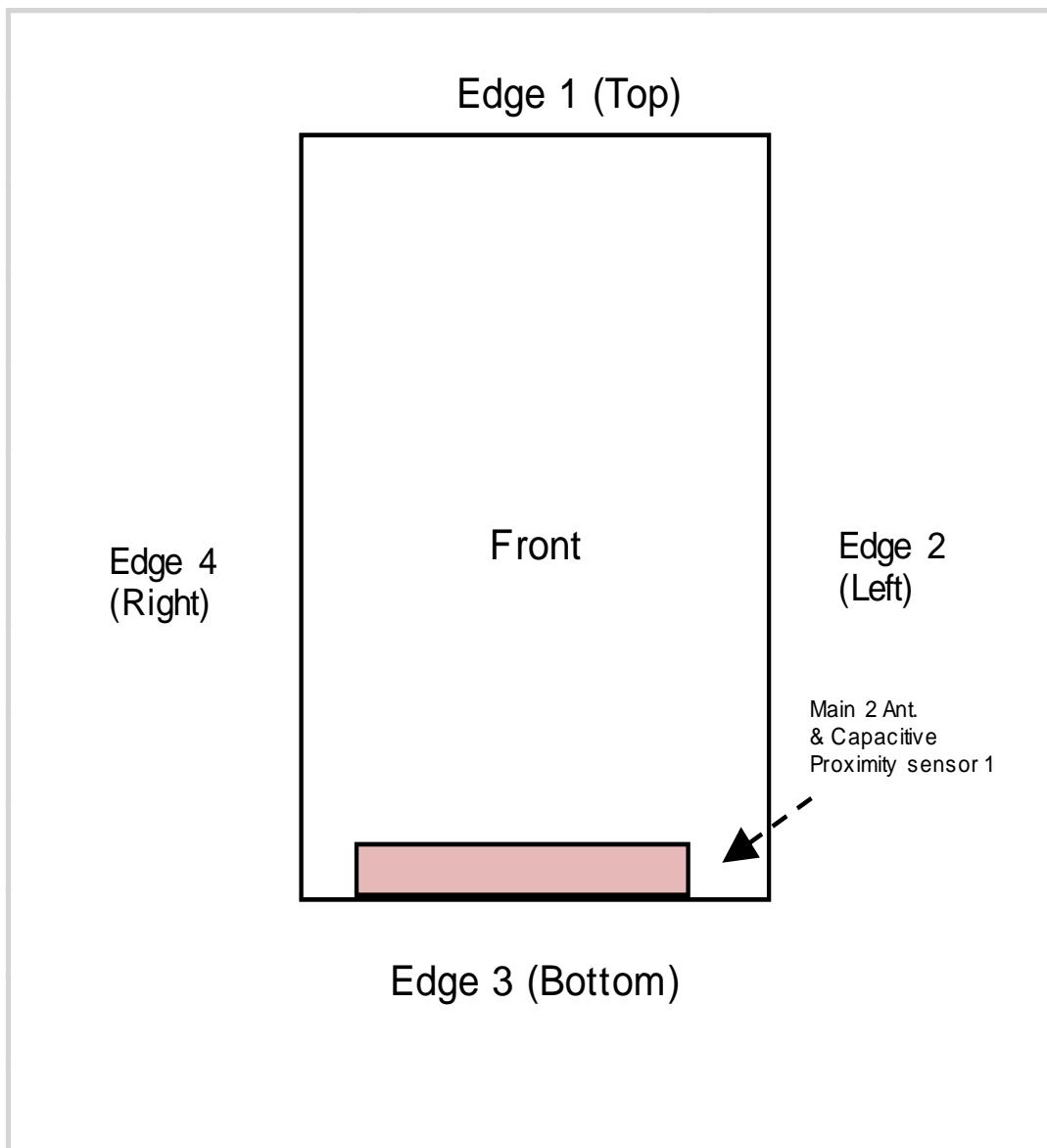


Appendix G. Proximity sensor feature

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

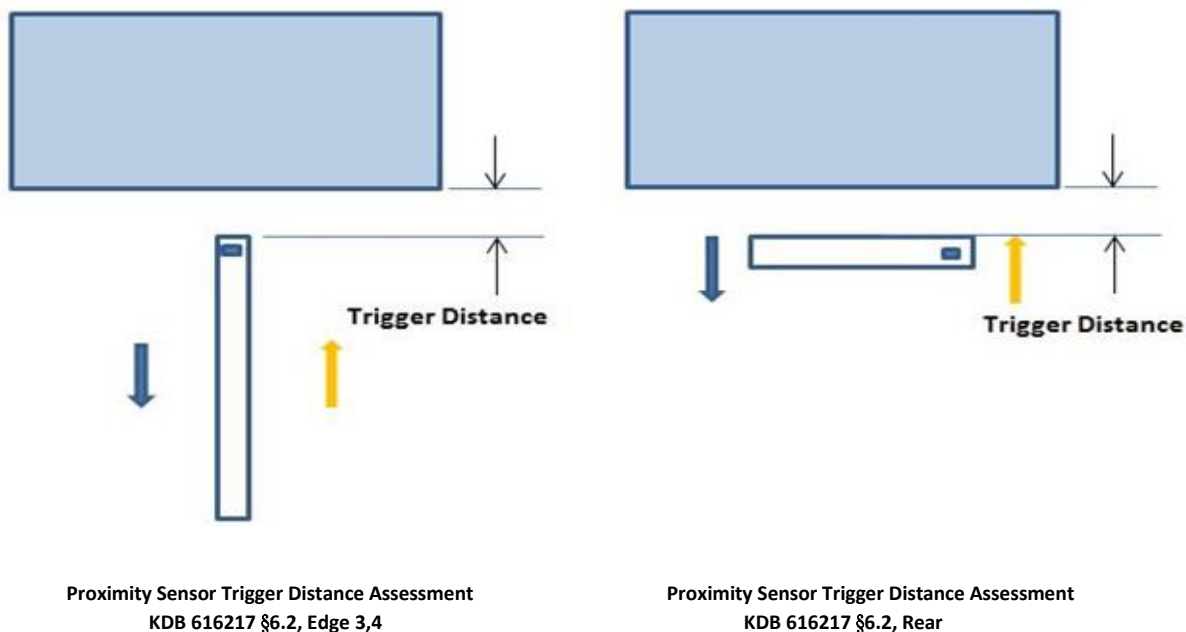


G.1 Proximity Sensor Triggering Distance (KDB 616217 §6.2)

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	26.28	26.38	26.42	26.50	26.29	29.41	29.94	29.84	29.97	29.99
GSM 1900 GPRX 2Tx	23.75	23.44	23.78	23.29	23.65	27.91	27.89	28.25	28.14	27.96
GSM 1900 GPRX 3Tx	21.99	21.79	21.66	21.81	21.96	26.00	25.78	26.20	25.83	26.09
GSM 1900 GPRX 4Tx	20.53	20.69	20.67	20.30	20.57	23.93	23.78	23.90	23.89	23.85
WCDMA 2	20.39	20.23	20.35	20.25	20.28	23.21	23.31	23.48	23.80	23.62
WCDMA 4	20.78	20.74	20.60	20.69	20.34	22.36	22.79	22.23	22.78	22.21
LTE B2	21.03	21.20	21.12	20.96	20.84	23.86	24.14	23.86	24.10	24.25
LTE B4	20.89	21.10	21.00	20.97	21.22	22.92	23.26	22.84	22.72	22.73
LTE B7	20.61	20.69	20.35	20.79	20.40	21.98	22.01	21.91	21.76	21.74
