(b) The chamber shall be maintained at a temperature of +40°C (plus or minus 1°C) for a minimum period of 12 hours and at a relative humidity of not less than 95 percent:

(c) At the beginning of the last 60 minutes of the above period, fans and any sources of heat provided in the equipment may be switched on:

(d) During the last 30 minutes of the period referred to in paragraph (b) of this subclause, and while the temperature of the chamber is still +40°C (plus or minus 1°C), at a relative humidity of not less than 95 percent, the, equipment shall be subjected to a performance check:

(e) The temperature shall then be allowed to fall below +25°C in not less than 1 hour, while the equipment is enclosed in the chamber, and shall then be exposed to normal room temperature and humidity for a period of 3 to 6 hours before the low temperature cycle.

(6) Low-temperature Cycle—

(a) Class B Equipment—

(i) The equipment shall be placed in a chamber which is maintained at a temperature of −15°C (plus or minus 2°C), at normal atmospheric pressure, for a minimum period of 12 hours:

(ii) During the last 30 minutes of that period, the equipment shall be subjected to a Performance check at the controlled temperature:

(b) Class X Equipment—

(i) The equipment shall be placed in a chamber which is maintained at a temperature of −25° (plus or minus 2°C), at normal atmospheric pressure, for a minimum period of 12 hours:

(ii) During the last 30 minutes of that period, The equipment shall be subjected to a performance check at the controlled temperature.

(7) Rain Test—

(a) The equipment shall be placed in a chamber fitted with 8 shower-heads, the discharge end of which shall consist of a flat non-corrodible plate 0.16 cm thick, having 36 holes each of 0.1 cm diameter evenly spaced on concentric circles as follows:

Sixteen holes on the periphery of a circle of 5.1 cm diameter; and

Eight holes on the periphery of a circle of 3.8 cm diameter; and

Eight holes on the periphery of a circle of 2.5 cm diameter; and;

Four holes on the periphery of a circle of 1.3 cm diameter

(b) The shower-heads shall be arranged at a distance of 50 to 80 cm from the equipment in such a manner that spray from 4 of the shower-heads is directed downwards at any angle of 45° at each of the 4 uppermost corners of the equipment. Spray from the other 4 shower-heads shall be directed horizontally at the centre of each area of the 4 sides of the equipment:

(c) Fresh water at room temperature and at a static pressure of not less than 103 kN/m² or more than 172 kN/m² shall be sprayed on to the equipment from the 8 shower-heads:

(d) The equipment shall be subjected to the foregoing test for a period of 1 hour—

(i) With the control panel in its normal position; and

(ii) With the control panel uppermost, if this is not its normal position. Throughout the test the equipment shall be continuously rotated between 12 and 20 revs/min, about a vertical axis passing through the centre of the equipmment:

(e) A performance check shall be carried out immediately after,but not during, exposure.

(8) Immersion Test—(a) The equipment shall be immersed in water, the surface of which is at least 10 cm above the highest point of the equipment, and shall remain immersed for a period of 1 hour:

(b) Upon its removal from the water, a performance check shall be carried out immediately:

(c) The equipment shall be inspected for water penetration.

(9) Corrosion Test—

(a) Salt Water—

(i) In addition to Class X equipment, the test shall apply to such components, materials, and finishes of Class B equipment as the type-testing authority may require:

(ii) The equipment shall be placed in a chamber fitted with apparatus capable of spraying in the form of a fine mist, such as would be produced by a spray gun, a salt solution to the following formula:

sodium chloride	26.5 grams
magnesium chloride	2.4 grams
magnesium sulphate	3.3 grams
calcium chloride	1.1 grams
potassium chloride	0.73 grams
sodium bicarbonate	0.20 grams
sodium bromide	0.28 grams

plus distilled water to make the solution up to 1 litre.

The quantity of each salt shall be subjected to a tolerance of ±10 percent. The spraying apparatus shall be such that the products of corrosion cannot mix with the salt solution contained in the spray reservoir:

(iii) The equipment shall be sprayed simultaneously on all its external surfaces with the salt solution for a period of 1 hour, and shall be kept working continuously for the last 30 minutes thereof:

(iv) This spraying shall be carried out 4 times with a storage period of 7 days at +40°C ±1°C between the repetitions. The relative humidity during storage shall be between 60 and 80 percent:

(v) At the conclusion of the total period the equipment shall be visually examined. There shall be no undue deterioration or corrosion of the metal parts, finishes, materials, or component parts. The equipment shall then be subjected to a performance check. In the case of hermetically sealed equipments, there shall be no evidence of moisture penetration on opening the cover:

(b) Battery Fumes—For equipment containing batteries—

(i) Any battery included in the equipment shall be fully charged and shall then be fitted into the equipment. If the arrangements are such that the battery can be charged without being removed from the equipment, the battery shall continue to be charged at the maximum permissible rate for a period of 24 hours:

(ii) The equipment shall then be stored for a period of 4 weeks at a temperature of +40°C ±1°C and at a relative humidity of between 60 and 80 percent:

(iii) At the conclusion of that period, the equipment shall be visually examined. There shall be no undue deterioration or corrosion of the metal parts, finishes, materials, or component parts. The equipment shall then be subjected to a performance check, either with the same or with freshly charged batteries.

(10) *Mould-growth Test*—

(a) Both the external and internal materials and finishes of the equipment shall be subjected to this test:

(b) The equipment shall be inoculated by spraying with an aqueous suspension of mould spores containing all the following cultures:

Aspergillus Niger:

Aspergillus Amstelodami: