

Report to SC-1

ANSI C63.4

Methods of measurement of emissions from low-voltage electrical and electronic equipment in the range of 9 kHz to 40 GHz

Andy Griffin

Working group for ANSI C63.4 Chair

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ANSI C63.4 WG membership

Name	Role within WG	Affiliation
Griffin, Andy	Chair	CISCO Systems
Popovici, Horia	Vice Chair	Innovation, Science and Economic Development Canada
Ramie, Jerry	Secretary	Consultant (non-voting)
Abbondante, Nick	Member	Intertek
Antola, Michael	Member	UL Solutions
Arthurs, Mark	Member	Sony
Beattie, Chad	Member	FCC Lab
Behm, Steve	Member	CKC Laboratories
Bowman, Richard	Member	Intel
Chen, Zhong	Member	ETS-Lindgren
Crumm, Allen	Member	SSC Labs
Cuevas, Jose	Member	Apple Inc. (Alternate Rep)
DeLisi, Bob	Member	UL Solutions
Harrington, Tim	Member	FCC Lab
Heckrotte, Michael	Member	UL Verification Services Inc.
Hofmann, Bob	Member	Hofmann EMC Engineering
Kiemel, Greg	Member	Apple Inc. (Primary Rep)
Klinger, Jeff	Member	Individual
Lin, Grace	Member	HYTORC
Mellberg, Hans	Member	Consultant
Molaei, Nima	Member	Element Materials Technology (Primary)
Pettit, Ghery	Member	Pettit EMC Consulting LLC
Potts, Nate	Member	Keysight Technologies
Royer, Tim	Member	TIMCO ENGINEERING, INC. (Primary)
Schaefer, David	Member	Element Materials Technology - Alternate
Sigouin, Dan	Member	Consultant
Terrien, Mark	Member	Consultant
Walton, Derek	Member	LF Research
Zainal, Khairul	Member	Apple, Inc.
Zimmerman, Dave	Member	Spectrum EMC, LLC

ANSI C63.4**1) SC1 vote**

Vote ended Feb. 21st 2020 and passed (14 yes, 10 no, 3 abstain)
8 members submitted a total of 122 comments

2) Progress

After completing the major part of the document, we sent version PC63.4/D2.3, February 2024 to members of SC1 and the Task Force members for a six-week comment period that ended 3/20/24. This was extended further due to "popular demand," to 4/5/24

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3) Comment matrix

We received comments from

Mark Arthurs

Andy Griffin

Apple

UL

Harry Hodes

David Zimmerman

Randy Long

Around 50 comments were received.

ANSI C63.4**3) Comment matrix**

We have held monthly meetings (mostly) to fix the issues. Of the approximate 50 comments around 18 comments were not accepted.

Harry Hodes requested that titling (or bore-sighting) be put back in the draft. This was not agreed but it was agreed to include an annex explaining the rationale behind the method proposed to replacing the current text in C63.4 about aiming the antenna at the source of the emission.

We agreed to use current process back in early 2022. There is no support for having multiple methods within the document.

ANSI C63.4**3) Comment matrix**

As Mark Arthurs pointed out that this is a long and complicated document with many changes from the previous edition and we expect more comments when the document is sent for vote. We have tried to summarize the major changes at the start but an actual redline version would not be effective.

There is an open item to provide data to change the tolerance of the AC mains supply from the current proposed draft of 5 % to 10 %. The main concern is from higher power devices. We also need to check both the live and the neutral lines.

The current version of C63.4 has no tolerance just that the supply shall be sufficient to power the device.