

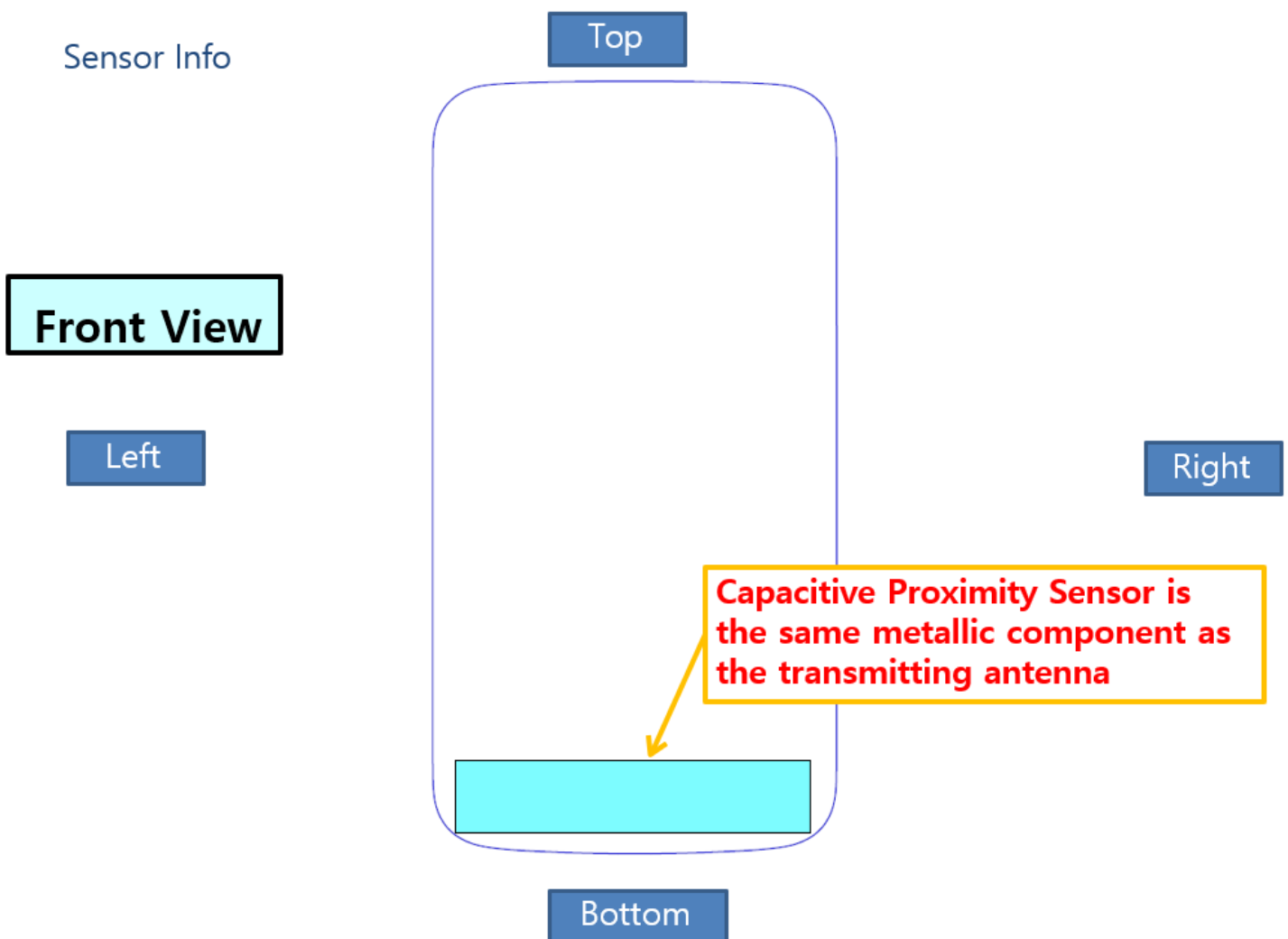
Proximity Sensor Triggering Distance, Sensor Coverage, and Tilt Angle Assessment

Power Reduction by Proximity Sensing

According to FCC KDB 616217 6.3, if the proximity sensors are not designed to cover the entire rear surface of the tablet, the sensing regions are limited and are spatially offset from the antenna.

However, this device uses a capacitive proximity sensor that is same metallic component as the transmitting antenna to facilitate triggering in any conditions the user may use the device in proximity of the antenna in the device.

Therefore, no further sensor coverage assessments were required according to KDB 616217 D04.



