

Agilent 8167 2B	1.12			
Wavelength range	1260 nm to 1375 nm			
Wavelength resolution	0.1 pm, 17.7 MHz at 1300 nm			
Mode-hop free tuning range <sup>12</sup>	Full wavelength range			
Max. Tuning speed	80 nm/s			
	Specification under static condition	Add-on specification under dynamic condition (typ.) <sup>11</sup>		
		@5 nm/s	@40 nm/s	@80 nm/s
Absolute wavelength accuracy <sup>1, 2, 12</sup>	±10 pm	±0.4 pm	±1.0 pm	±2.5 pm
Relative wavelength accuracy <sup>1, 2, 12</sup>	±5 pm, typ. ±2 pm	±0.4 pm	±0.8 pm	±2.0 pm
Wavelength repeatability <sup>2, 12</sup>	±0.8 pm, typ. ±0.5 pm			
		Specification under dynamic condition (typ.)		
Dynamic wavelength repeatability <sup>2, 11, 12</sup>		±0.3 pm	±0.4 pm	±0.7 pm
Wavelength stability <sup>2, 12</sup> (typ., 24 hours at constant temperature)	≤ ±1 pm			
Linewidth (typ.), coherence control off	100 kHz			
Effective linewidth (typ.), coherence ctrl. on	> 50 MHz (1270 nm - 1350 nm at flat output power)			
Output power (continuous power during tuning)	≥ +9 dBm peak typ ≥ +7 dBm (1290 nm – 1370 nm) ≥ +3 dBm (1270 nm – 1375 nm) ≥ 0 dBm (1260 nm – 1375 nm)			
Minimum output power	0 dBm			
Power linearity	±0.1 dB (1260 nm – 1350 nm) typ. ±0.1 dB (1350 nm – 1375 nm) <sup>12</sup>			
Power stability <sup>9</sup>	±0.01 dB, 1 hour (1260 nm – 1350 nm) typ. ±0.01 dB, 1 hour (1350 nm – 1375 nm) <sup>12</sup> typ. ±0.03 dB, 24 hours <sup>12</sup>			
	Specifications under static condition	Dynamic relative power flatness (typ.) <sup>10, 11</sup>		
		@5 nm/s	@40 nm/s	@80 nm/s
Power flatness versus wavelength <sup>12</sup>	±0.2 dB, typ. ±0.1 dB (1260 nm – 1350 nm) typ. ±0.2 dB <sup>12</sup> (1350 nm – 1375 nm)	±5 mdB	±15 mdB	±30 mdB
Dynamic power reproducibility (typ.) <sup>9, 10, 11</sup>		±5 mdB	±10 mdB	±15 mdB
Power repeatability (typ.) <sup>9, 12</sup>	±3 mdB			
Side-mode suppression ratio (typ.) <sup>4, 8, 12</sup>	≥ 40 dB (1270 nm – 1375 nm)			

Signal to source spontaneous emission ratio <sup>5, 6, 8</sup>	$\geq 45$ dB/ nm (1290 nm – 1370 nm) $\geq 40$ dB/ nm (1270 nm – 1375 nm) $\geq 35$ dB/ nm (typ., 1260 nm – 1375 nm) <sup>12</sup>
Signal to total source spontaneous emission ratio (typ.) <sup>6, 8</sup>	$\geq 28$ dB (1290 nm – 1370 nm)
Relative intensity noise (RIN, typ.) <sup>8</sup>	-145 dB/Hz (1270 nm – 1375 nm)
<p>1. Valid for one month and within a <math>\pm 4.4</math> K temperature range after automatic wavelength zeroing. Wavelength zeroing is an internal function that performs an automatic self-adjustment.</p> <p>2. At CW operation. Measured with wavelength meter based on wavelength in vacuum.</p> <p>4. Measured by heterodyne method.</p> <p>5. Value for 1 nm resolution bandwidth.</p> <p>6. Measured with optical spectrum analyzer.</p> <p>8. Output power as specified per wavelength range.</p> <p>9. Warm up time 1 hour.</p> <p>10. Valid for absolute humidity of 11.5 g/m<sup>3</sup> (For example: Equivalent to 25°C and 50% relative humidity).</p> <p>11. Conditions: Wavelength range 1300 nm to 1350 nm at flat output power <math>\geq 3</math> dBm</p> <p>12. Wavelength must not be equal to any water absorption line</p>	