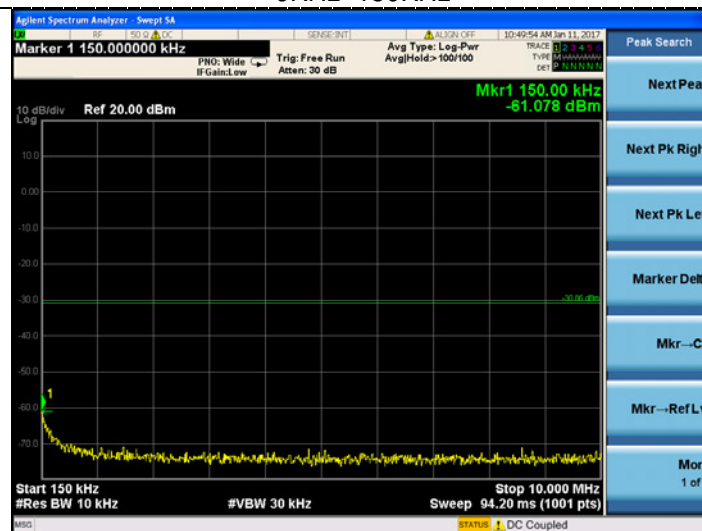
7



Channel 7



9KHz~150KHz



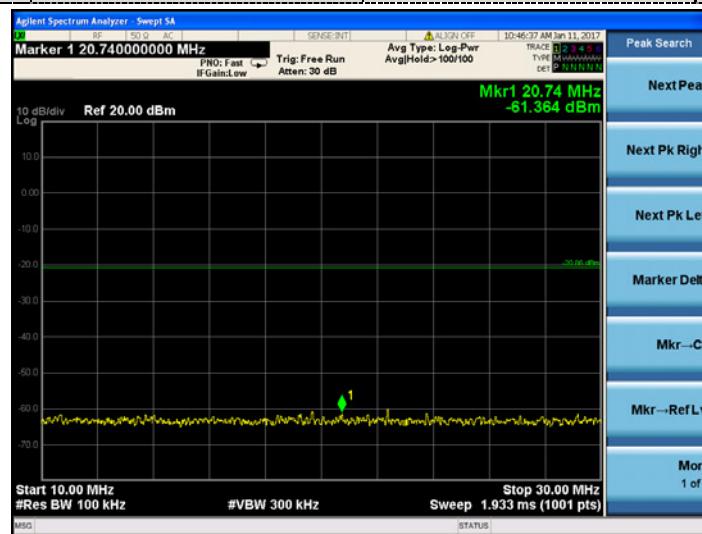
150KHz ~10MHz

Test Mode:

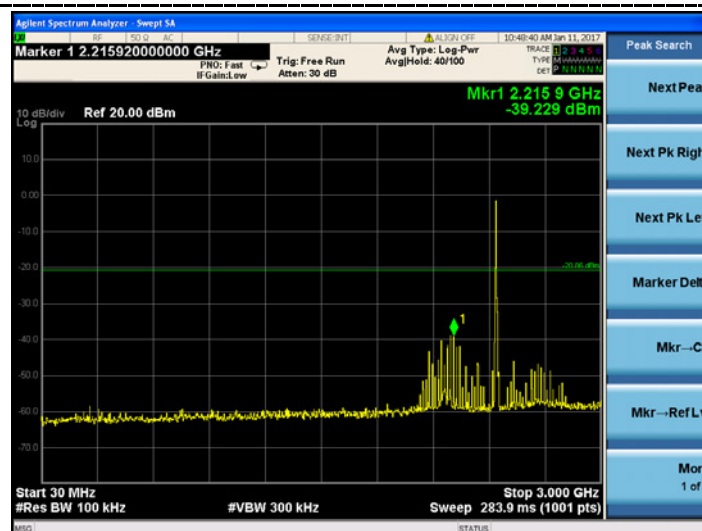
GFSK(ANT1)

Test channel :

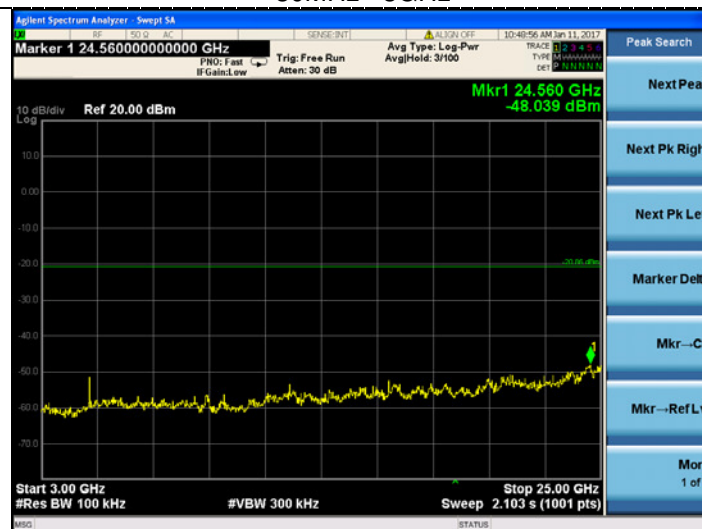
7



10MHz ~30MHz



30MHz ~3GHz



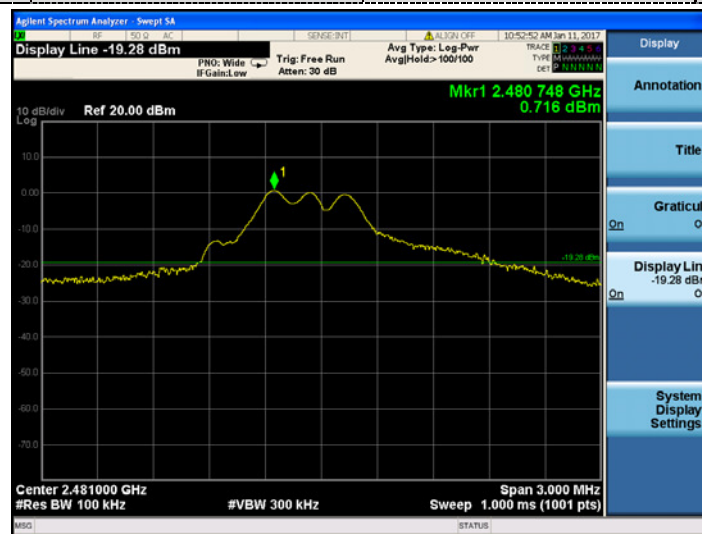
3GHz~25GHz

Test Mode:

