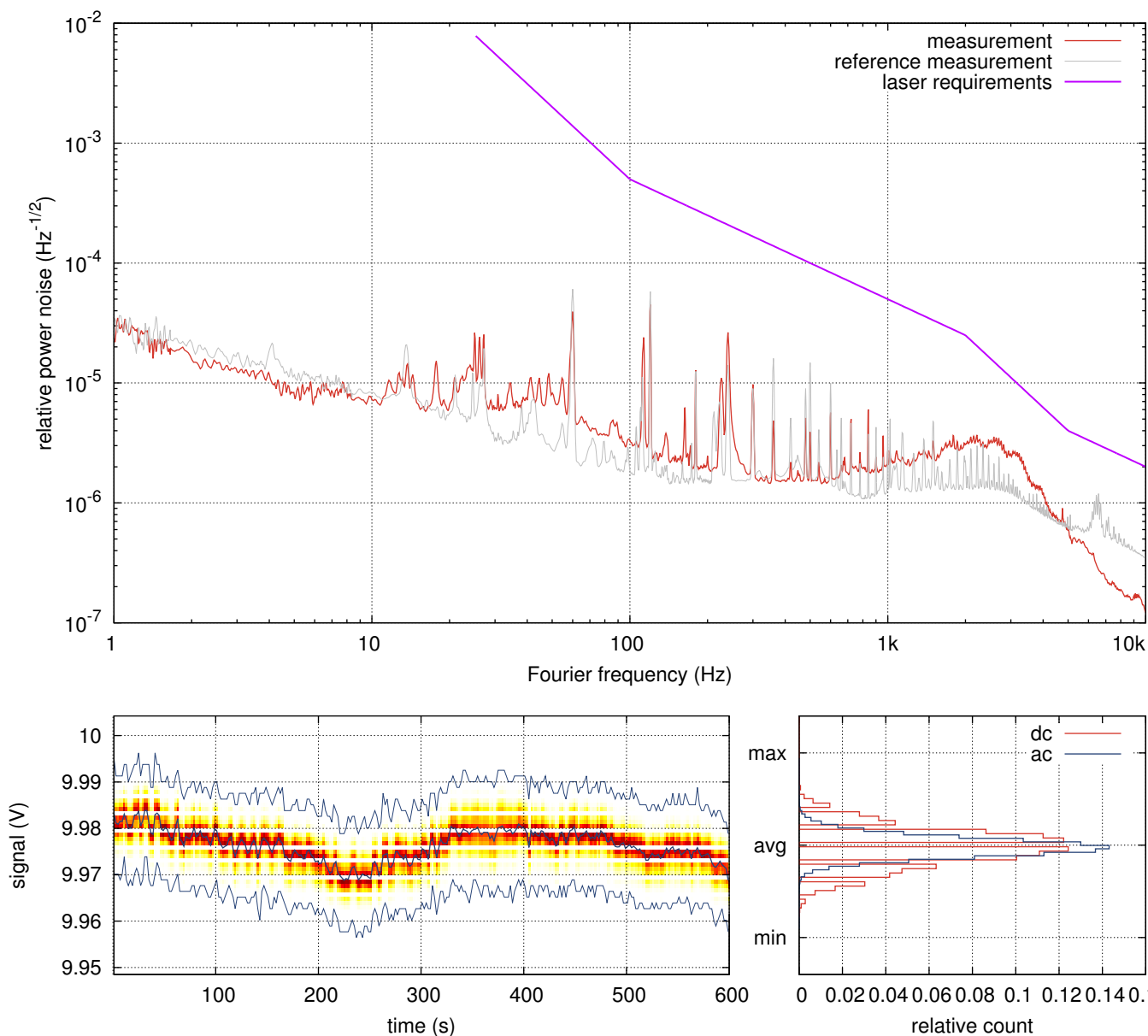




| DBB                    |                              |
|------------------------|------------------------------|
| Diagnostic breadboard: | DBID 0308, manual mode (2)   |
| Selected laser beam:   | 35W laser (DBB shutter open) |

| POWER NOISE                |                                             |
|----------------------------|---------------------------------------------|
| Measurement:               | 600 s = 10.0 min, 16. Feb 2018 16:32 PST    |
| Average DC signal:         | 9.976 V                                     |
| DC signal range:           | 9.956 V . . 9.996 V (65536 Hz samplingrate) |
| Minimum power:             | -0.20% ( [min-avg]/avg )                    |
| Relative peak-to-peak:     | 0.40% ( [max-min]/avg )                     |
| Photo current:             | 50 mA                                       |
| Relative shot noise level: | 2.53e-09 Hz <sup>-1/2</sup>                 |

| D A Q                 |                                                                                                                                                                                                     |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Measurement duration: | 600 s = 10.0 min                                                                                                                                                                                    |
| Measurement start:    | 16. Feb 2018 16:32 PST (17. Feb 2018 00:32 UTC, 1202862783 GPS)                                                                                                                                     |
| NDS:                  | h1nds1:8088 (v12r2)                                                                                                                                                                                 |
| User:                 | controls@opsws1                                                                                                                                                                                     |
| Channels:             | H1:PSL-DBB_RPD_DC_OUT 65536 Hz,<br>H1:PSL-DBB_RPD_REL_PWR_OUT 65536 Hz,<br>H1:PSL-DBB_SHUTTER 16 Hz,<br>H1:PSL-DBB_DBID 16 Hz,<br>H1:PSL-DBB_MON_SHUTTER_CLOSED 16 Hz,<br>H1:PSL-DBB_MODE_NUM 16 Hz |
| Raw data:             | <a href="#">rawdata.zip</a> (attached to this .pdf file, use Adobe Reader)                                                                                                                          |
| Calibration:          | default.cali (embedded), 01. Jan 1970 00:00 UTC                                                                                                                                                     |
| Report source files:  | <a href="#">report.zip</a> (attached to this .pdf file, use Adobe Reader)                                                                                                                           |
| Program:              | dbb_rpn.py v0.7, Patrick Kwee, patrick.kwee@aei.mpg.de                                                                                                                                              |

| I N F O                                                                                                                                                                                                                                                                                                     |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Measurement method: The power fluctuations of the beam were measured with a photodetector on the DBB.<br>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. |  |
| <i>no comment</i>                                                                                                                                                                                                                                                                                           |  |