

CCC01 – Cable Coupling Clamp



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The Cable Coupling Clamp (CCC01) has been designed by York EMC Services Ltd for the purpose of measuring the EMC properties of cables. It can be used to make repeatable measurements aimed at assessing the coupling and shielding effectiveness properties of a wide range of cables.

The CCC01 is based on the details of the possible launcher arrangement described in IEC 96-1 Amendment 2 1993-06 section A.5.6 Line Injection Method (frequency domain). It is also used in IEC 62153-4-6:2006 and mandated for the line injection method in EN 50289-1-6.

- Robust construction
 - ✓ Repeatable measurements
- Interchangeable cable fittings
 - ✓ Can be used on a range of cable sizes

Description

The CCC01 is designed to allow easy positioning of the test and injection feed cables in accordance with the layout described in IEC 96-1 Amendment 2 1993-06.

The CCC01 is supplied with left- and right-hand injection assemblies. Each assembly comprises the conductive metal launchers used to align the cable-under-test with the injection feed cable, and comes supplied with the injection cable and its ferrite ring chokes already fitted. Each injection feed cable is fitted with N-type female connectors, for connection to the test system (for example a network analyser or spectrum analyser with tracking generator). Each assembly also features a supporting plastic cable guide for the cable-under-test, with space given for ferrite ring chokes to be fitted as per the test specification.

The metal launchers are supplied with three pairs of conductive fittings with aperture sizes of 2.5mm, 5mm and 10mm diameter. Corresponding non-metallic fittings for the cable-under-test supporting guide clamps are also provided. With these fittings, a range of cable diameters can be accommodated.

A non-metallic base plate is also supplied, which allows the launchers to be easily aligned to give a test-cable measurement length of either 0.3m (EN 50289-1-6) and 0.5m (IEC 96-1) as required.

Please note: the cable under test (CUT) and parts associated with its construction and any ferrite rings to be fitted to it are not supplied.



Applications

- Cable shielding effectiveness measurements as indicated by:
 - IEC 96-1 Amendment 2 1993-06
 - IEC 62153-4-6:2006
 - EN 50289-1-6
- Investigation of cable coupling phenomena

Specifications

Frequency Range	10kHz to 1GHz typical (usable to higher frequencies, depending on application)
Output connector	50Ω N-type socket
Dimensions	220mm x 880mm (0.5m test setting) / 740mm (0.3m test setting)
Weight	3kg (typical excluding cable-under-test and any associated ferrites)

Standard Order Kits

Part Number
CCC01KIT01

Description
Standard CCC01 cable coupling clamp kit

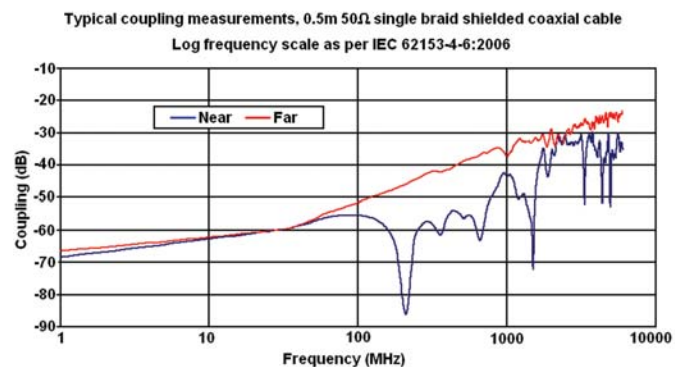
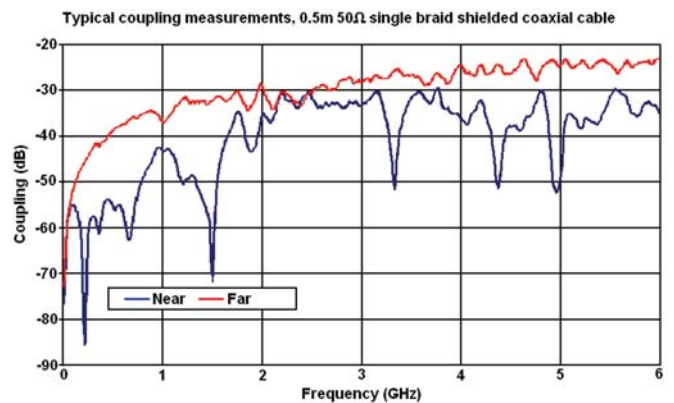
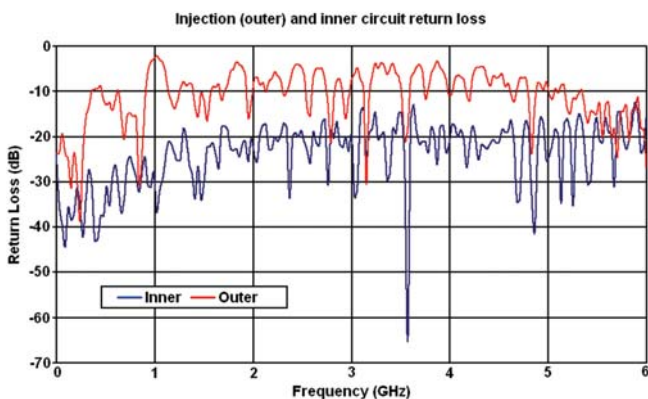
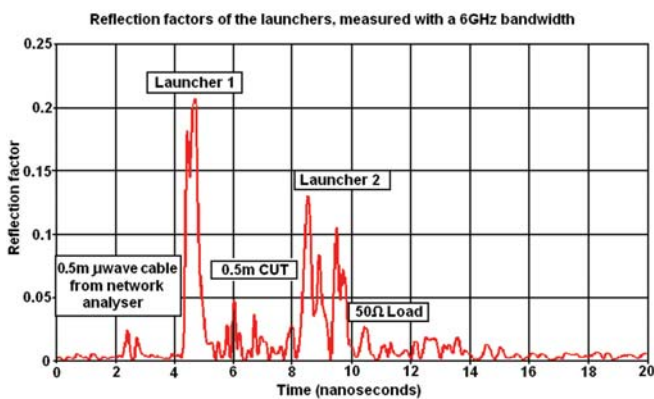
Parts Included

- CCC01 cable coupling clamp
- 2.5mm, 5mm and 10mm diameter cable mounting fittings
- Additional clip-on ferrite chokes
- Self-adhesive copper tape
- Hard case for injection assemblies and accessories

Accessories

Cable fittings CMF01 Kit of user-machinable blank fittings for custom cables

Typical Output Measurement Results



York **EMC** Services Ltd

York EMC Services Ltd,
The University of York,
Heslington, YORK, YO10 5DD, UK.
Tel +44 (0)1904 434440
Fax +44 (0)1904 434434
Email enquiry@yorkemc.co.uk
www.yorkemc.co.uk/instrumentation