

ISO 15529:2010-08 (E)

Optics and photonics - Optical transfer function - Principles of measurement of modulation transfer function (MTF) of sampled imaging system s

Contents	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms, definitions and symbols	1
3.1 Terms and definitions	1
3.2 Symbols	4
4 Theoretical relationships	5
4.1 Fourier transform of the image of a (static) slit object	5
4.2 Fourier transform of the output from a single sampling aperture for a slit object scanned across the aperture	6
4.3 Fourier transform of the average LSF for different positions of the slit object	8
5 Methods of measuring the MTFs associated with sampled imaging systems	8
5.1 General	8
5.2 Test azimuth	9
5.3 Measurement of Tsys of a sampled imaging device or complete system	9
5.4 Measurement of the MTF of the sampling aperture, Tap	15
6 Method of measuring the aliasing function, the aliasing ratio and the aliasing potential ...	15
Annex A (informative) Background theory	17
Annex B (informative) Aliasing in sampled imaging systems	20
Bibliography	25