

**READ ME File For '20Gbps silicon lateral MOS-Capacitor electro-optic modulator'**

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**This dataset supports the publication:** 20Gbps silicon lateral MOS-Capacitor electro-optic modulator

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**Conference Proceeding:** Cleo-2018 Laser Science and Photonic Applications

**This dataset contains:** Experimental DC optical spectra measurements

**Data supporting:** Fig.1.b

**The figures are as follows:**

Fig. 1 (a) Schematic profile of the lateral silicon MOS-capacitor modulator, the zoomed phase shift displays the designed waveguide transition and poly-Si region. (b) The measured transmission spectra with different applied forward bias voltages. (c) Measured open eye diagram with data rates 10Gbps and 20 Gbps, the applied driving voltage  $V_{pp}$  is 6 V with DC biased 3 V.

**Date of data collection:** ASeptember 2017 - October 2017

**Information about geographic location of data collection:** University of Southampton, U.K.

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