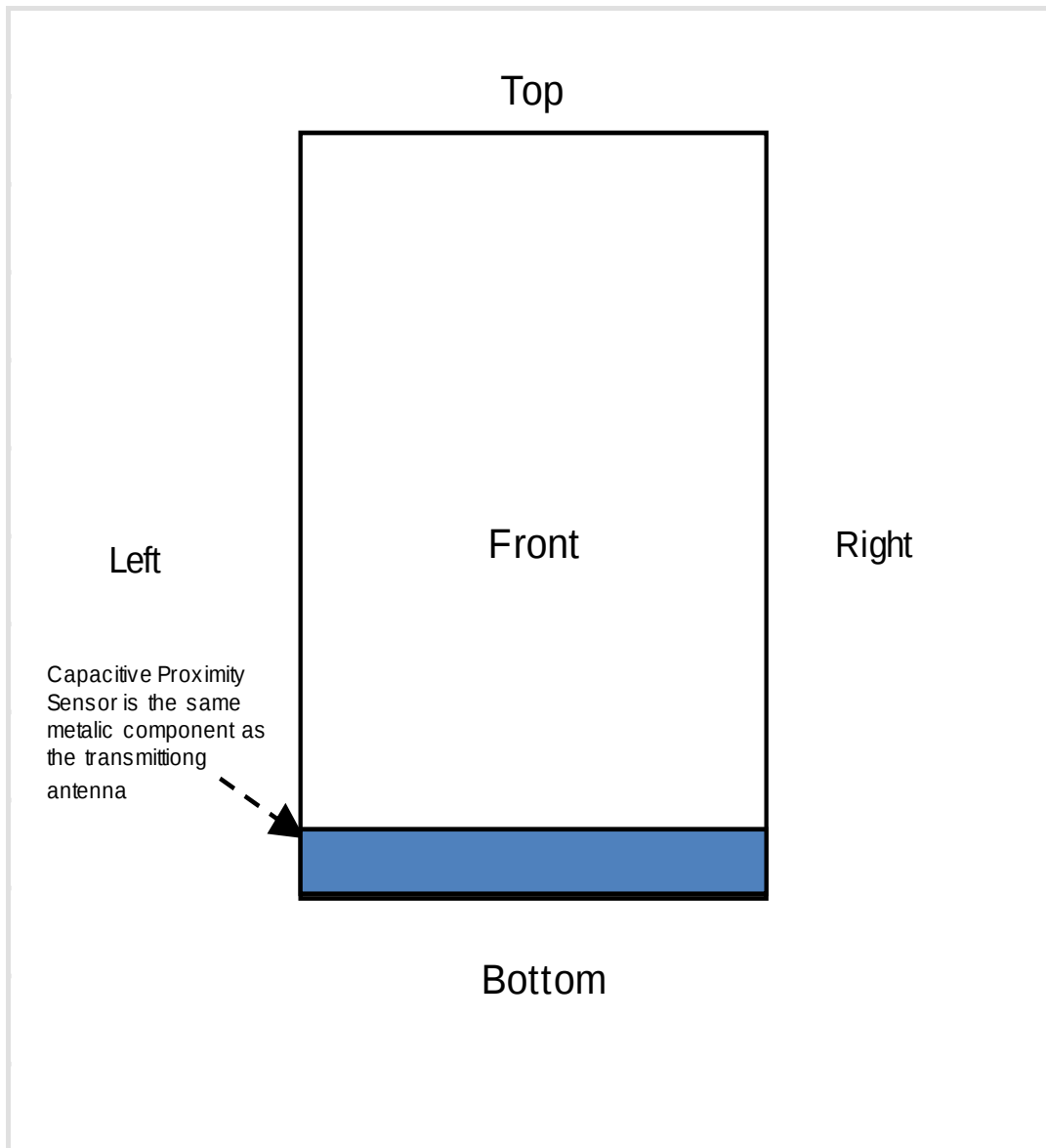


Appendix G. Proximity sensor feature

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

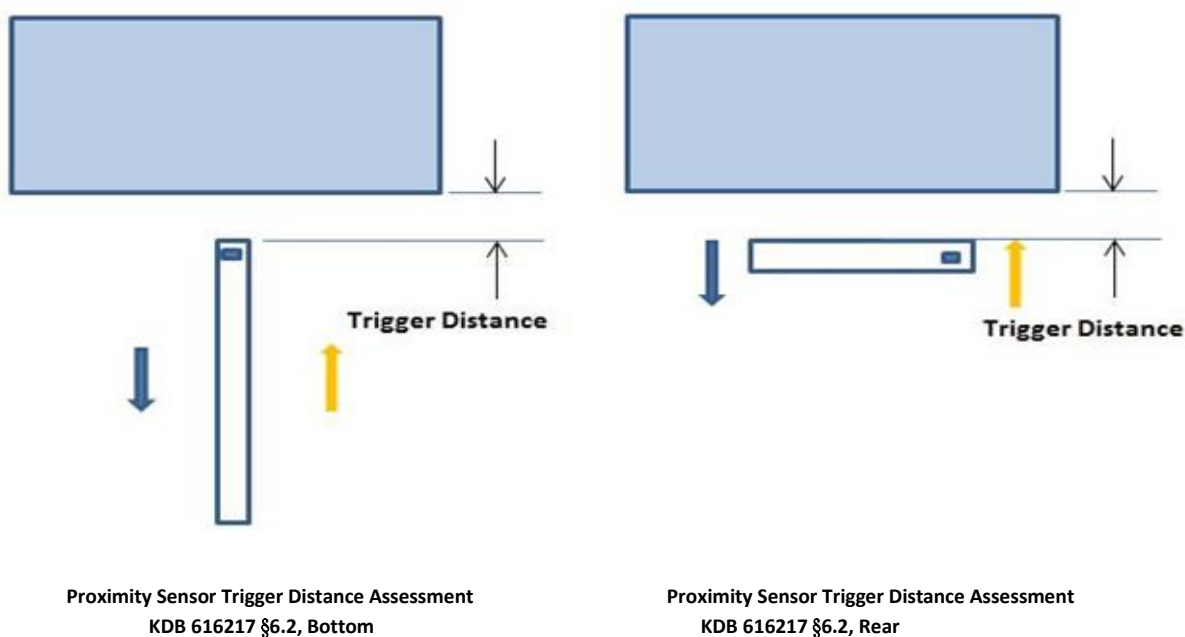


G.1 Proximity Sensor Triggering Distance (KDB 616217 §6.2)

Rear, Bottom 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 – Bottom	
	Moving toward phantom	Moving from phantom	Moving toward phantom	Moving from phantom
Main 1 Ant.	16 mm	16 mm	12 mm	12 mm

Proximity Sensor Triggering Distance Measurement Results**Main 1 Ant.****Rear, DUT Moving Toward (Trigger) and Away (Release) from the Phantom**

Distance to DUT vs. Output Power in dBm															
Distance (mm)	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12
GSM850 Voice 1Tx	33.13	32.94	33.14	32.94	32.96	32.94	33.15	33.00	33.02	32.96	33.03	33.00	33.00	32.94	33.02
GSM850 GPRS 1Tx	32.84	32.98	33.07	32.89	33.15	32.90	32.84	32.94	33.14	32.98	31.87	32.02	32.04	31.93	31.98
GSM850 GPRS 2Tx	31.44	31.38	31.53	31.38	31.52	31.46	31.64	31.51	31.34	31.57	30.59	30.56	30.57	30.54	30.61
GSM850 GPRS 3Tx	29.57	29.45	29.59	29.35	29.58	29.51	29.41	29.40	29.36	29.44	28.48	28.58	28.59	28.59	28.51