LTE B25	20.95	20.92	20.88	21.14	21.29	24.01	24.03	23.91	24.22	24.08
LTE B30	19.85	19.81	19.93	20.28	19.93	23.04	23.05	22.91	22.80	22.95
LTE B38	21.78	22.23	22.03	21.94	22.21	23.11	22.95	22.90	22.77	23.08
LTE B41 (PC2)	23.56	23.40	23.73	23.79	23.36	25.75	25.57	25.34	25.27	25.20
LTE B41 (PC3)	22.30	21.70	21.72	22.08	22.17	24.01	24.07	24.00	23.94	23.84
LTE B66	20.93	20.91	21.29	20.91	20.92	23.24	23.72	23.38	23.55	23.39
NR n2	21.00	20.80	21.01	21.20	20.88	23.70	23.86	24.04	24.03	23.90
NR n25	20.77	20.94	21.01	21.20	21.07	24.21	24.03	23.87	24.21	23.76
NR n30	19.95	20.14	19.75	19.85	20.11	22.74	22.89	22.93	23.11	23.00
NR n41 (PC2)	17.26	17.14	16.88	17.24	17.01	19.78	19.59	19.78	19.63	19.25
NR n41 (PC3)	16.73	16.99	17.01	17.04	16.97	19.68	19.21	19.50	19.27	19.67
NR n66	20.88	21.12	21.29	20.84	21.19	22.99	23.19	23.14	22.89	22.96
NR n70	20.27	20.08	19.77	19.86	20.01	21.79	21.88	21.94	22.17	22.12