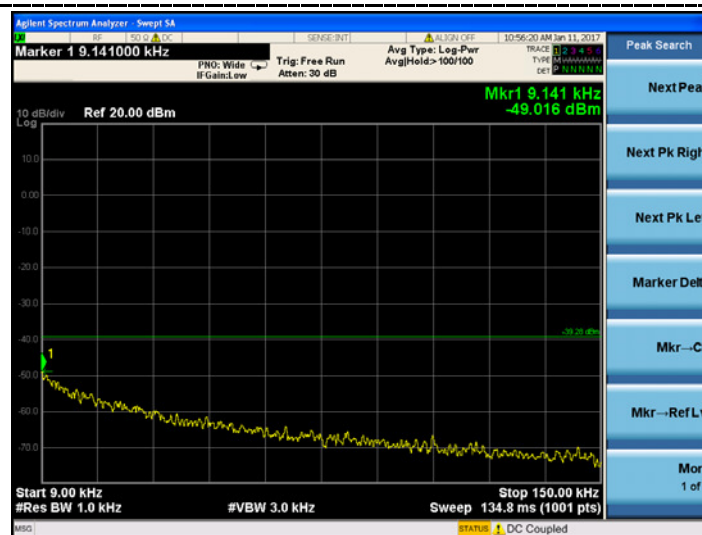
GFSK(ANT1)

Test channel :

15



Channel 15



9KHz~150KHz



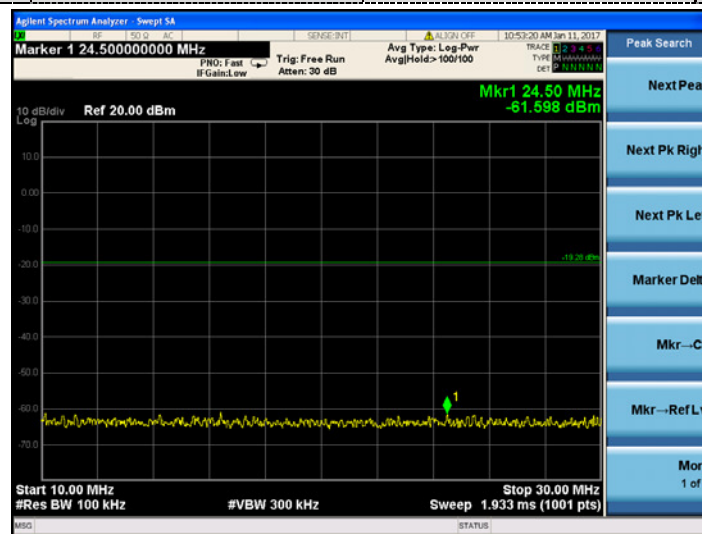
150KHz ~10MHz

Test Mode:

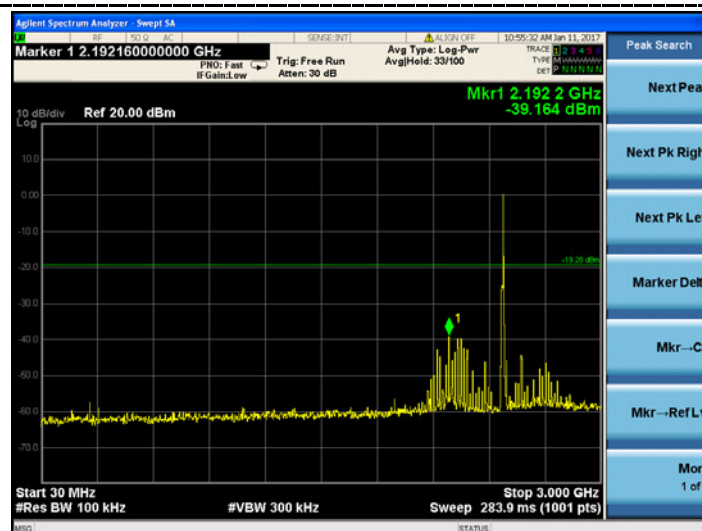
GFSK(ANT1)

Test channel :

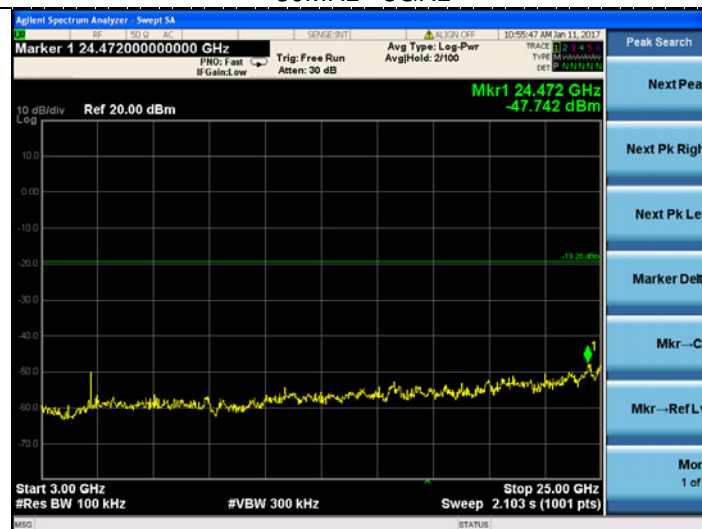
15



10MHz ~30MHz



30MHz ~3GHz



3GHz~25GHz

Test Mode:

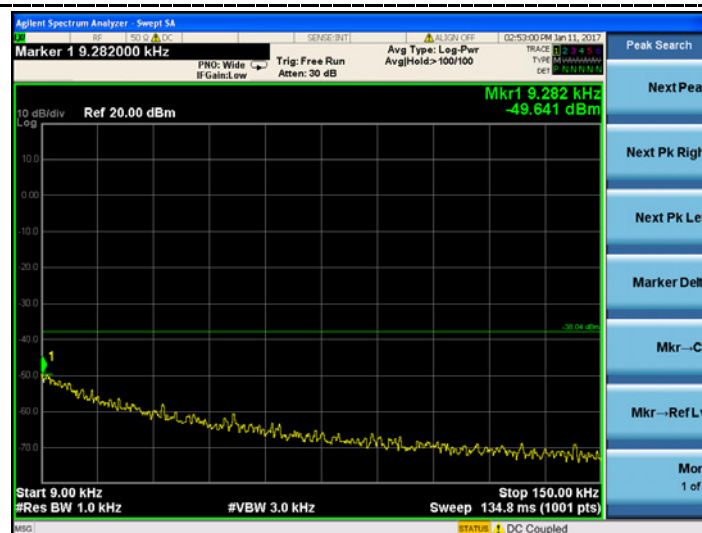
GFSK(ANT2)

Test channel :

