7.2.14 SAR measurement Results of WiFi 2.4G

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)													
Ant3(Core0)													
Left cheek	6/2437	802.11b	0.326	0.372	0.157	0.00	99%	0.376	13.46	14.50	0.477	Battery 1#	/
Left tilt	6/2437	802.11b	0.506	0.582	0.227	0.03	99%	0.588	13.46	14.50	0.747	Battery 1#	/
Right cheek	6/2437	802.11b	0.147	0.143	0.074	-0.11	99%	0.144	13.46	14.50	0.184	Battery 1#	/
Right tilt	6/2437	802.11b	0.186	0.208	0.102	0.15	99%	0.210	13.46	14.50	0.267	Battery 1#	/
Left tilt	6/2437	802.11b	0.598	0.570	0.226	0.05	99%	0.576	13.46	14.50	0.732	Battery 2#	/
Left tilt	1/2412	802.11b	0.356	0.341	0.140	0.02	99%	0.344	13.33	14.50	0.451	Battery 1#	/
Left tilt	11/2462	802.11b	0.394	0.407	0.158	-0.11	99%	0.411	13.19	14.50	0.556	Battery 1#	/
Ant4(Core1)													
Left cheek	6/2437	802.11b	0.006	0.001	0.000	-0.13	99%	0.001	12.83	14.50	0.001	Battery 1#	/
Left tilt	6/2437	802.11b	0.010	0.002	0.001	0.13	99%	0.002	12.83	14.50	0.003	Battery 1#	/
Right cheek	6/2437	802.11b	0.016	0.014	0.006	0.15	99%	0.014	12.83	14.50	0.021	Battery 1#	/
Right tilt	6/2437	802.11b	0.010	0.004	0.001	-0.12	99%	0.004	12.83	14.50	0.005	Battery 1#	/
Right cheek	6/2437	802.11b	0.014	0.009	0.003	0.17	99%	0.010	12.83	14.50	0.014	Battery 2#	/
Right cheek	1/2412	802.11b	0.022	0.017	0.007	-0.04	99%	0.017	12.68	14.50	0.027	Battery 1#	/
Right cheek	11/2462	802.11b	0.016	0.007	0.003	-0.13	99%	0.008	12.51	14.50	0.012	Battery 1#	/
Test at the best acoustic position													
Right cheek	1/2412	802.11b	0.020	0.016	0.007	0.14	99%	0.017	12.68	14.50	0.025	Battery 1#	/
VOG-L29 test data at worst case of VOG-L04													
Ant3(Core0)													
Left tilt	6/2437	802.11b	0.517	**0.609**	0.259	0.04	99%	0.615	13.46	14.50	**0.782**	Battery 1#	Yes
Ant4(Core1)													
Right cheek	1/2412	802.11b	0.023	**0.024**	0.011	0.01	99%	0.025	12.68	14.50	**0.037**	Battery 1#	Yes

Table 213: Head SAR test results of WiFi 2.4G SISO

Note: Per KDB248227D01, for Head SAR test of WiFi 2.4G SISO, SAR is measured for 2.4 GHz 802.11b DSSS using the initial test position procedure. The highest reported SAR for DSSS is adjusted by the ratio of OFDM 802.11g/n to DSSS specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for 802.11g/n is not required.

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)													
Test data of WiFi 2.4G MIMO with Ant 3(Core 0)													
Left cheek	6/2437	802.11n(40M)	0.327	0.346	0.156	-0.10	96%	0.360	12.67	14.50	0.549	Battery 1#	/
Left tilt	6/2437	802.11n(40M)	0.489	**0.496**	0.197	0.02	96%	0.517	12.67	14.50	**0.787**	Battery 1#	/
Right cheek	6/2437	802.11n(40M)	0.104	0.103	0.053	0.00	96%	0.107	12.67	14.50	0.164	Battery 1#	/
Right tilt	6/2437	802.11n(40M)	0.135	0.140	0.068	0.00	96%	0.146	12.67	14.50	0.222	Battery 1#	/
Left tilt	6/2437	802.11n(40M)	0.413	0.442	0.176	0.01	96%	0.460	12.67	14.50	0.702	Battery 2#	/
Left tilt	3/2422	802.11n(40M)	0.055	0.052	0.019	0.18	96%	0.054	5.10	7.00	0.084	Battery 1#	/
Left tilt	5/2432	802.11n(40M)	0.411	0.426	0.168	-0.05	96%	0.444	12.51	14.50	0.702	Battery 1#	/
Left tilt	9/2452	802.11n(40M)	0.056	0.053	0.020	0.18	96%	0.055	5.10	6.50	0.076	Battery 1#	/
Test at the best acoustic position													
Left tilt	6/2437	802.11n(40M)	0.465	0.427	0.177	0.01	96%	0.445	12.67	14.50	0.678	Battery 1#	/
Test data of WiFi 2.4G MIMO with Ant 4(Core 1)													
Left cheek	6/2437	802.11n(40M)	0.008	/	/	-0.13	96%	/	12.76	14.50	/	Battery 1#	/
Left tilt	6/2437	802.11n(40M)	0.009	/	/	0.15	96%	/	12.76	14.50	/	Battery 1#	/
Right cheek	6/2437	802.11n(40M)	0.016	0.012	0.005	-0.14	96%	0.012	12.76	14.50	0.018	Battery 1#	/
Right tilt	6/2437	802.11n(40M)	0.010	0.006	0.002	-0.13	96%	0.007	12.76	14.50	0.010	Battery 1#	/
Right cheek	6/2437	802.11n(40M)	0.016	0.012	0.004	0.16	96%	0.013	12.76	14.50	0.019	Battery 2#	/
Right cheek	3/2422	802.11n(40M)	0.001	0.001	0.000	0.10	96%	0.001	5.01	7.00	0.002	Battery 1#	/
Right cheek	5/2432	802.11n(40M)	0.018	0.012	0.005	0.05	96%	0.013	12.68	14.50	0.019	Battery 1#	/
Right cheek	9/2452	802.11n(40M)	0.001	0.001	0.000	0.10	96%	0.001	4.75	6.50	0.002	Battery 1#	/
VOG-L29 test data at worst case of VOG-L04													
Test data of WiFi 2.4G MIMO with Ant 3(Core 0)													
Left tilt	6/2437	802.11n(40M)	0.268	0.391	0.156	0.05	96%	0.407	12.67	14.50	0.621	Battery 1#	/
Test data of WiFi 2.4G MIMO with Ant 4(Core 1)													
Right cheek	6/2437	802.11n(40M)	0.018	**0.018**	0.007	0.01	96%	0.018	12.76	14.50	**0.027**	Battery 2#	/

Table 214: Head SAR test results of WiFi 2.4G MIMO

Note:

1) Per KDB248227D01, for Head SAR test of WiFi 2.4G CDD/MIMO, SAR is measured for 2.4 GHz OFDM 802.11n(40M) using the initial test position procedure. The highest reported SAR for OFDM 802.11n(40M) is adjusted by the ratio of OFDM 802.11g and OFDM 802.11n(20M) to OFDM 802.11n(40M) specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for 802.11g and 802.11n(20M) is not required.

2) As different maximum tune-up output power is specified across the different channels range, WIFI 2.4G CDD/MIMO SAR test is performed on 3C/5CH/6CH/9CH according to the max tune-up power to ensure compliance.

Test Position of Head	Dist.	Test Mode	WiFi 2.4G CDD/MIMO 1-g SAR (W/kg)		
			Ant 3(Core 0)	Ant 4(Core 1)	CDD/MIMO (Ant 3(Core 0) + Ant 4(Core 1))
Left cheek	/	802.11n(40M)	0.549	0.027	0.576
Left tilt	/	802.11n(40M)	0.787	0.027	**0.814**
Right cheek	/	802.11n(40M)	0.164	0.027	0.191
Right tilt	/	802.11n(40M)	0.222	0.010	0.232

Table 215: Head SAR test results of WiFi 2.4G CDD/MIMO calculation

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)														
Ant3(Core0)														
Front Side	15mm	1/2412	802.11b	0.048	0.045	0.024	-0.09	99%	0.045	16.61	18.00	0.062	Battery 1#	/
Back Side	15mm	1/2412	802.11b	0.045	0.041	0.022	0.09	99%	0.041	16.61	18.00	0.056	Battery 1#	/
Front Side	15mm	1/2412	802.11b	0.056	0.054	0.029	-0.19	99%	0.054	16.61	18.00	0.075	Battery 2#	/
Front Side	15mm	6/2437	802.11b	0.083	**0.080**	0.044	0.07	99%	0.081	16.48	18.00	**0.115**	Battery 2#	Yes
Front Side	15mm	11/2462	802.11b	0.073	0.069	0.037	-0.18	99%	0.070	16.36	18.00	0.102	Battery 2#	/
Ant4(Core1)														
Front Side	15mm	1/2412	802.11b	0.002	/	/	0.00	99%	/	15.27	17.00	/	Battery 1#	/
Back Side	15mm	1/2412	802.11b	0.047	0.033	0.012	0.15	99%	0.033	15.27	17.00	0.049	Battery 1#	/
Back Side	15mm	1/2412	802.11b	0.044	0.042	0.016	-0.10	99%	0.042	15.27	17.00	0.063	Battery 2#	/
Back Side	15mm	6/2437	802.11b	0.037	0.031	0.011	0.03	99%	0.032	15.04	17.00	0.049	Battery 2#	/
Back Side	15mm	11/2462	802.11b	0.022	0.016	0.005	0.16	99%	0.017	15.01	17.00	0.026	Battery 2#	/
VOG-L29 test data at worst case of VOG-L04														
ANT1														
Front Side	15mm	6/2437	802.11b	0.076	0.074	0.041	-0.03	99%	0.075	16.48	18.00	0.106	Battery 2#	/
ANT2														
Back Side	15mm	1/2412	802.11b	0.074	**0.068**	0.029	0.11	99%	0.068	15.27	17.00	**0.102**	Battery 2#	Yes

Table 216: Body Worn SAR test results of WiFi 2.4G SISO

Note: Per KDB248227D01, for Body SAR test of WiFi 2.4G SISO, SAR is measured for 2.4 GHz 802.11b DSSS using the initial test position procedure. The highest reported SAR for DSSS is adjusted by the ratio of OFDM 802.11g/n to DSSS specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for 802.11g/n is not required.