GSM850 GPRS 4Tx	28.53	28.41	28.43	28.57	28.41	28.43	28.56	28.40	28.62	28.54	27.50	27.59	27.52	27.59	27.53
PCS Voice 1Tx	30.48	30.33	30.43	30.44	30.65	30.36	30.50	30.52	30.65	30.50	30.36	30.49	30.58	30.48	30.60
PCS GPRS 1Tx	30.50	30.35	30.59	30.50	30.53	30.63	30.63	30.51	30.54	30.38	28.55	28.45	28.48	28.48	28.63
PCS GPRS 2Tx	29.00	28.97	29.00	28.95	28.88	29.10	29.10	28.95	29.09	28.92	26.90	26.99	26.99	27.00	27.13
PCS GPRS 3Tx	26.61	26.58	26.59	26.44	26.48	26.47	26.51	26.51	26.53	26.44	24.55	24.61	24.57	24.42	24.54
PCS GPRS 4Tx	24.80	24.98	25.13	25.05	24.83	24.86	24.91	25.04	25.07	25.03	23.04	22.94	23.08	22.93	22.97
WCDMA B2	23.39	23.39	23.66	23.44	23.45	23.39	23.46	23.54	23.47	23.43	20.40	20.51	20.57	20.55	20.60
WCDMA B4	23.52	23.54	23.66	23.54	23.48	23.55	23.58	23.64	23.35	23.48	21.45	21.59	21.43	21.35	21.42
LTE B2	23.01	22.98	22.94	22.94	22.93	23.08	23.08	22.92	22.96	23.05	21.12	21.01	21.10	20.88	21.06
LTE B4	24.02	24.06	23.89	23.91	24.11	23.93	23.88	23.94	23.96	23.99	20.97	21.10	20.95	20.96	21.15
LTE B41	23.09	22.98	22.93	22.96	23.01	23.02	22.93	22.86	22.94	23.15	20.92	21.06	20.94	21.10	21.01
LTE B66	23.87	23.93	24.09	23.92	24.00	24.04	24.07	24.17	23.83	24.02	20.96	21.04	21.03	21.10	21.02

