

Supplementary materials: Hyperspectral study of the coupling between trions in WSe₂ monolayers to a circular Bragg grating cavity

Main article available at https://doi.org/10.5802/crphys.76

Oliver Iff[®] ^{*a*}, Marcelo Davanco[®] ^{*b*}, Simon Betzold[®] ^{*a*}, Magdalena Moczała-Dusanowska^{*a*}, Matthias Wurdack[®] ^{*c*}, Monika Emmerling^{*a*}, Sven Höfling^{*a*, *d*} and Christian Schneider^{*, *e*}

^a Technische Physik and Wilhelm-Conrad-Röntgen Research Center for Complex Material Systems, Universität Würzburg, Am Hubland, Würzburg-97074, Germany

 b Center for Nanoscale Science and Technology, NIST, Gaithersburg, 100 Bureau Drive, MD 20899, USA

^c Nonlinear Physics Centre, Research School of Physics, The Australian National University, Canberra, ACT 2601, Australia

 d SUPA, School of Physics and Astronomy, University of St. Andrews, St. Andrews KY16 9SS, UK

^e Institute of Physics, University of Oldenburg, 26129 Oldenburg, Germany

E-mails: oliver.iff@physik.uni-wuerzburg.de (O. Iff), marcelo.davanco@nist.gov (M. Davanco), simon.betzold@uni-wuerzburg.de (S. Betzold), magdalena.moczala@uni-wuerzburg.de (M. Moczała-Dusanowska), Matthias.Wurdack@anu.edu.au (M. Wurdack), monika.emmerling@uni-wuerzburg.de (M. Emmerling), sven.hoefling@physik.uni-wuerzburg.de (S. Höfling), christian.schneider@uni-oldenburg.de (C. Schneider)

^{*} Corresponding author.



Figure 1. Amplitude of the total electric field and its components for the bullseye mode, recorded 10 nm above the cavity surface.



Figure 2. Photoluminescence spectrum from the center and the edge of the CBG in Fig 4a). All peaks are fitted with a Gaussian fit to extract the individual parameters. X- denotes the trionic emssion, P0, P1 and P2 are additional peaks usually found in WSe₂