

Intermodulation Rejection

Due to the unique design of the amplifier system, the intermodulation rejection test was performed with slight deviation from the usual three tone intermodulation test.

The Test was performed with eight channel of RF input simultaneously, evenly spaced at 562.5 kHz within the designated frequency band assigned to the amplifier section when operating in the designated block.

A spectrum analyzer was connected to the RF output of the amplifier section under test. The intermodulation rejection of Block A and Block C were evaluated by first detecting any intermodulation products with a reduced bandwidth. Result: no intermodulation product was detected. The resolution bandwidth was then set to the applicable bandwidth, plots were captured and simultaneously presented to show block edge compliance within Block A and Block C as well.

Justification for the deviation: The EUT can only achieve the rated output power with the eight-assigned channel injected at the RF input port of the amplifier. This arrangement is believed to be the worse case scenario due to the multiple tone employed during the actual operation of the product.