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)														
Test data of WiFi 2.4G CDD with Ant 3(Core 0)														
Front Side	15mm	6/2437	802.11g	0.074	0.073	0.040	0.06	99%	0.074	16.34	18.00	0.108	Battery 1#	/
Back Side	15mm	6/2437	802.11g	0.072	0.065	0.036	0.04	99%	0.066	16.34	18.00	0.097	Battery 1#	/
Front Side	15mm	6/2437	802.11g	0.078	**0.075**	0.041	0.01	99%	0.076	16.34	18.00	**0.111**	Battery 2#	/
Front Side	15mm	3/2422	802.11g	0.056	0.052	0.029	-0.08	99%	0.052	16.23	18.00	0.079	Battery 2#	/
Front Side	15mm	9/2452	802.11g	0.063	0.059	0.032	0.09	99%	0.060	16.19	18.00	0.091	Battery 2#	/
Test data of WiFi 2.4G CDDwith Ant 4(Core 1)														
Front Side	15mm	6/2437	802.11g	<0.001	<0.001	<0.001	0.00	99%	/	15.19	17.00	/	Battery 1#	/
Back Side	15mm	6/2437	802.11g	0.052	0.046	0.017	0.07	99%	0.046	15.19	17.00	0.070	Battery 1#	/
Back Side	15mm	6/2437	802.11g	0.048	0.045	0.018	-0.06	99%	0.045	15.19	17.00	0.069	Battery 2#	/
Back Side	15mm	3/2422	802.11g	0.052	**0.048**	0.019	-0.07	99%	0.048	15.15	17.00	**0.073**	Battery 1#	/
Back Side	15mm	9/2452	802.11g	0.054	0.046	0.018	0.00	99%	0.046	15.01	17.00	0.073	Battery 1#	/
VOG-L29 test data at worst case of VOG-L04														
Test data of WiFi 2.4G CDD with Ant 3(Core 0)														
Front Side	15mm	6/2437	802.11g	0.064	0.063	0.035	-0.02	99%	0.064	16.34	18.00	0.093	Battery 2#	/
Test data of WiFi 2.4G CDDwith Ant 4(Core 1)														
Back Side	15mm	3/2422	802.11g	0.046	0.044	0.017	-0.05	99%	0.045	15.15	17.00	0.069	Battery 1#	/

Table 217: Body Worn SAR test results of WiFi 2.4G CDD

Note:

1) Per KDB248227D01, for Head SAR test of WiFi 2.4G CDD/MIMO, SAR is measured for 2.4 GHz OFDM 802.11g using the initial test position procedure. The highest reported SAR for OFDM 802.11g is adjusted by the ratio of OFDM 802.11n(20M) and OFDM 802.11n(40M) to OFDM 802.11g specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for 802.11 n(20M) and 802.11n(40M) is not required.

2) As different maximum tune-up output power is specified across the different channels range, WIFI 2.4G CDD 11g SAR test is performed on 3CH/6CH/9CH according to the max tune-up power to ensure compliance.

Test Position of Body-Worn	Dist.	Test Mode	WiFi 2.4G CDD/MIMO 1-g SAR(W/kg)		
			Ant 3(Core 0)	Ant 4(Core 1)	CDD/MIMO (Ant 3(Core 0) + Ant 4(Core 1))
Front Side	15mm	802.11g	0.111	0.073	**0.184**
Back Side	15mm	802.11g	0.097	0.073	0.170

Table 218: Body Worn SAR test results of WiFi 2.4G CDD/MIMO calculation

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)														
Ant3(Core0)														
Front Side	10mm	1/2412	802.11b	0.095	0.095	0.052	-0.11	99%	0.096	16.61	18.00	0.132	Battery 1#	/
Back Side	10mm	1/2412	802.11b	0.083	0.077	0.042	-0.09	99%	0.077	16.61	18.00	0.107	Battery 1#	/
Right Side	10mm	1/2412	802.11b	0.067	0.067	0.028	-0.12	99%	0.068	16.61	18.00	0.094	Battery 1#	/
Top Side	10mm	1/2412	802.11b	0.177	0.166	0.083	-0.06	99%	0.168	16.61	18.00	0.231	Battery 1#	/
Top Side	10mm	1/2412	802.11b	0.208	0.196	0.097	0.06	99%	0.198	16.61	18.00	0.273	Battery 2#	/
Top Side	10mm	6/2437	802.11b	0.273	**0.258**	0.131	-0.17	99%	0.261	16.48	18.00	**0.370**	Battery 2#	Yes
Top Side	10mm	11/2462	802.11b	0.196	0.188	0.096	-0.02	99%	0.190	16.36	18.00	0.277	Battery 2#	/
Ant4(Core1)														
Front Side	10mm	1/2412	802.11b	0.007	/	/	0.00	99%	/	15.27	17.00	/	Battery 1#	/
Back Side	10mm	1/2412	802.11b	0.122	0.106	0.042	0.07	99%	0.107	15.27	17.00	0.159	Battery 1#	/
Left Side	10mm	1/2412	802.11b	0.087	0.080	0.032	0.11	99%	0.081	15.27	17.00	0.120	Battery 1#	/
Top Side	10mm	1/2412	802.11b	0.008	/	/	0.11	99%	/	15.27	17.00	/	Battery 1#	/
Back Side	10mm	1/2412	802.11b	0.107	0.112	0.044	-0.06	99%	0.113	15.27	17.00	0.168	Battery 2#	/
Back Side	10mm	6/2437	802.11b	0.090	0.099	0.038	-0.07	99%	0.100	15.04	17.00	0.157	Battery 2#	/
Back Side	10mm	11/2462	802.11b	0.062	0.060	0.020	-0.07	99%	0.061	15.01	17.00	0.096	Battery 2#	/
VOG-L29 test data at worst case of VOG-L04														
ANT1														
Top Side	10mm	6/2437	802.11b	0.265	0.247	0.125	-0.18	99%	0.249	16.48	18.00	0.354	Battery 2#	/
ANT2														
Back Side	10mm	1/2412	802.11b	0.197	**0.201**	0.082	-0.19	99%	0.203	15.27	17.00	**0.302**	Battery 2#	Yes

Table 219: Hotspot SAR test results of WiFi 2.4G

Note:

1) Per KDB248227D01, for Hotspot SAR test of WiFi 2.4G SISO, SAR is measured for 2.4 GHz 802.11b DSSS using the initial test position procedure. The highest reported SAR for DSSS is adjusted by the ratio of OFDM 802.11g/n to DSSS specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for 802.11g/n is not required.

2) Per KDB 648474 D04, Product Specific 10-g SAR test is not required for WiFi 2.4G SISO since hotspot mode 1-g reported SAR < 1.2 W/kg.

3) WiFi 2.4G CDD/MIMO does not support hotspot function.

Product Specific 10-g SAR	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 10-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 10-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 10-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)														
Test data of WiFi 2.4G CDD with Ant 3(Core 0)														
Front Side	0mm	6/2437	802.11g	1.040	1.830	0.761	0.00	99%	0.769	16.34	18.00	1.127	Battery 1#	/
Back Side	0mm	6/2437	802.11g	0.563	0.990	0.453	0.00	99%	0.458	16.34	18.00	0.671	Battery 1#	/
Left Side	0mm	6/2437	802.11g	0.062	0.144	0.062	0.00	99%	0.062	16.34	18.00	0.091	Battery 1#	/
Right Side	0mm	6/2437	802.11g	0.324	0.970	0.324	0.01	99%	0.327	16.34	18.00	0.480	Battery 1#	/
Top Side	0mm	6/2437	802.11g	0.829	2.560	0.866	0.02	99%	0.875	16.34	18.00	1.282	Battery 1#	/
Top Side	0mm	6/2437	802.11g	0.707	2.110	0.725	-0.16	99%	0.732	16.34	18.00	1.073	Battery 2#	/
Top Side	0mm	3/2422	802.11g	0.754	1.870	0.631	-0.16	99%	0.637	16.23	18.00	0.958	Battery 1#	/
Top Side	0mm	9/2452	802.11g	0.615	1.820	0.618	0.04	99%	0.624	16.19	18.00	0.947	Battery 1#	/
Test data of WiFi 2.4G CDDwith Ant 4(Core 1)														
Front Side	0mm	6/2437	802.11g	0.031	0.064	0.031	0.00	99%	0.031	15.19	17.00	0.047	Battery 1#	/
Back Side	0mm	6/2437	802.11g	0.456	1.430	0.481	-0.14	99%	0.486	15.19	17.00	0.737	Battery 1#	/
Left Side	0mm	6/2437	802.11g	0.449	1.160	0.364	-0.08	99%	0.368	15.19	17.00	0.558	Battery 1#	/
Right Side	0mm	6/2437	802.11g	<0.001	<0.001	<0.001	0.00	99%	/	15.19	17.00	/	Battery 1#	/
Top Side	0mm	6/2437	802.11g	0.040	0.065	0.023	0.08	99%	0.023	15.19	17.00	0.035	Battery 1#	/
Back Side	0mm	6/2437	802.11g	0.277	0.950	0.308	0.00	99%	0.311	15.19	17.00	0.472	Battery 2#	/
Back Side	0mm	3/2422	802.11g	0.419	1.460	0.491	-0.01	99%	0.496	15.15	17.00	0.759	Battery 1#	/
Back Side	0mm	9/2452	802.11g	0.421	1.490	**0.496**	0.10	99%	0.501	15.01	17.00	**0.792**	Battery 1#	Yes
VOG-L29 test data at worst case of VOG-L04														
Test data of WiFi 2.4G CDD with Ant 3(Core 0)														
Top Side	0mm	6/2437	802.11g	0.931	2.800	**0.949**	0.00	99%	0.959	16.34	18.00	**1.405**	Battery 1#	Yes
Test data of WiFi 2.4G CDDwith Ant 4(Core 1)														
Back Side	0mm	9/2452	802.11g	0.567	1.420	0.469	-0.12	99%	0.474	15.01	17.00	0.749	Battery 1#	/

Table 220: Product Specific 10-g SAR of WiFi 2.4G CDD

Note:

1) Per KDB248227D01, for Product Specific 10-g SAR test of WiFi 2.4G CDD, SAR is measured for 2.4 GHz OFDM 802.11g using the initial test position procedure. The highest reported SAR for OFDM 802.11g is adjusted by the ratio of OFDM 802.11n(20M) and OFDM 802.11n(40M) to OFDM 802.11g specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for 802.11 n(20M) and 802.11n(40M) is not required.

