Guidance



UMS Charge Code Form Appendix for Lamps

This Guidance is intended for use with the UMS Charge Code Form for lamps.

Questions 1-2

The test house must have ISO 17025 accreditation, but can be located anywhere in the world. A PDF of their accreditation certificate and the schedule to their certificate, or a link to their certification/schedule on their website would be sufficient evidence of their fitness to perform testing for UMS purposes. The ISO accreditation of the test house must include the ability to carry out testing on the electrical properties of equipment. It is important that you verify with the test house that their accreditation includes this capability, and discuss any uncertainties with ELEXON in advance of committing to testing, as otherwise we may be unable to process your application.

Question 3

To be issued with a Charge Code, the Circuit Watts and Volt Ampere (VA) of the product 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 required **unless, on review of the test data, it is determined that more samples are needed**. Here is an example of the format:

Manufacturer's name and equipment model name

Voltage		Sample 1	Sample 2	Sample 3	Sample 4	Sample 5
210	Watts					
	VA					
220	Watts					
	VA					
230	Watts					
	VA					
240	Watts					
	VA					
250	Watts					
	VA					

The power measurements must include any voltage transformers necessary to operate the equipment from the mains and samples must be tested after operating for sufficient time to reach their steady load state. The accuracy of the measurements shall be stated and the minimum accuracy shall be $\pm 2\%$ of the recorded value.

Some equipment has functionality which requires a larger number of test samples to be submitted:

Equipment type	Functionality	Additional Testing Requirements		
Dimming	Has the facility to dim to a specified level.	5 test samples must be provided for each level the equipment will be dimmed to in live operation AND at full operational power.		
Reduced Operation	The equipment can be set to operate at a specified % of its usual full power load.	5 test samples must be provided for each level the equipment will be set to in live operation AND at full operational power.		
Control gear (ballasts)	Drives lamps at the same power regardless of the type of lamp.	Test samples should be divided into at least three batches. Each batch (of 5 samples) will be tested with lamps supplied by a different major manufacturer.		
Constant Light Output (CLO)	This technology compensates for deterioration in performance over the lifetime of the equipment by drawing more energy to ensure that the light generated is always the same.	We require 5 samples from the start of life for the equipment and 5 samples for the end of life for the equipment.		

Question 4

A product specification or brochure assists us in understanding your product, provides additional information to the expert group who approve Charge Codes and therefore improves the chances of your product being given a Code in a timely fashion.

Question 5

The table below contains *only* the three most common lamps submitted for coding. The codes for all other lamp types, along with further information on the testing requirements for all lamp types, can be found in the Operational Information Document.

If your lamp is going to be used in multiple ways, please list all of the relevant lamp types under this question. For example, if your LED lamp can be used as either sign-back-lighting or street lighting, and it is likely to be used as both, you would enter '40' and '41' in answer to Question 5. Similarly, if your LED lighting product is also capable of being used as traffic equipment (for example, as the lamp for a belisha beacon), you would need to complete a separate 'Signals and Miscellaneous' application form in addition to the 'Lamps' application.

Code	Lamp Type	Code	Lamp Type	Code	Lamp Type
40	Light Emitting Diodes (LEDs)	41	LED Street Lights	50	Electronic Ballasts*

^{*}If you are intending to submit an application for a '50' Electronic Ballast, please note that we require the ballast be tested with a minimum of two different lamp types. If we receive an application for a '50' type that does not include 5 samples for each lamp type, we will provide you with an appropriate lamp-specific Charge Code.

Question 6

The nominal wattage of your equipment is the wattage 'on the box', or the wattage you declare to customers. We use this wattage in constructing a Charge Code. It is therefore important that it matches the wattage you sell your products at because it is the best way for end-users to quickly and easily find your product on the Charge Code spreadsheet.

If you are applying for dimmed Charge Codes, we only require a nominal wattage for the product at full power.

Question 7

The control gear used in conjunction with the lamp forms part of the Charge Code we issue. If you are unsure about which control gear type to choose, please consult the <u>Operational Information Document</u>, and then, if still unsure, contact us at <u>UMS.Operations@elexon.co.uk</u>.

If your application is for any kind of LED, or for '50' type electronic ballasts (see the first table under Question 5), control gear type will always be '0'.

Control gear will be one of the following:

Code	Lamp Type	Code	Lamp Type	Code	Lamp Type
0	No Control Gear	1	Standard Control Gear	2	Low Loss Control Gear
3	High Frequency Electronic Ballast	4	SOX/E Optimum Gear	5	Low Frequency Electronic Ballast
6	Multi-Level Static Dimming				

Question 8

The name or model number you give for the product should be what appears 'on the box', as sold to customers. The entry for your product on the Charge Code spreadsheet will include a cell with this description, and customers and UMSOs will use it to select the correct product for their inventories. It is therefore important that this description is clear, and matches the name under which your product is sold.

If you are applying for dimmed Charge Codes, please note that your codes will be given dimmed percentage values based on the circuit wattages in your test data. We do not use dimmed values based on Lumen levels in any of the descriptions on the Charge Code spreadsheet.

Question 9

If you are not the manufacturer of the equipment you are applying for, please specify the manufacturer in the field provided.

Generally, the manufacturer of the equipment is the party who must apply for a Charge Code. The only instance in which an exception can be made to this rule is where the manufacturer will be using you as their sole distributor, and is willing to provide written assurance of the fact to ELEXON.

If you are unsure about how to answer this question, please contact us at the email address provided.

Useful Links

- Contact <u>UMS.Operations@elexon.co.uk</u>
- Unmetered Supplies
- ➤ UMS Charge Code Form Lamps
- Operational Information Document
- Charge Codes and Switch Regimes

For more information please contact the **BSC Service Desk** at <u>bscservicedesk@cgi.com</u> or call **0370 010 6950**.

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