



DBB	
Diagnostic breadboard:	DBID 0308, lock mode (4)
Selected laser beam:	200W laser (DBB shutter open)
Power in DBB (RPD.DC):	9.9 V
PMC resonant:	100%
Beam alignment:	auto-alignment on
Modematching lens positions:	lens 1 (ML ₁) = -2.9 mm, lens 2 (ML ₂) = -5.9 mm, lenses latched

POINTING	
Measurement:	60 s = 1.0 min, 01. Feb 2012 12:08 PST
Error signal:	1x = 0.035 eps _{rms} , -0.143 ... 0.114 eps,
	1y = 0.062 eps _{rms} , -0.250 ... 0.250 eps,
Error signal slope (1x, 1y, 2x, 2y):	2x = 0.042 eps _{rms} , -0.275 ... 0.147 eps,
	2y = 0.039 eps _{rms} , -0.163 ... 0.169 eps
Error signal calibration age:	1.02e-04 eps/cts, 1.45e-04 eps/cts, 1.24e-04 eps/cts, 1.05e-04 eps/cts
Control signal:	3.4 min, 2.9 min, 1.7 min, 0.9 min
	1x = 0.195 ± 0.014 eps, 1y = 0.230 ± 0.013 eps,
	2x = -0.096 ± 0.024 eps, 2y = 0.338 ± 0.021 eps

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Measurement duration:	60 s = 1.0 min
Measurement start:	01. Feb 2012 12:08 PST (01. Feb 2012 20:08 UTC, 1012162125 GPS)
NDS:	h2nds0:8088 (v12r0)
User:	controls@h2pslws0
Channels:	<p>H2:PSL-DBB_QPD_1DX_CAL_OUT 65536 Hz, H2:PSL-DBB_QPD_1DY_CAL_OUT 65536 Hz, H2:PSL-DBB_QPD_2DX_CAL_OUT 65536 Hz, H2:PSL-DBB_QPD_2DY_CAL_OUT 65536 Hz, H2:PSL-DBB_CTRL_CTRL1X_EPS_OUTPUT 16 Hz, H2:PSL-DBB_CTRL_CTRL1Y_EPS_OUTPUT 16 Hz, H2:PSL-DBB_CTRL_CTRL2X_EPS_OUTPUT 16 Hz, H2:PSL-DBB_CTRL_CTRL2Y_EPS_OUTPUT 16 Hz, H2:PSL-DBB_SHUTTER 16 Hz, H2:PSL-DBB_DBID 16 Hz, H2:PSL-DBB_MON_SHUTTER_CLOSED 16 Hz, H2:PSL-DBB_MODE_NUM 16 Hz, H2:PSL-DBB_RPD_DC_OUTPUT 16 Hz, H2:PSL-DBB_CTRL_DSWITCH_ON 16 Hz, H2:PSL-DBB_LENS1 16 Hz, H2:PSL-DBB_LENS2 16 Hz, H2:PSL-DBB_LENS_LATCH 16 Hz, H2:PSL-DBB_CTRL_RESONANT 16 Hz, H2:PSL-DBB_QPD_MCALI_AGE_1X 16 Hz, H2:PSL-DBB_QPD_MCALI_AGE_1Y 16 Hz, H2:PSL-DBB_QPD_MCALI_AGE_2X 16 Hz, H2:PSL-DBB_QPD_MCALI_AGE_2Y 16 Hz, H2:PSL-DBB_QPD_MCALI_FACTOR_1X 16 Hz, H2:PSL-DBB_QPD_MCALI_FACTOR_1Y 16 Hz, H2:PSL-DBB_QPD_MCALI_FACTOR_2X 16 Hz, H2:PSL-DBB_QPD_MCALI_FACTOR_2Y 16 Hz</p>
Raw data:	rawdata.zip (attached to this .pdf file, use Adobe Reader)
Calibration:	default.cali (embedded), 01. Jan 1970 00:00 UTC
Report source files:	report.zip (attached to this .pdf file, use Adobe Reader)
Program:	dbb_pnt.py v0.6, Patrick Kwee, patrick.kwee@aei.mpg.de

I N F O

Measurement method: The beam pointing fluctuations are measured with the differential wavefront sensing method. The fundamental mode of the DBB PMC is used as beam pointing reference. Shift and tilt of the beam are normalized with the beam waist radius and the beam divergence angle.

Detailed information about the measurement method and instructions for performing this measurement are available in Kwee et al., Appl. Opt., 47(32):6022–6032, 2008; LIGO-T0900133; LIGO-T0900579.

no comment