

First edition
2021-04

AMENDMENT 1
2021-08

**Information technology — Plenoptic
image coding system (JPEG Pleno) —**

Part 2:

Light field coding

**AMENDMENT 1: Profiles and levels for
JPEG Pleno light field coding system**

*Technologies de l'information — Système de codage d'images
plénoptiques (JPEG Pleno) —*

Partie 2: Codages des champs de lumière

*AMENDMENT 1: Profils et niveaux pour le système de codage des
champs de lumière JPEG Pleno*



Reference number
ISO/IEC 21794-2:2021/Amd.1:2021(E)

© ISO/IEC 2021



COPYRIGHT PROTECTED DOCUMENT

© ISO/IEC 2021

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier; Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see patents.iec.ch).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

A list of all parts in the ISO/IEC 21794 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

STANDARDSISO.COM : Click to view the full PDF of ISO/IEC 21794-2:2021/AMD1:2021

Information technology — Plenoptic image coding system (JPEG Pleno) —

Part 2: Light field coding

AMENDMENT 1: Profiles and levels for JPEG Pleno light field coding system

A.3.2

Replace the content of A.3.2 with the following:

Profile and levels shall be as defined in Annex F. The type of the JPEG Pleno Profile and Level box shall be 'jpl' (0x6A70 686F) and contents of the box shall have the organization as in Figure A.2 and format as in Table A.2.



Key

Ppih profile of the codestream (as defined in Annex F)

Plev level of the codestream (as defined in Annex F)

Figure A.2 — Organization of the contents of a JPEG Pleno Profile and Level box

Table A.2 — Format of the contents of the JPEG Pleno Profile and Level box

Field name	Size (bits)	Value
Ppih	16	Variable, defined in Annex F
Plev	16	Variable, defined in Annex F

Annex F

At the end of Annex E, add a new Annex F as follows:

Annex F (normative)

Profiles and levels for JPEG Pleno light field coding system

F.1 General

This annex defines two profiles named baseline block-based profile and baseline view-based profile. The baseline block-based profile comprises all coding tools belonging to the 4D transform mode coding path. The baseline view-based profile comprises all coding tools belonging to the 4D prediction mode coding path. The 4D transform mode and the 4D prediction mode are specified in 7.2.

Figure F.1 shows the relationship between the coding tools in this document and the profiles defined in this Annex.

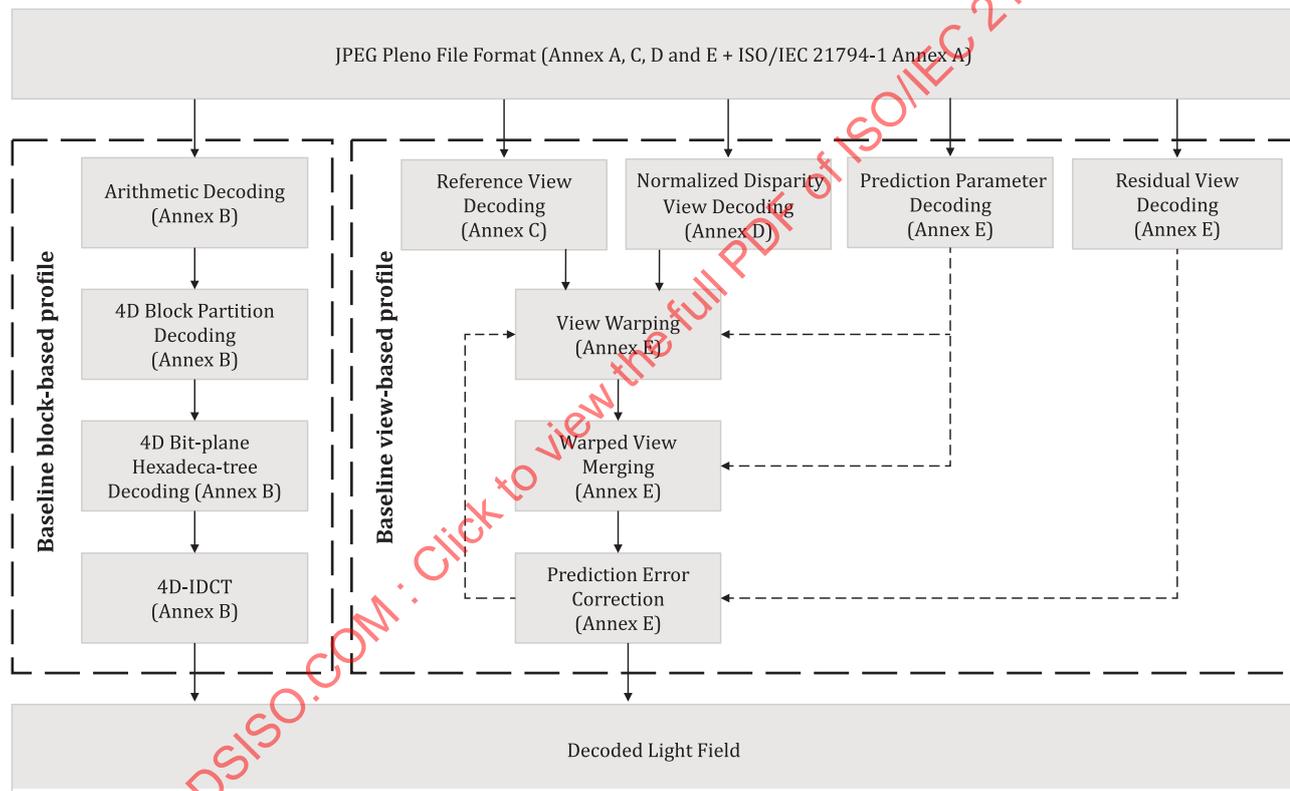


Figure F.1 — Relationship between coding tools and profiles

F.2 Profiles

The JPEG Pleno profile and level box (A.3.2) shall be used for signalling one of the two profiles setting the Ppnh value according to the values defined in Table F.1. JPEG Pleno decoders that conform to the Baseline view-based profile shall use ITU-T Rec. T.800 | ISO/IEC 15444-1 for decoding reference views (C.3.1), normalized disparity views (D.3.1), and residual images (E.3.1).