

Appendix H. – Power reduction verification

Per the May 2017 TCBC Workshop notes, demonstration of proper functioning of the power reduction mechanism is required to support the corresponding SAR Configurations.

Power Verification Procedure

The Power verification was performed according to the following procedure:

1. A base station simulator was used to establish a conducted RF connection and output power was monitored. The Power measurements were conformed to be within expected tolerances for all states before and after a power reduction mechanism was triggered. For licensed modes, the device state index as displayed on the device UI was recorded before and after the mechanism was triggered

The verification process was divided into two parts:

- 1). Evaluation of output power levels for individual triggering mechanism
- 2) Evaluation of the triggering distances for proximity-based sensors.

FCC KDB Publication 616217D04v01r02 section 6 was used as a guideline for selection SAR test distances for this device when being used in body use conditions.

2. Step 1 was repeated for all relevant modes and frequency bands for the mechanism being investigated.
3. Step 1 and 2 were repeated for all individual power reduction mechanism and combinations thereof. For the combination cases, one mechanism was switched to a “triggered” state at a time; powers were conformed to be within tolerance after each additional mechanism was activated.

Proximity sensor triggering Distance Verification Procedure

(KDB 616217 D04v01r02 §6.2)

The distance verification procedure was performed according to the following procedure:

1. A base station simulator was used to establish an RF connection and to monitor the power levels. The device being tested was placed below the relevant section of the phantom with the relevant side or edge of the device facing toward the phantom. For Licensed modes, the device state index(DSI) on the device UI was monitored to determine the triggering state.
2. The device was moved toward and away from the phantom to determine the distance at which the mechanism triggers and the output power is reduced, per KDB Publication 616217 D04v01r02 .Each applicable test position was evaluated. The distance were conformed to be the same or larger (more conservative) than the minimum distances provided by the manufacturer.
3. Step 1 and 2 were repeated for the relevant modes, as appropriate
4. Steps1 through 3 were repeated for all distance-based power reduction mechanisms.

For detailed measurement conducted power results, please refer to the Section .11

1. Main Ant1

1.1 Power Reduction Verification for Main Ant 1

Mechanism(s)	Mode/Band	Device State Index	
		Un-triggered (Max Power)	Triggered (Reduced Power)
Grip	UMTS Band 5	DSI 0	DSI 1
Grip	UMTS Band 4	DSI 0	DSI 1
Grip	UMTS Band 2	DSI 0	DSI 1
Grip	LTE Band 2	DSI 0	DSI 1
Grip	LTE Band 4	DSI 0	DSI 1
Grip	LTE Band 5	DSI 0	DSI 1
Grip	LTE Band 7	DSI 0	DSI 1
Grip	LTE Band 12	DSI 0	DSI 1
Grip	LTE Band 13	DSI 0	DSI 1
Grip	LTE Band 14	DSI 0	DSI 1
Grip	LTE Band 25	DSI 0	DSI 1
Grip	LTE Band 26	DSI 0	DSI 1
Grip	LTE Band 30	DSI 0	DSI 1
Grip	LTE Band 41	DSI 0	DSI 1
Grip	LTE Band 41(HPUE)	DSI 0	DSI 1
Grip	LTE Band 66	DSI 0	DSI 1
Grip	LTE Band 71	DSI 0	DSI 1
Grip	N2	DSI 0	DSI 1
Grip	N5	DSI 0	DSI 1
Grip	N25	DSI 0	DSI 1
Grip	N66	DSI 0	DSI 1
Grip	N71	DSI 0	DSI 1

Note: This device uses different Device State Indices(DSI) to configure different time averaged power level based on certain exposure scenarios. For this model, DSI=1 represents the case when the grip sensor is active, and DSI=0 represents the case where the device cannot detect the use condition.

1.2 Proximity sensor triggering Distance Verification.



Proximity Sensor Trigger Distance Assessment KDB 616217 D04 §6.2 (Rear / Right / Top side)

LEGEND

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

Tissue simulating liquid	Trigger distance - Rear		Trigger distance – Right Side		Trigger distance - Top	
	Moving toward phantom [mm]	Moving away from phantom [mm]	Moving toward phantom [mm]	Moving away from phantom [mm]	Moving toward phantom [mm]	Moving away from phantom [mm]
700MHz	18	19	9	10	24	25
800MHz	18	19	9	10	24	25
1750 MHz	18	19	9	10	24	25
1900 MHz	18	19	9	10	24	25
2300MHz	18	19	9	10	24	25
2600 MHz	18	19	9	10	24	25

Distance Measurement verification for Proximity sensor

Rear side – EUT Moving toward (trigger) to the Phantom

Distance	Distance to DUT Output power (dBm)									
	23	22	21	20	19	18	17	16	15	14
UMTS Band 5	23.63	23.67	23.72	23.67	23.76	17.79	17.79	17.66	17.66	17.75
UMTS Band 4	23.73	23.90	23.70	23.71	23.72	13.83	13.80	13.74	13.65	13.73
UMTS Band 2	23.63	23.55	23.49	23.60	23.59	13.49	13.60	13.55	13.63	13.56
LTE Band 2	24.03	23.89	24.05	23.98	24.05	13.99	14.08	14.10	14.16	14.17
LTE Band 4	23.70	23.78	23.84	23.71	23.70	13.62	13.58	13.64	13.64	13.65
LTE Band 5	24.55	24.60	24.67	24.63	24.50	16.07	15.93	15.95	15.95	16.09
LTE Band 7	24.10	24.14	24.11	24.23	24.14	11.70	11.82	11.88	11.88	11.89
LTE Band 12	24.80	24.90	24.80	24.88	24.93	15.77	15.93	15.90	15.76	15.86
LTE Band 13	23.93	24.06	24.03	23.91	23.93	16.03	15.95	16.09	16.02	16.01
LTE Band 14	24.26	24.11	24.16	24.18	24.16	16.00	16.08	15.94	16.00	16.04
LTE Band 25	24.18	24.13	24.20	24.16	24.18	13.95	13.96	14.10	14.10	14.12
LTE Band 26	24.20	24.20	24.17	24.22	24.23	15.85	15.89	15.99	15.84	15.97
LTE Band 30	22.57	22.54	22.43	22.52	22.41	12.60	12.65	12.71	12.69	12.68
LTE Band 41	24.50	24.43	24.40	24.52	24.50	14.08	14.19	14.24	14.22	14.22
LTE Band41(HPUE)	27.08	27.21	27.02	27.08	27.18	14.04	14.08	14.06	14.01	14.06
LTE Band 66	23.93	23.85	23.92	23.91	23.82	13.68	13.69	13.80	13.63	13.80
LTE Band 71	24.63	24.51	24.47	24.53	24.58	16.01	15.92	15.86	16.02	16.01
N2	24.65	24.63	24.61	24.68	24.64	14.69	14.73	14.73	14.60	14.60
N5	24.53	24.53	24.45	24.46	24.43	16.63	16.60	16.57	16.51	16.45
N25	24.13	24.02	24.06	24.13	23.98	13.91	13.96	13.96	13.98	14.10
N66	24.47	24.48	24.60	24.51	24.52	14.48	14.59	14.56	14.51	14.60
N71	24.26	24.40	24.41	24.43	24.42	13.85	13.69	13.87	13.88	13.75

Rear side – EUT Moving away (Release) from the Phantom

Distance	Distance to DUT Output power (dBm)									
	15	16	17	18	19	20	21	22	23	24
UMTS Band 5	17.63	17.61	17.72	17.73	17.69	23.63	23.79	23.63	23.74	23.69
UMTS Band 4	13.83	13.76	13.66	13.81	13.74	23.74	23.73	23.88	23.87	23.83
UMTS Band 2	13.50	13.63	13.60	13.64	13.63	23.57	23.52	23.61	23.49	23.62
LTE Band 2	14.06	14.12	14.16	14.00	14.19	23.94	23.90	23.96	24.03	24.04
LTE Band 4	13.56	13.68	13.64	13.55	13.55	23.89	23.71	23.86	23.74	23.87
LTE Band 5	16.06	15.91	16.04	16.06	16.04	24.69	24.53	24.52	24.62	24.67
LTE Band 7	11.86	11.78	11.85	11.71	11.79	24.19	24.20	24.12	24.13	24.09
LTE Band 12	15.86	15.77	15.82	15.87	15.78	24.91	24.86	24.83	24.86	24.87
LTE Band 13	16.12	15.95	16.10	16.08	15.97	24.06	24.02	23.95	24.03	23.90
LTE Band 14	15.98	16.03	15.98	16.06	16.00	24.21	24.11	24.11	24.29	24.16
LTE Band 25	13.99	13.96	13.97	13.96	13.98	24.05	24.10	24.15	24.13	24.01
LTE Band 26	15.83	15.98	15.83	15.99	15.84	24.16	24.16	24.17	24.28	24.32
LTE Band 30	12.67	12.69	12.70	12.65	12.79	22.42	22.47	22.50	22.47	22.39
LTE Band 41	14.05	14.16	14.12	14.19	14.16	24.46	24.36	24.44	24.51	24.39
LTE Band 41(HPUE)	14.07	14.09	14.04	14.02	14.12	27.12	27.12	27.07	27.02	27.10
LTE Band 66	13.76	13.63	13.67	13.64	13.64	23.83	23.87	23.79	23.84	23.81
LTE Band 71	15.86	15.93	15.97	16.01	15.90	24.60	24.55	24.45	24.54	24.58
N2	14.64	14.61	14.65	14.71	14.64	24.54	24.71	24.57	24.58	24.51
N5	16.56	16.50	16.48	16.55	16.62	24.52	24.36	24.49	24.39	24.34
N25	13.97	14.06	14.02	14.09	14.09	24.15	24.16	24.07	23.97	24.07
N66	14.49	14.54	14.51	14.53	14.46	24.47	24.57	24.54	24.62	24.46
N71	13.75	13.68	13.79	13.68	13.81	24.28	24.33	24.37	24.38	24.30

Based on the most conservative measured triggering distance of 18mm, additional Body SAR measurements were required at 17mm from rear side for the above modes.