2) As different maximum tune-up output power is specified across the different channels range, WIFI 2.4G CDD 11g SAR test is performed on 3CH/6CH/9CH according to the max tune-up power to ensure compliance.

Product Specific 10-g SAR	Dist.	Test Mode	WiFi 2.4G CDD/MIMO 10-g SAR (W/kg)		
			Ant 3(Core 0)	Ant 4(Core 1)	CDD/MIMO(Ant 3(Core 0) + Ant 4(Core 1))
Front Side	0mm	802.11g	1.127	0.047	1.174
Back Side	0mm	802.11g	0.671	0.792	**1.463**
Left Side	0mm	802.11g	0.091	0.558	0.649
Right Side	0mm	802.11g	0.480	0.792	1.272
Top Side	0mm	802.11g	1.405	0.035	1.440

Table 221: Product Specific 10-g SAR of WiFi 2.4G CDD/MIMO calculation

7.2.15 SAR measurement Results of WiFi 5G

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)													
Ant3(Core0)													
Test data of U-NII-1&U-NII-2A band													
Left cheek	54/5270	802.11n(40M)	0.085	0.111	0.031	0.04	96%	0.116	9.62	11.00	0.159	Battery 1#	/
Left tilt	54/5270	802.11n(40M)	0.112	0.129	0.038	0.03	96%	0.134	9.62	11.00	0.185	Battery 1#	/
Right cheek	54/5270	802.11n(40M)	0.029	0.051	0.014	0.12	96%	0.053	9.62	11.00	0.073	Battery 1#	/
Right tilt	54/5270	802.11n(40M)	0.071	0.074	0.022	0.16	96%	0.077	9.62	11.00	0.105	Battery 1#	/
Left tilt	54/5270	802.11n(40M)	0.174	0.195	0.056	-0.19	96%	0.203	9.62	11.00	0.279	Battery 2#	/
Left tilt	62/5310	802.11n(40M)	0.104	0.117	0.032	-0.04	96%	0.122	7.78	9.00	0.161	Battery 2#	/
Test data of U-NII-2C band													
Left cheek	118/5590	802.11n(40M)	0.189	0.243	0.070	0.05	96%	0.253	10.12	11.00	0.310	Battery 1#	/
Left tilt	118/5590	802.11n(40M)	0.338	**0.391**	0.106	-0.12	96%	0.407	10.12	11.00	**0.499**	Battery 1#	Yes
Right cheek	118/5590	802.11n(40M)	0.074	/	/	0.17	96%	/	10.12	11.00	/	Battery 1#	/
Right tilt	118/5590	802.11n(40M)	0.127	/	/	0.10	96%	/	10.12	11.00	/	Battery 1#	/
Left tilt	118/5590	802.11n(40M)	0.285	0.378	0.111	-0.01	96%	0.394	10.12	11.00	0.482	Battery 2#	/
Left tilt	110/5550	802.11n(40M)	0.284	0.375	0.110	-0.01	96%	0.391	10.02	11.00	0.490	Battery 1#	/
Left tilt	134/5670	802.11n(40M)	0.192	0.253	0.075	0.05	96%	0.264	8.48	9.50	0.333	Battery 1#	/
Test data of U-NII-3 band													
Left cheek	155/5775	802.11ac(80M)	0.082	0.082	0.027	0.11	92%	0.089	9.01	11.00	0.141	Battery 1#	/
Left tilt	155/5775	802.11ac(80M)	0.142	0.194	0.057	0.08	92%	0.211	9.01	11.00	0.333	Battery 1#	/
Right cheek	155/5775	802.11ac(80M)	0.056	/	/	0.19	92%	/	9.01	11.00	/	Battery 1#	/
Right tilt	155/5775	802.11ac(80M)	0.070	0.065	0.021	0.16	92%	0.070	9.01	11.00	0.111	Battery 1#	/
Left tilt	155/5775	802.11ac(80M)	0.219	0.199	0.058	-0.08	92%	0.216	9.01	11.00	0.342	Battery 2#	/
Test at the best acoustic position													
Left tilt	118/5590	802.11n(40M)	0.258	0.261	0.080	0.15	96%	0.272	10.12	11.00	0.333	Battery 1#	/

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)													
Ant4(Core1)													
Test data of U-NII-1&U-NII-2A band													
Left cheek	54/5270	802.11n(40M)	0.001	/	/	0.00	96%	/	9.72	11.00	/	Battery 1#	/
Left tilt	54/5270	802.11n(40M)	0.001	/	/	0.00	96%	/	9.72	11.00	/	Battery 1#	/
Right cheek	54/5270	802.11n(40M)	0.027	0.005	0.001	-0.08	96%	0.005	9.72	11.00	0.007	Battery 1#	/
Right tilt	54/5270	802.11n(40M)	0.022	0.011	0.002	0.15	96%	0.011	9.72	11.00	0.015	Battery 1#	/
Right tilt	54/5270	802.11n(40M)	0.019	0.006	0.002	0.16	96%	0.006	9.72	11.00	0.008	Battery 2#	/
Right tilt	62/5310	802.11n(40M)	0.000	<0.001	<0.001	0.00	96%	/	7.05	9.00	/	Battery 2#	/
Test data of U-NII-2C band													
Left cheek	118/5590	802.11n(40M)	<0.001	/	<0.001	0.00	96%	/	9.66	11.00	/	Battery 1#	/
Left tilt	118/5590	802.11n(40M)	<0.001	/	<0.001	0.00	96%	/	9.66	11.00	/	Battery 1#	/
Right cheek	118/5590	802.11n(40M)	0.024	0.010	0.004	0.00	96%	0.011	9.66	11.00	0.014	Battery 1#	/
Right tilt	118/5590	802.11n(40M)	0.023	0.012	0.002	0.00	96%	0.012	9.66	11.00	0.017	Battery 1#	/
Right tilt	118/5590	802.11n(40M)	0.014	0.011	0.002	0.00	96%	0.011	9.66	11.00	0.015	Battery 2#	/
Right tilt	110/5550	802.11n(40M)	0.025	0.018	0.003	0.00	96%	0.018	9.34	11.00	0.027	Battery 1#	/
Right tilt	134/5670	802.11n(40M)	<0.001	<0.001	<0.001	0.00	96%	<0.001	8.36	9.50	<0.001	Battery 1#	/
Test data of U-NII-3 band													
Left cheek	155/5775	802.11ac(80M)	0.004	/	/	0.00	92%	/	9.05	11.00	/	Battery 1#	/
Left tilt	155/5775	802.11ac(80M)	0.002	/	/	0.00	92%	/	9.05	11.00	/	Battery 1#	/
Right cheek	155/5775	802.11ac(80M)	0.022	0.015	0.003	0.00	92%	0.016	9.05	11.00	0.025	Battery 1#	/
Right tilt	155/5775	802.11ac(80M)	0.023	0.014	0.002	0.00	92%	0.016	9.05	11.00	0.024	Battery 1#	/
Right cheek	155/5775	802.11ac(80M)	0.009	0.013	0.002	0.00	92%	0.014	9.05	11.00	0.022	Battery 2#	/
Test at the best acoustic position													
Right tilt	110/5550	802.11n(40M)	0.017	0.012	0.003	0.00	96%	0.012	9.34	11.00	0.018	Battery 1#	/
VOG-L29 test data at worst case of VOG-L04													
Ant3(Core0)													
Left tilt	118/5590	802.11n(40M)	0.212	0.216	0.064	0.04	96%	0.225	10.12	11.00	0.276	Battery 1#	/
Ant4(Core1)													
Right tilt	110/5550	802.11n(40M)	0.079	**0.059**	0.021	0.15	96%	0.061	9.34	11.00	**0.089**	Battery 1#	Yes

Table 222: Head SAR test results of WiFi 5G SISO

Note:

1) Per KDB248227D01, for Head SAR test of WiFi 5G U-NII-2A, SAR is measured for 802.11n (40M) OFDM using the initial test position procedure. The highest reported SAR is adjusted by the ratio of other WiFi 5G modes to 802.11n (40M) specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for other WiFi 5G mode is not required.

2) Per KDB248227D01, for Head SAR test of WiFi 5G U-NII-2C, SAR is measured for 802.11n(40M) OFDM using the initial test position procedure. The highest reported SAR is adjusted by the ratio of 8 other WiFi 5G modes to 802.11n (40M)specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for other WiFi 5G mode is not required.

3) Per KDB248227D01, for Head SAR test of WiFi 5G U-NII-3, SAR is measured for 802.11ac (80M) OFDM using the initial test position procedure. The highest reported SAR is adjusted by the ratio of other WiFi 5G modes to 802.11ac (80M) specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for other WiFi 5G mode is not required.

4) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. As the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition).

