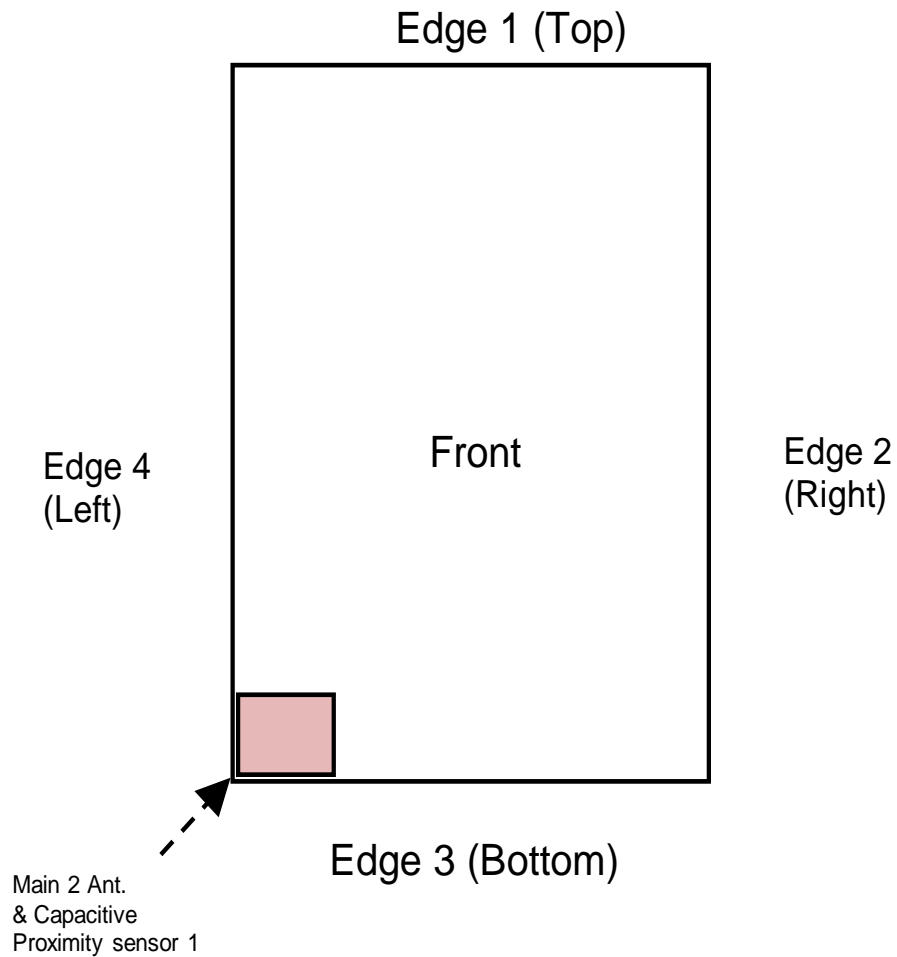


Appendix G. Proximity sensor feature

The DUT has one proximity sensor to reduce the output power. The position of the sensors and antenna are as shown in the graphic.