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	26.6	26.8	26.6	26.4	26.7	29.8	30.0	29.5	29.6	29.8
GSM 1900 GPRX 2Tx	23.7	23.3	23.5	23.5	23.8	27.8	28.1	27.9	28.2	27.8
GSM 1900 GPRX 3Tx	21.5	22.0	21.5	21.4	21.8	26.2	25.8	25.8	25.8	26.0
GSM 1900 GPRX 4Tx	20.8	20.6	20.8	20.3	20.4	23.8	24.1	23.9	23.9	24.3
WCDMA 2	20.4	20.7	20.5	20.4	20.5	23.7	23.4	23.3	23.5	23.3
WCDMA 4	20.7	20.5	20.5	20.7	20.5	22.5	22.4	22.2	22.3	22.3
LTE B2	20.8	20.8	21.0	20.7	20.8	24.1	23.9	24.2	24.2	24.2
LTE B4	21.0	21.3	21.0	20.9	21.2	23.0	23.3	22.8	22.8	22.8
LTE B7	20.5	20.8	20.3	20.4	20.3	22.2	22.0	21.8	22.2	22.3
LTE B25	21.1	20.9	21.1	20.7	20.7	24.0	24.0	23.8	24.0	24.3
LTE B30	20.2	20.1	19.8	20.1	20.0	23.1	23.2	23.2	23.2	22.8
LTE B38	22.1	22.0	21.8	22.1	21.8	23.1	22.9	23.3	22.9	22.8
LTE B41 (PC2)	23.5	23.5	23.7	23.6	23.5	25.4	25.7	25.5	25.2	25.6
LTE B41 (PC3)	22.2	22.1	21.8	22.1	22.1	24.2	23.7	24.2	24.1	23.7
LTE B66	21.1	20.9	21.3	21.1	20.7	23.5	23.3	23.4	23.4	23.3
NR n2	21.2	21.1	21.0	21.0	21.1	24.1	23.9	23.8	24.0	23.8
NR n25	21.3	20.7	21.3	20.8	20.7	24.3	23.9	24.1	23.8	24.2
NR n30	19.9	19.9	19.9	20.1	20.3	23.0	23.0	23.0	23.3	22.9
NR n41 (PC2)	17.2	17.0	17.2	17.3	17.1	19.3	19.3	19.4	19.5	19.3
NR n41 (PC3)	17.0	16.8	17.2	16.8	17.0	19.4	19.4	19.7	19.3	19.5
NR n66	21.2	20.8	20.8	20.9	21.1	22.8	23.0	22.9	22.8	22.9
NR n70	20.1	20.3	19.8	20.0	19.8	22.0	22.1	22.1	21.8	22.3

Edge 4, 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	26.59	26.31	26.40	26.38	26.71	29.67	29.57	29.71	29.86	29.82
GSM 1900 GPRX 2Tx	23.23	23.68	23.20	23.75	23.57	28.10	27.89	27.77	27.97	27.78
GSM 1900 GPRX 3Tx	21.45	21.87	21.45	21.49	21.98	26.18	26.13	25.95	25.76	25.74
GSM 1900 GPRX 4Tx	20.70	20.53	20.44	20.73	20.62	24.09	24.14	23.84	23.77	24.15
WCDMA 2	20.54	20.67	20.69	20.36	20.72	23.29	23.67	23.34	23.55	23.66
WCDMA 4	20.56	20.44	20.76	20.27	20.65	22.74	22.45	22.58	22.80	22.67
LTE B2	20.86	21.19	20.72	21.22	21.02	24.13	24.23	23.95	24.19	23.93
LTE B4	21.02	21.24	20.91	20.74	21.02	23.25	23.15	23.15	22.91	23.21
LTE B7	20.51	20.39	20.68	20.77	20.36	21.72	22.19	22.23	22.16	22.01
LTE B25	20.98	20.78	20.86	20.70	20.87	23.90	23.77	23.79	23.90	24.30
LTE B30	20.25	20.17	20.07	20.23	20.23	23.05	22.83	23.17	22.90	22.86
LTE B38	21.79	22.27	21.99	22.11	21.70	22.83	22.80	23.25	23.05	23.28
LTE B41 (PC2)	23.89	23.70	23.90	23.62	23.32	25.53	25.45	25.30	25.57	25.52
LTE B41 (PC3)	21.91	21.90	22.11	22.06	22.19	24.03	23.88	23.84	24.30	23.90
LTE B66	21.00	21.17	20.73	20.95	20.87	23.36	23.28	23.67	23.67	23.44
NR n2	20.83	21.10	20.80	20.84	21.03	24.03	24.26	23.72	23.89	24.29
NR n25	21.22	20.72	20.92	20.72	21.11	24.20	24.17	24.16	23.76	23.86
NR n30	20.29	20.28	20.16	20.25	19.74	22.81	22.72	23.29	23.05	23.23
NR n41 (PC2)	16.99	16.77	17.01	17.28	17.14	19.49	19.23	19.41	19.49	19.49
NR n41 (PC3)	16.79	16.95	16.96	16.89	16.75	19.27	19.25	19.47	19.59	19.30
NR n66	20.96	20.88	20.85	20.83	20.81	22.97	23.23	22.88	22.93	23.22
NR n70	20.10	19.75	20.29	20.21	20.18	21.92	21.80	22.21	22.11	22.15

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.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-