Test Position of Head	Dist.	Test Mode	WiFi 1-g SAR (W/kg)		
			Ant 3(Core 0)	Ant 4(Core 1)	MIMO(Ant 3(Core 0) +Ant 4(Core 1))
CDD/MIMO					
U-NII-2A band					
Left cheek	/	802.11n(40M)	0.159	0.015	0.174
Left tilt	/	802.11n(40M)	0.279	0.015	0.294
Right cheek	/	802.11n(40M)	0.073	0.007	0.080
Right tilt	/	802.11n(40M)	0.105	0.015	0.120
U-NII-2C band					
Left cheek	/	802.11n(40M)	0.310	0.089	0.399
Left tilt	/	802.11n(40M)	0.499	0.089	**0.588**
Right cheek	/	802.11n(40M)	0.499	0.014	0.513
Right tilt	/	802.11n(40M)	0.499	0.089	**0.588**
U-NII-3 band					
Left cheek	/	802.11ac(80M)	0.119	0.025	0.144
Left tilt	/	802.11ac(80M)	0.344	0.025	0.369
Right cheek	/	802.11ac(80M)	0.344	0.025	0.369
Right tilt	/	802.11ac(80M)	0.093	0.024	0.117

Table 223: Head SAR test results of WiFi 5G CDD/MIMO

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)														
Ant3(Core0)														
Test data of U-NII-1&U-NII-2A band														
Front Side	15mm	60/5300	802.11a	0.001	<0.001	<0.001	0.00	99%	<0.001	14.71	16.00	<0.001	Battery 1#	/
Back Side	15mm	60/5300	802.11a	0.013	0.011	0.003	0.00	99%	0.011	14.71	16.00	0.015	Battery 1#	/
Back Side	15mm	60/5300	802.11a	0.034	0.020	0.007	0.00	99%	0.020	14.71	16.00	0.027	Battery 2#	/
Back Side	15mm	52/5260	802.11a	0.035	0.025	0.008	0.12	99%	0.025	14.44	16.00	0.036	Battery 2#	/
Back Side	15mm	56/5280	802.11a	0.028	0.020	0.006	0.13	99%	0.020	14.59	16.00	0.028	Battery 2#	/
Test data of U-NII-2C band														
Front Side	15mm	116/5580	802.11a	0.048	0.035	0.013	0.00	99%	0.035	14.57	16.00	0.049	Battery 1#	/
Back Side	15mm	116/5580	802.11a	0.047	0.036	0.013	0.00	99%	0.037	14.57	16.00	0.051	Battery 1#	/
Back Side	15mm	116/5580	802.11a	0.055	**0.040**	0.014	0.10	99%	0.041	14.57	16.00	**0.057**	Battery 2#	Yes
Back Side	15mm	104/5520	802.11a	0.040	0.027	0.009	0.000	99%	0.027	14.55	16.00	0.038	Battery 2#	/
Back Side	15mm	136/5680	802.11a	0.043	0.030	0.011	0.00	99%	0.030	14.56	16.00	0.042	Battery 2#	/
Test data of U-NII-3 band														
Front Side	15mm	157/5785	802.11a	0.013	/	/	0.00	99%	/	14.21	16.00	/	Battery 1#	/
Back Side	15mm	157/5785	802.11a	0.034	0.016	0.006	0.00	99%	0.016	14.21	16.00	0.024	Battery 1#	/
Back Side	15mm	157/5785	802.11a	0.037	0.017	0.006	0.00	99%	0.017	14.21	16.00	0.025	Battery 2#	/
Back Side	15mm	153/5765	802.11a	0.034	0.025	0.008	0.00	99%	0.026	14.15	16.00	0.039	Battery 2#	/
Back Side	15mm	161/5805	802.11a	0.016	0.015	0.004	0.00	99%	0.015	14.21	16.00	0.022	Battery 2#	/
VOG-L29 test data at worst case of VOG-L04														
Ant3(Core0)														
Back Side	15mm	116/5580	802.11a	0.046	0.026	0.008	0.00	99%	0.026	14.57	16.00	0.036	Battery 2#	/

Table 224: Body Worn SAR test results of WiFi 5G Ant3 SISO

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)														
Ant4(Core1)														
Test data of U-NII-1&U-NII-2A band														
Front Side	15mm	60/5300	802.11a	<0.001	/	/	0.00	99%	/	14.46	15.50	/	Battery 1#	/
Back Side	15mm	60/5300	802.11a	**0.035**	0.034	0.011	0.00	99%	0.034	14.46	15.50	0.044	Battery 1#	/
Back Side	15mm	60/5300	802.11a	0.029	0.017	0.006	0.00	99%	0.017	14.46	15.50	0.021	Battery 2#	/
Back Side	15mm	52/5260	802.11a	0.033	0.032	0.011	0.00	99%	0.032	14.36	15.50	0.042	Battery 2#	/
Back Side	15mm	56/5280	802.11a	0.032	0.028	0.009	0.11	99%	0.028	14.45	15.50	0.036	Battery 2#	/
Test data of U-NII-2C band														
Front Side	15mm	136/5680	802.11a	<0.001	/	/	0.00	99%	/	13.67	15.50	/	Battery 1#	/
Back Side	15mm	136/5680	802.11a	0.021	0.011	0.004	0.00	99%	0.011	13.67	15.50	0.017	Battery 1#	/
Back Side	15mm	136/5680	802.11a	0.030	0.015	0.005	0.00	99%	0.015	13.67	15.50	0.024	Battery 2#	/
Back Side	15mm	104/5520	802.11a	0.010	0.004	0.001	0.000	99%	0.004	13.63	15.50	0.007	Battery 2#	/
Back Side	15mm	132/5660	802.11a	0.016	0.022	0.006	0.00	99%	0.022	13.66	15.50	0.033	Battery 2#	/
Test data of U-NII-3 band														
Front Side	15mm	149/5745	802.11a	<0.001	/	/	0.00	99%	/	13.73	15.50	/	Battery 1#	/
Back Side	15mm	149/5745	802.11a	0.014	0.011	0.004	0.00	99%	0.011	13.73	15.50	0.017	Battery 1#	/
Back Side	15mm	149/5745	802.11a	0.002	0.007	0.003	0.00	99%	0.007	13.73	15.50	0.011	Battery 2#	/
Back Side	15mm	157/5785	802.11a	0.001	0.008	0.001	0.00	99%	0.008	13.61	15.50	0.013	Battery 1#	/
Back Side	15mm	161/5805	802.11a	0.013	0.009	0.003	0.00	99%	0.009	13.66	15.50	0.014	Battery 1#	/
VOG-L29 test data at worst case of VOG-L04														
Ant4(Core1)														
Back Side	15mm	60/5300	802.11a	**0.031**	**0.035**	0.019	-0.03	99%	0.035	14.46	15.50	**0.044**	Battery 1#	Yes

Table 225: Body Worn SAR test results of WiFi 5G Ant4 SISO

Note:

1) Per KDB248227D01, for Body-Worn SAR test of WiFi 5G , SAR is measured for 5GHz 802.11a using the initial test position procedure.The highest reported SAR for 802.11a is adjusted by the ratio of other WiFi 5G modes to 802.11a specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for other WiFi 5G modes are not required.

2) Per KDB 648474 D04, Product Specific 10-g SAR test is not required for U-NII-1 and U-NII-3 since hotspot mode 1-g reported SAR < 1.2 W/kg.

3) The device do not support hotspot function at U-NII-2A & U-NII-2C band.

4) Per KDB 248227D01v02, simultaneous transmission provisions in KDB Publication 447498 should be used to determine simultaneous transmission SAR test exclusion for WiFi MIMO. If the sum of 1-g SAR single transmission SAR measurement is <1.6W/kg, no additional SAR measurements for MIMO are required. Alternatively,SAR for MIMO can be measured with all antennas transmitting simultaneously at the specified maximum output power of MIMO operation

Test Position of Body-Worn	Dist.	Test Mode	WiFi 5G CDD/MIMO 1-g SAR (W/kg)		
			Ant 3(Core 0)	Ant 4(Core 1)	CDD/MIMO(Ant 3(Core 0) +Ant 4(Core 1))
CDD/MIMO					
Test data of U-NII-2A band					
Front Side	15mm	802.11a	0.036	0.043	0.079
Back Side	15mm	802.11a	0.036	0.043	0.079
U-NII-2C band					
Front Side	15mm	802.11a	0.049	0.033	0.082
Back Side	15mm	802.11a	0.057	0.033	**0.090**
U-NII-3 band					
Front Side	15mm	802.11a	0.039	0.017	0.056
Back Side	15mm	802.11a	0.039	0.017	0.056

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)														
Ant3(Core0)														
Test data of U-NII-1 band														
Front Side	10mm	48/5240	802.11a	0.066	0.033	0.010	0.00	99%	0.033	14.28	16.00	0.049	Battery 1#	/
Back Side	10mm	48/5240	802.11a	0.052	0.034	0.011	0.00	99%	0.034	14.28	16.00	0.051	Battery 1#	/
Left Side	10mm	48/5240	802.11a	0.003	/	/	0.00	99%	/	14.28	16.00	/	Battery 1#	/
Right Side	10mm	48/5240	802.11a	0.036	/	/	0.06	99%	/	14.28	16.00	/	Battery 1#	/
Top Side	10mm	48/5240	802.11a	0.091	0.069	0.022	0.12	99%	0.070	14.28	16.00	0.104	Battery 1#	/
Top Side	10mm	48/5240	802.11a	0.086	0.070	0.022	0.09	99%	0.071	14.28	16.00	0.106	Battery 2#	/
Top Side	10mm	44/5220	802.11a	0.092	0.084	0.026	0.09	99%	0.085	14.08	16.00	0.132	Battery 2#	/
Top Side	10mm	40/5200	802.11a	0.078	0.067	0.021	0.01	99%	0.068	14.08	16.00	0.106	Battery 2#	/
Test data of U-NII-3 band														
Front Side	10mm	161/5805	802.11a	0.024	/	/	0.00	99%	/	14.21	16.00	/	Battery 1#	/
Back Side	10mm	161/5805	802.11a	0.050	/	/	0.00	99%	/	14.21	16.00	/	Battery 1#	/
Left Side	10mm	161/5805	802.11a	0.018	0.018	0.006	0.00	99%	0.019	14.21	16.00	0.028	Battery 1#	/
Right Side	10mm	161/5805	802.11a	0.028	0.028	0.008	0.00	99%	0.028	14.21	16.00	0.042	Battery 1#	/
Top Side	10mm	161/5805	802.11a	0.109	0.094	0.032	-0.05	99%	0.095	14.21	16.00	0.143	Battery 1#	/
Top Side	10mm	161/5805	802.11a	0.133	0.119	0.042	0.02	99%	0.120	14.21	16.00	0.182	Battery 2#	/
Top Side	10mm	157/5785	802.11a	0.133	0.133	0.046	0.02	99%	0.134	14.21	16.00	0.203	Battery 2#	/
Top Side	10mm	153/5765	802.11a	0.161	**0.150**	0.051	-0.09	99%	0.152	14.15	16.00	**0.232**	Battery 2#	Yes
VOG-L29 test data at worst case of VOG-L04														
Ant3(Core0)														
Top Side	10mm	153/5765	802.11a	0.124	0.132	0.057	-0.15	99%	0.133	14.15	16.00	0.204	Battery 2#	/

