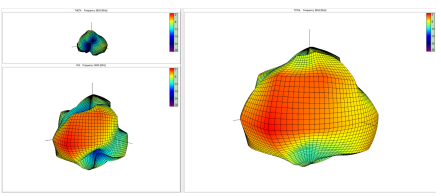
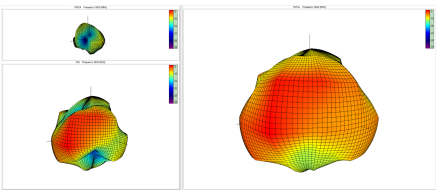
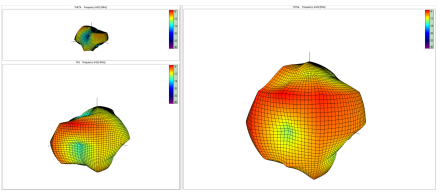
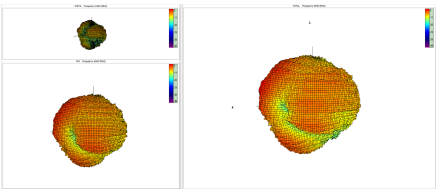
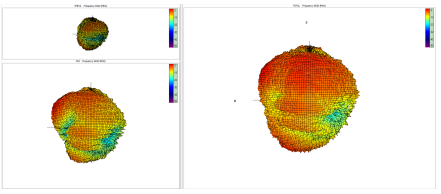
ANT 3	5855 MHz	
ANT3	5925 MHz	
ANT 3	6425 MHz	
ANT 3	6550 MHz	
ANT 3	6920 MHz	

8. Antenna Composite Gain Test Method

The great-circle-cut method, whereby the measuring antenna remains in fixed position while the EUT is rotated about two axes in sequential order. The radiated RF performance of the EUT is measured by sampling the radiated transmit power of the mobile at various locations surrounding the device. A three-dimensional characterization of the transmit performance of the EUT is pieced together by analyzing the data from the spatially distributed measurements.

Data points are taken at every 15 degrees in the theta (**θ**) and phi (φ) axes to fully characterize the EUT's Far-Field radiation pattern and total radiated power. All of the measured power values are then integrated

The correlated gain is calculated of each degree in the specific spatial domain of the sphere generated by each antenna, and the highest among them is extracted to be the correlation gain of the represented one.

Gain formula of the correlation (direction gain) is based on KDB 662911 D01, F(2)(e)(ii), and listed in the following:

- $$DirectionalGain = 10 \cdot \log\left[\frac{\sum_{j=1}^{N_{SS}}\left\{\sum_{k=1}^{N_{ANT}} g_{j,k}\right\}^2}{N_{ANT}}\right]$$

where

Each antenna is driven by no more than one spatial stream;
N_{SS} = the number of independent spatial streams of data;
N_{ANT} = the total number of antennas
$g_{j,k} = 10^{G_k/20}$ if the kth antenna is being fed by spatial stream j, or zero if it is not;
G_k is the gain in dBi of the kth antenna.

Ant	Band	Frequency (MHz)	Correlated Gain(dBi)
Ant 4 + 3	UNII-5	5925 - 6425	-2.83
	UNII-6	6425 - 6525	-2.41
	UNII-7	6525 - 6875	-0.33
	UNII-8	6875 - 7125	-0.33