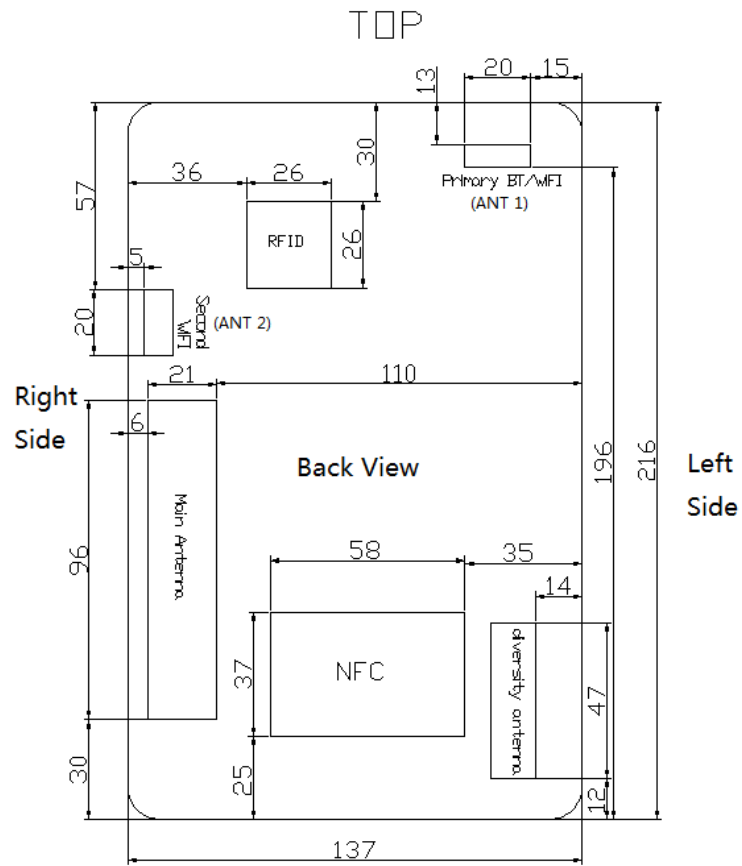


Appendix E. Antenna location and standalone SAR test exclusion

The location of the antenna inside EUT is as below:



The side of button

Unit: mm

Figure: The location of the antennas

Note: The Diversity antenna does not support TX function.

The distance <50mm

Mode	Position	Distance (mm)	Pmax (dBm)	Pmax (mW)	f (GHz)	Calculation Result	SAR Exclusion threshold	Test Requirement (Yes/No)
GSM850	Rear	5	30	1000.00	0.8488	184.26	3	Yes
	Right	6	30	1000.00	0.8488	153.55	3	Yes
	Bottom	30	30	1000.00	0.8488	30.71	3	Yes
GSM1900	Rear	5	27	501.19	1.9098	138.52	3	Yes
	Right	6	27	501.19	1.9098	115.44	3	Yes
	Bottom	30	27	501.19	1.9098	23.09	3	Yes
UMTS B2	Rear	5	22.5	177.83	1.9076	49.12	3	Yes
	Right	6	22.5	177.83	1.9076	40.93	3	Yes
	Bottom	30	22.5	177.83	1.9076	8.19	3	Yes
UMTS B4	Rear	5	22.5	177.83	1.7526	47.08	3	Yes
	Right	6	22.5	177.83	1.7526	39.24	3	Yes
	Bottom	30	22.5	177.83	1.7526	7.85	3	Yes
UMTS B5	Rear	5	22	158.49	0.8466	29.17	3	Yes
	Right	6	22	158.49	0.8466	24.30	3	Yes
	Bottom	30	22	158.49	0.8466	4.86	3	Yes
LTE B2	Rear	5	20	100.00	1.9	27.57	3	Yes
	Right	6	20	100.00	1.9	22.97	3	Yes
	Bottom	30	20	100.00	1.9	4.59	3	Yes
LTE B4	Rear	5	21	125.89	1.7450	33.26	3	Yes
	Right	6	21	125.89	1.7450	27.72	3	Yes
	Bottom	30	21	125.89	1.7450	5.54	3	Yes
LTE B5	Rear	5	24	251.19	0.8440	46.15	3	Yes
	Right	6	24	251.19	0.8440	38.46	3	Yes
	Bottom	30	24	251.19	0.8440	7.69	3	Yes
LTE B7	Rear	5	23	199.53	2.56	63.85	3	Yes
	Right	6	23	199.53	2.56	53.21	3	Yes
	Bottom	30	23	199.53	2.56	10.64	3	Yes