Table 226: Hotspot SAR test results of WiFi 5G Ant3 SISO

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 1-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)														
Ant4(Core1)														
Test data of U-NII-1&U-NII-2A band														
Front Side	10mm	48/5240	802.11a	0.000	0.000	0.000	0.00	99%	0.000	14.23	15.50	0.000	Battery 1#	/
Back Side	10mm	48/5240	802.11a	0.082	**0.092**	0.026	0.00	99%	0.093	14.23	15.50	**0.124**	Battery 1#	Yes
Left Side	10mm	48/5240	802.11a	0.048	0.048	0.013	0.00	99%	0.048	14.23	15.50	0.065	Battery 1#	/
Right Side	10mm	48/5240	802.11a	0.000	0.000	0.000	0.00	99%	0.000	14.23	15.50	0.000	Battery 1#	/
Top Side	10mm	48/5240	802.11a	0.000	0.000	0.000	0.00	99%	0.000	14.23	15.50	0.000	Battery 1#	/
Back Side	10mm	48/5240	802.11a	0.092	0.075	0.021	0.00	99%	0.075	14.23	15.50	0.101	Battery 2#	/
Back Side	10mm	44/5220	802.11a	0.086	0.075	0.020	0.00	99%	0.076	14.13	15.50	0.104	Battery 1#	/
Back Side	10mm	40/5200	802.11a	0.079	0.067	0.018	0.00	99%	0.068	14.05	15.50	0.095	Battery 1#	/
Test data of U-NII-3 band														
Front Side	10mm	149/5745	802.11a	0.000	0.000	0.000	0.00	99%	0.000	13.73	15.50	0.000	Battery 1#	/
Back Side	10mm	149/5745	802.11a	0.051	0.029	0.011	0.00	99%	0.029	13.73	15.50	0.043	Battery 1#	/
Left Side	10mm	149/5745	802.11a	0.028	0.013	0.004	-0.07	99%	0.014	13.73	15.50	0.020	Battery 1#	/
Right Side	10mm	149/5745	802.11a	0.000	0.000	0.000	0.00	99%	0.000	13.73	15.50	0.000	Battery 1#	/
Top Side	10mm	149/5745	802.11a	0.000	0.000	0.000	0.00	99%	0.000	13.73	15.50	0.000	Battery 1#	/
Back Side	10mm	149/5745	802.11a	0.064	0.045	0.014	0.00	99%	0.045	13.73	15.50	0.068	Battery 2#	/
Back Side	10mm	161/5805	802.11a	0.057	0.036	0.012	0.00	99%	0.036	13.66	15.50	0.055	Battery 2#	/
Back Side	10mm	157/5785	802.11a	0.056	0.039	0.013	0.00	99%	0.039	13.61	15.50	0.061	Battery 2#	/
VOG-L29 test data at worst case of VOG-L04														
Ant4(Core1)														
Back Side	10mm	48/5240	802.11a	0.048	0.053	0.026	0.16	99%	0.053	14.23	15.50	0.071	Battery 1#	/

Table 227: Hotspot SAR test results of WiFi 5G Ant4 SISO

Note:
1) Per KDB248227D01, for Body-Worn SAR test of WiFi 5G , SAR is measured for 5GHz 802.11a using the initial test position procedure.The highest reported SAR for 802.11a is adjusted by the ratio of other WiFi 5G modes to 802.11a specified maximum output power and the adjusted SAR is < 1.2 W/kg, so SAR for other WiFi 5G modes are not required.
2) Per KDB 648474 D04, Product Specific 10-g SAR test is not required for U-NII-1 and U-NII-3 since hotspot mode 1-g reported SAR < 1.2 W/kg.
3) The device do not support hotspot function at U-NII-2A & U-NII-2C band.
4) Per KDB 248227D01v02, simultaneous transmission provisions in KDB Publication 447498 should be used to determine simultaneous transmission SAR test exclusion for WiFi MIMO. If the sum of 1-g SAR single transmission SAR measurement is <1.6W/kg, no additional SAR measurements for MIMO are required. Alternatively,SAR for MIMO can be measured with all antennas transmitting simultaneously at the specified maximum output power of MIMO operation

Test Position of Hotspot	Dist.	Test Mode	WiFi 1-g SAR (W/kg)		
			Ant 3(Core 0)	Ant 4(Core 1)	CDD/MIMO(Ant 3(Core 0) +Ant 4(Core 1))
CDD/MIMO					
U-NII-1 band					
Front Side	10mm	802.11a	0.049	0.124	0.173
Back Side	10mm	802.11a	0.051	0.124	0.175
Left Side	10mm	802.11a	0.132	0.065	0.197
Right Side	10mm	802.11a	0.132	0.124	0.256
Top Side	10mm	802.11a	0.132	0.124	0.256
U-NII-3 band					
Front Side	10mm	802.11a	0.232	0.068	0.300
Back Side	10mm	802.11a	0.232	0.068	0.300
Left Side	10mm	802.11a	0.028	0.020	0.048
Right Side	10mm	802.11a	0.042	0.068	0.110
Top Side	10mm	802.11a	0.232	0.068	**0.300**

Product Specific 10-g SAR	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 10-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 10-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 10-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)														
Ant3(Core0)														
Test data of U-NII-2A band														
Front Side	0mm	60/5300	802.11a	0.267	1.040	0.327	-0.06	99%	0.330	14.71	16.00	0.445	Battery 1#	/
Back Side	0mm	60/5300	802.11a	0.127	/	/	-0.12	99%	/	14.71	16.00	/	Battery 1#	/
Left Side	0mm	60/5300	802.11a	0.008	/	/	0.04	99%	/	14.71	16.00	/	Battery 1#	/
Right Side	0mm	60/5300	802.11a	0.081	/	/	-0.02	99%	/	14.71	16.00	/	Battery 1#	/
Top Side	0mm	60/5300	802.11a	0.520	2.970	0.742	-0.17	99%	0.749	14.71	16.00	1.009	Battery 1#	/
Top Side	0mm	60/5300	802.11a	0.592	3.320	0.825	0.06	99%	0.833	14.71	16.00	1.122	Battery 2#	/
Top Side	0mm	52/5260	802.11a	0.581	3.260	0.846	-0.14	99%	0.855	14.44	16.00	1.224	Battery 2#	/
Top Side	0mm	56/5280	802.11a	0.609	3.090	0.797	-0.08	99%	0.805	14.59	16.00	1.114	Battery 2#	/
Test data of U-NII-2C band														
Front Side	0mm	116/5580	802.11a	0.414	1.890	0.540	0.02	99%	0.545	14.57	16.00	0.758	Battery 1#	/
Back Side	0mm	116/5580	802.11a	0.119	/	/	0.07	99%	/	14.57	16.00	/	Battery 1#	/
Left Side	0mm	116/5580	802.11a	0.030	/	/	-0.04	99%	/	14.57	16.00	/	Battery 1#	/
Right Side	0mm	116/5580	802.11a	0.004	/	/	-0.04	99%	/	14.57	16.00	/	Battery 1#	/
Top Side	0mm	116/5580	802.11a	0.775	4.510	1.070	-0.17	99%	1.081	14.57	16.00	1.502	Battery 1#	/
Top Side	0mm	116/5580	802.11a	0.827	5.280	**1.240**	-0.19	99%	1.253	14.57	16.00	**1.741**	Battery 2#	Yes
Top Side	0mm	104/5520	802.11a	0.668	4.360	1.040	-0.17	99%	1.051	14.55	16.00	1.467	Battery 2#	/
Top Side	0mm	136/5680	802.11a	0.703	4.510	1.070	-0.18	99%	1.081	14.56	16.00	1.506	Battery 2#	/
VOG-L29 test data at worst case of VOG-L04														
Ant3(Core0)														
Top Side	0mm	116/5580	802.11a	0.778	4.660	1.160	0.10	99%	1.172	14.57	16.00	1.629	Battery 2#	/