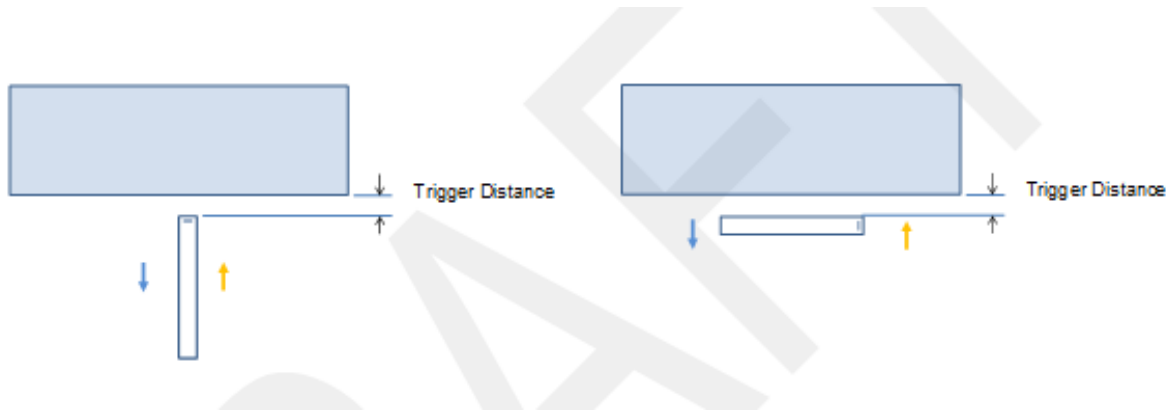
1. Proximity Sensor Triggering Distance (KDB 616217 §6.2)

Back of the DUT was placed directly below the flat phantom. The DUT was moved toward the phantom in accordance with the steps outlined in KDB 616217 §6.2 to determine the trigger distance for enabling power reduction. The DUT was moved away from the phantom to determine the trigger distance for resuming full power.

The measurement was then repeated for the surface of Edge Bottom and Edge Left.

The DUT featured a visual indicator on its display that showed the status of the proximity sensor (Triggered or not triggered). This was used to determine the status of the sensor during the proximity sensor assessment as monitoring the output power directly was not practical without affecting the measurement.

It was confirmed separately that the output power was altered according to the proximity sensor status indication. This was achieved by observing the proximity sensor status at the same time as monitoring the conducted power. Section 9 contains both the full and reduced conducted power measurements.



Proximity Sensor Trigger Distance Assessment
KDB 616219 §6.2, Edge Bottom and Left

Proximity Sensor Trigger Distance Assessment
KDB 616219 §6.2, Back

LEGEND

- Direction of DUT travel for determination of power reduction triggering point
- Direction of DUT travel for determination of full power resumption triggering point

Summary of Trigger Distances

| Tissue simulating liquid | Trigger distance - Back | | Trigger distance - Edge Bottom | | Trigger distance - Edge Left | |
|--------------------------|-------------------------|---------------------|--------------------------------|---------------------|------------------------------|---------------------|
| | Moving toward phantom | Moving from phantom | Moving toward phantom | Moving from phantom | Moving toward phantom | Moving from phantom |
| Broadband 1750 MHz | 13 mm | 13 mm | 11 mm | 11 mm | 10 mm | 10 mm |
| Broadband 1900 MHz | 13 mm | 13 mm | 11 mm | 11 mm | 10 mm | 10 mm |

Proximity Sensor Triggering Distance Measurement Results

Back

| KDB 616217 6.2.h | | | | | | | | | | |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Measured Power [dBm] | | | | | | | | | | |
| Distance[mm] | 25 | 22 | 19 | 16 | 15 | 14 | 13 | 12 | 11 | 10 |
| GSM 1900 Voice, GPRS 1Tx | 31.24 | 30.86 | 31.28 | 31.29 | 31 | 27.82 | 28.17 | 28.08 | 28.22 | 28.04 |
| GSM 1900 GPRS 2Tx | 28.34 | 28.23 | 28.34 | 28.76 | 28.67 | 25.68 | 25.39 | 25.3 | 25.51 | 25.39 |
| GSM 1900 GPRS 3Tx | 26.3 | 26.74 | 26.33 | 26.37 | 26.75 | 22.73 | 23.18 | 23.26 | 23.04 | 22.75 |
| GSM 1900 GPRS 4Tx | 24.78 | 25.12 | 25.23 | 25.13 | 24.91 | 20.89 | 20.75 | 20.89 | 20.74 | 21.1 |
| WCDMA 2 | 24.04 | 23.92 | 23.83 | 23.71 | 23.71 | 20.75 | 21.02 | 20.98 | 20.9 | 20.71 |
| WCDMA 4 | 23.87 | 23.98 | 24.29 | 23.91 | 24.29 | 21.02 | 20.75 | 21 | 20.94 | 21.13 |
| LTE B2 | 23.72 | 23.81 | 23.72 | 24.18 | 23.73 | 20.79 | 20.76 | 20.98 | 21.09 | 20.85 |
| LTE B4 | 24.28 | 23.93 | 23.85 | 23.82 | 24.24 | 21.05 | 21.27 | 21.18 | 20.76 | 21 |
| LTE B66 | 24.15 | 23.92 | 23.84 | 24.2 | 23.98 | 21.15 | 20.89 | 20.8 | 20.91 | 21.2 |