Mode	Position	Distance (mm)	Pmax (dBm)	Pmax (mW)	f (GHz)	Calculation Result	SAR Exclusion threshold	Test Requirement (Yes/No)
LTE B12	Rear	5	24	251.19	0.711	42.36	3	Yes
	Right	6	24	251.19	0.711	35.30	3	Yes
	Bottom	30	24	251.19	0.711	7.06	3	Yes
LTE B13	Rear	5	24	251.19	0.782	44.43	3	Yes
	Right	6	24	251.19	0.782	37.02	3	Yes
	Bottom	30	24	251.19	0.782	7.40	3	Yes
LTE B14	Rear	5	24	251.19	0.793	44.74	3	Yes
	Right	6	24	251.19	0.793	37.28	3	Yes
	Bottom	30	24	251.19	0.793	7.46	3	Yes
LTE B17	Rear	5	24	251.19	0.711	42.36	3	Yes
	Right	6	24	251.19	0.711	35.30	3	Yes
	Bottom	30	24	251.19	0.711	7.06	3	Yes
BT(ANT 1)	Rear	5	10	10.00	2.48	3.15	3	Yes
	Top	13	10	10.00	2.48	1.21	3	No
	Left	15	10	10.00	2.48	1.05	3	No
2.4G WiFi(ANT 1)	Rear	5	15	31.62	2.462	9.92	3	Yes
	Top	13	15	31.62	2.462	3.82	3	Yes
	Left	15	15	31.62	2.462	3.31	3	Yes
5.2G WiFi(ANT 1)	Rear	5	14	25.12	5.24	11.50	3	Yes
	Top	13	14	25.12	5.24	4.42	3	Yes
	Left	15	14	25.12	5.24	3.83	3	Yes
5.3G WiFi(ANT 1)	Rear	5	14	25.12	5.32	11.59	3	Yes
	Top	13	14	25.12	5.32	4.46	3	Yes
	Left	15	14	25.12	5.32	3.86	3	Yes
5.5G WiFi(ANT 1)	Rear	5	13	19.95	5.7	9.53	3	Yes
	Top	13	13	19.95	5.7	3.66	3	Yes
	Left	15	13	19.95	5.7	3.18	3	Yes
5.8G WiFi(ANT 1)	Rear	5	13	19.95	5.825	9.63	3	Yes
	Top	13	13	19.95	5.825	3.70	3	Yes
	Left	15	13	19.95	5.825	3.21	3	Yes

Mode	Position	Distance (mm)	Pmax (dBm)	Pmax (mW)	f (GHz)	Calculation Result	SAR Exclusion threshold	Test Requirement (Yes/No)
2.4G WiFi(ANT 2)	Rear	5	15	31.62	2.462	9.92	3	Yes
	Right	5	15	31.62	2.462	9.92	3	Yes
5.2G WiFi(ANT 2)	Rear	5	14	25.12	5.24	11.50	3	Yes
	Right	5	14	25.12	5.24	11.50	3	Yes
5.3G WiFi(ANT 2)	Rear	5	14	25.12	5.32	11.59	3	Yes
	Right	5	14	25.12	5.32	11.59	3	Yes
5.5G WiFi(ANT 2)	Rear	5	13	19.95	5.7	9.53	3	Yes
	Right	5	13	19.95	5.7	9.53	3	Yes
5.8G WiFi(ANT 2)	Rear	5	13	19.95	5.825	9.63	3	Yes
	Right	5	13	19.95	5.825	9.63	3	Yes
RFID (Micro)	Rear	5	25.5	354.81	9.225	215.53	3	Yes
	Right	36	25.5	354.81	9.225	29.94	3	Yes
	Top	30	25.5	354.81	9.225	35.92	3	Yes
RFID (NANO)	Rear	5	21.5	141.25	9.272	86.02	3	Yes
	Right	36	21.5	141.25	9.272	11.95	3	Yes
	Top	30	21.5	141.25	9.272	14.34	3	Yes

