01+033David J Tinsley Electrical Engineering Consultancy Ltd.

Name of Test	Instrument	Scale	Max/Min Reading	Expected Reading	Any Other Info
Continuity of CPC	Low Resisatance Ohmeter	Low Ohms	Low Ohms	<5 Ohms	Link PH & CPC at DB, and take reading at furthest point - This is called the R1 + R2 Value
Continuity of Ring Final	Low Resisatance Ohmeter	Low Ohms	Low Ohms	Same at each Outlet	(Open end R1 + Open end R2) / 4 should be the reading at each outlet. Tolerance is allowed of 0.05 Ohms at each outlet.
Insulation Resistance	IR Tester	500V	1.0 M- Ohms	>200MΩ	Remove all Lamps, appliances, dimmers & neons. Test 2 Way lights on both strapping cables.
Polarity (Dead)	Low Resisatance Ohmeter - or Bell Set	Low Ohms or Bell	NA	Correct or Incorrect	ES Lampholders - the phase to the centre & the Neutral to the thread exception for E14 & E27.
Polarity (Live)	Approved Voltage Tester	230V	PH-N - 230v PH- E - 230v N - E - 0v	PH-N - 230v PH-E - 230v N - E - 0v	Carried out at the Main Switch to ensure the Incoming suppy has not been reversed
Earth Loop Impedance	Earth Loop Impedance Tester (ELZ Tester)	Low Ohms	See Tables in Part 4 for Max Zs readings	Consierably Lower than those in Tables	Rule of Thumb - the reading should be less than 80% of the maximum given in table.
RCD	RCD Tester	½ x l∆n 1x l∆n 5x l∆n	At ½ x - No Trip: At 1x - < 200/300mS: At 5x - < 40mS		The test should be carried out in both sides of the Sine Wave. Note for RCD's of 100mA or more the only tests are at half times and 1 times I∆n.
PSC	A PSC Tester as part of the ELZ Tester	PSC	Lower than the breaking Capacity of the Device before it	The Lower the Ze the higher the PSC as PSC = Uo/Ze	PSCC & PEFC are different - PSCC is generally higher than PEFC due to the larger csa of the PH & N as opposed to the PH & E.
EARTH ELECTRODE RESISTANCE	Propriatory Tester or an ELZ Tester	200Ω	< 200Ω (see Table)		The four Leads of a propriatory Tester are called P1, P2 & C1, C2 - see diagram in Guidance Note 3
Ze	Earth Loop Impedance Tester (ELZ Tester)	Low Ohms for TN System - 200Ω for TT	TN-C-S - 0.35Ω TN-S 0.80Ω TT - <200Ω	Low for TN Systems & >25Ω for TT	Should be the first Test carried out before any periodic testing to ensure a good earth at the incomer.

Are Dead Tests Are Live Tests

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