

ISO 20462-3:2012-05 (E)

Photography - Psychophysical experimental methods for estimating image quality - Part 3: Quality ruler method

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Quality ruler experiments	5
4.1	General properties of quality rulers	5
4.2	Experimental conditions and reported results	5
4.3	Attributes varied in quality rulers	5
5	Hardcopy quality ruler implementation	6
5.1	Physical apparatus	6
5.2	Reference stimuli	7
6	Softcopy quality ruler implementation	8
6.1	Physical apparatus	8
6.2	Reference stimuli	8
6.3	Controlling software	8
7	Generation of quality ruler stimuli	9
7.1	General requirements	9
7.2	Modulation transfer functions (MTFs)	10
7.3	Scene-dependent ruler calibration	11
8	Standard quality scale (SQS) determinations	12
8.1	Properties of the SQS	12
8.2	Experimental requirements for measuring primary SQS1	12
8.3	Experimental requirements for measuring secondary SQS2	12
Annex A (informative) Sample instructions for a hardcopy quality ruler experiment		13
Annex B (informative) Sample instructions for softcopy ruler experiments using binary sort paired comparison		15
Annex C (informative) Sample code of a binary search routine for the softcopy quality ruler		17
Annex D (informative) Calibration of the standard quality scale (SQS) and its reference stimuli		19
Annex E (informative) Example of results from quality ruler experiments		21
Annex F (informative) Sample instructions for a softcopy ruler experiment using slider bar matching 25 Bibliography		26