Right side – EUT Moving toward (trigger) to the Phantom

Distance	Distance to DUT Output power (dBm)									
	14	13	12	11	10	9	8	7	6	5
UMTS Band 5	23.67	23.73	23.66	23.81	23.74	17.68	17.73	17.71	17.73	17.79
UMTS Band 4	23.88	23.85	23.79	23.90	23.78	13.80	13.68	13.83	13.68	13.71
UMTS Band 2	23.57	23.68	23.60	23.49	23.56	13.53	13.52	13.62	13.51	13.51
LTE Band 2	23.89	24.04	24.07	24.06	23.91	14.10	14.15	14.06	14.16	14.00
LTE Band 4	23.83	23.83	23.90	23.88	23.73	13.63	13.60	13.64	13.63	13.59
LTE Band 5	24.59	24.67	24.58	24.57	24.58	16.02	16.01	15.93	16.08	16.01
LTE Band 7	24.21	24.18	24.16	24.12	24.11	11.81	11.90	11.83	11.77	11.87
LTE Band 12	24.97	24.82	24.87	24.78	24.96	15.86	15.92	15.93	15.88	15.81
LTE Band 13	24.01	24.05	24.04	24.06	23.96	16.00	16.14	16.11	16.00	16.12
LTE Band 14	24.30	24.29	24.24	24.14	24.14	15.98	16.10	16.12	15.94	15.99
LTE Band 25	24.04	24.01	24.08	24.13	24.07	14.03	14.00	14.05	14.01	14.08
LTE Band 26	24.26	24.35	24.17	24.32	24.25	15.91	16.03	15.86	15.86	15.85
LTE Band 30	22.56	22.52	22.49	22.55	22.40	12.72	12.69	12.76	12.62	12.62
LTE Band 41	24.46	24.52	24.43	24.50	24.42	14.06	14.23	14.19	14.21	14.14
LTE Band 41(HPUE)	27.02	27.13	27.17	27.04	27.14	14.18	14.06	14.07	14.15	14.16
LTE Band 66	23.84	23.82	23.95	23.89	23.94	13.75	13.76	13.67	13.75	13.62
LTE Band 71	24.53	24.44	24.50	24.59	24.54	16.03	16.01	16.02	15.86	15.90
N2	24.61	24.54	24.61	24.57	24.64	14.72	14.76	14.64	14.61	14.74
N5	24.45	24.50	24.54	24.43	24.49	16.43	16.51	16.63	16.56	16.59
N25	24.05	23.97	24.01	24.15	24.04	14.10	13.95	13.98	14.00	13.98
N66	24.42	24.54	24.62	24.57	24.43	14.58	14.60	14.44	14.58	14.47
N71	24.34	24.27	24.31	24.43	24.41	13.73	13.75	13.88	13.76	13.78

Right side – EUT Moving away (Release) from the Phantom

Distance	Distance to DUT Output power (dBm)									
	6	7	8	9	10	11	12	13	14	15
UMTS Band 5	17.65	17.74	17.68	17.65	17.64	23.68	23.73	23.80	23.80	23.61
UMTS Band 4	13.69	13.71	13.79	13.66	13.73	23.82	23.89	23.73	23.75	23.79
UMTS Band 2	13.50	13.57	13.58	13.52	13.57	23.57	23.61	23.61	23.51	23.60
LTE Band 2	14.13	14.11	14.14	14.14	14.05	23.91	24.01	23.91	24.07	23.90
LTE Band 4	13.68	13.66	13.72	13.61	13.62	23.90	23.86	23.78	23.88	23.80
LTE Band 5	16.05	16.09	15.94	15.96	15.95	24.57	24.66	24.59	24.57	24.51
LTE Band 7	11.79	11.87	11.72	11.78	11.85	24.15	24.17	24.23	24.28	24.10
LTE Band 12	15.81	15.76	15.92	15.91	15.82	24.88	24.91	24.95	24.95	24.82
LTE Band 13	16.01	16.01	16.14	15.99	15.95	23.97	23.92	23.93	23.99	23.93
LTE Band 14	16.12	16.04	16.11	15.98	15.97	24.30	24.29	24.18	24.29	24.14
LTE Band 25	13.95	14.05	14.11	14.11	14.07	24.21	24.02	24.13	24.11	24.15
LTE Band 26	15.97	15.95	16.01	15.98	15.99	24.26	24.29	24.33	24.18	24.23
LTE Band 30	12.64	12.73	12.63	12.73	12.70	22.50	22.46	22.43	22.39	22.58
LTE Band 41	14.11	14.23	14.24	14.18	14.11	24.44	24.47	24.39	24.46	24.35
LTE Band 41(HPUE)	14.15	14.01	14.19	14.02	14.09	27.05	27.16	27.18	27.08	27.17
LTE Band 66	13.64	13.61	13.61	13.76	13.61	23.93	23.99	23.87	23.92	23.97
LTE Band 71	15.88	16.01	15.85	16.00	16.00	24.50	24.61	24.50	24.63	24.51
N2	14.67	14.73	14.71	14.69	14.62	24.51	24.68	24.59	24.65	24.66
N5	16.54	16.44	16.60	16.63	16.46	24.47	24.52	24.36	24.50	24.46
N25	14.09	13.96	14.02	13.97	13.93	24.10	24.07	24.01	24.09	23.99
N66	14.54	14.45	14.60	14.55	14.59	24.55	24.57	24.46	24.57	24.59
N71	13.86	13.82	13.72	13.77	13.74	24.24	24.23	24.24	24.25	24.31

Based on the most conservative measured triggering distance of 9mm, additional Body SAR measurements were required at 8mm from right side for the above modes

Top side – EUT Moving toward (trigger) to the Phantom

Distance	Distance to DUT Output power (dBm)									
	29	28	27	26	25	24	23	22	21	20
UMTS Band 5	23.65	23.76	23.80	23.71	23.66	17.61	17.78	17.68	17.69	17.68
UMTS Band 4	23.89	23.81	23.79	23.78	23.77	13.69	13.79	13.64	13.75	13.68
UMTS Band 2	23.69	23.58	23.55	23.64	23.57	13.64	13.62	13.64	13.47	13.52
LTE Band 2	23.96	24.02	23.92	24.06	24.06	14.08	14.01	14.10	13.99	14.00
LTE Band 4	23.76	23.73	23.77	23.71	23.70	13.53	13.62	13.64	13.53	13.71
LTE Band 5	24.60	24.52	24.58	24.69	24.56	16.01	16.01	16.05	15.91	16.01
LTE Band 7	24.16	24.24	24.11	24.20	24.22	11.79	11.86	11.86	11.77	11.73
LTE Band 12	24.80	24.77	24.84	24.89	24.92	15.82	15.75	15.80	15.84	15.79
LTE Band 13	23.99	24.08	23.95	24.04	24.02	15.96	15.96	15.98	16.10	16.13
LTE Band 14	24.18	24.17	24.17	24.30	24.21	16.11	16.02	16.13	16.11	15.98
LTE Band 25	24.09	24.09	24.10	24.07	24.12	14.00	14.06	14.01	14.12	13.94
LTE Band 26	24.22	24.32	24.33	24.27	24.31	15.88	15.94	15.84	15.93	15.89
LTE Band 30	22.48	22.41	22.39	22.52	22.57	12.65	12.66	12.60	12.63	12.60
LTE Band 41	24.49	24.52	24.52	24.51	24.51	14.05	14.24	14.19	14.15	14.08
LTE Band 41(HPUE)	27.04	27.12	27.17	27.11	27.14	14.07	14.05	14.00	14.00	14.08
LTE Band 66	23.90	23.87	23.86	23.92	23.80	13.78	13.80	13.69	13.80	13.68
LTE Band 71	24.61	24.53	24.51	24.53	24.63	15.99	15.86	15.96	15.98	15.94
N2	24.54	24.54	24.64	24.67	24.62	14.76	14.70	14.74	14.75	14.70
N5	24.36	24.49	24.37	24.44	24.50	16.47	16.62	16.52	16.53	16.56
N25	24.00	24.08	23.97	24.08	24.02	13.93	13.95	14.11	14.11	14.02
N66	24.46	24.47	24.60	24.62	24.54	14.49	14.49	14.51	14.58	14.54
N71	24.30	24.33	24.23	24.24	24.28	13.85	13.85	13.73	13.68	13.72

Top side – EUT Moving away (Release) from the Phantom

Distance	Distance to DUT Output power (dBm)									
	21	22	23	24	25	26	27	28	29	30
UMTS Band 5	17.75	17.80	17.75	17.69	17.70	23.69	23.62	23.61	23.78	23.71
UMTS Band 4	13.71	13.75	13.82	13.79	13.75	23.73	23.89	23.76	23.84	23.72
UMTS Band 2	13.57	13.51	13.60	13.54	13.53	23.54	23.56	23.58	23.58	23.49
LTE Band 2	14.15	14.09	14.07	14.03	14.12	23.87	23.87	24.01	24.02	23.94
LTE Band 4	13.53	13.57	13.60	13.65	13.71	23.70	23.76	23.86	23.85	23.73
LTE Band 5	15.96	16.01	15.99	16.09	15.90	24.63	24.63	24.60	24.62	24.61
LTE Band 7	11.73	11.70	11.85	11.85	11.70	24.16	24.12	24.17	24.22	24.18
LTE Band 12	15.95	15.76	15.94	15.94	15.81	24.81	24.78	24.91	24.97	24.81
LTE Band 13	16.07	15.99	16.02	16.07	16.07	23.95	23.90	23.92	23.97	24.09
LTE Band 14	16.07	16.10	16.03	16.08	16.07	24.28	24.24	24.24	24.19	24.20
LTE Band 25	14.02	14.00	14.12	14.01	14.00	24.17	24.09	24.15	24.20	24.20
LTE Band 26	15.89	15.95	15.97	15.83	15.88	24.31	24.35	24.28	24.32	24.16
LTE Band 30	12.64	12.73	12.67	12.71	12.72	22.48	22.59	22.55	22.54	22.50
LTE Band 41	14.14	14.20	14.05	14.15	14.10	24.34	24.32	24.33	24.42	24.47
LTE Band 41(HPUE)	14.05	14.05	14.15	14.01	14.13	27.09	27.07	27.20	27.04	27.09
LTE Band 66	13.79	13.73	13.81	13.70	13.75	23.85	23.79	23.91	23.79	23.82
LTE Band 71	16.01	15.92	16.03	15.92	15.95	24.46	24.44	24.49	24.56	24.45
N2	14.75	14.60	14.67	14.76	14.74	24.52	24.51	24.70	24.59	24.61
N5	16.46	16.55	16.43	16.54	16.61	24.34	24.51	24.35	24.39	24.36
N25	13.95	14.08	14.00	14.03	13.91	23.97	24.14	24.09	24.08	24.15
N66	14.62	14.59	14.55	14.45	14.62	24.42	24.51	24.46	24.61	24.47
N71	13.72	13.82	13.88	13.73	13.71	24.34	24.28	24.24	24.26	24.42

Based on the most conservative measured triggering distance of 24mm, additional Body SAR measurements were required at 23mm from top side for the above modes.

