CCIT Report No. 330

Multi-layered chiral filters response at oblique incidence

Haim Cory and Isaac Rosenhouse

ABSTRACT

The response of multi-layered filters is investigated at oblique incidence. It is found that there is a slight degradation with respect to the same filter operating at normal incidence. A possible application is proposed for this device: a reflector or a subreflector fed at two different frequencies by two feeds situated on each side of multi-layered chiral filter functioning as a frequency selective surface. The response of this device is well-behaved and is similar for TE and TM modes.