Supplementary Information for Inconsistencies of metalens performance and comparison with conventional diffractive optics.

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Rajesh Menon[1,2,*] & Berardi Sensale-Rodriguez

[1]Department of Electrical & Computer Engineering, University of Utah, 50 Central Campus Dr., Salt Lake City, UT 84112, USA.

[2]Oblate Optics, Inc., San Diego, CA 92130, USA

[*]rmenon@eng.utah.edu

Table S1: Summary of reported metalens efficiencies (only one example from each reference is shown for brevity). All values in this table are for monochromatic lenses. Those values marked in red exceed bounds dictated by Ref. [12].

Reference	λ	NA	Unit-cell period (Λ/λ)	Radius of focal spot (/FWHM)	Reported eff.	Eff from Fig. S4 (Radius of 3 x FWHM)
[4]	405nm	0.8	0.49	Not disclosed	88%	83%
[6]	660nm	0.85	0.53	2 sim, 4 expt.	84% sim, 60% expt.	79%
[7]	532nm	0.9	0.45	Not disclosed	42%	74%
[8]	532nm	0.98	0.41	3	67%	49%
[9]	405nm	0.8	0.49	Not disclosed	86%	83%
[10]	915nm	0.78	Grating averaging	10	77%	84%
[11]	1,550nm	0.89	0.52	3	72%	75%

References:

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