1.3 Proximity Sensor Coverage for SAR measurements

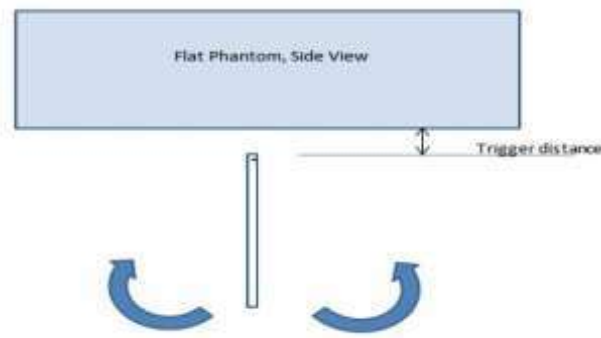
(KDB 616217 D04v01r02 §6.3)

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

1.4 Proximity Sensor Tilt Angle Assessment

(KDB 616217 D04v01r02 §6.4)

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Bottom side parallel to the base of the flat phantom for each band. The EUT was rotated about Bottom side 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 side) KDB 616217 §6.4

Summary of Tablet Tilt Angle influence to Proximity Sensor Triggering (Top side)

Band (MHz)	Minimum distance at which power reduction was maintained over-45°	Power reduction status										
		-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°
700MHz	24 mm	On	On	On	On	On	On	On	On	On	On	On
800MHz	24 mm	On	On	On	On	On	On	On	On	On	On	On
1750 MHz	24 mm	On	On	On	On	On	On	On	On	On	On	On
1900 MHz	24 mm	On	On	On	On	On	On	On	On	On	On	On
2300MHz	24 mm	On	On	On	On	On	On	On	On	On	On	On
2600 MHz	24 mm	On	On	On	On	On	On	On	On	On	On	On

1.5 Resulting test positions for Body SAR measurements

Wireless technologies	Position	§6.2 Triggering Distance [mm]	§6.3 Coverage	§6.4 Tilt Angle	Worst case distance for Body SAR [mm]
Main Ant 1	Rear	18	N/A	N/A	17
	Right Side	9	N/A	N/A	8
	Top	24	N/A	N/A	23

Note: FCC KDB Publication 616217 D04v01r02 Section 6 was used as a guideline for selecting SAR test distances for this device when being used in Proximity use conditions.

2. Main Ant 2

2.1 Power Reduction Verification

Mechanism(s)	Mode/Band	Device State Index	
		Un-triggered (Max Power)	Triggered (Reduced Power)
Grip	N 41	DSI 0	DSI 1

2.2 Proximity sensor triggering Distance Verification.



Proximity Sensor Trigger Distance Assessment KDB 616217 D04 §6.2 (Rear / Top side)

LEGEND

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

Tissue simulating liquid	Trigger distance - Rear		Trigger distance - Top	
	Moving toward phantom [mm]	Moving away from phantom [mm]	Moving toward phantom [mm]	Moving away from phantom [mm]
2600 MHz	5	6	8	8

Rear side – EUT Moving toward (trigger) to the Phantom

Distance	Distance to DUT Output power (dBm)									
	10	9	8	7	6	5	4	3	2	1
N 41	23.39	23.36	23.34	23.36	23.35	13.55	13.62	13.52	13.46	13.51

Rear side – EUT Moving away (Release) from the Phantom

Distance	Distance to DUT Output power (dBm)									
	2	3	4	5	6	7	8	9	10	11
N 41	13.49	13.63	13.47	13.62	13.62	23.36	23.31	23.32	23.31	23.39

Based on the most conservative measured triggering distance of 5mm, additional Body SAR measurements were required at 4mm from rear side for the above modes.

Top side – EUT Moving toward (trigger) to the Phantom

Distance	Distance to DUT Output power (dBm)									
	13	12	11	10	9	8	7	6	5	4
N 41	23.31	23.34	23.39	23.31	23.38	13.60	13.62	13.54	13.58	13.57

Top side – EUT Moving away (Release) from the Phantom

Distance	Distance to DUT Output power (dBm)									
	4	5	6	7	8	9	10	11	12	13
N 41	13.53	13.53	13.55	13.56	13.62	23.32	23.32	23.30	23.27	23.33

Based on the most conservative measured triggering distance of 8mm, additional Body SAR measurements were required at 7mm from top side for the above modes.

2.3 Proximity Sensor Coverage for SAR measurements

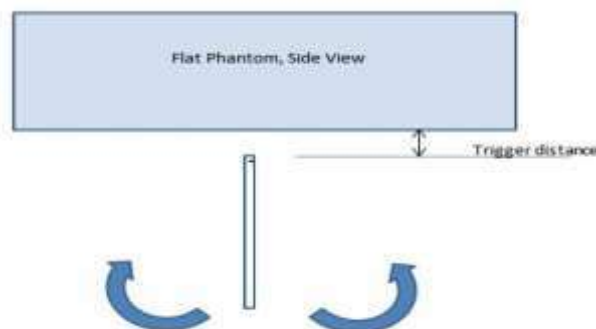
(KDB 616217 D04v01r02 §6.3)

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

2.4 Proximity Sensor Tilt Angle Assessment

(KDB 616217 D04v01r02 §6.4)

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Bottom side parallel to the base of the flat phantom for each band. The EUT was rotated about Bottom side 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 side) KDB 616217 §6.4

Summary of Tablet Tilt Angle influence to Proximity Sensor Triggering (Top side)

Band (MHz)	Minimum distance at which power reduction was maintained over-45°	Power reduction status											
		-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°	
2600 MHz	8 mm	On	On	On	On	On	On	On	On	On	On	On	

2.5 Resulting test positions for Body SAR measurements

Wireless technologies	Position	§6.2 Triggering Distance [mm]	§6.3 Coverage	§6.4 Tilt Angle	Worst case distance for Body SAR [mm]
Main Ant 2	Rear	5	N/A	N/A	4
	Top	8	N/A	N/A	7

Note: FCC KDB Publication 616217 D04v01r02 Section 6 was used as a guideline for selecting SAR test distances for this device when being used in Proximity use conditions.

This device uses an independent fixed level power reduction mechanism for WLAN operations when 5G NR mmWave is active and also during activating in close proximity to the user's Body

3. WLAN/BT Ant 1

3.1 Power reduction Verification

Power reduction verification for WLAN/BT Ant1

Mechanism	Mode/Band	Device State Index		
		Un-triggered (Max Power)	Mechanism 1: (Reduced Power)	Mechanism 2: (Reduced Power)
Grip on	2.4 GHz 802.11b	19.65	10.63	
Grip on	2.4 GHz 802.11g	17.89	9.64	
Grip on	2.4 GHz 802.11n	16.47	9.33	
Grip on	2.4 GHz 802.11ax SU	13.53	9.03	
Grip on	2.4 GHz Bluetooth	14.18	4.45	
Grip on	5 GHz 802.11a (Except ch165)	16.03	7.32	
Grip on	5 GHz 802.11n 20MHz (Except ch165)	15.51	6.98	
Grip on	5 GHz 802.11ac 20MHz (Except ch165)	15.47	7.02	
Grip on	5 GHz 802.11ax SU 20MHz	9.42	6.88	
Grip on	5 GHz 802.11n 40MHz (Except ch62,102)	14.88	7.05	
Grip on	5 GHz 802.11ac 40MHz (Except ch62,102)	13.32	6.97	
Grip on	5 GHz 802.11ax SU 40MHz	9.31	6.66	
Grip on	5 GHz 802.11ac 80MHz	12.43	6.57	
Grip on	5 GHz 802.11ax SU 80MHz	9.38	6.59	
mmWave active	2.4 GHz 802.11b	19.65	19.65	
mmWave active	2.4 GHz 802.11g	17.89	17.89	
mmWave active	2.4 GHz 802.11n	16.47	16.47	
mmWave active	2.4 GHz 802.11ax SU	13.53	13.53	
mmWave active	2.4 GHz Bluetooth	14.18	14.18	

