

# ANSI/CTA Standard

**TV Receiving Antenna Performance  
Presentation Measurement**

**ANSI/CTA-774-C**

**(Formerly ANSI/CEA-774-C)**

**November 2014**



**Consumer  
Technology  
Association**

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(Formulated under the cognizance of the CTA **R4 Video Systems Committee**.)

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## **FOREWORD**

This standard was developed under the auspices of the Consumer Electronics Association (CEA) R5 Antenna Systems Committee. It replaces CEA-774-A, which replaced EIA/CEA-774 (re-designated CEA-774 in 2003), which replaced RETMA-141-A.

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## TV Receiving Antenna Performance Presentation and Measurement

### 1 Scope

This standard defines test and measurement procedures for use by manufacturers of television receive antennas who wish to categorize their antennas in accordance with CEA-2028-A, Color Codes for Outdoor TV Receiving Antennas, for use with the CEA TV Antenna Selector Program [www.AntennaWeb.org](http://www.AntennaWeb.org). Essential elements include procedures to determine antenna gain, front-to-back ratio, average gain to null ratio, directivity and distortion performance of active antennas with integrated amplifiers.

### 2 References

#### 2.1 Normative References

The following standards contain provisions that, through reference in this text, constitute normative provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed here.

##### 2.1.1 Normative Reference List

#### 2.2 Informative References

The following standards contain provisions that, through reference in this text, constitute informative provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed here.

##### 2.2.1 Informative Reference List

- ANSI/CEA-909-A, Antenna Control Interface, December 2007
- CEA-2028-B, Color Codes for Outdoor TV Receiving Antennas, April, 2014

##### 2.2.2 Informative Reference Acquisition

ANSI/EIA/CEA Standards:

- Global Engineering Documents, World Headquarters, 15 Inverness Way East, Englewood, CO USA 80112-5776; Phone 800-854-7179; Fax 303-397-2740; Internet <http://global.ihs.com>; Email [global@ihs.com](mailto:global@ihs.com)

IEEE Standards:

- Institute of Electrical and Electronics Engineers, 445 Hoes Lane, Piscataway, New Jersey 08854-1331 USA; Tel: +1 732 981 0060; Internet <http://www.ieee.org>.

### 2.3 Definitions

Antenna Directivity Pattern

A plot of the horizontal radiation pattern of an antenna.