

Supporting Information

Ultra Low Band Gap α,β -unsubstituted BODIPY-based Copolymer Synthesized by Palladium Catalyzed Cross-Coupling Polymerization for Near Infrared Organic Photovoltaics

Benedetta M. Squeo,^a Nicola Gasparini,^b Tayebah Ameri,^b Alex Palma-Caldo,^c Sybille Allard,^c Vasilis G. Gregoriou,^{a,d} Christoph J. Brabec,^{b,e} Ullrich Scherf^c and Christos L. Chochos^{*a}

^a *Advent Technologies SA, Patras Science Park, Stadiou Street, Platani-Rio, 26504 Patra, Greece. E-mail: cchochos@advent-energy.com.*

^b *Institute of Materials for Electronics and Energy Technology (I-MEET), Friedrich-Alexander-University Erlangen-Nuremberg, Martensstraße 7, 91058 Erlangen, Germany.*

^c *Macromolecular Chemistry Group (buwmakro) and Institute for Polymer Technology, Bergische Universität Wuppertal, Gaußstraße 20, D-42119 Wuppertal, Germany.*

^d *National Hellenic Research Foundation (NHRF), 48 Vassileos Constantinou Avenue 11635, Athens, Greece*

^e *Bavarian Center for Applied Energy Research (ZAE Bayern), Haberstrasse 2a, 91058 Erlangen, Germany*

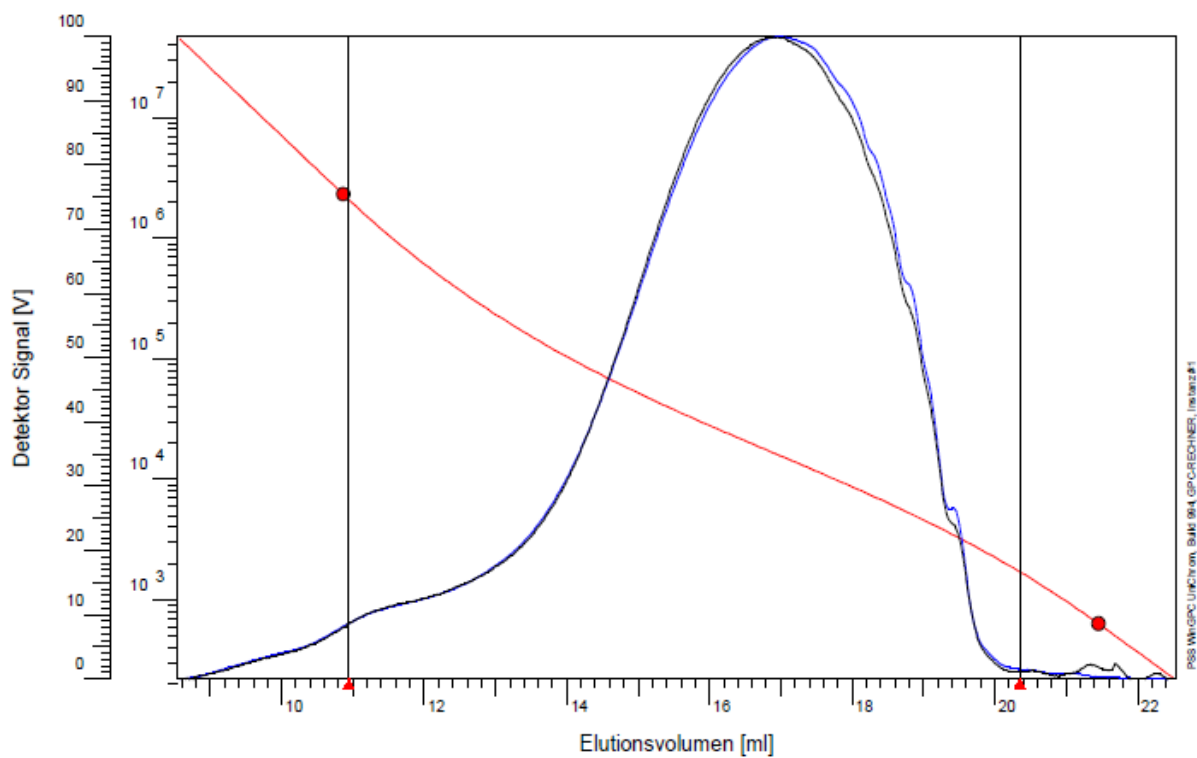


Figure S1. GPC chromatographs of TBDPTV using UV (blue line) and RID (black line) detector.

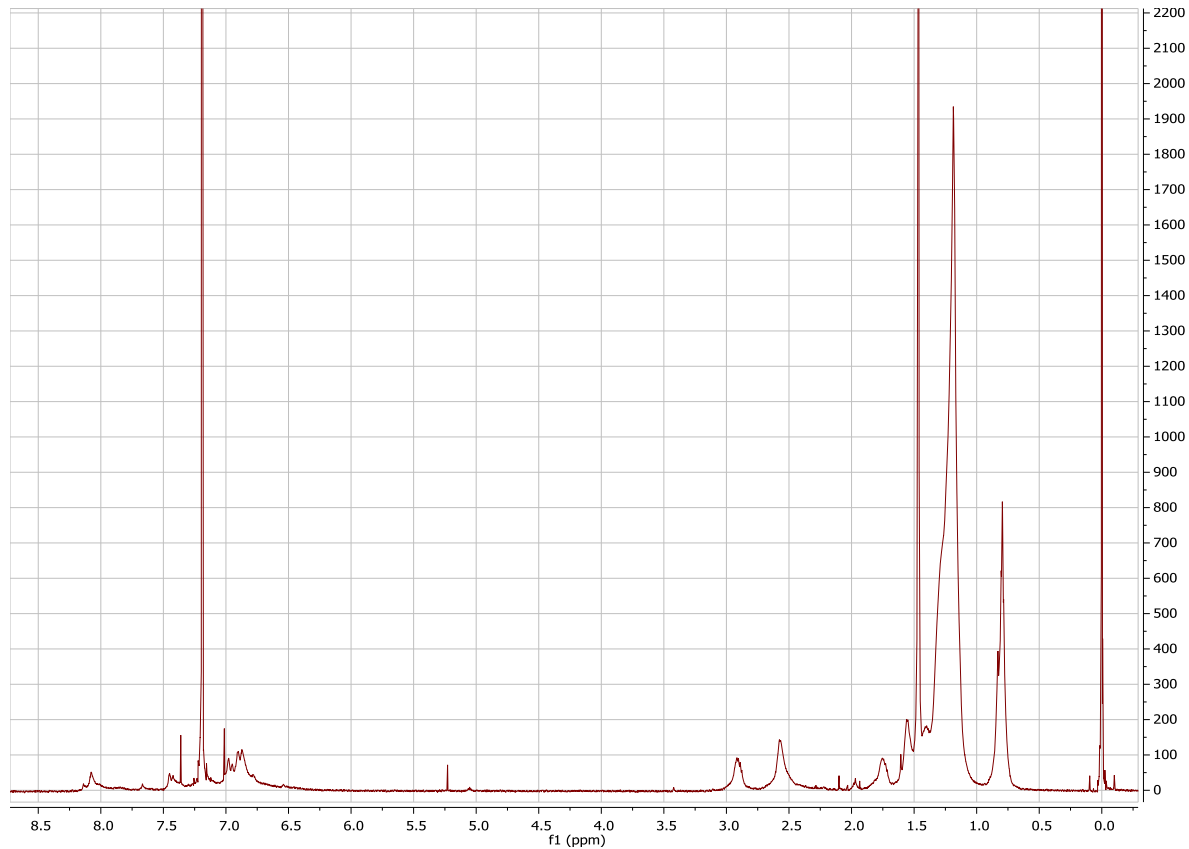


Figure S2. ¹H-NMR spectra (400 MHz) of TBDPTV in CDCl₃.