mmWave active	5 GHz 802.11a (Except ch165)	16.03	16.03	
mmWave active	5 GHz 802.11n 20MHz (Except ch165)	15.51	15.51	
mmWave active	5 GHz 802.11ac 20MHz (Except ch165)	15.47	15.47	
mmWave active	5 GHz 802.11ax SU 20MHz	9.42	9.42	
mmWave active	5 GHz 802.11n 40MHz (Except ch62,102)	14.88	14.88	
mmWave active	5 GHz 802.11ac 40MHz (Except ch62,102)	13.32	13.32	
mmWave active	5 GHz 802.11ax SU 40MHz	9.31	9.31	
mmWave active	5 GHz 802.11ac 80MHz	12.43	12.43	
mmWave active	5 GHz 802.11ax SU 80MHz	9.38	9.38	
Grip on then mmwave active	2.4 GHz 802.11b	19.65	10.63	7.13
Grip on then mmwave active	2.4 GHz 802.11g	17.89	9.64	6.74
Grip on then mmwave active	2.4 GHz 802.11n	16.47	9.33	6.63
Grip on then mmwave active	2.4 GHz 802.11ax SU	13.53	9.03	6.55
Grip on then mmwave active	2.4 GHz Bluetooth	14.18	4.45	4.51
Grip on then mmwave active	5 GHz 802.11a (Except ch165)	16.03	7.32	6.12
Grip on then mmwave active	5 GHz 802.11n 20MHz (Except ch165)	15.51	6.98	6.14
Grip on then mmwave active	5 GHz 802.11ac 20MHz (Except ch165)	15.47	7.02	6.10
Grip on then mmwave active	5 GHz 802.11ax SU 20MHz	9.42	6.88	6.08
Grip on then mmwave active	5 GHz 802.11n 40MHz (Except ch62,102)	14.88	7.05	6.11
Grip on then mmwave active	5 GHz 802.11ac 40MHz (Except ch62,102)	13.32	6.97	5.97
Grip on then mmwave active	5 GHz 802.11ax SU 40MHz	9.31	6.66	6.01
Grip on then mmwave active	5 GHz 802.11ac 80MHz	12.43	6.57	5.88
Grip on then mmwave active	5 GHz 802.11ax SU 80MHz	9.38	6.59	5.84

mmwave active then Grip on	2.4 GHz 802.11b	19.65	19.65	7.13
mmwave active then Grip on	2.4 GHz 802.11g	17.89	17.89	6.74
mmwave active then Grip on	2.4 GHz 802.11n	16.47	16.47	6.63
mmwave active then Grip on	2.4 GHz 802.11ax SU	13.53	13.53	6.55
mmwave active then Grip on	2.4 GHz Bluetooth	14.18	14.18	4.51
mmwave active then Grip on	5 GHz 802.11a (Except ch165)	16.03	16.03	6.12
mmwave active then Grip on	5 GHz 802.11n 20MHz (Except ch165)	15.51	15.51	6.14
mmwave active then Grip on	5 GHz 802.11ac 20MHz (Except ch165)	15.47	15.47	6.10
mmwave active then Grip on	5 GHz 802.11ax SU 20MHz	9.42	9.42	6.08
mmwave active then Grip on	5 GHz 802.11n 40MHz (Except ch62,102)	14.88	14.88	6.11
mmwave active then Grip on	5 GHz 802.11ac 40MHz (Except ch62,102)	13.32	13.32	5.97
mmwave active then Grip on	5 GHz 802.11ax SU 40MHz	9.31	9.31	6.01
mmwave active then Grip on	5 GHz 802.11ac 80MHz	12.43	12.43	5.88
mmwave active then Grip on	5 GHz 802.11ax SU 80MHz	9.38	9.38	5.84

3.2 Proximity sensor triggering Distance Verification

Tissue simulating liquid	Trigger distance – Rear		Trigger distance – Right Side		Trigger distance – Right Corner Side		Trigger distance – Top	
	Moving toward phantom [mm]	Moving away from phantom [mm]	Moving toward phantom [mm]	Moving away from phantom [mm]	Moving toward phantom [mm]	Moving away from phantom [mm]	Moving toward phantom [mm]	Moving away from phantom [mm]
2450MHz	11	12	9	11	14	15	16	17
5000MHz	11	12	9	11	14	15	16	17

Rear side – EUT Moving toward (trigger) to the Phantom

Mode	Distance to DUT Output power (dBm)									
	16	15	14	13	12	11	10	9	8	7
2.4 GHz 802.11b	19.68	19.63	19.67	19.66	19.55	10.71	10.6	10.55	10.72	10.68
2.4 GHz 802.11g	17.80	17.90	17.90	17.91	17.96	9.63	9.57	9.64	9.74	9.67
2.4 GHz 802.11n	16.39	16.49	16.48	16.57	16.56	9.42	9.36	9.36	9.25	9.39
2.4 GHz 802.11ax SU	16.44	16.54	16.45	16.62	16.49	9.17	9.25	9.13	9.15	9.25
2.4 GHz Bluetooth	14.19	14.21	14.16	14.24	14.27	4.56	4.52	4.57	4.48	4.59
5 GHz 802.11a (Except ch165)	15.98	16.10	15.94	15.97	15.98	7.27	7.31	7.34	7.39	7.35
5 GHz 802.11n 20MHz (Except ch165)	15.51	15.46	15.55	15.41	15.56	7.02	6.89	6.97	6.91	6.88
5 GHz 802.11ac 20MHz (Except ch165)	15.44	15.46	15.37	15.56	15.57	6.96	6.92	6.95	7.09	7.04
5 GHz 802.11ax SU 20MHz	9.35	9.51	9.41	9.37	9.47	6.85	6.84	6.82	6.8	6.78
5 GHz 802.11n 40MHz (Except ch62,102)	14.54	14.66	14.69	14.63	14.59	6.98	7.02	7.09	7.14	7.08
5 GHz 802.11ac 40MHz	13.29	13.37	13.34	13.29	13.29	7.05	6.94	6.95	7.06	7

5 GHz 802.11ax SU 40MHz	9.33	9.37	9.25	9.41	9.26	6.68	6.57	6.63	6.76	6.7
5 GHz 802.11ac 80MHz	12.40	12.39	9.32	12.49	12.40	6.55	6.69	6.69	6.59	6.75
5 GHz 802.11ax SU 80MHz	9.36	9.43	9.35	9.33	9.41	6.53	6.51	6.59	6.59	6.52

Rear side – EUT Moving away (Release) from the Phantom

Mode / Distance	Distance to DUT Output power (dBm)									
	8	9	10	11	12	13	14	15	16	17
2.4 GHz 802.11b	10.64	10.68	10.7	10.55	10.68	19.64	19.59	19.74	19.68	19.68
2.4 GHz 802.11g	9.56	9.56	9.62	9.55	9.73	17.80	17.92	17.82	17.84	17.94
2.4 GHz 802.11n	9.34	9.4	9.38	9.24	9.35	16.56	16.42	16.41	16.53	16.48
2.4 GHz 802.11ax SU	9.27	9.27	9.21	9.21	9.24	16.55	16.55	16.48	16.51	16.62
2.4 GHz Bluetooth	4.51	4.58	4.58	4.47	4.63	14.23	14.22	14.21	14.12	14.12
5 GHz 802.11a (Except ch165)	7.41	7.24	7.36	7.41	7.31	15.95	16.05	16.02	16.05	16.02
5 GHz 802.11n 20MHz (Except ch165)	6.99	7.03	6.89	6.99	7.04	15.55	15.52	15.60	15.53	15.42
5 GHz 802.11ac 20MHz (Except ch165)	7.03	7.12	7.12	7.06	7.12	15.45	15.55	15.41	15.41	15.37
5 GHz 802.11ax SU 20MHz	6.84	6.93	6.83	6.88	6.85	9.47	9.45	9.46	9.48	9.37
5 GHz 802.11n 40MHz (Except ch62,102)	7.04	6.97	7.14	7.04	6.99	14.61	14.65	14.61	14.52	14.53
5 GHz 802.11ac 40MHz	6.88	6.95	7.03	6.98	7.01	13.37	13.34	13.34	13.34	13.23
5 GHz 802.11ax SU 40MHz	6.59	6.72	6.65	6.7	6.69	9.39	9.32	9.23	9.21	9.23
5 GHz 802.11ac 80MHz	6.53	6.51	6.58	6.55	6.54	12.52	12.33	12.47	12.52	12.33
5 GHz 802.11ax SU 80MHz	6.58	6.58	6.56	6.51	6.57	9.45	9.38	9.38	9.30	9.34

Based on the most conservative measured triggering distance of 11mm, additional Body SAR measurements were required at 10mm from rear side for the above modes.

Right side – EUT Moving toward (trigger) to the Phantom

Mode	Distance to DUT Output power (dBm)									
	14	13	12	11	10	9	8	7	6	5
2.4 GHz 802.11b	19.74	19.69	19.73	19.58	19.71	10.65	10.53	10.65	10.72	10.54
2.4 GHz 802.11g	17.79	17.81	17.82	17.90	17.94	9.73	9.63	9.61	9.71	9.58
2.4 GHz 802.11n	16.41	16.43	16.51	16.48	16.43	9.27	9.25	9.33	9.27	9.37
2.4 GHz 802.11ax SU	16.54	16.57	16.57	16.47	16.60	9.16	9.3	9.21	9.31	9.19
2.4 GHz Bluetooth	14.18	14.15	14.12	14.15	14.28	4.51	4.51	4.62	4.52	4.53
5 GHz 802.11a (Except ch165)	16.06	16.03	16.02	15.93	16.08	7.32	7.3	7.41	7.4	7.31
5 GHz 802.11n 20MHz (Except ch165)	15.44	15.53	15.41	15.54	15.54	7.05	6.96	6.89	7.06	6.9
5 GHz 802.11ac 20MHz (Except ch165)	15.41	15.55	15.37	15.51	15.43	7.01	7.08	7.03	7.05	7.1
5 GHz 802.11ax SU 20MHz	9.48	9.42	9.34	9.44	9.36	6.8	6.97	6.85	6.85	6.85
5 GHz 802.11n 40MHz (Except ch62,102)	14.58	14.57	14.56	14.68	14.59	7.02	7	7.02	7.01	7.08
5 GHz 802.11ac 40MHz	13.24	13.37	13.39	13.27	13.40	7.07	7.02	6.87	6.94	6.92
5 GHz 802.11ax SU 40MHz	9.27	9.25	9.29	9.26	9.34	6.62	6.63	6.59	6.63	6.67
5 GHz 802.11ac 80MHz	12.41	12.38	9.27	12.41	12.44	6.56	6.7	6.71	6.68	6.62
5 GHz 802.11ax SU 80MHz	9.39	9.29	9.41	9.39	9.35	6.55	6.56	6.55	6.53	6.57