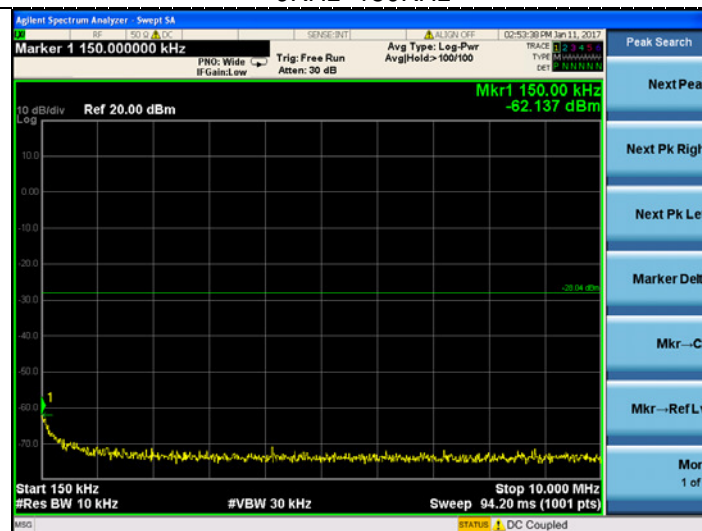
0



Channel 0



9KHz~150KHz



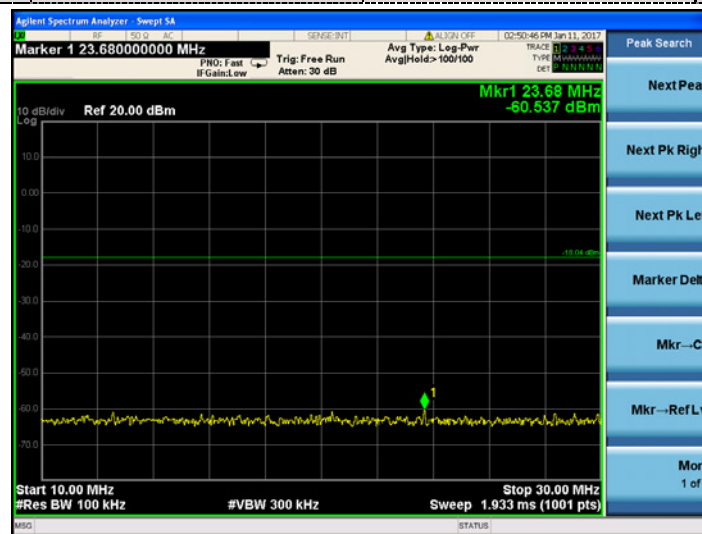
150KHz ~10MHz

Test Mode:

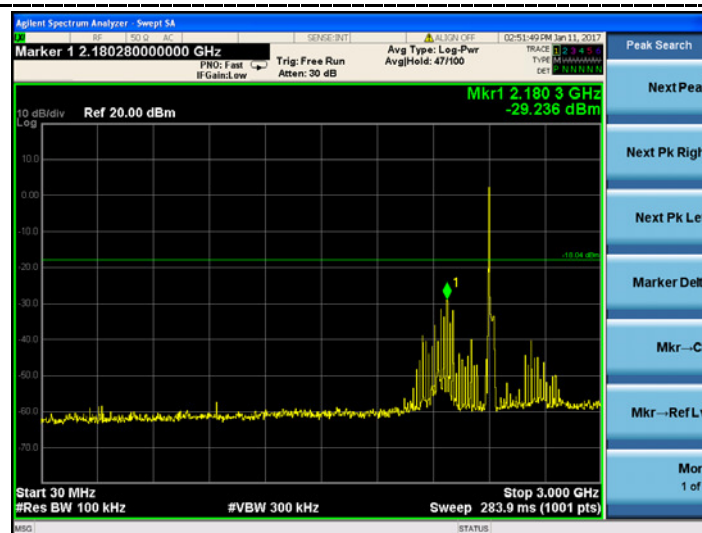
GFSK(ANT2)

Test channel :

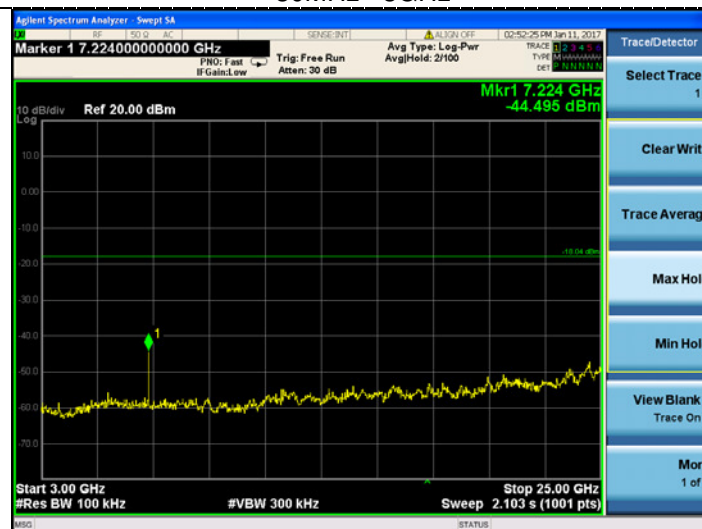
0



10MHz ~30MHz



30MHz ~3GHz



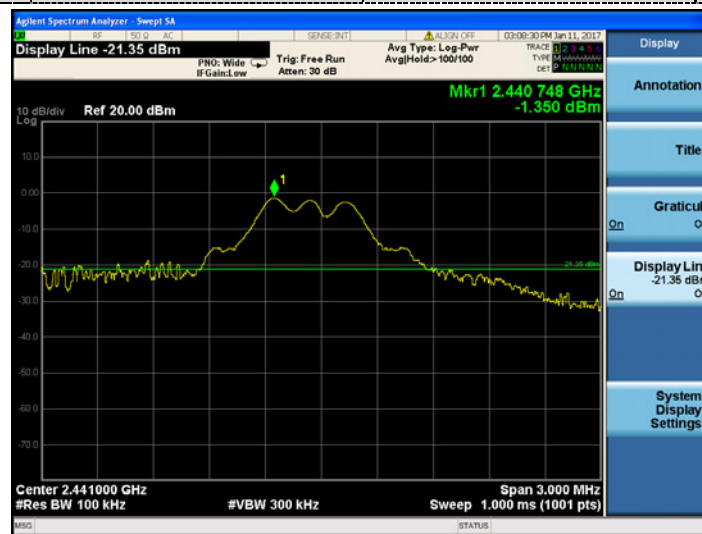
3GHz~25GHz

Test Mode:

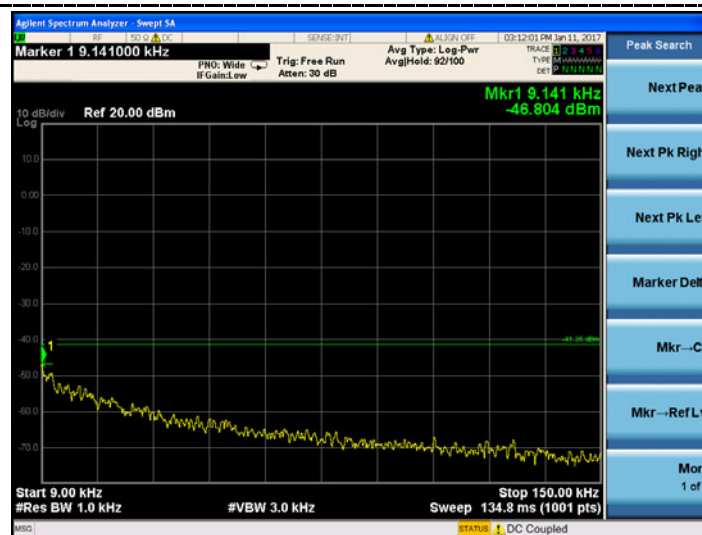
GFSK(ANT2)

Test channel :

