DUT and SAR Set-up Photos

Overall Dimensions



Top View of the DUT



Front View of the DUT





Right View of the DUT



Head Exposure Conditions

Path A Setup (Left hand antenna tested on the neck section of the right side of the SAM) viewed from the front



Path A Setup viewed from below



Path B Setup (Right hand antenna tested on the neck section of the left side of the SAM) viewed from the front



Path B Setup viewed from below







Antenna Layout – Top View

DETERMINING WORST CASE DISTANCE BETWEEN ANTENNA PATHS

As the SAR measurements for Antenna A and Antenna B were performed on the right and left neck sections of the SAM phantom, respectively, it is not possible to determine the SAR peak location separation distance (SPLSR) in the normal manner.

To determine SAR peak location separation distance, the test lab performed two independent SISO measurements under the same flat phantom. The EUT was placed with its top surface directly against the flat phantom. It was considered that the relative location of Antenna A hotspot to Antenna B hotspot in this orientation would provide a good approximation of the separation distance in normal use. Both measurements were superimposed and the separation distance was calculated using SEMCAD X.

This measurement was performed only at the frequency that required SPLSR calculation.

Mode		Х	Y	Z	d: Calculated distance (mm)	
		m	m	m		
Path A	1	0.061	-0.083	-0.181	1+2	132.3
Path B	2	-0.071	-0.092	-0.181		

The Peak Location Separation Distance is computed by using the following formula: $\sqrt{((X_1 + X_2)^2 + (Y_1 + Y_2)^2 + (Z_1 + Z_2)^2)}$

*The values in the table above are used only as a mean in determining the most conservative distance between antennas in order to calculate the SPLSR.

It can be concluded that the worst case distance between antenna paths is the distance between the antennas' feed points (131.5 mm). The distance between the antennas' feed points (131.5 mm) is a more conservative distance than the computed SAR Peak Location Separation Distance (132.3 mm). The most conservative distance, 131.5 mm, was used for SPLSR evaluation. SPLSR evaluation can be found in §12.2 of FCC SAR Report 15U21746-S1V4.

SAR Hotspot Plot and Antenna Separation Distance:





Antenna Layout – Top View