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ICES-005 Lighting Equipment

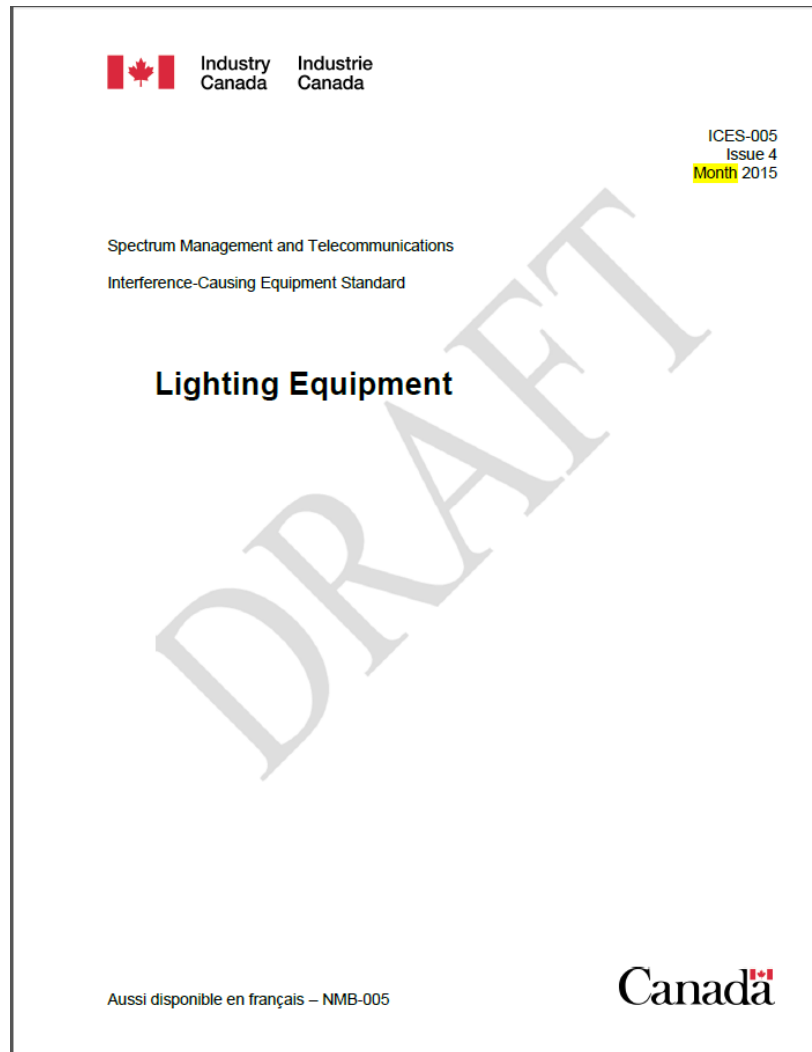
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ICE-005 Issue 4 (Draft)



Status:

Consultation – ICES-005 Issue 4
- Due date: July 10th, 2015

Date of publication: TBD

ICE-005 Issue 4 (Draft) Summary of changes

New Title:

- From “*Radio Frequency Lighting Devices (RFLD)*” to “*Lighting Equipment*”

Transition period:

- A transition period of twelve months is provided.

Scope:

- The scope is broadened to cover all lighting products capable of generating unwanted emissions that may cause radio frequency interference.

Test Methods:

- Includes an alternative compliance verification test method and corresponding limits, which are based on CISPR 15.

Industry Canada encourages the industry to familiarize itself with the CISPR 15 international standard and participate in the development of a North American standard for lighting equipment based on CISPR 15. Industry Canada will transition this lighting equipment regulatory standard to one solely based on CISPR 15 or a North American version of CISPR 15 within four years from the publication of this issue of ICES-005.

ICE-005 Issue 4 (Draft)

Technical Requirements (Alternative 1):

Lighting equipment can be demonstrated to comply with the technical requirements of ICES-005 by either complying with the requirements set out in this section or with those in section 7 (Alternative 2).

Instrumentation, Test Methods and Test Facilities:

The instrumentation, test methods and test facilities used to demonstrate compliance with the limits defined in section 6 (alternative 1) shall be in accordance with the requirements in ANSI C63.4.

