5.0 Test Procedure:

5.1 RF Test:

5.2.1 Initial Test Equipment Settings

5.2.1.2 Regulated DC Power Supply:

Set the Regulated DC Power Supply to output +6.0V DC and current of around 15A

5.2.1.3 Spectrum Analyzer:

Center Frequency: Frequency of Operation of UUT
Span: 500KHz
RBW: 1KHz
VBW: 100Hz

5.2.1.4 Signal Generator:

Center Frequency: Frequency of Operation of UUT
Modulation: OFF
Power Level: As per requirement (less than –50dBm)

5.2.1.5 Network Analyzer:

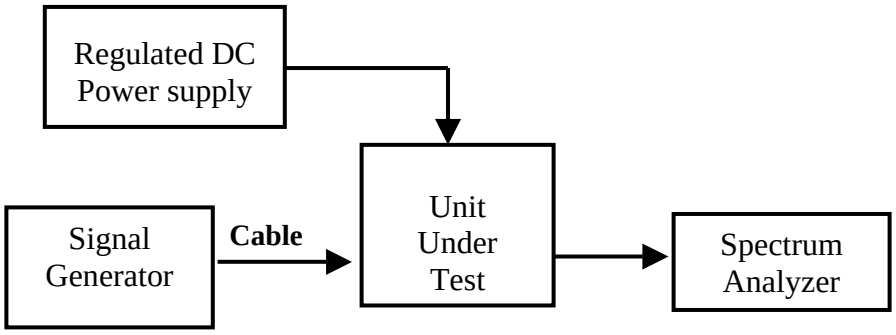
Center Frequency: Frequency of Operation of UUT
Span: 200 MHz
Power Level: -50 dBm
Scale Reference (at RFL Port) 10dB
Scale reference (at TRN Port): 30dB
Reference Position (at RFL Port): -30dB
Reference position (at TRN port): -10dB
Markers: As per our Interest.

5.2.1.2 Noise Figure:

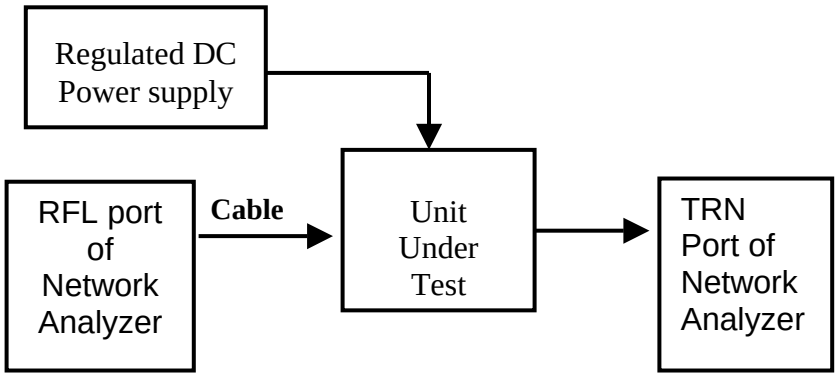
Start Frequency: Start frequency of Band under Testing
Stop Frequency: End frequency of Band Under Testing
Increment: 1 MHz /0.5 MHz

5.2.2 Test Setup Diagram:

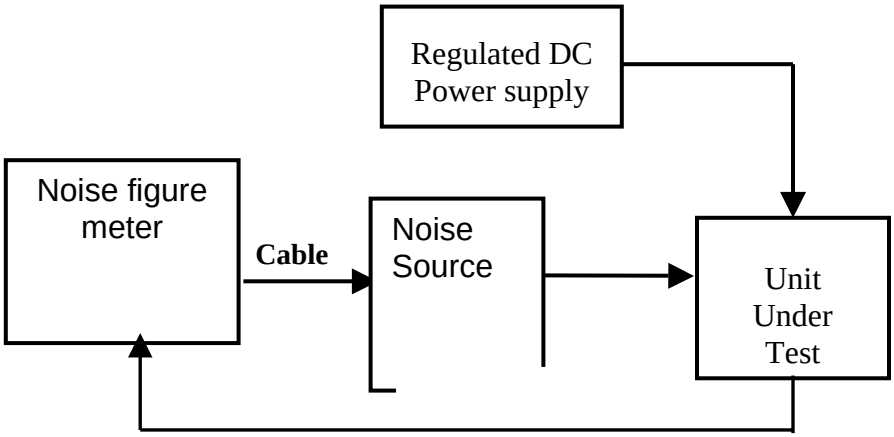
5.2.2.1 With Signal Generator and Spectrum Analyzer:



5.2.2.2 With Network Analyzer:



5.2.2.3 With Noise Figure Meter:

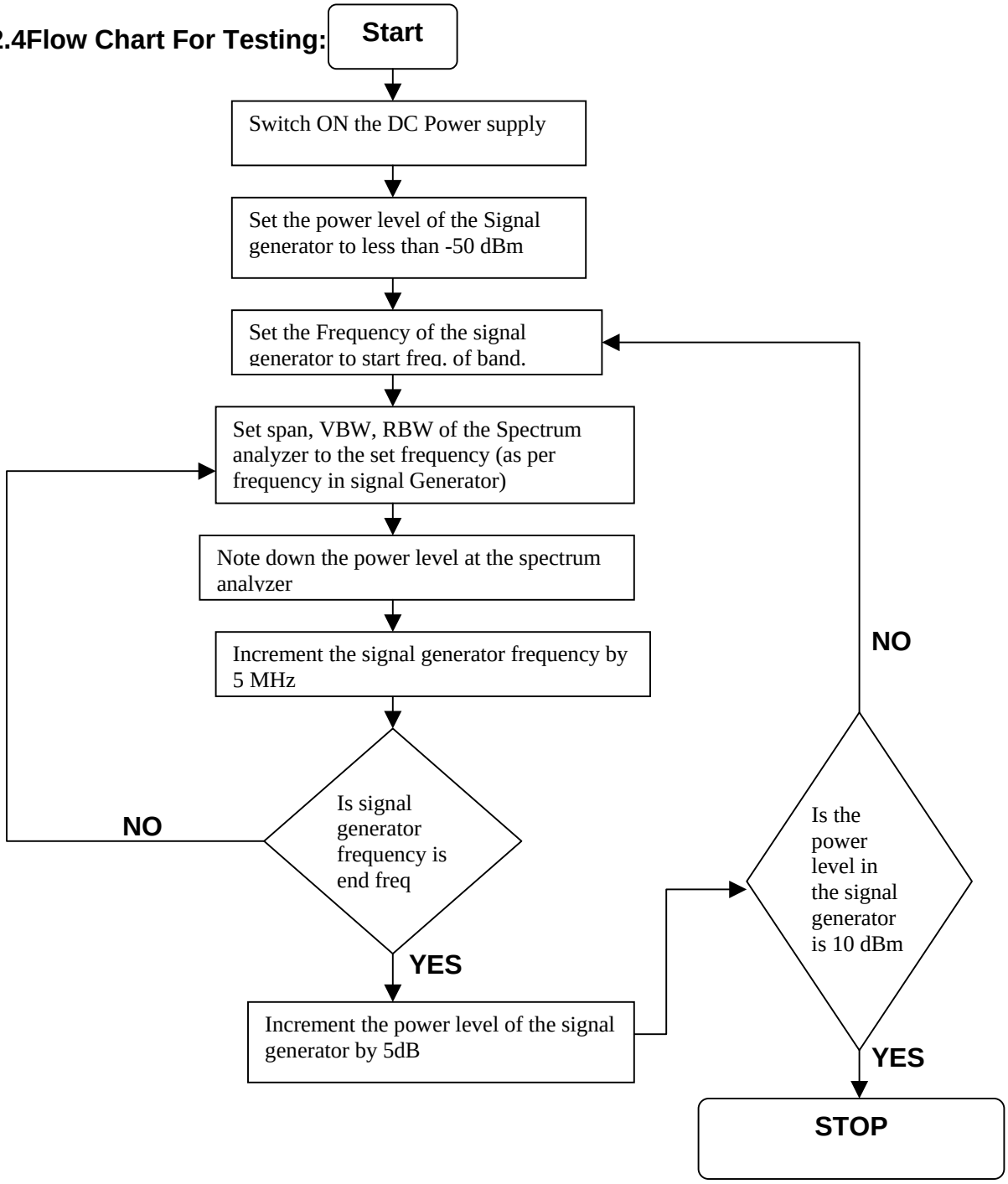


5.2.3 Gain Measurement:

(Note: Refer to the Initial test equipment setting before proceeding)

5.2.3.1 Calibrate the equipment and cables used.
5.2.3.2 Set the power Level of the signal generator to less than -50 dBm
5.2.3.3 Switch on the regulated DC Power Supply and the equipment
5.2.3.4 Set the Frequency of the signal Generator to the start frequency of band under test.
5.2.3.5 Set the span, VBW, RBW of the spectrum analyzer to the set frequency in signal generator
5.2.3.6 Connect the UUT as per the test setup diagram shown above
5.2.3.7 Note down the output power level at the Spectrum Analyzer.
5.2.3.8 Increment the signal generator frequency by 5 MHz
5.2.3.9 Repeat steps from iv to vi until the signal generator frequency reaches the end frequency of band under test.
5.2.3.10 Increment the power level of the signal generator by 5dB
5.2.3.11 Repeat the steps iv to Viii until the power level reaches 10dBm.
5.2.3.12 Switch OFF the power supply and the equipment.

5.2.4Flow Chart For Testing:



5.2.5 Precautions to be taken while Testing:

5.2.5.1 Always check the resistance between supply and ground before powering up any section. (This ensures DC short circuit)
5.2.5.2 Always put attenuating pads at the input and output of testing section. This ensures proper termination.
5.2.5.3 Do not solder any part or line while the system is ON.