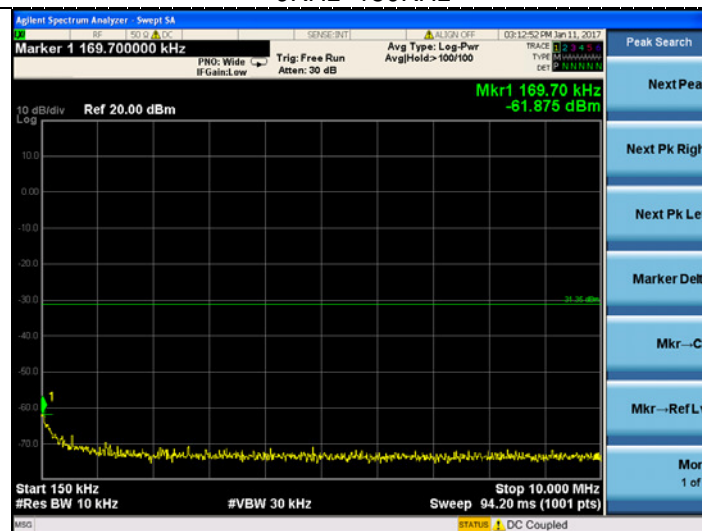
7



Channel 7



9KHz~150KHz



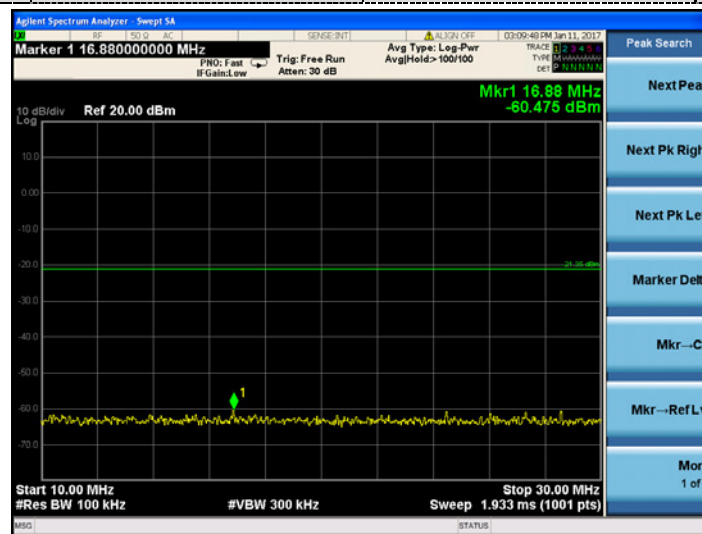
150KHz ~10MHz

Test Mode:

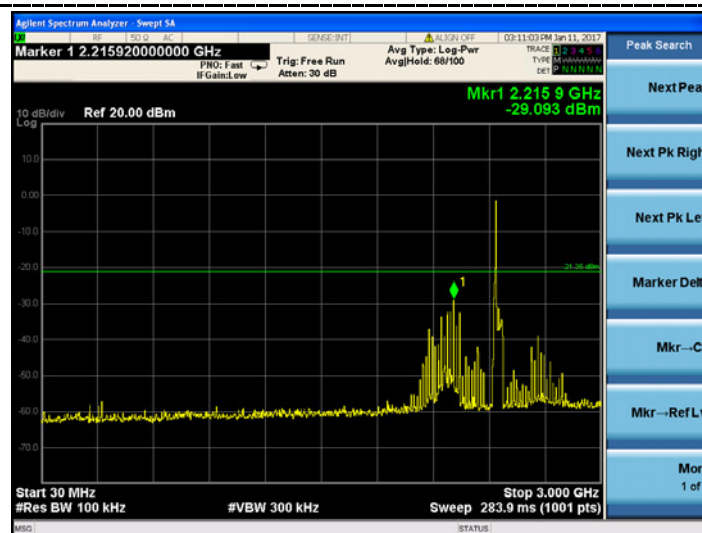
GFSK(ANT2)

Test channel :

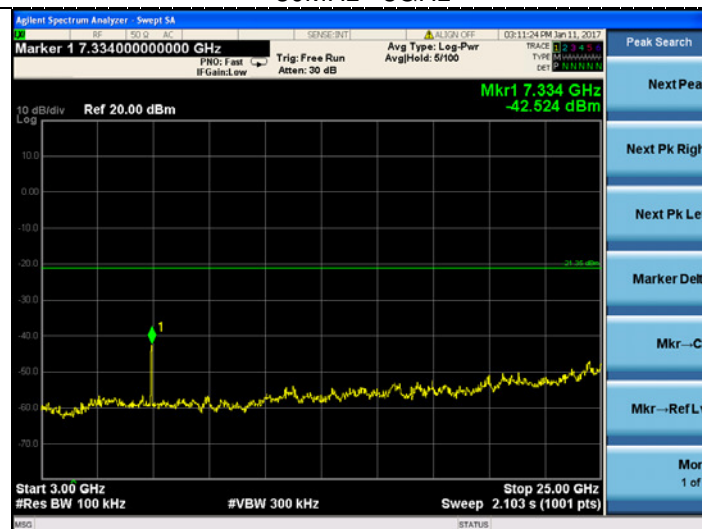
7



10MHz ~30MHz



30MHz ~3GHz



3GHz~25GHz

Test Mode:

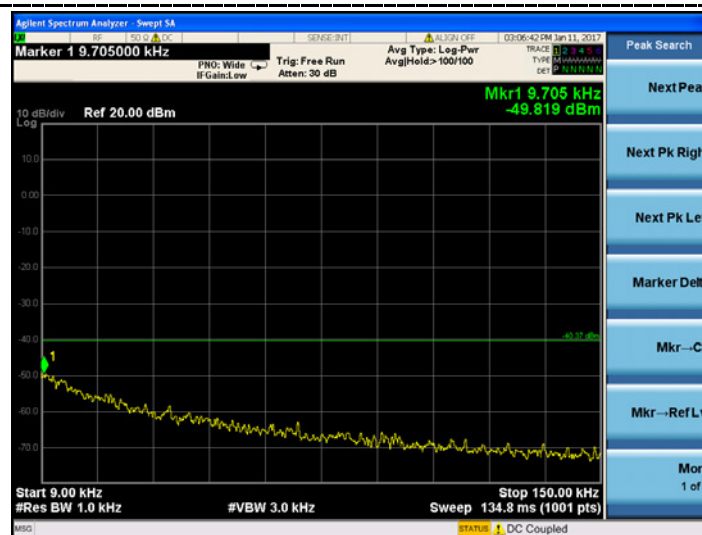
GFSK(ANT2)

Test channel :

