

Errata

In [I] the first section, fourth paragraph, the fourth and fifth sentences should read: “In [23] the authors derived averaged boundary conditions for planar arrays (in the first-order approximation, where the small parameter is the ratio period/wavelength).”

In [I] the second section, subsection C, the model given in [49] for a square patch array has been wrongly applied to the case of oblique incidence. The model given in [49] for square patches is only for normal incidence. However, the technique presented in [49] can be applied also to the case of oblique incidence for square patches when taking into account the normal component of the effective magnetic polarizability density of the surface α_{MS}^{zz} . This can be obtained from the magnetic polarizability density calculated for the particular particle in [156]. The resulting grid impedances in [I, (16)] read

$$Z_H^{TM,TE} = -j \frac{\eta}{2A_{TM,TE}},$$

where

$$A_{TM} = \frac{kD}{2} \frac{1.02 \left(\frac{D-w}{D}\right)^3}{1 - 0.367 \left(\frac{D-w}{D}\right)^3}, \quad A_{TE} = A_{TM} - \frac{kD}{2} \frac{0.4548 \left(\frac{D-w}{D}\right)^3}{1 - 0.329 \left(\frac{D-w}{D}\right)^3} \sin^2(\theta).$$

Also, Fig. 4 in [I] should be replaced with Fig. 3.4 of this thesis.