Right side – EUT Moving away (Release) from the Phantom

Mode	Distance to DUT Output power (dBm)									
	7	8	9	10	11	12	13	14	15	16
2.4 GHz 802.11b	10.64	10.57	10.57	10.64	10.7	19.75	19.70	19.74	19.69	19.72
2.4 GHz 802.11g	9.65	9.72	9.54	9.56	9.74	17.99	17.89	17.82	17.80	17.91
2.4 GHz 802.11n	9.43	9.27	9.38	9.42	9.41	16.39	16.45	16.49	16.56	16.56
2.4 GHz 802.11ax SU	9.21	9.2	9.3	9.27	9.24	16.48	16.61	16.49	16.57	16.61
2.4 GHz Bluetooth	4.61	4.56	4.65	4.46	4.58	14.09	14.23	14.15	14.14	14.23
5 GHz 802.11a (Except ch165)	7.26	7.25	7.41	7.29	7.36	16.10	16.01	16.00	16.06	16.11
5 GHz 802.11n 20MHz (Except ch165)	6.91	7.08	7.06	7.04	7.06	15.44	15.58	15.60	15.55	15.47
5 GHz 802.11ac 20MHz (Except ch165)	7.06	7.03	7.12	6.92	7.12	15.57	15.46	15.54	15.38	15.43
5 GHz 802.11ax SU 20MHz	6.78	6.83	6.83	6.79	6.96	9.43	9.37	9.47	9.37	9.37
5 GHz 802.11n 40MHz (Except ch62,102)	6.96	7.07	7.1	7.07	6.95	14.57	14.69	14.60	14.69	14.67
5 GHz 802.11ac 40MHz	6.98	6.88	6.94	6.96	6.93	13.38	13.38	13.27	13.35	13.26
5 GHz 802.11ax SU 40MHz	6.71	6.75	6.59	6.6	6.7	9.37	9.35	9.27	9.29	9.28
5 GHz 802.11ac 80MHz	6.54	6.56	6.52	6.54	6.57	12.37	12.44	12.43	12.39	12.39
5 GHz 802.11ax SU 80MHz	6.51	6.55	6.2-59	6.55	6.57	9.39	9.40	9.44	9.30	9.35

Based on the most conservative measured triggering distance of 9mm, additional Body SAR measurements were required at 8mm from right side for the above modes.

Right Corner side – EUT Moving toward (trigger) to the Phantom

Distance	Distance to DUT Output power (dBm)									
	19	18	17	16	15	14	13	12	11	10
2.4 GHz 802.11b	19.67	19.69	19.57	19.73	19.58	10.72	10.6	10.72	10.73	10.66
2.4 GHz 802.11g	17.82	17.87	17.88	17.96	17.99	9.65	9.65	9.67	9.57	9.57
2.4 GHz 802.11n	16.57	16.38	16.48	16.56	16.40	9.23	9.33	9.25	9.41	9.37
2.4 GHz 802.11ax SU	16.58	16.49	16.54	16.53	16.53	9.18	9.2	9.31	9.26	9.15
2.4 GHz Bluetooth	14.12	14.16	14.13	14.25	14.15	4.62	4.49	4.54	4.56	4.61
5 GHz 802.11a (Except ch165)	15.94	16.12	16.08	16.09	15.94	7.3	7.37	7.41	7.37	7.24
5 GHz 802.11n 20MHz (Except ch165)	15.45	15.46	15.52	15.42	15.44	6.89	6.99	6.89	7.06	7.08
5 GHz 802.11ac 20MHz (Except ch165)	15.43	15.46	15.57	15.44	15.39	6.94	6.95	6.93	7.07	6.95
5 GHz 802.11ax SU 20MHz	9.46	9.44	9.45	9.37	9.37	6.91	6.82	6.96	6.89	6.86
5 GHz 802.11n 40MHz (Except ch62,102)	14.58	14.70	14.61	14.60	14.61	6.95	6.98	6.95	7.05	7.13
5 GHz 802.11ac 40MHz	13.32	13.40	13.40	13.28	13.22	7.04	6.89	6.89	7.01	6.93
5 GHz 802.11ax SU 40MHz	9.30	9.39	9.26	9.34	9.29	6.61	6.57	6.59	6.74	6.74
5 GHz 802.11ac 80MHz	12.39	12.51	9.41	12.53	12.36	6.51	6.69	6.6	6.57	6.71
5 GHz 802.11ax SU 80MHz	9.37	9.44	9.39	9.42	9.31	6.51	6.55	6.56	6.53	6.53

Right Corner side – EUT Moving away (Release) from the Phantom

Mode / Distance	Distance to DUT Output power (dBm)									
	11	12	13	14	15	16	17	18	19	20
2.4 GHz 802.11b	10.72	10.54	10.67	10.55	10.56	19.74	19.66	19.70	19.70	19.62
2.4 GHz 802.11g	9.57	9.57	9.58	9.67	9.68	17.79	17.82	17.92	17.88	17.80
2.4 GHz 802.11n	9.38	9.36	9.33	9.42	9.33	16.37	16.48	16.45	16.40	16.57
2.4 GHz 802.11ax SU	9.15	9.29	9.3	9.3	9.19	16.60	16.63	16.51	16.46	16.59
2.4 GHz Bluetooth	4.63	4.59	4.52	4.61	4.51	14.25	14.18	14.11	14.15	14.20
5 GHz 802.11a (Except ch165)	7.31	7.23	7.31	7.39	7.3	16.04	16.13	15.95	16.12	15.98
5 GHz 802.11n 20MHz (Except ch165)	7	6.89	6.97	7.02	6.89	15.41	15.42	15.50	15.57	15.42
5 GHz 802.11ac 20MHz (Except ch165)	7.02	7.08	6.99	6.96	7.11	15.54	15.48	15.49	15.46	15.41
5 GHz 802.11ax SU 20MHz	6.87	6.82	6.79	6.94	6.97	9.42	9.51	9.50	9.52	9.44
5 GHz 802.11n 40MHz (Except ch62,102)	6.99	7	7.08	7.14	7.13	14.54	14.61	14.51	14.57	14.71
5 GHz 802.11ac 40MHz	7.04	6.99	6.94	7.05	6.99	13.27	13.26	13.37	13.27	13.33
5 GHz 802.11ax SU 40MHz	6.59	6.65	6.62	6.72	6.6	9.22	9.27	9.39	9.34	9.35
5 GHz 802.11ac 80MHz	6.59	6.52	6.51	6.59	6.59	12.48	12.33	12.49	12.41	12.42
5 GHz 802.11ax SU 80MHz	6.58	6.51	6.51	6.51	6.51	9.45	9.42	9.36	9.34	9.34

Based on the most conservative measured triggering distance of 14mm, additional Body SAR measurements were required at 13mm from right corner side for the above modes.

Top side – EUT Moving toward (trigger) to the Phantom

Distance	Distance to DUT Output power (dBm)									
	21	20	19	18	17	16	15	14	13	12
2.4 GHz 802.11b	19.73	19.71	19.67	19.72	19.71	10.61	10.57	10.54	10.63	10.71
2.4 GHz 802.11g	17.83	17.90	17.88	17.92	17.96	9.64	9.7	9.69	9.74	9.67
2.4 GHz 802.11n	16.45	16.46	16.57	16.57	16.55	9.25	9.42	9.33	9.43	9.35
2.4 GHz 802.11ax SU	16.48	16.47	16.56	16.63	16.46	9.3	9.2	9.2	9.32	9.23
2.4 GHz Bluetooth	14.10	14.10	14.23	14.20	14.13	4.43	4.6	4.46	4.43	4.51
5 GHz 802.11a (Except ch165)	15.99	16.00	16.10	16.00	16.01	7.42	7.34	7.41	7.36	7.3
5 GHz 802.11n 20MHz (Except ch165)	15.50	15.49	15.51	15.45	15.54	6.98	7.03	7	7.07	6.93
5 GHz 802.11ac 20MHz (Except ch165)	15.49	15.49	15.53	15.45	15.54	7.09	7.08	7.02	7.02	6.94
5 GHz 802.11ax SU 20MHz	9.45	9.34	9.32	9.49	9.48	6.8	6.83	6.86	6.92	6.94
5 GHz 802.11n 40MHz (Except ch62,102)	14.57	14.66	14.64	14.53	14.64	6.99	7.04	7.05	6.99	7.04
5 GHz 802.11ac 40MHz	13.38	13.23	13.28	13.41	13.25	7.04	7.07	7.03	6.97	6.89
5 GHz 802.11ax SU 40MHz	9.27	9.35	9.37	9.24	9.35	6.66	6.67	6.63	6.63	6.56
5 GHz 802.11ac 80MHz	12.37	12.51	9.25	12.38	12.49	6.58	6.7	6.74	6.68	6.76
5 GHz 802.11ax SU 80MHz	9.47	9.33	9.48	9.30	9.40	6.58	6.51	6.52	6.55	6.59