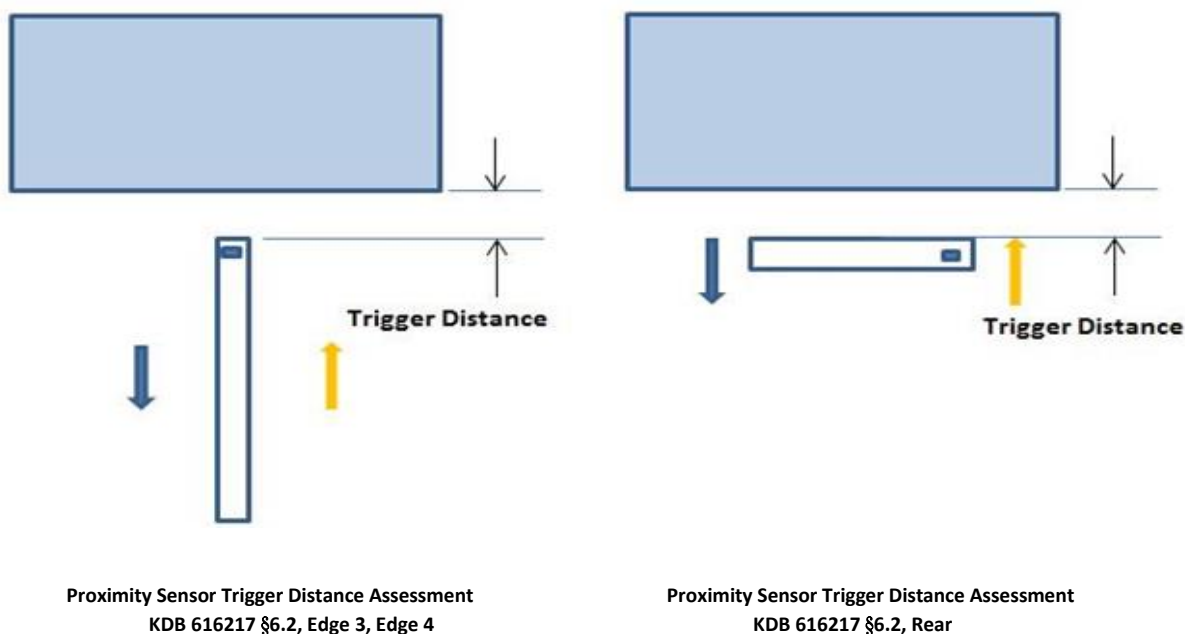


G.1 Proximity Sensor Triggering Distance (KDB 616217 §6.2)

Rear, Edge3, Edge4 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 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.



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

Antenna	Trigger distance - Rear		Trigger distance – Edge 3		Trigger distance – Edge 4	
	Moving toward phantom	Moving from phantom	Moving toward phantom	Moving from phantom	Moving toward phantom	Moving from phantom
Main 2 Ant.	14 mm	14 mm	8 mm	8 mm	7 mm	7 mm

Proximity Sensor Triggering Distance Measurement Results**Main 2 Ant.****Rear, DUT Moving Toward (Trigger) and Away (Release) from the Phantom**

Distance to DUT vs. Output Power in dBm										
Distance (mm)	10	11	12	13	14	15	16	17	18	19
GSM 1900 Voice/ GPRS 1Tx	27.7	28.4	27.6	27.8	27.9	30.4	30.1	30.1	29.5	29.9
GSM 1900 GPRX 2Tx	25.6	25.9	25.9	25.6	26.3	26.8	27.2	26.7	27.3	26.5
GSM 1900 GPRX 3Tx	24.1	24.8	24.7	24.3	24.9	25.5	26.0	25.9	26.3	26.4
GSM 1900 GPRX 4Tx	22.1	21.7	22.0	22.0	22.1	23.9	23.7	23.8	24.0	24.0
WCDMA 2	21.4	21.0	20.5	20.9	21.2	23.8	23.9	24.3	23.9	23.8
WCDMA 4	21.3	21.3	21.3	20.5	21.2	23.7	24.1	24.2	23.6	23.7
LTE Band 2	20.7	20.9	21.2	21.2	20.6	23.6	23.8	23.5	23.5	23.4
LTE Band 4	20.8	21.3	21.5	20.7	21.4	24.3	24.3	23.6	23.9	23.6
LTE Band 66	21.0	20.8	20.8	20.6	21.3	23.8	23.5	24.4	23.5	24.2

