

Zygo Corporation Laurel Brook Rd. Middlefield, Ct. 06455	TITLE Appendix A (Data Sheets)	DOC. NO. AP-0544, Sec. 9	REV. G
		Sheet 6 of 8	

□ Final Test Results

1. PN: 8070-0102-0 2 Revision: J SN: 06-03-G3574
2. Recorded Laser Tube Raw Optical Power: 3400 (uW, 2500 to 4100uW)
3. LED Status Power up Pass Fail (Power LED & Unstable LED on only)
4. Laser tube light time Pass Fail (≤ 71 seconds)
5. Mode Slews level (TP8 on heater board) Yes No (Sweep from -9 to +9V min, no mode hops)
6. Lock Time (cmd 132) Pass Fail (≤ 10 minutes @ 21°C from cold start)
7. Error Voltage (TP8 heater board after lock) Yes No (≤ 40 mV_{P-P})
8. LED Status at Lock Pass Fail (Power LED & OK LED on only)
9. Optical output power (no polarizer): 775 (uW, -01 to -04 ≥ 425 ; -05 & -06 ≥ 550)
10. Optical power at 0° (horizontal) 359 (uW)
11. Optical power at 90° (vertical) 355 (uW)
12. Calculated H/V ratio ($(|H-V|)/(H+V)$) 0.6 % ($\leq 5.0\%$, format 0.0%)
13. Minima's Angle around 0° 0.2 (0° $\pm 1.0^\circ$, format 0.0°)
14. Minima's Angle around 90° 90.00 (90° $\pm 1.0^\circ$, format 0.0°)
15. Calculated Angle between minimas 89.80 (90.0° $\pm 0.5^\circ$)
16. Extinction level at 0° minima -40 (≤ -34 dbm)
17. Extinction level at 90° minima -38 (≤ -34 dbm)
18. Beam height (@25.4cm and @ 152.4cm) 95.1 mm 95.1 mm (Parallel to ≤ 1 mm)
19. Beam Position (horizontal @ 152.4cm) Pass Fail (± 2.16 mm (± 0.085 ") of center)
20. Beam colimation (3mm @ 6m ; 6mm @ 25m) Yes No (NA for 6mm 2 piece telescope)
21. Beam Diameter (-01, -03, -05) N/A (6mm, ± 0.3 mm)
22. Beam Diameter (-02, -04, -06) 3.0 (3mm, ± 0.3 mm)
23. Beam Centroid (x,y position) 3.35 mm 3.16 mm (3.15 to 3.85mm : 2.95 to 3.65mm)
24. Beam centered in front aperture Yes No
25. Beam quality (circular and free of artifacts) Yes No
26. Beam image saved to file Yes No
27. AOM DAC count 2538 (counts, ≤ 2800)
28. Wavelength Stability DAC count 2466 (counts)
29. Ambient Temperature 20.5 °C
30. Heater Calibration Values (cmd 121) 12.01 ohms 20.50 °C (11.8 - 12.4 ohms)
31. Heater Low Calibration Value (cmd 125) 11.10 ohms : 21 cnts (11.0 - 11.2 ohms, ≤ 27 DAC cnts)
32. Heater High Calibration Value (cmd 126) 15.36 ohms : 204 cnts (15.15 - 15.45 ohms, ≤ 215 DAC cnts)
33. Heater Setpoint Temperature (cmd 130) 116 (°C)
34. Lock time (cmd 132) & ambient temperature 8.82 Minutes 20.5 °C (≤ 10 min)

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		Sheet 7 of 8	

Laser Head S/N: 06 - 03 - G3574

35. Duty Cycle (cmd 131) 36.80 (% , 27 to 55% and not limit cycling)

36. Laser head serial number (cmd 102) 06 - 03 - G3574 (all letters must be uppercase and must match written SN above)

37. Firmware Version (cmd 103) V01.17b

38. Hour Meter is Reset (cmd 104) Yes No

39. EPROM Image Stored Yes No

40. EPROM Write Protect has been enabled Yes No

41. Verify SN on label coincide with paperwork and EPROM. Yes No

42. Laser Head Appearance Check (Performed by the Quality Control Department)

- The Laser Head should be clean and cosmetically acceptable.
- Verify SN on label coincide with paperwork and EEPROM.
- Shake the Laser Head. There should be no "rattling".
- Check the Aperture for smooth operation. Rotate open to both stops. The stops should feel positive. Close shutter when complete.
- Check plastic mounting feet to ensure they are not cracked, loose, damaged
- Verify fiber optic receivers and transmitters have covers on them.

Technician Initials MO Date: 1-14-06

Inspector Initials Linda Ryan Date: 1/17/06