Mil-Standard 810E

Rain and drip Test as described:

1. Procedure I – **Blowing Rain**. Procedure I, is applicable for equipment which will be deployed out-of-doors and which will be unprotected from blowing rain. The accompanying wind velocity can vary from almost calm to extremely high. Test items, which cannot be adequately tested with this procedure because of their large size, should be considered for testing under procedure II.
2. Procedure II – Is appropriate when equipment is normally protected from rain but may be exposed to **falling water** from condensation or leakage from upper surfaces.

I-3.2 **Choice of related test conditions**. Variables under each test procedure include the test item configuration, rainfall rate, wind velocity, test time exposure surfaces, water pressure, and any additional appropriate guidelines in accordance with the requirements document.

a. **Test item configuration**. The test item should be tested in all of the configurations in which it can be placed during its life cycle. As a minimum, the following configurations should be considered:
    (1) In a shipping/storage container or transit case.
    (2) Protected or not protected.
    (3) In its operational container.
    (4) Modified with kits for special applications.

b. **Rainfall rate**. The rainfall rate used in Procedure I may be tailored to the anticipated deployment locale and duration. Although various rainfall intensities have been measured in areas of heavy rainfall, a minimum rate of 10cm/hr (4 in/h) is recommended, since it is not an uncommon occurrence and would provide a reasonable degree of confidence in the test item. Further information may be obtained from Mil Std-210C.

d. **Wind Velocity.** High rainfall intensities accompanied by winds of 18m/s (40mph) are not uncommon during storms. Unless otherwise specified or when steady state conditions are specified, this velocity is recommended.

e. **Test item exposure surfaces**. Wind-driven rain will usually have more of an effect on vertical surfaces than on horizontal surfaces, and vice versa for for vertical or near-vertical rain. All surfaces onto which the rain could fall or be driven must be exposed to the test conditions.