Table 228: Product Specific 10-g SAR test results of WiFi 5G Ant3 SISO

Product Specific 10-g SAR	Dist.	Test Channel /Freq.(MHz)	Test Mode	Area Scan 10-g SAR (W/kg)	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 10-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 10-g SAR (W/kg)	Accessory Information	SAR Plot.
					1-g	10-g								
Ant4(Core1) data in SISO Mode														
Test data of U-NII-2A band														
Front Side	0mm	60/5300	802.11a	0.033	0.105	0.047	-0.18	99%	0.048	14.46	15.50	0.061	Battery 1#	/
Back Side	0mm	60/5300	802.11a	0.389	2.120	0.534	-0.06	99%	0.539	14.46	15.50	0.685	Battery 1#	/
Left Side	0mm	60/5300	802.11a	0.150	/	/	-0.03	99%	/	14.46	15.50	/	Battery 1#	/
Right Side	0mm	60/5300	802.11a	0.003	/	/	-0.06	99%	/	14.46	15.50	/	Battery 1#	/
Top Side	0mm	60/5300	802.11a	0.033	/	/	0.10	99%	/	14.46	15.50	/	Battery 1#	/
Back Side	0mm	60/5300	802.11a	0.231	1.160	0.307	-0.01	99%	0.310	14.46	15.50	0.394	Battery 2#	/
Back Side	0mm	52/5260	802.11a	0.466	2.300	**0.594**	0.11	99%	0.600	14.36	15.50	0.780	Battery 1#	Yes
Back Side	0mm	56/5280	802.11a	0.506	2.220	0.569	-0.02	99%	0.575	14.45	15.50	0.732	Battery 1#	/
Test data of U-NII-2C band														
Front Side	0mm	136/5680	802.11a	0.019	0.075	0.036	-0.17	99%	0.037	13.67	15.50	0.056	Battery 1#	/
Back Side	0mm	136/5680	802.11a	0.313	2.180	0.488	0.15	99%	0.493	13.67	15.50	0.751	Battery 1#	/
Left Side	0mm	136/5680	802.11a	0.156	/	/	-0.14	99%	/	13.67	15.50	/	Battery 1#	/
Right Side	0mm	136/5680	802.11a	0.005	/	/	0.14	99%	/	13.67	15.50	/	Battery 1#	/
Top Side	0mm	136/5680	802.11a	0.021	/	/	0.08	99%	/	13.67	15.50	/	Battery 1#	/
Back Side	0mm	136/5680	802.11a	0.403	2.290	0.528	-0.12	99%	0.533	13.67	15.50	**0.813**	Battery 2#	/
Back Side	0mm	104/5520	802.11a	0.259	1.520	0.358	-0.01	99%	0.362	13.63	15.50	0.556	Battery 2#	/
Back Side	0mm	116/5580	802.11a	0.264	1.590	0.373	-0.03	99%	0.377	13.59	15.50	0.585	Battery 2#	/
VOG-L29 test data at worst case of VOG-L04														
Ant4(Core1) data in SISO Mode														
Back Side	0mm	136/5680	802.11a	0.412	1.880	0.561	0.00	99%	0.567	13.67	15.50	0.864	Battery 2#	/

Table 229: Product Specific 10-g SAR test results of WiFi 5G Ant4 SISO

Note:
1) Per KDB248227D01, for Product Specific 10-g SAR test of WiFi 5G, SAR is measured for 5GHz 802.11a using the initial test position procedure.The highest reported SAR for 802.11a is adjusted by the ratio of other WiFi 5G modes to 802.11a specified maximum output power and the adjusted SAR is < 75% limit, so SAR for other WiFi 5G modes are not required.
2) Per KDB 248227D01 v02, simultaneous transmission provisions in KDB Publication 447498 should be used to determine simultaneous transmission SAR test exclusion for WiFi MIMO. If the sum of 1-g SAR single transmission SAR measurement is <1.6W/kg, no additional SAR measurements for MIMO are required. Alternatively,SAR for MIMO can be measured with all antennas transmitting simultaneously at the specified maximum output power of MIMO operation

Product Specific 10-g SAR	Dist.	Test Mode	WiFi 10-g SAR (W/kg)		
			Ant 3(Core 0)	Ant 4(Core 1)	CDD/MIMO(Ant 3(Core 0) +Ant 4(Core 1))
CDD/MIMO					
Test data of U-NII-2A band					
Front Side	0mm	802.11a	0.445	0.061	0.506
Back Side	0mm	802.11a	1.224	0.780	2.004
Left Side	0mm	802.11a	1.224	0.780	2.004
Right Side	0mm	802.11a	1.224	0.780	2.004
Top Side	0mm	802.11a	1.224	0.780	2.004
Test data of U-NII-2C band					
Front Side	0mm	802.11a	0.758	0.056	0.814
Back Side	0mm	802.11a	1.741	0.864	2.605
Left Side	0mm	802.11a	1.741	0.864	2.605
Right Side	0mm	802.11a	1.741	0.864	2.605
Top Side	0mm	802.11a	1.741	0.864	**2.605**

Table 230: Product Specific 10-g SAR test results of WiFi 5G CDD/MIMO

7.2.16 SAR measurement Results of BT

Test Position of Head	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
			1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)												
Normal Power Level B Test data												
Left cheek	39/2441	DH5	0.097	0.042	0.14	77%	0.126	9.58	11.00	0.175	Battery 1#	/
Left tilt	39/2441	DH5	**0.128**	0.048	-0.16	77%	0.166	9.58	11.00	**0.231**	Battery 1#	/
Right cheek	39/2441	DH5	0.036	0.018	-0.06	77%	0.047	9.58	11.00	0.065	Battery 2#	/
Right tilt	39/2441	DH5	0.038	0.020	0.00	77%	0.049	9.58	11.00	0.068	Battery 1#	/
Left tilt	39/2441	DH5	0.123	0.015	-0.08	77%	0.160	9.58	11.00	0.222	Battery 1#	/
Left tilt	11/2413	DH5	0.108	0.041	-0.05	77%	0.140	9.40	11.00	0.203	Battery 2#	/
Left tilt	68/2470	DH5	0.112	0.042	-0.10	77%	0.145	9.14	11.00	0.223	Battery 2#	/
Test at the best acoustic position												
Left tilt	39/2441	DH5	0.126	0.049	0.00	77%	0.164	9.58	11.00	0.227	Battery 1#	/
VOG-L29 test data at worst case of VOG-L04												
Left tilt	39/2441	DH5	**0.134**	0.053	0.19	77%	0.174	9.58	11.00	**0.241**	Battery 1#	Yes

Table 231: Head SAR test results of BT

Test Position of Body-Worn	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)													
Normal Power Level B Test data													
Front Side	15mm	39/2441	DH5	0.003	0.001	0.00	77%	0.004	9.58	11.00	0.005	Battery 1#	/
Back Side	15mm	39/2441	DH5	0.003	0.001	0.00	77%	0.003	9.58	11.00	0.005	Battery 1#	/
Front Side	15mm	39/2441	DH5	0.003	0.001	0.00	77%	0.004	9.58	11.00	0.006	Battery 2#	/
Front Side	15mm	11/2413	DH5	0.002	0.001	0.00	77%	0.003	9.40	11.00	0.004	Battery 2#	/
Front Side	15mm	68/2470	DH5	0.003	0.001	0.00	77%	0.004	9.14	11.00	0.007	Battery 2#	/
High Power Level A Test data													
Front Side	15mm	13/2415	DH5	0.029	0.013	-0.06	77%	0.037	16.87	17.30	0.041	Battery 1#	/
Back Side	15mm	13/2415	DH5	0.026	0.013	0.00	77%	0.033	16.87	17.30	0.037	Battery 1#	/
Front Side	15mm	13/2415	DH5	0.028	0.013	0.00	77%	0.037	16.87	17.30	0.041	Battery 2#	/
Front Side	15mm	0/2402	DH5	**0.030**	0.014	-0.17	77%	0.039	15.86	17.30	**0.055**	Battery 1#	/
Front Side	15mm	26/2428	DH5	0.023	0.010	-0.14	77%	0.030	16.05	17.30	0.041	Battery 1#	/
VOG-L29 test data at worst case of VOG-L04													
Front Side	15mm	0/2402	DH5	**0.031**	0.016	0.00	77%	0.041	15.86	17.30	**0.057**	Battery 1#	Yes

Table 232: Body Worn SAR test results of BT

Test Position of Hotspot	Dist.	Test Channel /Freq.(MHz)	Test Mode	Measured SAR(W/kg)		Power Drift (dB)	Actual duty cycle	Scaled 1-g SAR (W/kg)	Conducted Power (dBm)	Tune-up Power (dBm)	Reported 1-g SAR (W/kg)	Accessory Information	SAR Plot.
				1-g	10-g								
VOG-L04 test data from original report(report no.SYBH(Z-SAR)20181218028001-2)													
Normal Power Level B Test data													
Front Side	10mm	39/2441	DH5	0.013	0.005	0.00	77%	0.016	9.58	11.00	0.023	Battery 1#	/
Back Side	10mm	39/2441	DH5	0.008	0.003	0.00	77%	0.010	9.58	11.00	0.014	Battery 1#	/
Right Side	10mm	39/2441	DH5	0.005	0.001	0.00	77%	0.006	9.58	11.00	0.009	Battery 1#	/
Top Side	10mm	39/2441	DH5	0.019	0.007	-0.05	77%	0.025	9.58	11.00	0.035	Battery 1#	/
Top Side	10mm	39/2441	DH5	0.019	0.007	0.14	77%	0.025	9.58	11.00	0.035	Battery 2#	/
Top Side	10mm	11/2413	DH5	0.014	0.005	-0.05	77%	0.019	9.40	11.00	0.027	Battery 2#	/
Top Side	10mm	68/2470	DH5	0.016	0.005	0.02	77%	0.021	9.14	11.00	0.031	Battery 2#	/
High Power Level A Test data													
Front Side	10mm	13/2415	DH5	0.057	0.030	0.00	77%	0.074	16.87	17.30	0.082	Battery 1#	/
Back Side	10mm	13/2415	DH5	0.053	0.028	0.00	77%	0.069	16.87	17.30	0.076	Battery 1#	/
Right Side	10mm	13/2415	DH5	0.040	0.011	-0.04	77%	0.052	16.87	17.30	0.057	Battery 1#	/
Top Side	10mm	13/2415	DH5	0.097	0.047	-0.14	77%	0.125	16.87	17.30	0.139	Battery 1#	/
Top Side	10mm	13/2415	DH5	0.096	0.046	-0.12	77%	0.124	16.87	17.30	0.137	Battery 2#	/
Top Side	10mm	0/2402	DH5	**0.106**	0.052	-0.11	77%	0.138	15.86	17.30	**0.192**	Battery 1#	/
Top Side	10mm	26/2428	DH5	0.074	0.038	-0.15	77%	0.096	16.05	17.30	0.128	Battery 1#	/
VOG-L29 test data at worst case of VOG-L04													
Top Side	10mm	0/2402	DH5	**0.125**	0.062	0.00	77%	0.162	16.05	17.30	**0.216**	Battery 1#	Yes

Table 233: Hotspot SAR test results of BT

Note: Per KDB 648474 D04, Product Specific 10-g SAR test is not required for this frequency band since hotspot mode 1-g reported SAR < 1.2 W/kg.

