

3-Element Yagi-Uda antenna operating at 1900MHz

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Abstract – The paper presents the design and evaluation of 3-element Yagi Uda antenna for its application in cellular communication at 1900 MHz. The proposed antenna successfully operates in 1900 MHz with its operating bandwidth of 291 MHz ranging from 1.8 GHz to 2.1 GHz. The proposed antenna exhibits directional radiation pattern with gain of 6.3 dBi. It achieves a total efficiency of 99% with radiation efficiency of 95%.

Keywords: Cellular Communication, directional antenna, Linear antenna, yagi-uda antenna, 3G communication.