Edge Bottom

| KDB 616217 6.2.h | | | | | | | | | | |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Measured Power [dBm] | | | | | | | | | | |
| Distance[mm] | 23 | 20 | 17 | 14 | 13 | 12 | 11 | 10 | 9 | 8 |
| GSM 1900 Voice, GPRS 1Tx | 31.13 | 30.95 | 31.13 | 30.96 | 30.86 | 27.89 | 27.93 | 28.02 | 27.95 | 27.77 |
| GSM 1900 GPRS 2Tx | 28.63 | 28.27 | 28.24 | 28.55 | 28.74 | 25.64 | 25.54 | 25.6 | 25.39 | 25.54 |
| GSM 1900 GPRS 3Tx | 26.4 | 26.54 | 26.34 | 26.3 | 26.39 | 23.01 | 23.19 | 22.94 | 22.98 | 22.92 |
| GSM 1900 GPRS 4Tx | 25.19 | 24.82 | 25.22 | 24.72 | 24.87 | 21.05 | 20.74 | 20.91 | 20.71 | 21.08 |
| WCDMA 2 | 24.28 | 24.11 | 23.74 | 24.02 | 23.89 | 20.75 | 21.06 | 20.94 | 21.07 | 20.96 |
| WCDMA 4 | 23.76 | 24.18 | 23.77 | 23.94 | 23.98 | 20.82 | 21.05 | 21.22 | 21.18 | 21.06 |
| LTE B2_Lower | 24.12 | 24.24 | 24.29 | 24.25 | 23.86 | 20.94 | 20.73 | 20.71 | 21.03 | 21.11 |
| LTE B4 | 23.71 | 23.81 | 24.13 | 23.77 | 23.93 | 20.92 | 21.26 | 21.19 | 21.17 | 21.17 |
| LTE B66_Lower | 24.01 | 24.06 | 24.06 | 23.98 | 24.11 | 21.16 | 20.8 | 20.98 | 20.73 | 20.73 |

Edge Left

| KDB 616217 6.2.h | | | | | | | | | | |
|--------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Measured Power [dBm] | | | | | | | | | | |
| Distance[mm] | 22 | 19 | 16 | 13 | 12 | 11 | 10 | 9 | 8 | 7 |
| GSM 1900 Voice, GPRS 1Tx | 30.92 | 30.86 | 30.9 | 30.87 | 31.1 | 28.01 | 27.96 | 27.75 | 28.17 | 27.81 |
| GSM 1900 GPRS 2Tx | 28.77 | 28.73 | 28.43 | 28.44 | 28.31 | 25.37 | 25.44 | 25.53 | 25.43 | 25.74 |
| GSM 1900 GPRS 3Tx | 26.22 | 26.36 | 26.33 | 26.22 | 26.67 | 23.13 | 23.08 | 23.03 | 23.24 | 22.76 |
| GSM 1900 GPRS 4Tx | 24.73 | 24.96 | 25.23 | 24.78 | 24.84 | 21.21 | 21.29 | 20.91 | 20.84 | 21.01 |
| WCDMA 2 | 24.16 | 23.8 | 24.11 | 24.25 | 24.04 | 21.02 | 20.87 | 21.26 | 20.99 | 21.06 |
| WCDMA 4 | 24.11 | 24.17 | 23.82 | 23.99 | 23.94 | 21.03 | 20.83 | 20.86 | 21.03 | 21.29 |
| LTE B2 | 24.05 | 23.85 | 24.16 | 23.78 | 24.09 | 20.92 | 20.95 | 20.72 | 20.97 | 20.73 |
| LTE B4 | 23.83 | 23.82 | 23.72 | 23.96 | 23.77 | 21.26 | 20.83 | 21.22 | 20.79 | 21.06 |
| LTE B66 | 23.91 | 23.96 | 24.05 | 24.21 | 24 | 21.12 | 20.99 | 20.9 | 21.19 | 21.22 |