7.3 Multiple Transmitter Evaluation

The detailed location of the Tx antennas inside the device refers to Appendix E.

The list information of following tables which is relevant for the decision if a simultaneous transmit evaluation is necessary according to FCC KDB 447498 D01 General RF Exposure Guidance.

Mode	Exposure Condition	Front Side	Back Side	Left Side	Right Side	Top Side	Bottom Side
Main Ant (Ant 1)	Hotspot/ Product specific 10g SAR	Yes	Yes	Yes	Yes	No	Yes
Second Ant (Ant 2)	Hotspot/ Product specific 10g SAR	Yes	Yes	Yes	No	Yes	No
WiFi 2.4G/5G Core 0/BT Ant (Ant 3)	Hotspot/ Product specific 10g SAR	Yes	Yes	No	Yes	Yes	No
WiFi 2.4G/5G Core 1 Ant (Ant 4)	Hotspot/ Product specific 10g SAR	Yes	Yes	Yes	No	Yes	No
WiFi 2.4G/5G CDD/MIMO	Hotspot/ Product specific 10g SAR	Yes	Yes	Yes	Yes	Yes	No

Table 234: Sides for Hotspot/Product specific 10g SAR testing

Note:

1) Per KDB 648474 D04, because the diagonal distance of this device is ≥160mm,so it is a phablet .

2) Per KDB 941225 D06 and KDB 648474 D04, particular DUT edges were not required to be evaluated for Hotspot SAR if the antenna-to-edge distance is greater than 2.5cm;

3) WiFi 2.4G CDD/MIMO does not support hotspot function, therefore WiFi 2.4G CDD/MIMO were not evaluated for hotspot SAR.

7.3.1 Simultaneous Transmission Possibilities

The Simultaneous Transmission Possibilities of this device are as below:

NO.	Simultaneous TX Combination	Head	Body-worn	Hotspot	Product Specific 10-g (0mm)
1	GSM Voice(Ant1) + BT	Yes	Yes	N/A	Yes
2	GSM DATA(Ant 1) + BT	N/A	Yes	Yes	Yes
3	GSM Voice(Ant 2) + BT	Yes	Yes	N/A	Yes
4	GSM DATA (Ant 2)+ BT	N/A	Yes	Yes	Yes
5	GSM Voice(Ant 1) + Wi-Fi 2.4G (Ant 3)/ Wi-Fi 2.4G (Ant 4)/ Wi- Fi 2.4G MIMO	Yes	Yes	N/A	Yes
6	GSM DATA(Ant 1) + Wi-Fi 2.4G (Ant 3)/ Wi-Fi 2.4G (Ant 4)/ Wi-Fi 2.4G MIMO	N/A	Yes	Yes	Yes
7	GSM Voice(Ant 2) + Wi-Fi 2.4G (Ant 3)/ Wi-Fi 2.4G (Ant 4)/ Wi-Fi 2.4G MIMO	Yes	Yes	N/A	Yes
8	GSM DATA (Ant 2)+ Wi-Fi 2.4G (Ant 3)/ Wi-Fi 2.4G (Ant 4)/ Wi-Fi 2.4G MIMO	N/A	Yes	Yes	Yes
9	UMTS (Ant 1) + BT	Yes	Yes	Yes	Yes
10	UMTS (Ant 1) + BT	Yes	Yes	Yes	Yes
11	UMTS (Ant 1) + Wi-Fi 2.4G (Ant 3)/ Wi-Fi 2.4G (Ant 4)/ Wi-Fi 2.4G MIMO	Yes	Yes	Yes	Yes
12	UMTS (Ant 2) + Wi-Fi 2.4G (Ant 3)/ Wi-Fi 2.4G (Ant 4)/ Wi-Fi 2.4G MIMO	Yes	Yes	Yes	Yes
13	LTE (Ant 1) + Wi-Fi 2.4G (Ant 3)/ Wi-Fi 2.4G (Ant 4)/ Wi-Fi 2.4G MIMO	Yes	Yes	Yes	Yes
14	LTE(Ant 1) + BT	Yes	Yes	Yes	Yes
15	LTE (Ant 2) + Wi-Fi 2.4G (Ant 3)/ Wi-Fi 2.4G (Ant 4)/ Wi-Fi 2.4G MIMO	Yes	Yes	Yes	Yes
16	LTE (Ant 2) + BT	Yes	Yes	Yes	Yes
17	GSM Voice(Ant 1) + Wi-Fi 5G (Ant 3)/ Wi-Fi 5G (Ant 4)/ Wi-Fi 5G MIMO	Yes	Yes	N/A	Yes
18	GSM DATA(Ant 1) + Wi-Fi 5G (Ant 3)/ Wi-Fi 5G (Ant 4)/ Wi- Fi 5G MIMO	N/A	Yes	Yes	Yes
19	GSM Voice(Ant 2) + Wi-Fi 5G (Ant 3)/ Wi-Fi 5G (Ant 4)/ Wi-Fi 5G MIMO	Yes	Yes	N/A	Yes
20	GSM DATA(Ant 2) + Wi-Fi 5G (Ant 3)/ Wi-Fi 5G (Ant 4)/ Wi-Fi 5G MIMO	N/A	Yes	Yes	Yes
21	UMTS (Ant 1) + Wi-Fi 5G (Ant 3)/ Wi-Fi 5G (Ant 4)/ Wi-Fi 5G MIMO	Yes	Yes	Yes	Yes
22	UMTS (Ant 2) + Wi-Fi 5G (Ant 3)/ Wi-Fi 5G (Ant 4)/ Wi-Fi 5G MIMO	Yes	Yes	Yes	Yes
23	LTE (Ant 1) + Wi-Fi 5G (Ant 3)/ Wi-Fi 5G (Ant 4)/ Wi-Fi 5G MIMO	Yes	Yes	Yes	Yes
24	LTE (Ant 2) + Wi-Fi 5G (Ant 3)/ Wi-Fi 5G (Ant 4)/ Wi-Fi 5G MIMO	Yes	Yes	Yes	Yes

25	GSM Voice(Ant 1) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)	Yes	Yes	N/A	Yes
26	GSM DATA(Ant 1) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)	N/A	Yes	Yes	Yes
27	GSM Voice(Ant 2) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)	Yes	Yes	N/A	Yes
28	GSM DATA(Ant 2) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)	N/A	Yes	Yes	Yes
29	UMTS (Ant 1) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)	Yes	Yes	Yes	Yes
30	UMTS (Ant 2) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)	Yes	Yes	Yes	Yes
31	LTE (Ant 1) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)	Yes	Yes	Yes	Yes
32	LTE (Ant 2) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)	Yes	Yes	Yes	Yes
33	GSM Voice(Ant 1) + BT+ Wi-Fi 5G (Ant3/ Ant4/ MIMO)	Yes	Yes	N/A	Yes
34	GSM DATA(Ant 1) + BT+ Wi-Fi 5G (Ant3/ Ant4/ MIMO)	N/A	Yes	Yes	Yes
35	GSM Voice(Ant 2) + BT+ Wi-Fi 5G (Ant3/ Ant4/ MIMO)	Yes	Yes	N/A	Yes
36	GSM DATA (Ant 2)+ BT+ Wi-Fi 5G (Ant3/ Ant4/ MIMO)	N/A	Yes	Yes	Yes
37	UMTS (Ant 1) + BT+ Wi-Fi 5G (Ant3/ Ant4/ MIMO)	Yes	Yes	Yes	Yes
38	UMTS (Ant 2) + BT+ Wi-Fi 5G (Ant3/ Ant4/ MIMO)	Yes	Yes	Yes	Yes
39	LTE (Ant 1) + BT+ Wi-Fi 5G (Ant3/ Ant4/ MIMO)	Yes	Yes	Yes	Yes
40	LTE (Ant 2) + BT+ Wi-Fi 5G (Ant3/ Ant4/ MIMO)	Yes	Yes	Yes	Yes
41	GSM Voice(Ant 1) + BT+ Wi-Fi 2.4G (Ant4)	Yes	Yes	N/A	Yes
42	GSM DATA(Ant 1) + BT+ Wi-Fi 2.4G (Ant4)	N/A	Yes	Yes	Yes
43	GSM Voice(Ant 2) + BT+ Wi-Fi 2.4G (Ant4)	Yes	Yes	N/A	Yes
44	GSM DATA (Ant 2)+ BT+ Wi-Fi 2.4G (Ant4)	N/A	Yes	Yes	Yes
45	UMTS (Ant 1) + BT+ Wi-Fi 2.4G (Ant4)	Yes	Yes	Yes	Yes
46	UMTS (Ant 2) + BT+Wi-Fi 2.4G (Ant4)	Yes	Yes	Yes	Yes
47	LTE (Ant 1) + BT+ Wi-Fi 2.4G (Ant4)	Yes	Yes	Yes	Yes
48	LTE (Ant 2) + BT+ Wi-Fi 2.4G (Ant4)	Yes	Yes	Yes	Yes
49	GSM DATA(Ant 1) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)+ BT	Yes	Yes	N/A	Yes
50	GSM DATA(Ant 2) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)+BT	N/A	Yes	Yes	Yes
51	GSM Voice(Ant 1) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)+ BT	Yes	Yes	N/A	Yes
52	GSM Voice (Ant 2) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)+BT	N/A	Yes	Yes	Yes
53	UMTS (Ant 1) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)+BT	Yes	Yes	Yes	Yes
54	UMTS (Ant 2) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)+BT	Yes	Yes	Yes	Yes
55	LTE (Ant 1) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)+BT	Yes	Yes	Yes	Yes

56	LTE (Ant 2) + Wi-Fi 2.4G (Ant 4) + Wi-Fi 5G (Ant 3)+BT	Yes	Yes	Yes	Yes

Table 235: Simultaneous Transmission Possibilities with BT Power Level B

Note:

1) Wi-Fi 2.4G Ant.4(Core1) can transmit simultaneously with Bluetooth and Wi-Fi 2.4G Ant.3(Core0) can't transmit simultaneously with Bluetooth.

