CSA C22.2 No. 2556:21
National Standard of Canada

Wire and cable test methods

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600-55 Metcalfe Street
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ICS 29.010; 29.060

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D. Verhage	Domtech Inc., Trenton, Ontario, Canada	
J. Willner	Bolton, Ontario, Canada	
S. Amjad	CSA Group, Toronto, Ontario, Canada	*Project Manager*

Standard for Safety for Wire and Cable Test Methods,

Fifth Edition, Dated April 30, 2021

Summary of Topics

This New Fifth Edition is being issued to incorporate several substantive changes which include the following:

- ***Deleted the option of testing using a carbon-arc weatherometer.***
- ***Deleted the option of using non-mechanical extensometers.***
- ***Revised to specify metallic braid versus copper.***
- ***Revised to add the IR constant K to allow for the calculation of insulation resistance requirements when the IR constant K is provided for marine shipboard cables.***
- ***Clarification of bead chain spacing for the spark tester.***
- ***Revised to account for product standards that require cold bend testing after sunlight resistance testing (e.g. flexible cords).***
- ***UL 493 and UL 4703 describe a procedure for flatwise and edgewise crush testing of cables. With two standards specifying this method, the procedure should be added to the trinational test methods standard.***
- ***The method for crush resistance at accelerated compression rate is not referenced in any product standards.***
- ***Revised to ensure specimens that break down at a relatively high voltage are not too short, which can lead to failure through flashover to the water rather than breakdown through the insulation.***
- ***The ramp rate in the Dielectric after Glancing Impact was revised to match the other dielectric breakdown tests.***
- ***The pressure in the gas supply is specified.***
- ***Note added to indicate that the requirements in the product standard prevail but in the absence of requirements, those described in this method apply.***
- ***Revised to allow the option of using an aliquot sample for titration, to specify the use of distilled, deionized or demineralized water for the titration, and to provide improved clarity in the procedure.***
- ***Replaced Figure 38 with 42 and 43***
- ***All volumetric glassware shall be class A glass.***
- ***Changed level of water in water trap from min 100 to 125 ±5mm.***
- ***Revised to clarify the title and scope.***
- ***The calculation method for braid shields and spiral or wrap shields was corrected in Annex G.***

The new requirements are substantially in accordance with Proposal(s) on this subject dated February 21, 2020 and October 30, 2020.