Edge3, DUT Moving Toward (Trigger) and Away (Release) from the Phantom

Distance to DUT vs. Output Power in dBm										
Distance (mm)	4	5	6	7	8	9	10	11	12	13
GSM 1900 Voice/ GPRS 1Tx	27.7	28.0	28.4	28.1	28.0	30.4	29.7	29.9	30.1	29.8
GSM 1900 GPRX 2Tx	26.1	25.8	25.5	26.5	26.4	26.7	26.6	26.6	27.2	26.5
GSM 1900 GPRX 3Tx	24.1	24.1	24.0	24.2	24.8	25.7	25.9	25.5	26.3	25.6
GSM 1900 GPRX 4Tx	21.9	22.2	21.6	21.7	22.5	23.8	24.3	24.2	23.5	23.8
WCDMA 2	20.7	20.5	20.8	21.5	21.0	24.3	23.7	24.1	23.8	24.2
WCDMA 4	21.0	21.4	21.3	21.3	20.5	24.0	24.4	24.2	24.4	24.3
LTE Band 2	20.9	21.2	21.2	20.6	20.6	23.6	23.7	23.3	24.0	23.8
LTE Band 4	20.5	21.4	21.1	20.9	20.7	24.1	24.5	23.7	23.8	23.9
LTE Band 66	21.0	20.7	20.7	21.5	21.4	23.6	24.2	24.3	24.5	24.2

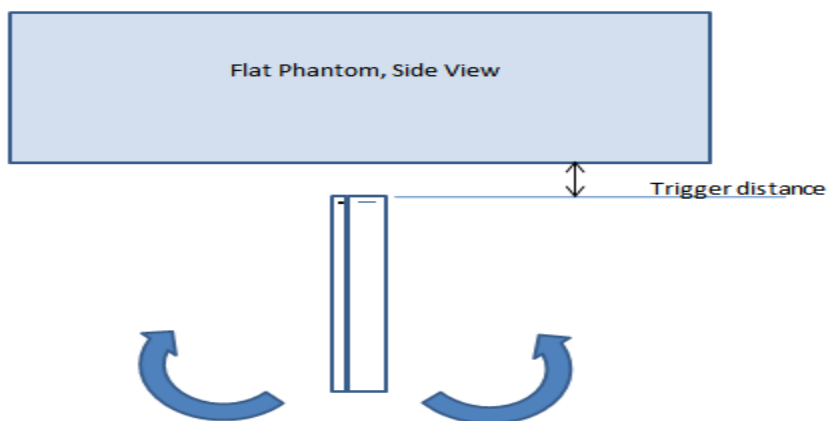
Edge4, DUT Moving Toward (Trigger) and Away (Release) from the Phantom

Distance to DUT vs. Output Power in dBm										
Distance (mm)	3	4	5	6	7	8	9	10	11	12
GSM 1900 Voice/ GPRS 1Tx	27.6	27.6	28.1	28.5	28.0	30.4	29.7	29.6	30.2	29.6
GSM 1900 GPRX 2Tx	26.3	25.9	26.1	25.9	25.7	26.7	26.6	27.1	27.4	27.3
GSM 1900 GPRX 3Tx	24.2	24.6	24.2	24.5	24.7	26.1	25.7	26.4	26.1	25.8
GSM 1900 GPRX 4Tx	21.9	22.4	21.8	21.9	21.6	24.4	24.1	23.5	24.1	23.6
WCDMA 2	20.9	21.2	20.8	21.3	21.1	23.9	24.2	23.8	23.5	24.4
WCDMA 4	20.6	21.3	20.9	20.5	21.0	24.4	24.4	23.9	24.0	24.4
LTE Band 2	21.2	20.6	21.2	20.7	20.7	24.0	24.0	23.5	23.9	23.4
LTE Band 4	21.0	21.4	21.3	21.3	20.7	24.2	24.5	24.4	24.0	24.3
LTE Band 66	20.8	21.0	20.7	20.6	21.4	24.0	24.2	23.8	23.6	23.6

G.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.

The EUT was rotated about Edge 3, Edge 4 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 3, Edge 4) KDB 616217 §6.4

[illegible][illegible]

G.4 Resulting test positions for SAR measurements

Wireless technologies	Position	§6.2 Triggering Distance	§6.3 Coverage	§6.4 Tilt Angle	Worst case distance for SAR
Main 2 Ant.	Rear	14 mm	N/A	N/A	13 mm
	Edge 3	8 mm	N/A	8 mm	7 mm
	Edge 4	7 mm	N/A	7 mm	6 mm

-End-