The distance >50mm

Mode	Position	Distance (mm)	Pmax (dBm)	Pmax (mW)	f (GHz)	Power allowed at numeric Threshold at 50mm	SAR Exclusion Result	Test Requirement (Yes/No)
GSM850	Left	110	30	1000.00	0.8488	162.81	502.33	Yes
	Top	90	30	1000.00	0.8488	162.81	389.16	Yes
GSM1900	Left	110	27	501.19	1.9098	108.54	708.54	No
	Top	90	27	501.19	1.9098	108.54	508.54	No
UMTS B2	Left	110	22.5	177.83	1.9076	108.60	708.60	No
	Top	90	22.5	177.83	1.9076	108.60	508.60	No
UMTS B4	Left	110	22.5	177.83	1.7526	113.31	713.31	No
	Top	90	22.5	177.83	1.7526	113.31	513.31	No
UMTS B5	Left	110	22	158.49	0.8466	163.02	501.66	No
	Top	90	22	158.49	0.8466	163.02	388.78	No
LTE B2	Left	110	20	100.00	1.9	108.82	708.82	No
	Top	90	20	100.00	1.9	108.82	508.82	No
LTE B4	Left	110	21	125.89	1.745	113.55	713.55	No
	Top	90	21	125.89	1.745	113.55	513.55	No
LTE B5	Left	110	24	251.19	0.844	163.28	500.88	No
	Top	90	24	251.19	0.844	163.28	388.34	No
LTE B7	Left	110	23	199.53	2.56	93.75	693.75	No
	Top	90	23	199.53	2.56	93.75	493.75	No
LTE B12	Left	110	24	251.19	0.711	177.89	462.29	No
	Top	90	24	251.19	0.711	177.89	367.49	No
LTE B13	Left	110	24	251.19	0.782	169.62	482.42	No
	Top	90	24	251.19	0.782	169.62	378.16	No
LTE B14	Left	110	24	251.19	0.793	168.44	485.64	No
	Top	90	24	251.19	0.793	168.44	379.91	No
LTE B17	Left	110	24	251.19	0.711	177.89	462.29	No
	Top	90	24	251.19	0.711	177.89	367.49	No
BT(ANT 1)	Right	102	10	10.00	2.48	95.25	615.25	No
	Bottom	196	10	10.00	2.48	95.25	1555.25	No

Mode	Position	Distance (mm)	Pmax (dBm)	Pmax (mW)	f (GHz)	Power allowed at numeric Threshold at 50mm	SAR Exclusion Result	Test Requirement (Yes/No)
2.4G WiFi(ANT 1)	Right	102	15	31.62	2.462	95.60	615.60	No
	Bottom	196	15	31.62	2.462	95.60	1555.60	No
5.2G WiFi(ANT 1)	Right	102	14	25.12	5.24	65.53	585.53	No
	Bottom	196	14	25.12	5.24	65.53	1525.53	No
5.3G WiFi(ANT 1)	Right	102	14	25.12	5.32	65.03	585.03	No
	Bottom	196	14	25.12	5.32	65.03	1525.03	No
5.5G WiFi(ANT 1)	Right	102	13	19.95	5.7	62.83	582.83	No
	Bottom	196	13	19.95	5.7	62.83	1522.83	No
5.8G WiFi(ANT 1)	Right	102	13	19.95	5.825	62.15	582.15	No
	Bottom	196	13	19.95	5.825	62.15	1522.15	No
2.4G WiFi(ANT 2)	Left	125	15	31.62	2.462	95.60	845.60	No
	Top	57	15	31.62	2.462	95.60	165.60	No
	Bottom	139	15	31.62	2.462	95.60	985.60	No
5.2G WiFi(ANT 2)	Left	125	14	25.12	5.24	65.53	815.53	No
	Top	57	14	25.12	5.24	65.53	135.53	No
	Bottom	139	14	25.12	5.24	65.53	955.53	No
5.3G WiFi(ANT 2)	Left	125	14	25.12	5.32	65.03	815.03	No
	Top	57	14	25.12	5.32	65.03	135.03	No
	Bottom	139	14	25.12	5.32	65.03	955.03	No
5.5G WiFi(ANT 2)	Left	125	13	19.95	5.7	62.83	812.83	No
	Top	57	13	19.95	5.7	62.83	132.83	No
	Bottom	139	13	19.95	5.7	62.83	952.83	No
5.8G WiFi(ANT 2)	Left	125	13	19.95	5.825	62.15	812.15	No
	Top	57	13	19.95	5.825	62.15	132.15	No
	Bottom	139	13	19.95	5.825	62.15	952.15	No
RFID (Micro)	Left	75	25.5	354.81	9.225	49.39	299.39	Yes
	Bottom	160	25.5	354.81	9.225	49.39	1149.39	No
RFID (NANO)	Left	75	21.5	141.25	9.272	49.26	299.26	No
	Bottom	160	21.5	141.25	9.272	49.26	1149.26	No

Note:

- 1) Although the Left and Top of GSM 1900/UMTS B5/LTE B12/LTE B13/LTE B14 can be exempted from testing, the SAR of these two locations has been tested.
- 2) Although some locations of WiFi/BT can be exempted from testing, SAR of all locations except front face has been tested.
- 3) Although some locations of RFID can be exempted from testing, all locations SAR except front face have been tested.