



# COVERING NOTE

---

GENERAL SECRETARIAT INTERNATIONAL TELECOMMUNICATION UNION

---

Geneva, 16 January 2004

ITU – TELECOMMUNICATION  
STANDARDIZATION SECTOR

**Subject: Erratum 1 (01/2004) to**

ITU-T Recommendation K.21 (07/2003), *Resistibility of telecommunication equipment installed in customer premises to overvoltages and overcurrents*

Modify **Table 7/K.21 – Lightning test conditions for ports connected to internal cables** as follows:

Test No.	Test description	Test circuit and waveshape (See Annex A/K.44)	Basic test levels (Also see clause 7/K.44)	Enhanced test levels (Also see clauses 5 and 7/K.44)	Number of tests	Primary protection	Acceptance criteria	Comments
7.1	Unshielded cable	Figures A.3-5 and A.6.5-1 $R = 10\ \Omega$	$U_{c(max)} = 1000\ V$	$U_{c(max)} = 1500\ V$	5 of each polarity	None	A	
7.2	Shielded cable	Figures A.3-5 and A.6.5-2 $R = 0\ \Omega$	$U_{c(max)} = 1000\ V$	$U_{c(max)} = 1500\ V$	5 of each polarity	None	A	
7.3	Floating D.C. Power interface	Figures A.3-5 and A.6.3-2 $R = 0\ \Omega$ Coupling element = $10\ \Omega + 9\ \mu F$ in series	$U_{c(max)} = 1000\ V$	$U_{c(max)} = 1500\ V$	5 of each polarity	None	A	For D.C. Power supplies with both sides floating
7.4	Earthed D.C. Power interface	Figures A.3-5 and A.6.3-2a $R = 0\ \Omega$ dpf1 coupling element = $10\ \Omega + 9\ \mu F$ in series dpf2 connected to generator return	$U_{c(max)} = 1000\ V$	$U_{c(max)} = 1500\ V$	5 of each polarity	None	A	For D.C. Power supplies with one side grounded
NOTE – For equipment without an earth connection, wrap the equipment in foil and connect the foil to the generator return.								