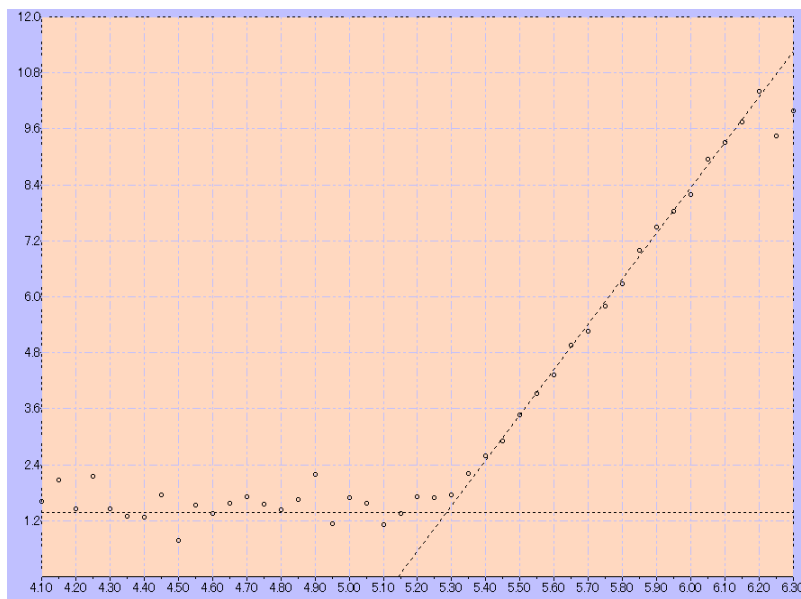


Figure S3. HOMO energy level of TBDPTV estimated by atmospheric pressure photoelectron spectroscopy (AC-2).

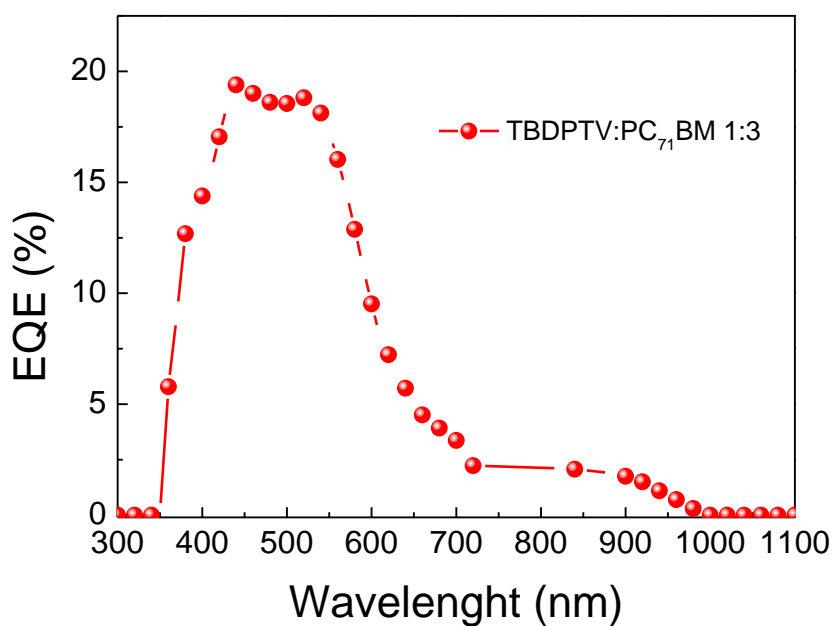


Figure S4. External quantum efficiency (EQE) curve of the TBDPTV:PC₇₁BM (1:3) device.

The J_{sc} calculated from EQE is 3.08 mA/cm^2 less than 10% different compared to J_{sc} obtained from solar simulator