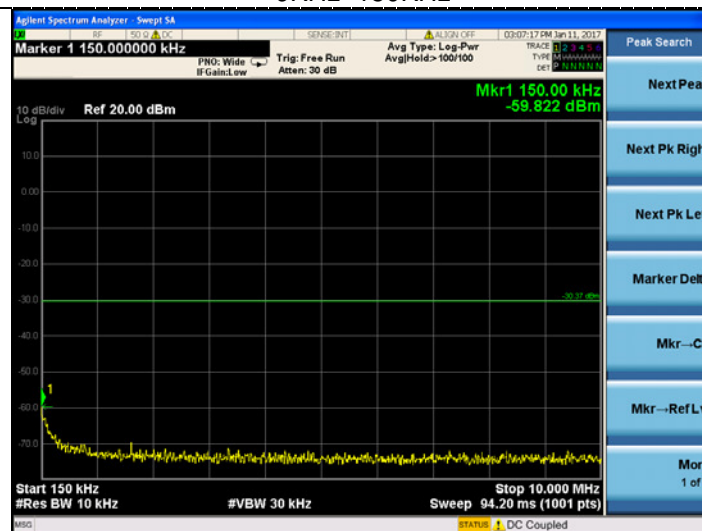
15



Channel 15



9KHz~150KHz



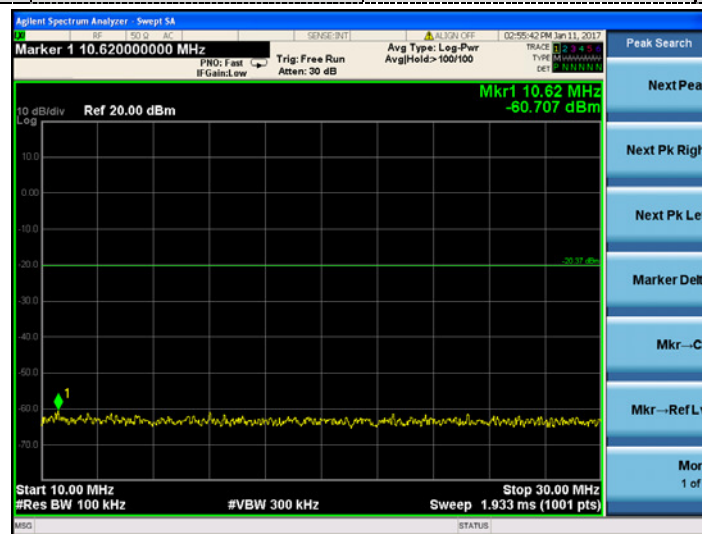
150KHz ~10MHz

Test Mode:

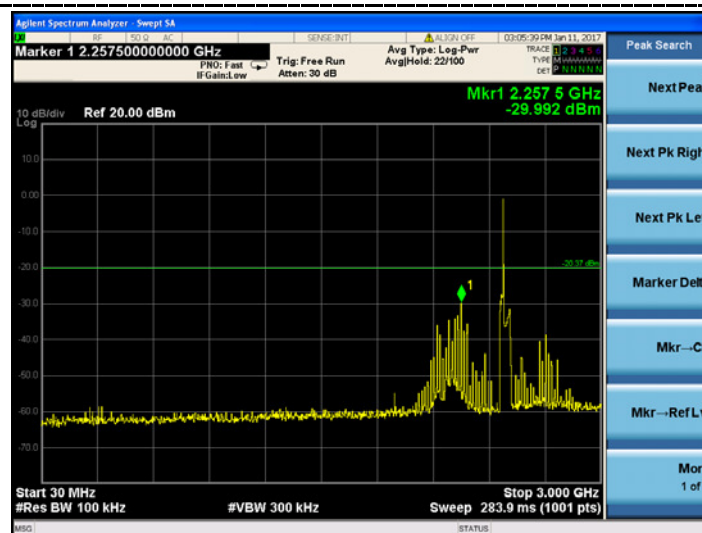
GFSK(ANT2)

Test channel :

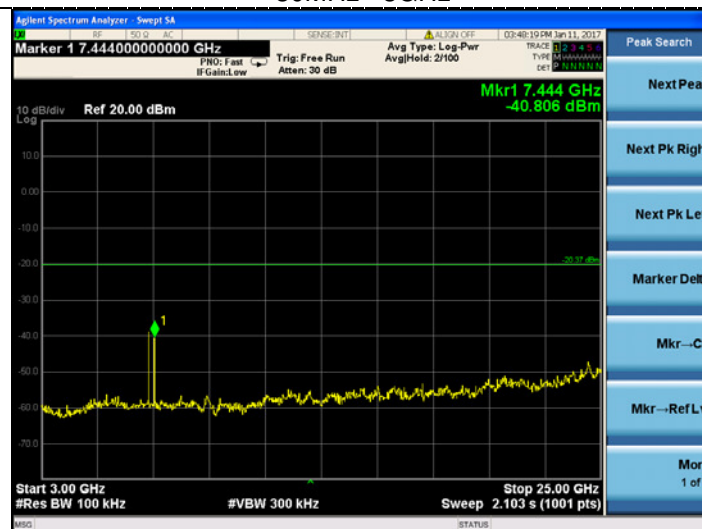
15



10MHz ~30MHz



30MHz ~3GHz



3GHz~25GHz

Test Mode:

GFSK(ANT3)

Test channel :

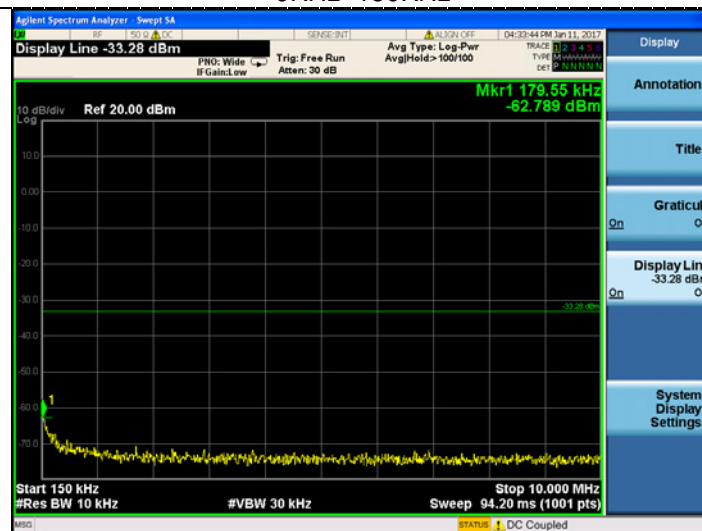
0



Channel 0



9KHz~150KHz



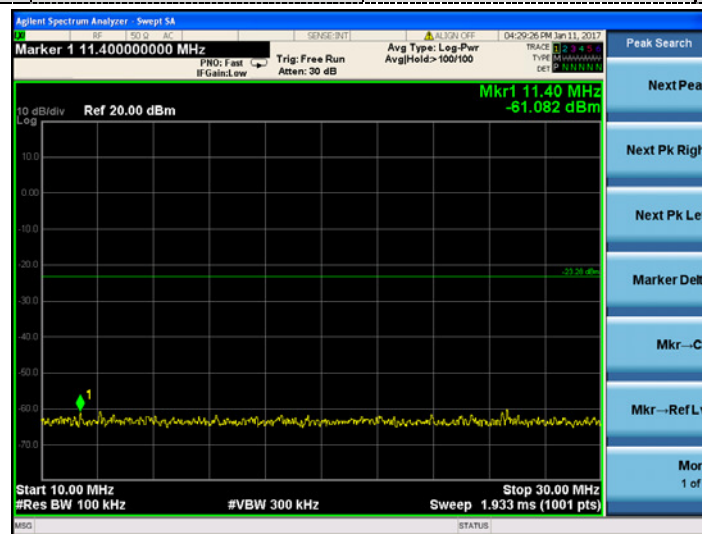
150KHz ~10MHz

Test Mode:

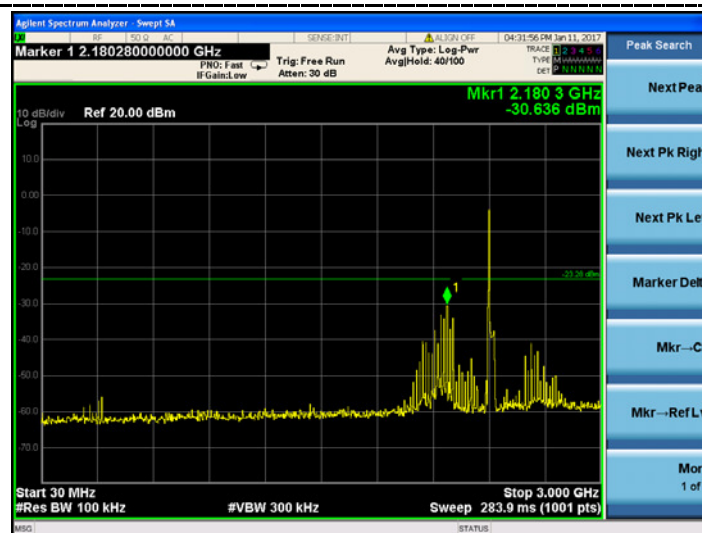
GFSK(ANT3)

Test channel :

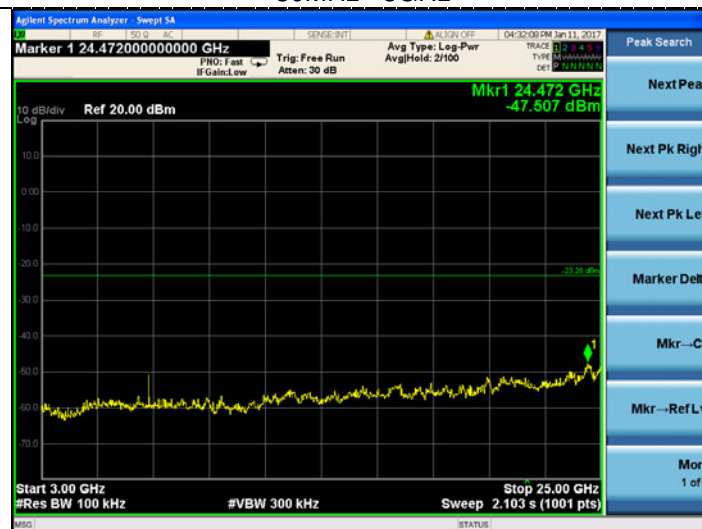
0



10MHz ~30MHz



30MHz ~3GHz



3GHz~25GHz

Test Mode:

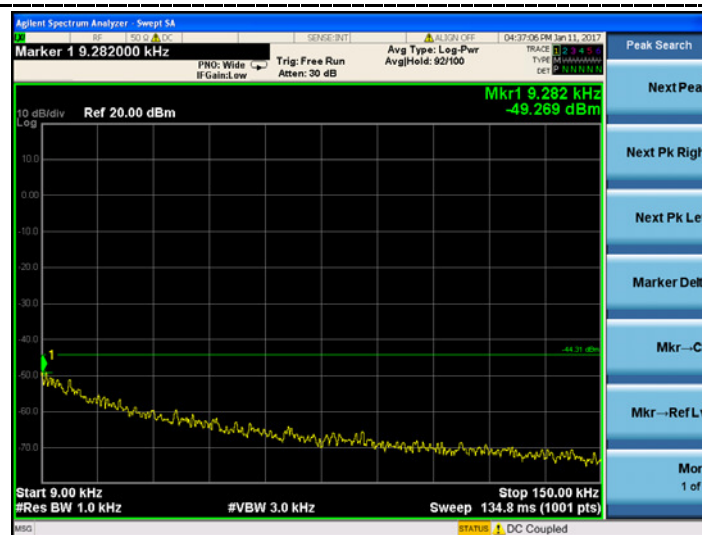
GFSK(ANT3)

Test channel :

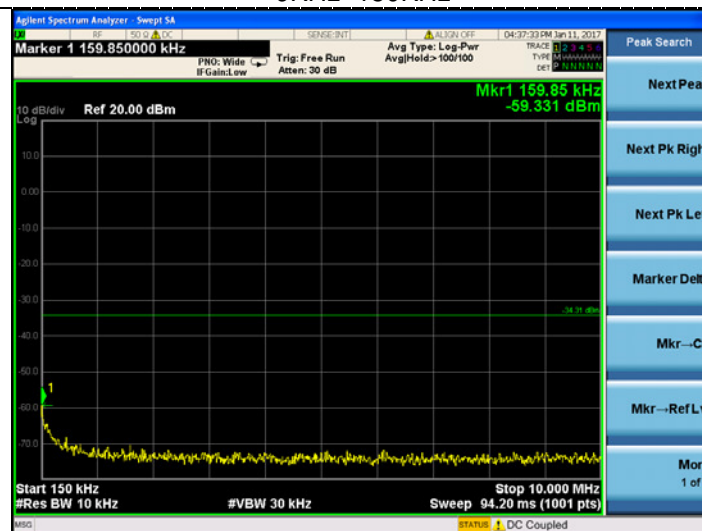
7



Channel 7



9KHz~150KHz



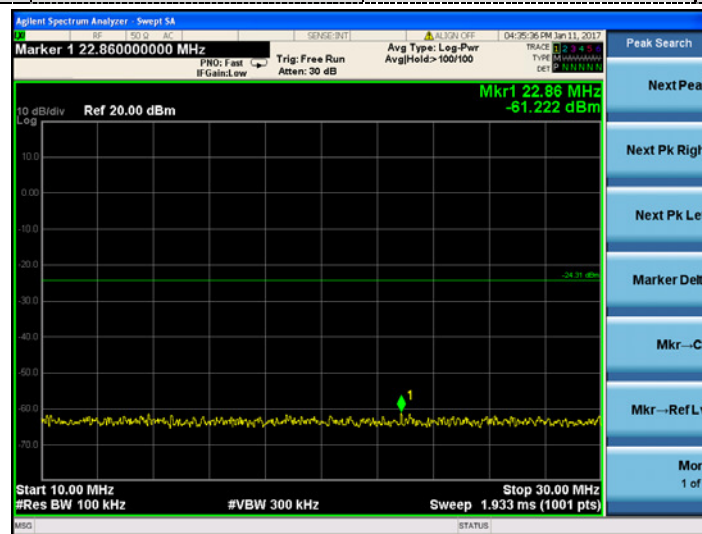
150KHz ~10MHz

Test Mode:

