ISO/TS 18621-11:2022-04 (E)

Graphic technology - Image quality evaluation methods for printed matter - Part 11: Colour gamut analysis

Contents

Page

Foreword iv

Introduction v

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 Describing a colour gamut 2
4.1 General 2
4.2 Requirements of a gamut boundary description 2
4.3 Device gamut and usable gamut 3
4.4 Procedures for describing a colour gamut 3
4.4.1 General 3
4.4.2 Procedure for describing the colour gamut of a reproduction system based on its ICC profile 4
4.4.3 Procedure for describing the device gamut of a reproduction system based on its characterization model 5
4.4.4 Procedure for describing the device gamut of a reproduction system based on measurement of a printed gamut target 5
4.4.5 Procedure for describing the device gamut of a reproduction system based on characterization data 5

5 Computing the volume of a colour reproduction gamut 6
5.1 General 6
5.2 Volume of a single gamut 6
5.2.1 Volume calculation 6
5.2.2 Verifying the volume calculation 7
5.3 Volume of the intersection of two gamuts 8
5.3.1 General 8
5.3.2 Determining if a coordinate is inside or outside a gamut 8

6 Comparing colour gamuts 9
6.1 General 9
6.2 GCI 9
6.3 Gamut coverage 9
6.4 Out-of-gamut volume proportion 9

7 Encoding and communicating a colour gamut description 9

Annex A (informative) Images for use in determining the gamut boundary of RGB and CMYK printing processes 11

Annex B (informative)Gamutvolumesforasetofreferenceprofiles 12

Annex C (informative) Errors in triangulation 13

Annex D (normative) Media-relative colour gamuts 15

Bibliography 16