Top side – EUT Moving away (Release) from the Phantom

Mode / Distance	Distance to DUT Output power (dBm)									
	13	14	15	16	17	18	19	20	21	22
2.4 GHz 802.11b	10.59	10.57	10.7	10.57	10.73	19.74	19.74	19.70	19.59	19.67
2.4 GHz 802.11g	9.56	9.7	9.58	9.64	9.69	17.85	17.89	17.87	17.93	17.85
2.4 GHz 802.11n	9.38	9.27	9.38	9.37	9.3	16.54	16.54	16.47	16.47	16.53
2.4 GHz 802.11ax SU	9.2	9.32	9.26	9.32	9.33	16.62	16.49	16.58	16.62	16.53
2.4 GHz Bluetooth	4.55	4.57	4.59	4.61	4.45	14.22	14.09	14.15	14.28	14.12
5 GHz 802.11a (Except ch165)	7.42	7.25	7.29	7.3	7.31	16.12	15.99	15.96	16.11	16.09
5 GHz 802.11n 20MHz (Except ch165)	7.02	7.01	6.88	7.06	6.89	15.56	15.59	15.53	15.53	15.42
5 GHz 802.11ac 20MHz (Except ch165)	6.93	6.98	7	6.97	7	15.40	15.41	15.41	15.41	15.39
5 GHz 802.11ax SU 20MHz	6.79	6.82	6.89	6.82	6.94	9.48	9.49	9.44	9.47	9.49
5 GHz 802.11n 40MHz (Except ch62,102)	6.96	7.02	7.07	7.09	7.06	14.70	14.61	14.55	14.67	14.60
5 GHz 802.11ac 40MHz	6.87	6.95	6.9	6.9	7.04	13.24	13.38	13.31	13.23	13.28
5 GHz 802.11ax SU 40MHz	6.65	6.56	6.62	6.62	6.66	9.30	9.21	9.25	9.26	9.41
5 GHz 802.11ac 80MHz	6.56	6.53	6.51	6.52	6.56	12.35	12.36	12.50	12.36	12.36
5 GHz 802.11ax SU 80MHz	6.53	6.59	6.57	6.58	6.54	9.35	9.45	9.31	9.28	9.33

Based on the most conservative measured triggering distance of 16mm, additional Body SAR measurements were required at 15mm from top side for the above modes.

3.3 Proximity Sensor Coverage for SAR measurements

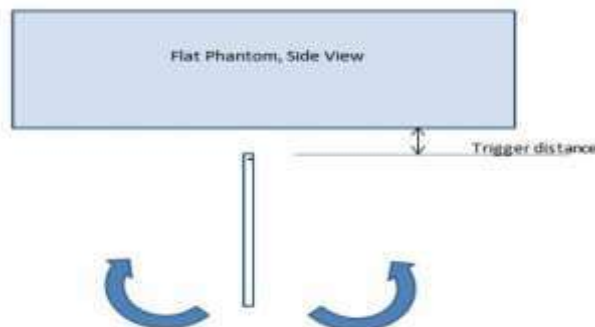
(KDB 616217 D04v01r02 §6.3)

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

3.4 Proximity Sensor Tilt Angle Assessment

(KDB 616217 D04v01r02 §6.4)

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Bottom side parallel to the base of the flat phantom for each band. The EUT was rotated about Bottom side 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 side) KDB 616217 §6.4

Summary of Tablet Tilt Angle influence to Proximity Sensor Triggering (Top side)

Band (MHz)	Minimum distance at which power reduction was maintained over-45°	Power reduction status										
		-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°
2450 MHz	16 mm	On	On	On	On	On	On	On	On	On	On	On
5000 Mhz	16 mm	On	On	On	On	On	On	On	On	On	On	On

3.5 Resulting test positions for Body SAR measurements

Wireless technologies	Position	§6.2 Triggering Distance [mm]	§6.3 Coverage	§6.4 Tilt Angle	Worst case distance for Body SAR [mm]
WLAN/BT Ant 1	Rear	11	N/A	N/A	10
	Right	9	N/A	N/A	8
	Right Corner	14	N/A	N/A	13
	Top	16	N/A	N/A	15

Note: FCC KDB Publication 616217 D04v01r02 Section 6 was used as a guideline for selecting SAR test distances for this device when being used in Proximity use conditions.

4. WLAN/BT Ant 2

4.1 Power reduction Verification

Mechanism	Mode/Band	Device State Index		
		Un-triggered (Max Power)	Mechanism 1: (Reduced Power)	Mechanism 2: (Reduced Power)
Grip on	2.4 GHz 802.11b	19.66	10.24	
Grip on	2.4 GHz 802.11g	17.77	9.31	
Grip on	2.4 GHz 802.11n	16.42	9.03	
Grip on	2.4 GHz 802.11ax SU	16.32	8.99	
Grip on	2.4 GHz Bluetooth	14.07	4.61	
Grip on	5 GHz 802.11a (Except ch165)	16.11	7.22	
Grip on	5 GHz 802.11n 20MHz (Except ch165)	15.48	6.87	
Grip on	5 GHz 802.11ac 20MHz	15.39	6.78	
Grip on	5 GHz 802.11ax SU 20MHz	9.33	6.67	
Grip on	5 GHz 802.11n 40MHz (Except ch62 and 102)	14.54	6.68	
Grip on	5 GHz 802.11ac 40MHz (Except ch62 and 102)	13.28	6.54	
Grip on	5 GHz 802.11ax SU 40MHz	9.29	6.51	
Grip on	5 GHz 802.11ac 80MHz	12.39	6.56	
Grip on	5 GHz 802.11ax SU 80MHz	9.31	6.53	
mmWave active	2.4 GHz 802.11b	19.66	19.66	
mmWave active	2.4 GHz 802.11g	17.77	17.77	
mmWave active	2.4 GHz 802.11n	16.42	16.42	
mmWave active	2.4 GHz 802.11ax SU	16.32	16.32	
mmWave active	2.4 GHz Bluetooth	14.07	14.07	

mmWave active	5 GHz 802.11a (Except ch165)	16.11	16.11	
mmWave active	5 GHz 802.11n 20MHz (Except ch165)	15.48	15.48	
mmWave active	5 GHz 802.11ac 20MHz	15.39	15.39	
mmWave active	5 GHz 802.11ax SU 20MHz	9.33	9.33	
mmWave active	5 GHz 802.11n 40MHz (Except ch62 and 102)	14.54	14.54	
mmWave active	5 GHz 802.11ac 40MHz (Except ch62 and 102)	13.28	13.28	
mmWave active	5 GHz 802.11ax SU 40MHz	9.29	9.29	
mmWave active	5 GHz 802.11ac 80MHz	12.39	12.39	
mmWave active	5 GHz 802.11ax SU 80MHz	9.31	9.31	
Grip on then mmWave active	5 GHz 802.11ax SU 80MHz	19.66	10.24	7.33
Grip on then mmWave active	2.4 GHz 802.11g	17.77	9.31	7.01
Grip on then mmWave active	2.4 GHz 802.11n	16.42	9.03	6.83
Grip on then mmWave active	2.4 GHz 802.11ax SU	16.32	8.99	6.69
Grip on then mmWave active	2.4 GHz Bluetooth	14.07	4.61	4.58
Grip on then mmWave active	5 GHz 802.11a (Except ch165)	16.11	7.22	6.16
Grip on then mmWave active	5 GHz 802.11n 20MHz (Except ch165)	15.48	6.87	6.12
Grip on then mmWave active	5 GHz 802.11ac 20MHz	15.39	6.78	6.00
Grip on then mmWave active	5 GHz 802.11ax SU 20MHz	9.33	6.67	6.16
Grip on then mmWave active	5 GHz 802.11n 40MHz (Except ch62 and 102)	14.54	6.68	6.08
Grip on then mmWave active	5 GHz 802.11ac 40MHz (Except ch62 and 102)	13.28	6.54	5.94
Grip on then mmWave active	5 GHz 802.11ax SU 40MHz	9.29	6.51	6.11

Grip on then mmWave active	5 GHz 802.11ac 80MHz	12.39	6.56	6.08
Grip on then mmWave active	5 GHz 802.11ax SU 80MHz	9.31	6.53	6.01
mmWave active then Grip on	2.4 GHz 802.11b	19.66	19.66	7.33
mmWave active then Grip on	2.4 GHz 802.11g	17.77	17.77	7.01
mmWave active then Grip on	2.4 GHz 802.11n	16.42	16.42	6.83
mmWave active then Grip on	2.4 GHz 802.11ax SU	16.32	16.32	6.69
mmWave active then Grip on	2.4 GHz Bluetooth	14.07	14.07	4.58
mmWave active then Grip on	5 GHz 802.11a (Except ch165)	16.11	16.11	6.16
mmWave active then Grip on	5 GHz 802.11n 20MHz (Except ch165)	15.48	15.48	6.12
mmWave active then Grip on	5 GHz 802.11ac 20MHz	15.39	15.39	6.00
mmWave active then Grip on	5 GHz 802.11ax SU 20MHz	9.33	9.33	6.16
mmWave active then Grip on	5 GHz 802.11n 40MHz (Except ch62 and 102)	14.54	14.54	6.08
mmWave active then Grip on	5 GHz 802.11ac 40MHz (Except ch62 and 102)	13.28	13.28	5.94
mmWave active then Grip on	5 GHz 802.11ax SU 40MHz	9.29	9.29	6.11
mmWave active then Grip on	5 GHz 802.11ac 80MHz	12.39	12.39	6.08
mmWave active then Grip on	5 GHz 802.11ax SU 80MHz	9.31	9.31	6.01

4.2 Proximity sensor triggering Distance Verification.

Tissue simulating liquid	Trigger distance – Rear		Trigger distance – Left Side		Trigger distance – Left Corner Side		Trigger distance – Top	
	Moving toward phantom [mm]	Moving away from phantom [mm]	Moving toward phantom [mm]	Moving away from phantom [mm]	Moving toward phantom [mm]	Moving away from phantom [mm]	Moving toward phantom [mm]	Moving away from phantom [mm]
2450MHz	12	13	8	9	9	10	9	10
5000MHz	12	13	8	9	9	10	9	10

