

Minutes of technical committee meeting for NIT-45/2018-NC-001162-12-R&D-NIS-5.03-0100-18-19

| S.No | Item | M/S New Age Instruments & Materials Pvt. Ltd., Gurugram (Party #1) | M/S Advanced Photonics, Mumbai (Party #2) | Remarks |
|------|---|--|---|-----------------|
| | SUPERCONTINUUM SOURCE | <i>Based on the technical bid submitted by the parties and enclosed with this document</i> | | |
| | Principals | M/S YSL Photonics, China | M/S NKT Photonics, Denmark | |
| | Model | SC-Pro: 40 MHz | EXW-12 | |
| | Tender specifications | | | |
| 1 | Visible power (over the entire spectral band) > 4 W | >4W | 4W | <i>Complies</i> |
| 2 | Repetition rate: > 40 MHz | 40MHz | 78± 0.5 MHz | <i>"</i> |
| 3 | Power density: 1 mW/nm | > 1 mW/nm | ≥1.0mW/nm | <i>"</i> |
| 4 | Wavelength range: < 450 nm to > 2000 nm | 450-2400nm | 455nm to 2300nm | <i>"</i> |
| 5 | Pump/seed pulse width: < 6 ps | ~6ps | ~5ps | <i>"</i> |
| 6 | Beam diameter: > 2 mm (approximately) | ~2mm@633nm | ~1mm@530nm ~2mm @1100nm ~3mm@2000nm | <i>"</i> |

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|----|--|-----------------------------|-----------------------------|-----------------|
| 7 | Beam Quality: $M2 < 1.1$ | < 1.1 | < 1.1 | <i>Complies</i> |
| 8 | Beam output: Gaussian beam profile, TEM_{00} mode | | Gaussian, single mode | " |
| 9 | Beam divergence: < 5 mrad | < 1 mrad | < 5 mrad | " |
| 10 | State of polarization: unpolarized | unpolarized | unpolarized | " |
| 11 | Power stability: $< 2\%$ peak-to-peak (long-term) | $< 1\%$ | $< \pm 0.5\%$ | " |
| 12 | Operating temperature range: 15-40oC | | +18o to +30oC | " |
| | #2: Specifications for Acousto-optic tunable filter (AOTF): | | | |
| 13 | AOTF Wavelength Range 400-650nm (visible) | 400nm~650nm | 400-650nm | <i>Complies</i> |
| 14 | AOTF Wavelength Range 650-1100nm (NIR) | 650nm~1100nm | 690-1100nm | " |
| 15 | AOTF Wavelength Range 1000nm-2200nm (MIR) | 1100~2200nm | 1100-2000nm | " |
| 16 | Channel Bandwidth: 2-8 nm in Visible range | VIS: 2-8 nm | 1,8 – 8,5nm | " |
| 17 | Channel Bandwidth: 2-6 nm in near-infrared range | NIR :2-6 nm | 1,8 – 5nm | " |
| 18 | No. of simultaneous channels: 8 or more | | 1 – 8 (per AOTF) | " |
| 19 | Supercontinuum Optical Throughput: 40% | Output Efficiency: $> 40\%$ | | " |
| 20 | Output state of polarization: Linear | linear | linear | " |
| 21 | Control interface: USB | USB | Control via common software | " |

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