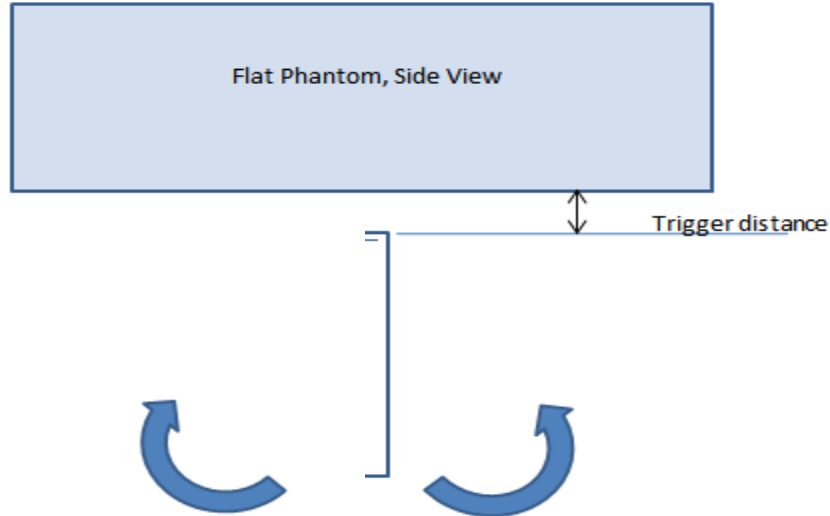
2. Proximity Sensor Coverage (KDB 616217 §6.3)

As there is no spatial offset between the antenna and the proximity sensor element, proximity sensor coverage did not need to be assessed.

3. Proximity Sensor Tilt Angle Assessment (KDB 616217 §6.4)

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Edge Bottom parallel to the base of the flat phantom for each band.

The DUT was rotated about Edge Bottom for angles up to $\pm 45^\circ$. If the output power increased during the rotation the DUT was moved 1mm toward the phantom and the rotation repeated. This procedure was repeated until the power remained reduced for all angles up to $\pm 45^\circ$.



Proximity sensor tilt angle assessment (Edge Bottom) KDB 616217 §6.4

Summary of DUT Edge Bottom Tilt Angle Influence to Proximity Sensor Triggering

| Band (MHz) | Minimum trigger distance measured according to KDB 616217 §6.2 | Minimum distance at which power reduction was maintained over +/-45° | Power reduction status | | | | | | | | | | |
|------------|--|--|------------------------|------|------|------|------|----|-----|-----|-----|-----|-----|
| | | | -45° | -40° | -30° | -20° | -10° | 0° | 10° | 20° | 30° | 40° | 45° |
| 1750 | 12 mm | 12 mm | On | On | On | On | On | On | On | On | On | On | On |
| 1900 | 12 mm | 12 mm | On | On | On | On | On | On | On | On | On | On | On |

Summary of DUT Edge Left Tilt Angle Influence to Proximity Sensor Triggering

| Band (MHz) | Minimum trigger distance measured according to KDB 616217 §6.2 | Minimum distance at which power reduction was maintained over +/-45° | Power reduction status | | | | | | | | | | |
|------------|--|--|------------------------|------|------|------|------|----|-----|-----|-----|-----|-----|
| | | | -45° | -40° | -30° | -20° | -10° | 0° | 10° | 20° | 30° | 40° | 45° |
| 1750 | 11 mm | 11 mm | On | On | On | On | On | On | On | On | On | On | On |
| 1900 | 11 mm | 11 mm | On | On | On | On | On | On | On | On | On | On | On |

Resulting test positions for SAR measurements

| Wireless technologies | Position | §6.2 Triggering Distance | §6.3 Coverage | §6.4 Tilt Angle | SAR Test Distance (Trigger Distance - 1mm) |
|-----------------------|-------------|--------------------------|---------------|-----------------|--|
| WWAN 1750/1900 MHz | Rear | 14 mm | N/A | N/A | 13 mm |
| | Edge Bottom | 12 mm | N/A | N/A | 11 mm |
| | Edge Left | 11 mm | N/A | N/A | 10 mm |