MEASUREMENT OF ATTENUATION OF MICROWAVE SIGNALS

This thesis is presented in partial fulfillment for the award of

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UNIVERSITITEKNOLOGI MARA

ZAIRIISMAEL BIN RIZMAN

FACULTY OF ELECTRICAL ENGINEERING

UNIVERSITY TECHNOLOGY MARA

40450 SHAH ALAM

SELANGOR DARUL EHSAN

MALAYSIA

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ABSTRACT

Attenuation of microwave propagation in the estate of palm oil trees was investigated at microwave frequencies (0.9, 1.8 and 2.3 GHz). In order to perform the measurements under well defined, reproducible conditions, a regularly planted, well groomed stand of palm oil trees of about the same growth was chosen as the test site. The experiments were repeated, over the same transmission paths, under different number of trees (1, 2, 3 and 4) which obstructing the signal path, with different height (measure on height of trunk, fruit and leave). The particular interest was the attenuation of microwave with increasing number of trees in the signal path.

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