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

Distance to DUT vs. Output Power in dBm															
Distance (mm)	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8
GSM850 Voice 1Tx	33.08	32.95	33.03	33.04	32.93	33.00	32.88	32.96	33.06	32.99	33.08	32.88	33.04	33.08	32.97
GSM850 GPRS 1Tx	33.09	33.05	33.02	32.98	33.06	33.09	33.02	33.04	32.90	32.94	32.01	32.14	31.97	31.99	31.91
GSM850 GPRS 2Tx	31.43	31.53	31.40	31.47	31.67	31.47	31.57	31.55	31.44	31.53	30.40	30.48	30.58	30.50	30.38
GSM850 GPRS 3Tx	29.54	29.48	29.47	29.52	29.54	29.56	29.46	29.47	29.60	29.61	28.43	28.56	28.48	28.40	28.55
GSM850 GPRS 4Tx	28.42	28.56	28.42	28.46	28.56	28.54	28.54	28.56	28.36	28.47	27.62	27.42	27.64	27.41	27.63
PCS Voice 1Tx	30.53	30.50	30.39	30.53	30.52	30.64	30.60	30.47	30.43	30.45	30.55	30.49	30.53	30.52	30.61
PCS GPRS 1Tx	30.68	30.35	30.45	30.59	30.59	30.43	30.68	30.56	30.46	30.54	28.56	28.55	28.48	28.57	28.50
PCS GPRS 2Tx	28.91	28.87	29.04	29.08	28.99	28.88	29.07	29.02	28.88	28.97	26.83	26.93	26.99	27.20	27.05
PCS GPRS 3Tx	26.56	26.54	26.55	26.42	26.52	26.59	26.56	26.50	26.44	26.44	24.49	24.59	24.61	24.41	24.51
PCS GPRS 4Tx	25.03	25.04	25.04	25.07	25.05	25.06	25.01	24.96	25.12	25.06	22.92	23.08	22.91	23.06	22.89
WCDMA B2	23.49	23.32	23.59	23.40	23.50	23.49	23.48	23.33	23.46	23.44	20.42	20.44	20.61	20.59	20.53
WCDMA B4	23.60	23.52	23.43	23.51	23.42	23.47	23.52	23.44	23.48	23.56	21.59	21.45	21.51	21.58	21.63
LTE B2	23.00	22.95	22.87	22.97	23.16	23.02	23.02	22.97	22.98	22.89	21.15	20.87	21.03	20.94	21.18
LTE B4	23.85	24.01	24.10	24.02	23.99	24.05	23.98	24.12	24.00	23.98	20.93	21.02	21.07	21.02	21.11
LTE B41	23.00	22.94	22.85	22.98	22.93	22.95	22.96	23.01	23.06	22.91	21.03	21.13	20.93	21.07	20.89
LTE B66	24.16	23.85	24.05	24.01	24.09	24.03	24.03	24.04	24.02	24.15	21.00	21.04	21.06	21.06	20.97

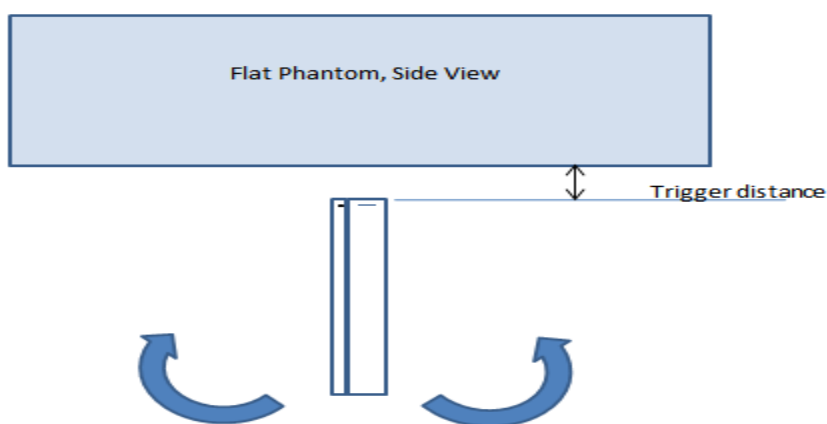
G.2 Proximity Sensor Coverage (KDB 616217 §6.3)

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

G.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 Bottom parallel to the base of the flat phantom for each band.

The EUT was rotated about 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 (Bottom) KDB 616217 §6.4

Summary of Tablet Tilt Angle Influence to Proximity Sensor Triggering (Bottom)

Antenna	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°
Main 1 Ant	12 mm	12 mm	On	On	On	On	On	On	On	On	On	On	On

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 1 Ant.	Rear	16 mm	N/A	N/A	15 mm
	Bottom	12 mm	N/A	12 mm	11 mm

- End -