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**METROLOGICAL CHARACTERISTICS
of the
CHR CONTACTLESS OPTICAL SENSOR**

MEASUREMENT REPORT

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Sensor serial number: 15-06-5129

Chromatic lens serial number: 15-09-14821

Magnifier serial number: 14-51-14322

	Experimenter	Metrology Manager
Name	VIBERT Jérôme	MOSCOSO Joaquin
Date	17/03/16	17/03/2016
Visa		



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METROLOGICAL CHARACTERISTICS OF THE CHROMATIC CONFOCAL SENSOR

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Introduction

The metrological characteristics have been measured in STIL Metrology laboratory at a temperature of 20 °C +/- 1 °C.

The measurements were carried out on n° C090310-1 COFRAC certified calibration bench by comparison with a Heindenhein LIP 372 ZERODUR encoder.

Sensor identification

Controller type: CCS OptimaPlus
Controller serial number: 15-06-5129
Controller channel: 1
Calibration table location: 0

Chromatic lens type: CL3
Chromatic lens serial number: 15-09-14821
Magnifier type: MG70
Magnifier serial number: 14-51-14322
Fiber type: Standard

Nominal sensor characteristics

Nominal measuring range: 1.300 millimeters
Numerical aperture: 0.42
Max measuring angle for specular samples: 25.0 deg.
Working distance: 12.0 millimeters
Quantization step: 0.04 micrometers
Lateral resolution: 4.5 micrometers
Max accepted linearity error: 0.130 micrometers

Measured metrological characteristics

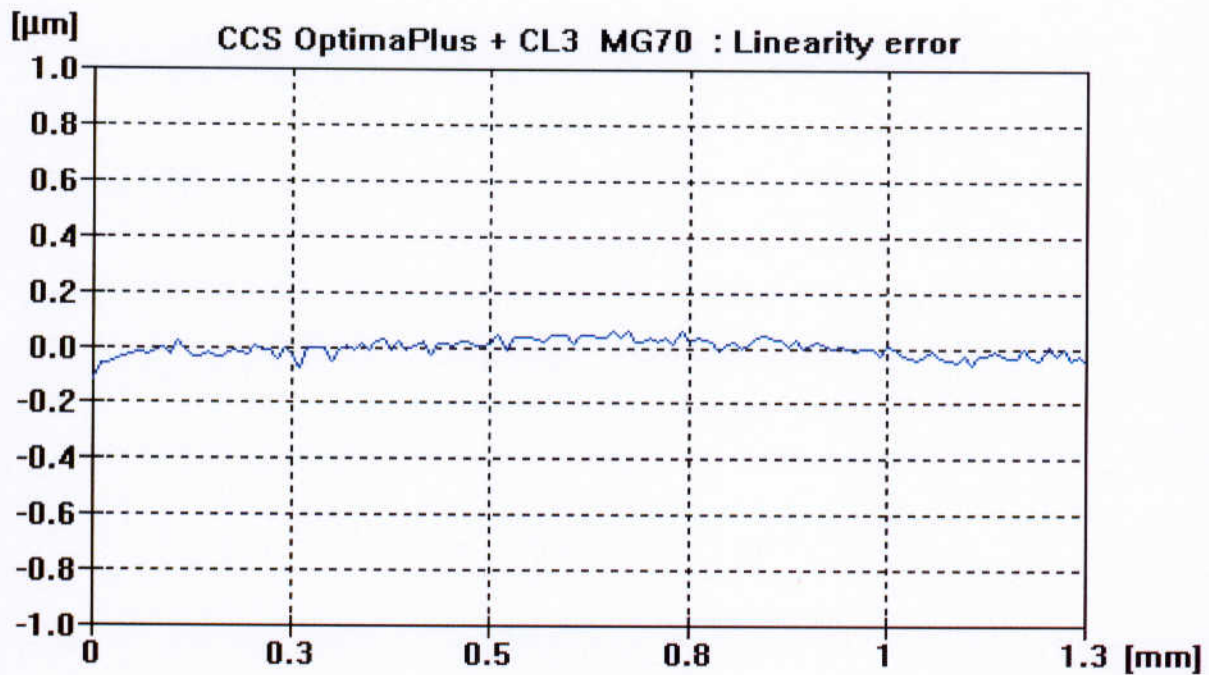
Measuring range: 1.300 millimeters
Max linearity error: 0.08 micrometers
Static noise at the center of measuring range: 44 nanometers



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