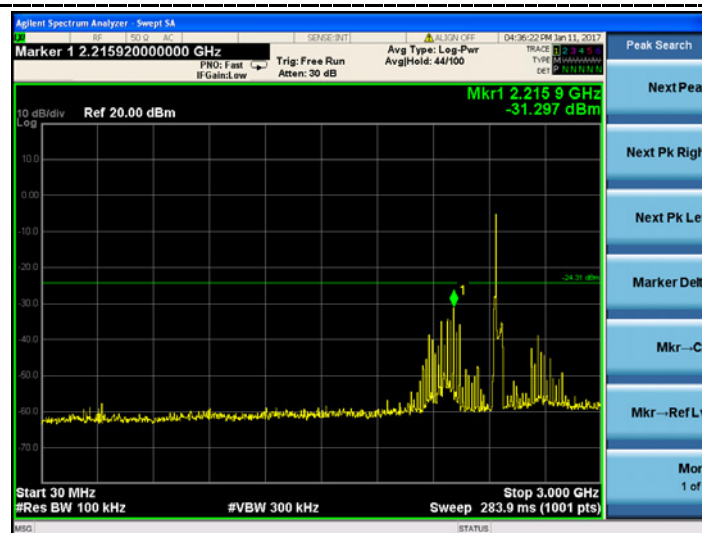
GFSK(ANT3)

Test channel :

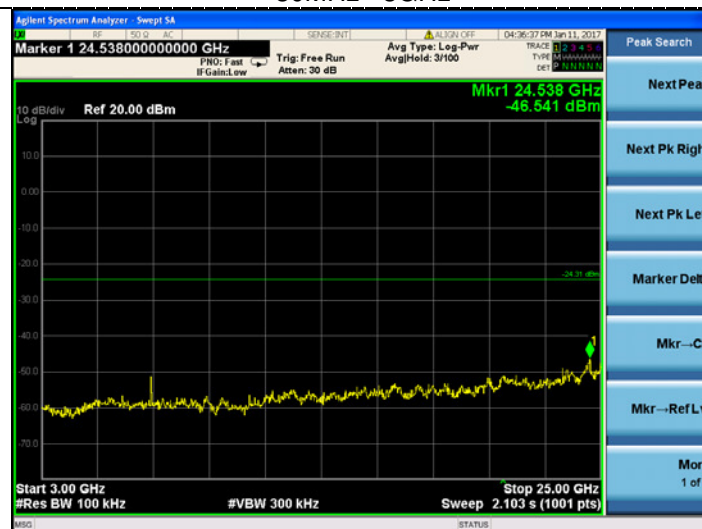
7



10MHz ~30MHz



30MHz ~3GHz



3GHz~25GHz

Test Mode:

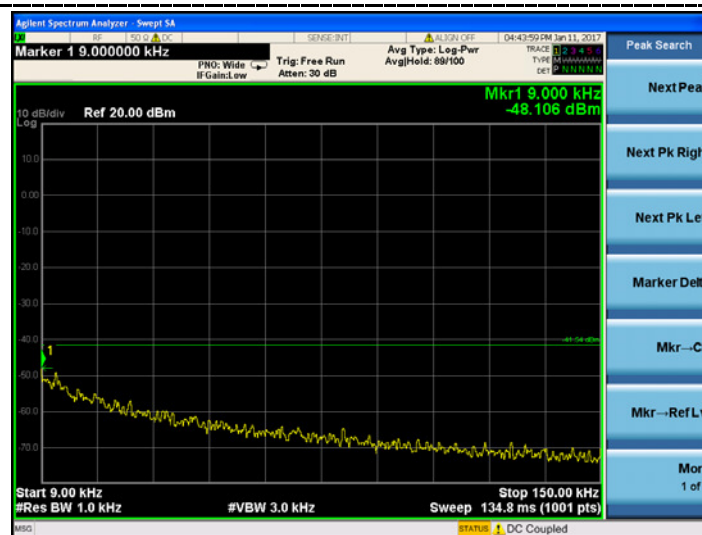
GFSK(ANT3)

Test channel :

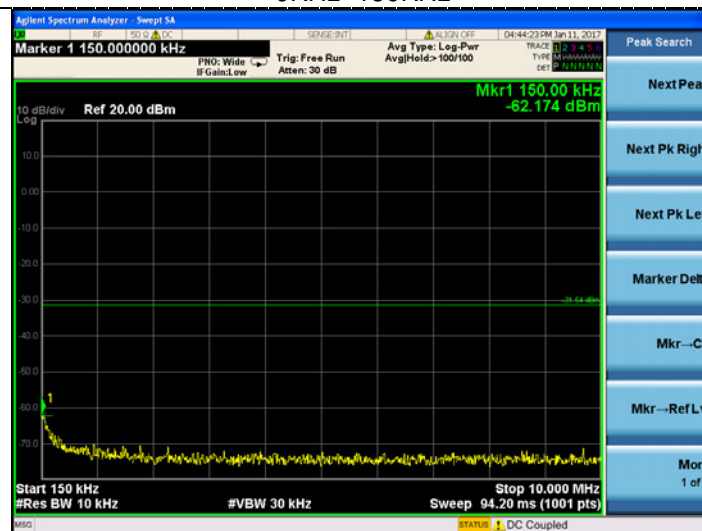
15



Channel 15



9KHz~150KHz



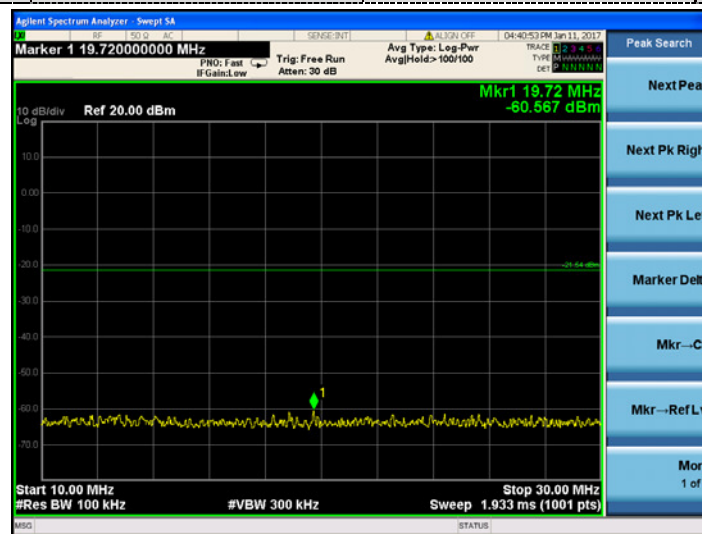
150KHz ~10MHz

Test Mode:

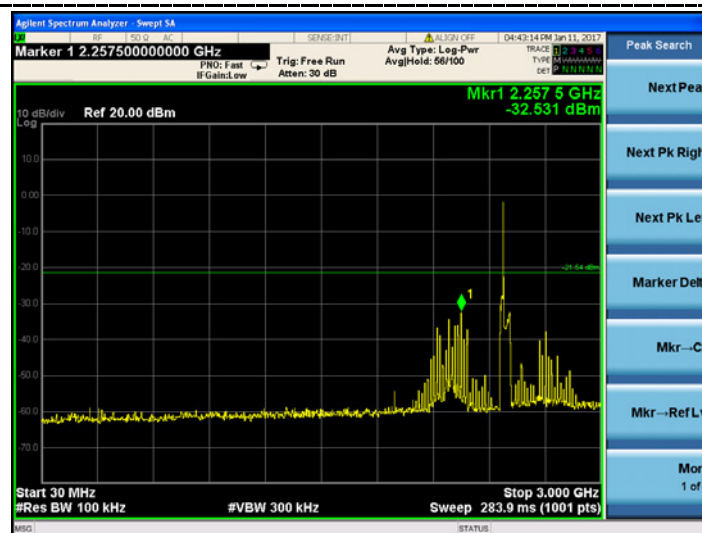
GFSK(ANT3)

