

High resolution Fourier domain optical coherence tomography in the 2 μm wavelength range using a broadband supercontinuum source: erratum

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Abstract: We correct a mistake in the OCT system sensitivity given in our recent paper [Opt. Express **23**(3), 1992 (2015)].

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References and links

1. C. S. Cheung, J. M. O. Daniel, M. Tokurakawa, W. A. Clarkson, and H. Liang, "High resolution Fourier domain optical coherence tomography in the 2 μm wavelength range using a broadband supercontinuum source," Opt. Express **23**(3), 1992–2001 (2015).

At the end of Section 3 of our recent paper [1], we gave the OCT system sensitivity estimate where the conversion of the 4% reflectivity of the air/glass interface to dB units with respect to a 100% reflective mirror was incorrectly given as 28 dB when it should have been 14 dB, since the interference term is proportional to the square root of the reflectance. The OCT system sensitivity is, therefore, -74 dB (i.e. $4 \times 10^{-6}\%$ reflectivity) for an incident power of 1.3 mW on the sample and integration time of 7 μs . The sensitivity can be improved by ~ 20 dB with 500 averages to -94 dB. We note that this error does not affect any of the other results and conclusions.