

ISO 12232:2006-04 (E)

Photography - Digital still cameras - Determination of exposure index, ISO speed ratings, standard output sensitivity, and recommended exposure index

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	Exposure index values	3
4.1	General	3
4.2	Focal plane measurement	3
4.3	Scene luminance measurement	3
5	Test conditions	4
5.1	General	4
5.2	Illumination	4
5.2.1	Daylight illumination	4
5.2.2	Tungsten illumination	4
5.3	Temperature and relative humidity	5
5.4	White balance	5
5.5	Infrared (IR) blocking filter	5
5.6	Photosite integration time	5
5.7	Compression	5
5.8	Other DSC user settings	5
6	Determination of ISO speed	5
6.1	General	5
6.2	Saturation-based speed	6
6.2.1	Focal plane measurement	6
6.2.2	Scene luminance measurement	6
6.3	Noise-based speed	6
6.3.1	Focal plane method	6
6.3.2	Scene luminance method	7
6.3.3	Colour cameras	7
6.3.4	Quantization effects	8
6.4	Method of reporting	8
7	Determination of standard output sensitivity (SOS)	8
7.1	Method for calculating SOS	9
7.2	Method of reporting	9
8	Specification of recommended exposure index (REI)	9
8.1	Method for calculating recommended exposure index	9
8.2	Method of reporting	10
Annex A (informative)	Recommended procedure for determining the noise-based ISO speed	11
Annex B (informative)	Scene luminance and focal plane exposure	13

Annex C (informative) Recommended procedure for determining SOS values	14
Annex D (normative) Removing low frequency variations from the image data	15
Annex E (informative) Calculation of noise-based minimum illumination level	16
Bibliography	17