Rear side – EUT Moving toward (trigger) to the Phantom

Distance	Distance to DUT Output power (dBm)									
	17	16	15	14	13	12	11	10	9	8
2.4 GHz 802.11b	19.68	19.71	19.69	19.62	19.56	10.59	10.7	10.57	10.73	10.7
2.4 GHz 802.11g	17.90	17.90	17.80	17.98	17.84	9.57	9.62	9.63	9.62	9.69
2.4 GHz 802.11n	16.45	16.37	16.39	16.50	16.54	9.41	9.34	9.35	9.42	9.37
2.4 GHz 802.11ax SU	13.50	13.61	13.49	13.57	13.50	9.1	9.01	9.08	9.06	8.98
2.4 GHz Bluetooth	14.27	14.19	14.20	14.24	14.28	4.53	4.41	4.39	4.48	4.35
5 GHz 802.11a (Except ch165)	16.09	15.98	16.00	16.13	16.11	7.24	7.22	7.23	7.38	7.38
5 GHz 802.11n 20MHz (Except ch165)	15.56	15.47	15.58	15.41	15.55	7	7.05	7.01	6.98	6.93
5 GHz 802.11ac 20MHz	15.47	15.44	15.55	15.55	15.47	6.98	7.04	6.95	6.94	7.08
5 GHz 802.11ax SU 20MHz	9.35	9.34	9.35	9.51	9.36	6.89	6.88	6.84	6.97	6.98
5 GHz 802.11n 40MHz (Except ch62 and 102)	14.83	14.88	14.96	14.86	14.86	6.97	7	7.04	7.04	7.04
5 GHz 802.11ac 40MHz (Except ch62 and 102)	13.31	13.24	13.31	13.26	13.29	6.87	7.04	6.99	6.93	6.94

5 GHz 802.11ax SU 40MHz	9.34	9.38	9.35	9.38	9.22	6.74	6.64	6.62	6.74	6.61
5 GHz 802.11ac 80MHz	12.41	12.39	9.27	12.35	12.50	6.63	6.58	6.68	6.56	6.68
5 GHz 802.11ax SU 80MHz	9.36	9.48	9.44	9.28	9.35	6.51	6.69	6.65	6.58	6.56

Rear side – EUT Moving away (Release) from the Phantom

Mode / Distance	Distance to DUT Output power (dBm)									
	9	10	11	12	13	14	15	16	17	18
2.4 GHz 802.11b	10.6 6	10.54	10.67	10.56	10.6 7	19.68	19.58	19.69	19.56	19.71
2.4 GHz 802.11g	9.63	9.68	9.55	9.69	9.65	17.84	17.79	17.97	17.98	17.91
2.4 GHz 802.11n	9.29	9.28	9.38	9.24	9.33	16.55	16.42	16.55	16.38	16.46
2.4 GHz 802.11ax SU	9	9	9.13	9.1	9.02	13.46	13.53	13.55	13.53	13.57
2.4 GHz Bluetooth	4.35	4.45	4.41	4.35	4.53	14.15	14.14	14.24	14.26	14.26
5 GHz 802.11a (Except ch165)	7.36	7.4	7.29	7.23	7.38	15.95	16.03	16.01	16.02	16.09
5 GHz 802.11n 20MHz (Except ch165)	6.91	6.89	6.91	6.94	7.04	15.56	15.61	15.54	15.59	15.53
5 GHz 802.11ac 20MHz	6.95	6.99	7	7.12	7.05	15.51	15.53	15.39	15.48	15.45
5 GHz 802.11ax SU 20MHz	6.98	6.86	6.8	6.94	6.78	9.32	9.45	9.39	9.46	9.39
5 GHz 802.11n 40MHz (Except ch62 and 102)	7.06	7.06	7.1	7.11	6.97	14.85	14.86	14.80	14.90	14.86
5 GHz 802.11ac 40MHz (Except ch62 and 102)	7	6.92	6.91	7.06	7.02	13.23	13.28	13.28	13.35	13.28
5 GHz 802.11ax SU 40MHz	6.58	6.71	6.74	6.61	6.6	9.32	9.24	9.36	9.33	9.21
5 GHz 802.11ac 80MHz	6.53	6.48	6.59	6.64	6.47	12.39	12.38	12.44	12.45	12.40

5 GHz 802.11ax SU 80MHz	6.63	6.57	6.64	6.54	6.52	9.46	9.39	9.32	9.33	9.35
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Based on the most conservative measured triggering distance of 12mm, additional Body SAR measurements were required at 11mm from rear side for the above modes.

Left side – EUT Moving toward (trigger) to the Phantom

Distance	Distance to DUT Output power (dBm)									
	13	12	11	10	9	8	7	6	5	4
2.4 GHz 802.11b	19.67	19.61	19.54	19.71	19.68	10.57	10.7	10.54	10.59	10.63
2.4 GHz 802.11g	17.94	17.89	17.82	17.86	17.98	9.74	9.61	9.68	9.68	9.73
2.4 GHz 802.11n	16.46	16.39	16.43	16.54	16.56	9.27	9.4	9.24	9.3	9.31
2.4 GHz 802.11ax SU	13.57	13.46	13.62	13.55	13.43	9.05	8.97	9	9.09	9.04
2.4 GHz Bluetooth	14.25	14.20	14.25	14.10	14.23	4.52	4.37	4.36	4.51	4.55
5 GHz 802.11a (Except ch165)	15.97	15.95	15.96	15.95	15.95	7.28	7.31	7.35	7.34	7.4
5 GHz 802.11n 20MHz (Except ch165)	15.51	15.61	15.50	15.46	15.47	6.96	6.92	6.98	7.03	6.91
5 GHz 802.11ac 20MHz	15.42	15.53	15.41	15.45	15.49	7.12	6.92	7.07	6.98	7.08
5 GHz 802.11ax SU 20MHz	9.40	9.34	9.48	9.51	9.37	6.83	6.88	6.78	6.85	6.9
5 GHz 802.11n 40MHz (Except ch62 and 102)	14.87	14.92	14.82	14.87	14.96	6.99	7.08	7.04	7.04	7
5 GHz 802.11ac 40MHz (Except ch62 and 102)	13.23	13.30	13.23	13.38	13.36	7	7.06	7	6.93	6.93
5 GHz 802.11ax SU 40MHz	9.34	9.26	9.38	9.23	9.39	6.74	6.64	6.56	6.74	6.67
5 GHz 802.11ac 80MHz	12.41	12.36	9.33	12.44	12.38	6.5	6.65	6.59	6.7	6.59
5 GHz 802.11ax SU 80MHz	9.38	9.46	9.36	9.30	9.45	6.63	6.5	6.68	6.51	6.53

Left side – EUT Moving away (Release) from the Phantom

Mode / Distance	Distance to DUT Output power (dBm)									
	5	6	7	8	9	10	11	12	13	14
2.4 GHz 802.11b	10.56	10.58	10.67	10.61	10.53	19.74	19.70	19.60	19.64	19.61
2.4 GHz 802.11g	9.68	9.71	9.68	9.56	9.61	17.88	17.97	17.88	17.87	17.90
2.4 GHz 802.11n	9.32	9.42	9.25	9.34	9.34	16.41	16.45	16.45	16.55	16.43
2.4 GHz 802.11ax SU	9.03	8.95	8.95	9.05	9.04	13.53	13.63	13.61	13.61	13.59
2.4 GHz Bluetooth	4.37	4.38	4.4	4.51	4.43	14.24	14.28	14.17	14.26	14.18
5 GHz 802.11a (Except ch165)	7.25	7.34	7.38	7.37	7.32	15.95	16.12	15.95	16.02	15.96
5 GHz 802.11n 20MHz (Except ch165)	7.03	6.88	7.03	6.95	6.92	15.49	15.58	15.43	15.42	15.61
5 GHz 802.11ac 20MHz	6.98	6.94	6.92	7.03	7.1	15.46	15.42	15.53	15.57	15.40
5 GHz 802.11ax SU 20MHz	6.93	6.87	6.8	6.89	6.79	9.39	9.46	9.34	9.48	9.33
5 GHz 802.11n 40MHz (Except ch62 and 102)	7.09	7.01	7.13	7.08	7.12	14.95	14.84	14.88	14.94	14.91
5 GHz 802.11ac 40MHz (Except ch62 and 102)	6.99	7.04	6.93	6.96	6.93	13.26	13.34	13.36	13.23	13.23
5 GHz 802.11ax SU 40MHz	6.61	6.61	6.7	6.68	6.64	9.31	9.38	9.25	9.34	9.30
5 GHz 802.11ac 80MHz	6.56	6.52	6.49	6.56	6.52	12.46	12.45	12.41	12.53	12.37
5 GHz 802.11ax SU 80MHz	6.52	6.59	6.56	6.49	6.65	9.32	9.35	9.42	9.38	9.41

Based on the most conservative measured triggering distance of 8mm, additional Body SAR measurements were required at 7mm from left side for the above modes.

