***Mixer Phase tracking measurement:***

***Mixer used tested: J4018MB (Eclipse microwave)***

Summary: Two methods were used to test the phase tracking of the mixers, VMC and the SMC+phase methods.

***VMC methods procedure:***

***Cal mixer: J4018MB (SL no: 32387) \*No filters used at the output.***

The VMC calibration was done using the above two mixers. For the phase measurements on the mixers in the batch, the Cal mixer trace was used as reference. This trace was normalized and the subsequent measurements on the phase were performed on mixers with serial numbers 32384 and 32383. The plot shows the absolute phase of the DUT that is used as the reference mixer (32387). The plots in red and blue are the plots wrt the reference mixer (32387)

Figure 1 VMC measurement

**SMC+CAL : We used the phase reference standard to do the SMC+phase calibration and set the point to normalize on the first point**.

The plot shows the absolute phase of the DUT that is used as the reference mixer (32387). The plots in red and blue are the plots wrt the reference mixer (32387).

Figure 2 SMC measurement