

Comments and Corrections

Corrections to “Optical Wireless Communication With Adaptive Focus and MEMS-Based Beam Steering”

Paul Brandl, *Student Member, IEEE*, Stefan Schidl, Andreas Polzer, Wolfgang Gaberl, and Horst Zimmermann, *Senior Member, IEEE*

In the above letter [1], it was assumed that the concomitant angular displacement of the laser beam is equal to the deviation angle of the MEMS mirror. However, according to the reflection law, the angular displacement of the reflected beam is twice the angle through which the mirror has rotated [2], see Fig. 1. Therefore, the field of view (FOV)—the sum of the maximum positive and negative deviation angle of the laser ray—is twice as large as the previously published numbers and the following corrections should be made.

On page 1428, chapter II, paragraph 1, line 3: “FOV of $12^\circ \times 12^\circ$ ” should be “FOV of $24^\circ \times 24^\circ$.”

On page 1428, chapter II, paragraph 1, line 4: “receiving area of 1.47 m horizontally (x) and 1.47 m vertically (y)” should be “receiving area of 2.97 m horizontally (x) and 2.97 m vertically (y)”

On page 1430, chapter III, paragraph 2, line 4: “FOV of $(1.47 \text{ m})^2$ ” should be “FOV of $(2.97 \text{ m})^2$.”

The fifth author’s e-mail address was printed incorrectly. The correct e-mail address is horst.zimmermann@tuwien.ac.at.

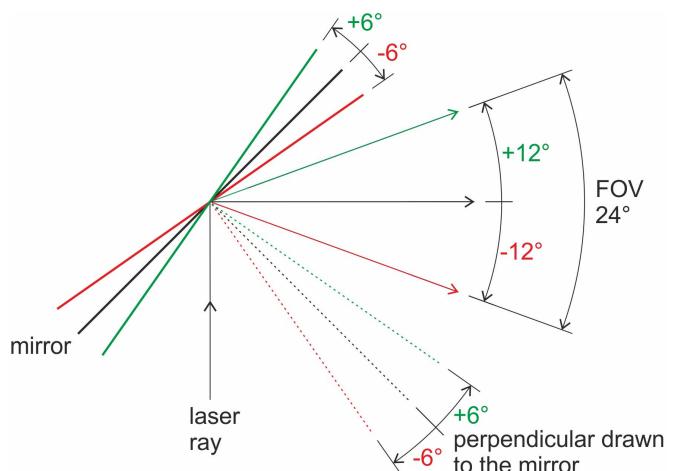


Fig. 1. Rotation of the MEMS mirror and the concomitant angular displacement of the laser ray. Definition of field of view (FOV).

REFERENCES

- [1] P. Brandl, S. Schidl, A. Polzer, W. Gaberl, and H. Zimmermann, “Optical wireless communication with adaptive focus and MEMS-based beam steering,” *IEEE Photon. Technol. Lett.*, vol. 25, no. 15, pp. 1428–1431, Aug. 1, 2013.
- [2] E. Hecht, “Geometrical optics,” in *Optics*, 4th ed. San Francisco, CA, USA: Addison-Wesley, 2002, pp. 177–178.

Manuscript received April 2, 2014; accepted June 7, 2014. Date of current version November 10, 2014.

The authors are with the Institute of Electrodynamics, Microwave and Circuit Engineering, Vienna University of Technology, Vienna 1040, Austria (e-mail: paul.brandl@tuwien.ac.at; stefan.schidl@tuwien.ac.at; andreas.polzer@tuwien.ac.at; wolfgang.gaberl@tuwien.ac.at; horst.zimmermann@tuwien.ac.at).

Color versions of one or more of the figures in this paper are available online at <http://ieeexplore.ieee.org>.

Digital Object Identifier 10.1109/LPT.2014.2359582