Test channel :

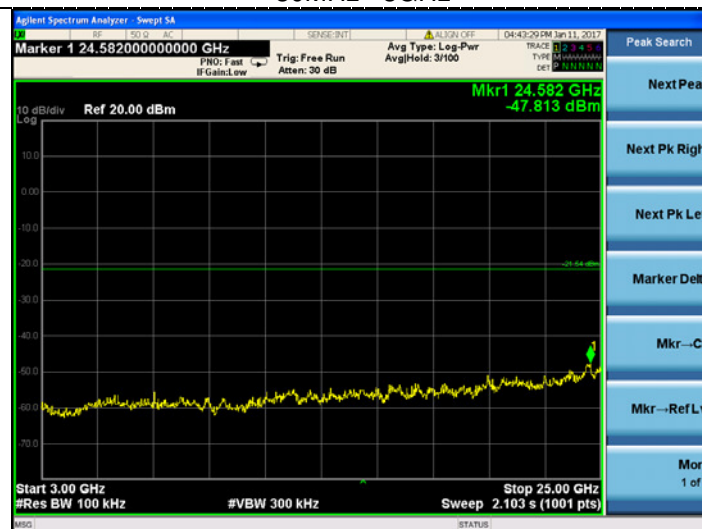
15



10MHz ~30MHz



30MHz ~3GHz



3GHz~25GHz

4.8. Antenna Requirement

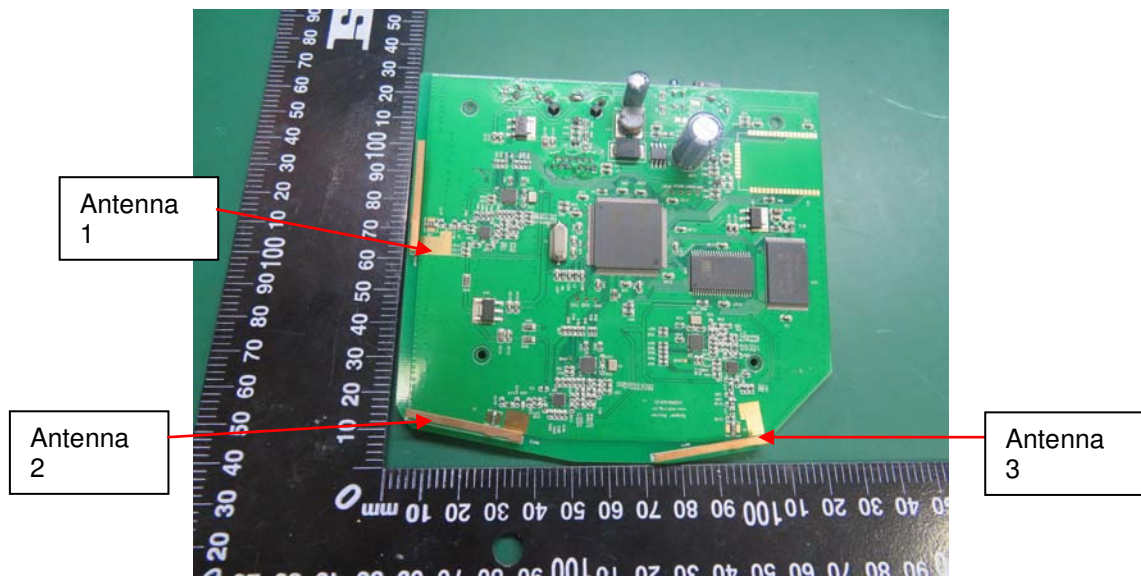
Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (c), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Antenna Information

The antenna is layout on PCB board, The directional gains of antenna used for transmitting is 2.04dBi.



5. Test Setup Photos of the EUT





6. External and Internal Photos of the EUT

External Photos

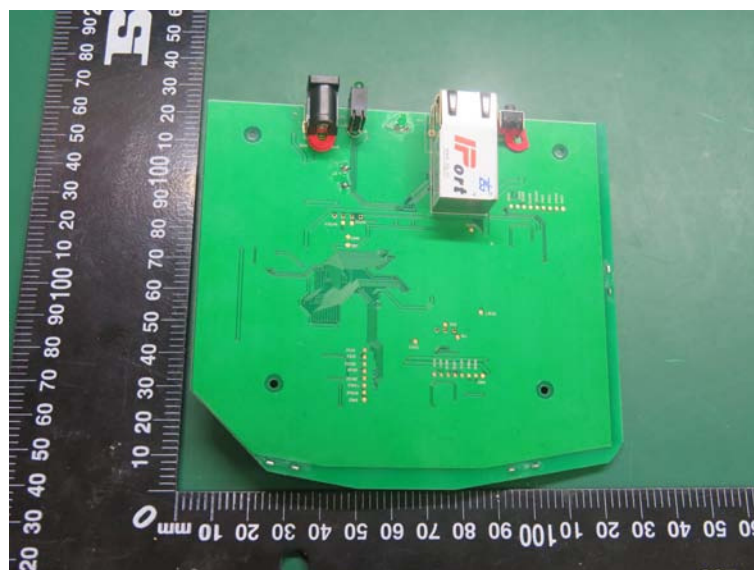
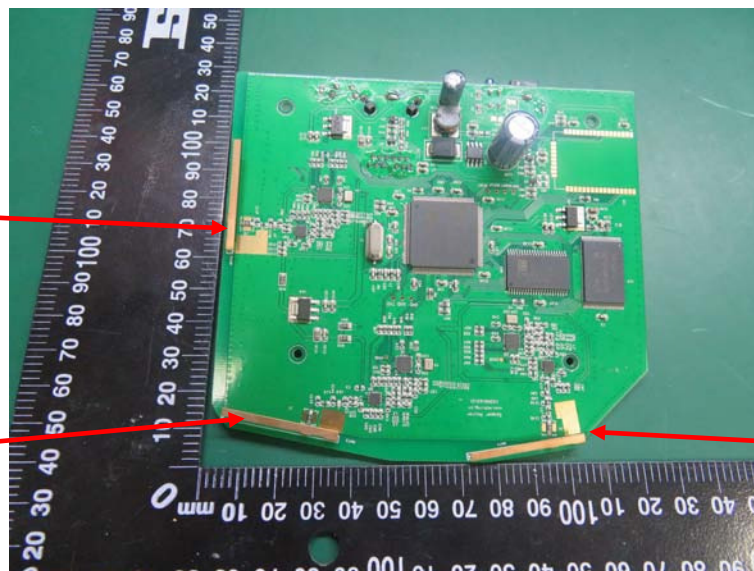


Internal Photos

Antenna 1

Antenna 2

Antenna 3



.....End of Report.....