Limits:

Class A and B limits for Conducted and Radiated Emissions

Technical Requirements (Alternative 2):

Lighting equipment can be demonstrated to comply with the technical requirements of ICES-005 by either complying with the requirements set out in this section or with those in section 6 (Alternative 1).

Instrumentation, Test Methods and Test Facilities:

The instrumentation, test methods and test facilities used to demonstrate compliance with the limits defined in section 7 (alternative 2) shall be in accordance with the requirements in CISPR 15.

Limits:

The limits applicable to the alternative 2 are those set out in CISPR 15, with the following modification:

The quasi-peak limit for the electric component of the radiated field strength emitted from lighting equipment, set out in Table 3b of CISPR 15 is extended up to 1000 MHz. Specifically, the limit value at 300 MHz also applies within 300 – 1000 MHz frequency range. The instrumentation, test facility and method of measurement requirements defined in CISPR 15 for frequencies within 30 – 300 MHz also apply within 300 – 1000 MHz.

ICE-005 Issue 4 (Draft) cont'd

Statistical Analysis:

The clause 10 of CISPR 15 cannot be used for demonstrating compliance with ICES-005. Each unit of a lighting equipment model is required to be in compliance with ICES-005.

Intentional Radiators:

- If the lighting equipment includes intentional radiators (e.g. for wireless light regulation control), the emission from the wireless transmitter shall not be considered when assessing compliance with ICES-005. This can be done either by switching off the wireless function of the lighting equipment (if possible and if it does not change in any way the typical non-intentional emissions) or by ignoring the intentional radiated emission.
- At the intentional radiation frequency (frequencies), the lighting equipment shall meet the requirements of the applicable RSS(s). Additionally, the lighting equipment shall meet all the other applicable requirements set out in RSS-Gen (e.g. RF exposure, labelling).
- Lighting equipment that includes intentional radiators is classified as Category I radio apparatus and requires a technical acceptance certificate (TAC), pursuant to subsections 4(2) of the Radiocommunication Act and 21(1) of the Radiocommunication Regulations.
- Either the Certification and Engineering Bureau of Industry Canada or a recognized Certification Body may issue a TAC (see RSS-Gen). The application for certification shall follow the procedures set out in RSP-100.

ICE-005 Issue X (Draft) versus IEEE C63.29 versus CSA bi-national

IEEE C63.29

<p>8. Description of Contents of Standard: (Provide a one paragraph description, not to exceed 500 characters.)</p>	<p>This standard is intended to include procedures for compliance testing of general illumination lighting products with applicable radio regulatory requirements. This standard encompass various technologies, from traditional lighting like (fluorescent and HID) as well as novel technologies (like LED and other). Related national and international standards (e.g., CISPR 15, ANSI C63.4) will be reviewed and used to the extent possible.</p>
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CSA bi-national





- CSA bi-national technical committee and standards development process in compliance with both ANSI and SCC requirements

CISPR 2015 – CISPR-F / WG2 / CISPR-15

CIS/F Publications (15) All Publications		
Preview	Reference, Edition, Date, Title	Language
	CISPR 15:2013 Edition 8.0 (2013-05-08) Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment	EN-FR, ES

CIS/F Stability date of publications (12)					
Publication Number	Publication Date	Stability Date	Maintenance Team	Project in progress	
CISPR 15 f12 Ed. 8.0	2013-06-11	2017			
CISPR 15 f11 Ed. 8.0	2013-06-11	2017			
CISPR 15 Ed. 8.0	2013-05-08	2017	WG2	CISPR 15 Ed. 9.0 (CDM)	
CISPR 15 am1 Ed. 8.0	2015-03-27	2017	WG2	CISPR 15 Ed. 9.0 (CDM)	

CISPR 2015 – CISPR-F / WG2 / CISPR-15

CIS/F Work programme (2) 							
Project Reference	Document Reference	Init. Date	Current Stage	Next Stage	Working Group	Project Leader	Fcst. Publ. Date
CISPR 14-1 Ed. 6.0 Electromagnetic Compatibility - Requirements for household appliances, electric tools and similar apparatus - Part 1: Emission	CIS/F/661/CDV  1504 kB  1559 kB	2013-05	ADIS 2015-09	DEC 2015-12	WG1	S. Kloska	2016-06
CISPR 15 Ed. 9.0 Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment	CIS/F/663/CD  2807 kB	2015-03	CDM 2015-09	A2CD 2015-10	WG2	P. Archer	2018-09