Left Corner side – EUT Moving toward (trigger) to the Phantom

Distance	Distance to DUT Output power (dBm)									
	14	13	12	11	10	9	8	7	6	5
2.4 GHz 802.11b	19.58	19.59	19.62	19.63	19.73	10.54	10.73	10.72	10.6	10.65
2.4 GHz 802.11g	17.95	17.99	17.93	17.84	17.79	9.56	9.74	9.72	9.62	9.67
2.4 GHz 802.11n	16.50	16.55	16.46	16.47	16.45	9.31	9.4	9.36	9.3	9.34
2.4 GHz 802.11ax SU	13.60	13.57	13.59	13.63	13.55	9.05	9.01	9.12	8.93	8.93
2.4 GHz Bluetooth	14.19	14.12	14.13	14.14	14.21	4.55	4.43	4.52	4.53	4.43
5 GHz 802.11a (Except ch165)	15.97	16.09	15.98	16.08	16.11	7.22	7.35	7.4	7.41	7.31
5 GHz 802.11n 20MHz (Except ch165)	15.50	15.59	15.41	15.44	15.47	7.06	6.97	6.97	6.91	7.05
5 GHz 802.11ac 20MHz	15.39	15.45	15.39	15.53	15.42	6.95	6.96	7.05	6.94	7.09
5 GHz 802.11ax SU 20MHz	9.33	9.51	9.35	9.32	9.32	6.78	6.98	6.84	6.91	6.92
5 GHz 802.11n 40MHz (Except ch62 and 102)	14.93	14.88	14.95	14.94	14.82	7.1	7.15	7.01	6.95	6.98
5 GHz 802.11ac 40MHz (Except ch62 and 102)	13.24	13.27	13.27	13.34	13.38	7.01	7.03	7.03	7.06	6.96
5 GHz 802.11ax SU 40MHz	9.41	9.40	9.32	9.25	9.40	6.67	6.67	6.63	6.64	6.68
5 GHz 802.11ac 80MHz	12.44	12.38	9.38	12.36	12.39	6.63	6.64	6.61	6.67	6.74
5 GHz 802.11ax SU 80MHz	9.33	9.42	9.45	9.42	9.45	6.54	6.61	6.66	6.49	6.6

Left Corner side – EUT Moving away (Release) from the Phantom

Mode / Distance	Distance to DUT Output power (dBm)									
	6	7	8	9	10	11	12	13	14	15
2.4 GHz 802.11b	10.6 5	10.61	10.6	10.62	10.6 2	19.63	19.71	19.64	19.60	19.57
2.4 GHz 802.11g	9.65	9.74	9.61	9.69	9.61	17.95	17.99	17.87	17.99	17.81
2.4 GHz 802.11n	9.42	9.27	9.26	9.29	9.37	16.53	16.57	16.38	16.54	16.38
2.4 GHz 802.11ax SU	9.02	9.13	8.97	9.08	9.07	13.45	13.62	13.62	13.45	13.60
2.4 GHz Bluetooth	4.48	4.37	4.51	4.39	4.48	14.20	14.12	14.21	14.09	14.13
5 GHz 802.11a (Except ch165)	7.33	7.26	7.38	7.34	7.34	16.08	16.07	16.06	15.97	15.94
5 GHz 802.11n 20MHz (Except ch165)	6.98	7.07	6.98	6.88	6.97	15.47	15.57	15.45	15.53	15.49
5 GHz 802.11ac 20MHz	7.08	7.06	6.96	7	7.05	15.40	15.42	15.41	15.40	15.57
5 GHz 802.11ax SU 20MHz	6.84	6.89	6.89	6.98	6.93	9.45	9.43	9.45	9.48	9.47
5 GHz 802.11n 40MHz (Except ch62 and 102)	7.14	6.99	6.97	7.13	7.03	14.88	14.85	14.83	14.84	14.88
5 GHz 802.11ac 40MHz (Except ch62 and 102)	6.9	7.04	6.94	6.99	7.06	13.26	13.25	13.27	13.25	13.35
5 GHz 802.11ax SU 40MHz	6.59	6.67	6.72	6.58	6.7	9.34	9.25	9.36	9.27	9.38
5 GHz 802.11ac 80MHz	6.63	6.67	6.56	6.48	6.61	12.41	12.48	12.53	12.45	12.46
5 GHz 802.11ax SU 80MHz	6.65	6.55	6.62	6.59	6.52	9.40	9.45	9.47	9.35	9.47

Based on the most conservative measured triggering distance of 9mm, additional Body SAR measurements were required at 8mm from left corner side for the above modes.

Top side – EUT Moving toward (trigger) to the Phantom

Distance	Distance to DUT Output power (dBm)									
	14	13	12	11	10	9	8	7	6	5
2.4 GHz 802.11b	19.73	19.73	19.66	19.74	19.64	10.58	10.53	10.72	10.67	10.64
2.4 GHz 802.11g	17.88	17.93	17.98	17.97	17.84	9.74	9.66	9.71	9.69	9.54
2.4 GHz 802.11n	16.54	16.37	16.52	16.54	16.49	9.43	9.29	9.36	9.41	9.32
2.4 GHz 802.11ax SU	13.55	13.46	13.52	13.62	13.47	9.12	9.02	9.04	9	9.05
2.4 GHz Bluetooth	14.15	14.26	14.22	14.27	14.18	4.37	4.43	4.54	4.53	4.39
5 GHz 802.11a (Except ch165)	16.02	16.08	16.11	16.13	16.02	7.29	7.33	7.25	7.3	7.26
5 GHz 802.11n 20MHz (Except ch165)	15.46	15.58	15.45	15.59	15.53	6.99	7.04	6.93	6.99	6.92
5 GHz 802.11ac 20MHz	15.47	15.54	15.47	15.42	15.40	7.06	7	6.93	6.96	7.01
5 GHz 802.11ax SU 20MHz	9.43	9.42	9.44	9.45	9.49	6.93	6.96	6.82	6.78	6.89
5 GHz 802.11n 40MHz (Except ch62 and 102)	14.83	14.87	14.98	14.96	14.95	7.13	7	7.13	7.07	7.1
5 GHz 802.11ac 40MHz (Except ch62 and 102)	13.28	13.38	13.38	13.29	13.35	6.88	7.05	6.99	6.94	6.9
5 GHz 802.11ax SU 40MHz	9.27	9.39	9.41	9.25	9.22	6.69	6.6	6.65	6.74	6.56
5 GHz 802.11ac 80MHz	12.33	12.42	9.37	12.44	12.38	6.62	6.69	6.59	6.75	6.56
5 GHz 802.11ax SU 80MHz	9.28	9.38	9.43	9.43	9.43	6.55	6.51	6.58	6.58	6.68

Top side – EUT Moving away (Release) from the Phantom

Mode / Distance	Distance to DUT Output power (dBm)									
	6	7	8	9	10	11	12	13	14	15
2.4 GHz 802.11b	10.7 1	10.7 3	10.69	10.72	10.59	19.71	19.65	19.70	19.57	19.60
2.4 GHz 802.11g	9.59	9.69	9.71	9.63	9.66	17.98	17.87	17.92	17.92	17.79
2.4 GHz 802.11n	9.26	9.33	9.35	9.38	9.31	16.57	16.53	16.53	16.51	16.40
2.4 GHz 802.11ax SU	8.94	9.1	9.13	8.96	9.07	13.61	13.60	13.63	13.48	13.57
2.4 GHz Bluetooth	4.39	4.53	4.4	4.37	4.38	14.15	14.11	14.20	14.26	14.13
5 GHz 802.11a (Except ch165)	7.38	7.4	7.25	7.24	7.23	15.96	16.10	15.98	15.98	16.09
5 GHz 802.11n 20MHz (Except ch165)	6.94	7	7.01	7.02	6.89	15.42	15.46	15.41	15.60	15.53
5 GHz 802.11ac 20MHz	7.11	6.95	7.09	7.02	6.96	15.57	15.52	15.51	15.54	15.57
5 GHz 802.11ax SU 20MHz	6.86	6.87	6.9	6.88	6.82	9.40	9.50	9.49	9.42	9.41
5 GHz 802.11n 40MHz (Except ch62 and 102)	7.02	7.01	7.09	7.15	7.05	14.98	14.93	14.89	14.84	14.92
5 GHz 802.11ac 40MHz (Except ch62 and 102)	6.98	7.01	7.03	7.02	7.03	13.23	13.23	13.27	13.41	13.26
5 GHz 802.11ax SU 40MHz	6.63	6.64	6.59	6.59	6.66	9.31	9.31	9.25	9.38	9.26
5 GHz 802.11ac 80MHz	6.57	6.6	6.61	6.62	6.58	12.50	12.45	12.45	12.35	12.47
5 GHz 802.11ax SU 80MHz	6.62	6.6	6.59	6.52	6.67	9.37	9.29	9.35	9.31	9.33

Based on the most conservative measured triggering distance of 9mm, additional Body SAR measurements were required at 8mm from top side for the above modes.

4.3 Proximity Sensor Coverage for SAR measurements

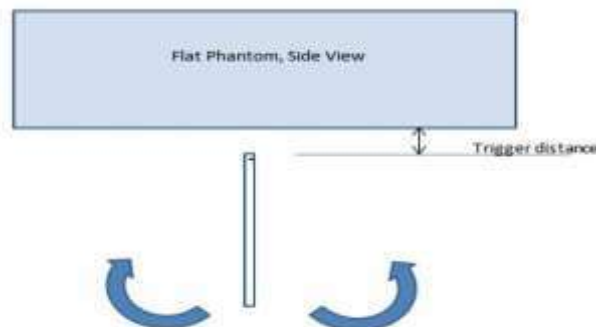
(KDB 616217 D04v01r02 §6.3)

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

4.4 Proximity Sensor Tilt Angle Assessment

(KDB 616217 D04v01r02 §6.4)

The DUT was positioned directly below the flat phantom at the minimum measured trigger distance with Bottom side parallel to the base of the flat phantom for each band. The EUT was rotated about Bottom side 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 side) KDB 616217 §6.4

Summary of Tablet Tilt Angle influence to Proximity Sensor Triggering (Top side)

Band (MHz)	Minimum distance at which power reduction was maintained over-45°	Power reduction status										
		-45°	-40°	-30°	-20°	-10°	0°	10°	20°	30°	40°	45°
2450 MHz	9 mm	On	On	On	On	On	On	On	On	On	On	On
5000 Mhz	9 mm	On	On	On	On	On	On	On	On	On	On	On

4.5 Resulting test positions for Body SAR measurements

Wireless technologies	Position	§6.2 Triggering Distance [mm]	§6.3 Coverage	§6.4 Tilt Angle	Worst case distance for Body SAR [mm]
WLAN/BT Ant 2	Rear	12	N/A	N/A	11
	Left	8	N/A	N/A	7
	Left Corner	9	N/A	N/A	8
	Top	9	N/A	N/A	8

Note: FCC KDB Publication 616217 D04v01r02 Section 6 was used as a guideline for selecting SAR test distances for this device when being used in Proximity use conditions.