

An Overview of the Unmetered Supply (UMS) Charge Code Process

What is a charge code?

A charge code is used to look up the circuit watts associated with unmetered equipment to calculate consumption. You can use charge codes to get your equipment connected and to make your billing arrangements.

Why do I need one?

All UMS equipment must be tested against the criteria set out in BSCP520. Upon a successful review of the test results, a temporary charge code is issued until the Unmetered Supplies User Group (UMSUG) issue the manufacturer with a permanent charge code.

The [Operational Information Document](#) (OID) contains detailed information on how to apply for a charge code and the pre-requisites for testing the proposed equipment. All test records are recorded and sent to us for validation. The test data is evaluated and a charge code will be issued to you based on the results. The UMS testing procedure below provides you with guidance on testing.

Why do I test my equipment?

The aim of testing is to provide an accurate indication of the load at the Distribution Network terminals for the particular equipment under normal service conditions; i.e. to establish what consumption would be recorded by a standard meter fitted at the supply terminals. The load tests for equipment designed for operation at other voltages MUST include an appropriate transformer. Brief details of the equipment, including the product name and product code used by the manufacturer, must be supplied with the test data to enable the list of agreed ratings to be maintained.

The applicant must also send a complete UMS checklist along with their application.

How do I test my equipment?

Testing needs to be carried out by an ISO 9001 accredited test house or any other test house agreed by ELEXON. Accredited test houses which have been used in the past are listed below, although please note that this is not a complete list.

Test Houses for Charge Code Applications

Keith Richens	01630 658 568	keith.rich@cranage.co.uk
UKAS		http://www.ukas.org/testing/singlesearchresult.asp
The Lighting Association	01952 290907	lab@lightingassociation.com

To be issued with a charge code, the circuit watts and Volt Ampere (VA) should be measured at five different voltage levels from 210V, increasing in 10V increments up to 250V (at 50Hz). A sample size of five is recommended.

Further Requirements

Brief details of the equipment, including the product name and product code used by the manufacturer, must be supplied with the test data to enable the list of agreed ratings to be maintained.

Equipment Tests

1. We reserve the right to witness the tests if required.
2. Both power/voltage and volt-ampere/voltage curves will be required with measurements taken at 210, 220, 230 240 and 250 volts, 50 hertz.

3. The accuracy of the measurements shall be stated and the minimum accuracy shall be $\pm 2\%$ of the recorded value.
4. The power measurements must include any voltage transformers necessary to operate the equipment from the mains.
5. The sample size shall be 1% of the expected first year's production subject to a minimum of five and a maximum of fifty.
6. Samples must be tested after operating for sufficient time to reach their steady load state. If it is likely that the load will vary over the life of the equipment, then testing should be carried out after at least 100 hours of operation.
7. If the equipment contains both lamps and control gear, the control gear will be divided into at least three batches. Each batch will be tested with lamps supplied by a different major manufacturer.
8. If the equipment includes facilities to dim to a fixed load level, then full load as well as dimmed load data is required.

Please note: It is a standard requirement of Unmetered Connection Agreements that the power factor of connected equipment should be as near to unity as practicable, but in any case at not less than 0.85 lagging or 0.95 leading. If equipment does not meet this standard then Distribution Companies may refuse to connect the equipment.

The issue of a charge code does not mean that the equipment meets the requirements of Distribution Companies for an Unmetered Connection.