



Recommendation ITU-R BT.2022
(08/2012)

**General viewing conditions for subjective
assessment of quality of SDTV and HDTV
television pictures on flat panel displays**

BT Series
Broadcasting service
(television)



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Foreword

The role of the Radiocommunication Sector is to ensure the rational, equitable, efficient and economical use of the radio-frequency spectrum by all radiocommunication services, including satellite services, and carry out studies without limit of frequency range on the basis of which Recommendations are adopted.

The regulatory and policy functions of the Radiocommunication Sector are performed by World and Regional Radiocommunication Conferences and Radiocommunication Assemblies supported by Study Groups.

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Series of ITU-R Recommendations

(Also available online at <http://www.itu.int/publ/R-REC/en>)

Series	Title
BO	Satellite delivery
BR	Recording for production, archival and play-out; film for television
BS	Broadcasting service (sound)
BT	Broadcasting service (television)
F	Fixed service
M	Mobile, radiodetermination, amateur and related satellite services
P	Radiowave propagation
RA	Radio astronomy
RS	Remote sensing systems
S	Fixed-satellite service
SA	Space applications and meteorology
SF	Frequency sharing and coordination between fixed-satellite and fixed service systems
SM	Spectrum management
SNG	Satellite news gathering
TF	Time signals and frequency standards emissions
V	Vocabulary and related subjects

Note: This ITU-R Recommendation was approved in English under the procedure detailed in Resolution ITU-R 1.

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RECOMMENDATION ITU-R BT.2022

General viewing conditions for subjective assessment of quality of SDTV and HDTV television pictures on flat panel displays

(Question ITU-R 81-1/6)

(2012)

Scope

This Recommendation specifies general viewing conditions for subjective assessment of quality of SDTV and HDTV television pictures on flat panel displays.

The ITU Radiocommunication Assembly,

considering

- a) that Recommendation ITU-R BT.500 has been developed assuming the use of CRT displays in subjective assessment;
- b) that the transition from CRT to non-CRT display imposes the use of non-CRT displays for subjective assessment;
- c) that the picture rendering characteristics may differ between CRT and non-CRT displays;
- d) that increasingly SDTV and HDTV flat panel displays (FPDs) are being used for subjective quality assessment of television pictures,

recognizing

- a) that Recommendations ITU-R BT.814 and BT.815 provide specifications and alignment procedures for setting of brightness and contrast of displays;
- b) that Recommendation ITU-R BT.1848 provides guidelines on safe areas of 625-line, 720-line and 1 080-line formats of wide-screen 16:9 aspect ratio digital productions;
- c) that Recommendation ITU-R BT.1886 specifies the reference electro-optical transfer function (EOTF) that the displays used in HDTV programme production should follow in order to facilitate consistent picture presentation;
- d) that Report ITU-R BT.2129 investigates user requirements for a flat panel display as a master monitor in an HDTV programme production environment,

noting

- 1 that specific viewing conditions for subjective assessments of specific systems are given in the related Recommendations (e.g. Recommendation ITU-R BT.710 for the HDTV and Recommendation ITU-R BT.1129 for SDTV);
- 2 that Recommendations ITU-R BT.710 and BT.1129 came into force before the development of wide screen flat panel displays,

recommends

- 1 that the general viewing conditions described in Annex 1 should be used for subjective assessment of picture quality.