2) Wi-Fi 5G Ant.3(Core0) can transmit simultaneously with Bluetooth and Ant.4(Core1) also can transmit simultaneously with Bluetooth.

3) Wi-Fi 2.4G has two TX antennas. Wi-Fi 2.4G 802.11g/n support 2*2 CDD/MIMO function.

4) Wi-Fi 5G has two TX antennas. Wi-Fi 5G 802.11 a/n/ac support 2*2 CDD/MIMO function.

5) Wi-Fi 2.4G& Wi-Fi 5G can't work at same mode, but they can transmit simultaneously at different modes (Wi-Fi station/P-to-P) by using different Wi-Fi antennas. Only Wi-Fi 2.4G Ant.4(Core1) station mode and Wi-Fi 5G Ant.3(Core0) P-to-P mode or Wi-Fi 2.4G Ant.4(Core1) P-to-P mode and Wi-Fi 5G Ant.3(Core0) station mode can transmit simultaneously.

6) The device does not support DTM function.

7) * VoLTE or pre-installed VOIP applications are considered.

8) The Main Antenna (Ant1) and Second Antenna (Ant2) can't transmit simultaneously.

9) For Wi-Fi 5G, U-NII-2A (5250-5350 MHz) and U-NII-2C (5470-5725 MHz) bands does not support hotspot function.

10) The device supports Vo-WIFI function.

11) When 2.4G hotspot +BT off ,it works on Ant.3(Core0). When 2.4G hotspot +BT on, 2.4G hotspot works on Ant.4(Core1) and BT works on Ant.3(Core0).

12) WIFI 2.4G hotspot does not support CDD/MIMO mode.

13) Ant 3=WiFi Core 0/ BT; Ant 4 = WiFi Core 1.

The simultaneous transmission possibilities for BT at lower power level B and high power level A are different. The simultaneous transmission possibilities for BT high power level A is as below table:

NO.	Simultaneous TX Combination	Head	Body-worn	Hotspot	Product Specific 10-g (0mm)
1	GSM Voice(Ant 1) + BT	N/A	Yes	N/A	Yes
2	GSM DATA(Ant 1) + BT	N/A	Yes	Yes	Yes
3	GSM Voice(Ant 2) + BT	N/A	Yes	N/A	Yes
4	GSM DATA (Ant 2)+ BT	N/A	Yes	Yes	Yes
5	UMTS (Ant 1) + BT	N/A	Yes	Yes	Yes
6	UMTS (Ant 2) + BT	N/A	Yes	Yes	Yes
7	LTE(Ant 1) + BT	N/A	Yes	Yes	Yes
8	LTE (Ant 2) + BT	N/A	Yes	Yes	Yes
9	GSM Voice(Ant 1) + BT+ Wi-Fi 2.4G (Ant4)	N/A	Yes	N/A	Yes
10	GSM DATA(Ant 1) + BT+ Wi-Fi 2.4G (Ant4)	N/A	Yes	Yes	Yes
11	GSM Voice(Ant 2) + BT+ Wi-Fi 2.4G (Ant4)	N/A	Yes	N/A	Yes
12	GSM DATA (Ant 2)+ BT+ Wi-Fi 2.4G (Ant4)	N/A	Yes	Yes	Yes
13	UMTS (Ant 1) + BT+ Wi-Fi 2.4G (Ant4)	N/A	Yes	Yes	Yes
14	UMTS (Ant 2) + BT+ Wi-Fi 2.4G (Ant4)	N/A	Yes	Yes	Yes
15	LTE (Ant 1) + BT+ Wi-Fi 2.4G (Ant4)	N/A	Yes	Yes	Yes
16	LTE (Ant 2) + BT+ Wi-Fi 2.4G (Ant4)	N/A	Yes	Yes	Yes
17	GSM Voice(Ant 1) + BT+ Wi-Fi 5G (Ant4)	N/A	Yes	N/A	Yes
18	GSM DATA(Ant 1) + BT+ Wi-Fi 5G (Ant4)	N/A	Yes	Yes	Yes
19	GSM Voice(Ant 2) + BT+ Wi-Fi 5G (Ant4)	N/A	Yes	N/A	Yes
20	GSM DATA (Ant 2)+ BT+ Wi-Fi 5G (Ant4)	N/A	Yes	Yes	Yes
21	UMTS (Ant 1) + BT+ Wi-Fi 5G (Ant4)	N/A	Yes	Yes	Yes
22	UMTS (Ant 2) + BT+ Wi-Fi 5G (Ant4)	N/A	Yes	Yes	Yes
23	LTE (Ant 1) + BT+ Wi-Fi 5G (Ant4)	N/A	Yes	Yes	Yes
24	LTE (Ant 2) + BT+ Wi-Fi 5G (Ant4)	N/A	Yes	Yes	Yes

Table 236: Simultaneous Transmission Possibilities with BT Power Level A

1) When BT is in high power level A, BT and Wi-Fi 5G Ant.3(Core0)/WIFI 5G MIMO cannot transmit simultaneously because BT occupies Wifi 5G Ant.3(Core0) ’s RF channel. They are time division multiplexing.

2) When WiFi 2.4G and 5G are both on at the same time, BT can only work at power B. BT High Power A will be limited by design.

3) Ant 3=WiFi Core 0/ BT; Ant 4 = WiFi Core 1.

7.3.2 SAR Summation Scenario

Test Position		Second antenna														Second antenna MaxSAR
		GSM 850	GSM 1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 12	LTE Band 17	LTE Band 26	LTE Band 38	LTE Band 41	
Head	Left cheek	0.501	0.191	0.291	0.368	0.362	0.276	0.315	0.393	0.171	0.370	/	0.418	0.165	0.192	0.501
	Left tilt	0.416	0.262	0.413	0.535	0.344	0.446	0.453	0.315	0.180	0.370	/	0.455	0.223	0.238	0.535
	Right cheek	0.425	0.276	0.370	0.333	0.398	0.364	0.332	0.349	0.291	0.356	/	0.516	0.258	0.313	0.516
	Right tilt	0.388	0.556	0.543	0.585	0.421	0.577	0.381	0.316	0.457	0.461	/	0.471	0.497	0.590	0.590
Body Worn	Front side	0.305	0.030	0.100	0.188	0.298	0.092	0.195	0.324	0.094	0.238	/	0.282	0.076	0.100	0.324
	Back side	0.310	0.086	0.187	0.192	0.306	0.135	0.225	0.288	0.245	0.165	/	0.333	0.208	0.302	0.333
Hotspot	Front side	0.765	0.119	0.110	0.152	0.610	0.118	0.211	0.715	0.080	0.311	/	0.604	0.152	0.109	0.765
	Back side	0.796	0.100	0.138	0.171	0.717	0.126	0.212	0.544	0.361	0.470	/	0.734	0.477	0.425	0.796
	Left side	0.265	0.027	0.027	0.036	0.248	0.058	0.048	0.251	0.038	0.119	/	0.343	0.060	0.038	0.343
	Right side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Top side	0.448	0.350	0.548	0.349	0.450	0.355	0.469	0.382	0.258	0.278	/	0.388	0.296	0.296	0.548
	Bottom side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Product Specific 10-g	Front side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Back side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Left side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Right side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Top side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Bottom side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

Table 237: Second antenna Max SAR

Test Position		Main antenna														Main antenna MaxSAR
		GSM 850	GSM 1900	UMTS Band II	UMTS Band IV	UMTS Band V	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 12	LTE Band 17	LTE Band 26	LTE Band 38	LTE Band 41	
Head	Left cheek	0.105	0.078	0.182	0.372	0.148	0.179	0.268	0.145	0.114	0.072	/	0.136	0.112	0.104	0.372
	Left tilt	0.065	0.048	0.091	0.134	0.101	0.112	0.121	0.108	0.091	0.050	/	0.089	0.083	0.089	0.134
	Right cheek	0.158	0.123	0.255	0.296	0.224	0.275	0.271	0.207	0.237	0.106	/	0.187	0.157	0.190	0.296
	Right tilt	0.047	0.039	0.095	0.143	0.084	0.101	0.117	0.085	0.193	0.039	/	0.074	0.049	0.051	0.193
Body Worn	Front side	0.266	0.123	0.265	0.536	0.278	0.283	0.466	0.278	0.266	0.154	/	0.261	0.224	0.247	0.536
	Back side	0.330	0.190	0.497	0.640	0.390	0.512	0.641	0.396	0.492	0.285	/	0.361	0.353	0.369	0.641
Hotspot	Front side	0.372	0.267	0.318	0.465	0.446	0.218	0.420	0.472	0.385	0.188	/	0.401	0.257	0.310	0.472
	Back side	0.593	0.301	0.228	0.439	0.652	0.232	0.458	0.615	0.416	0.370	/	0.599	0.378	0.424	0.652
	Left side	0.328	0.062	0.072	0.101	0.370	0.069	0.106	0.327	0.083	0.225	/	0.308	0.045	0.059	0.370
	Right side	0.162	0.115	0.120	0.190	0.197	0.113	0.183	0.177	0.096	0.112	/	0.182	0.061	0.071	0.197
	Top side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Bottom side	0.350	0.673	0.750	0.851	0.337	0.672	0.742	0.367	0.711	0.100	/	0.374	0.738	0.881	0.881
Product Specific 10-g	Front side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Back side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Left side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Right side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Top side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	Bottom side	/	/	2.720	2.631	/	2.958	2.505	/	1.700	/	/	/	1.769	2.961	2.961

Table 238: Main antenna Max SAR

Test Position		Second antenna MaxSAR	WiFi 2.4G Ant3 (Core0)	WiFi 2.4G Ant4 (Core1)	WiFi 2.4G MIMO	WiFi 5G Ant3 (Core0)	WiFi 5G Ant4 (Core1)	WiFi 5G MIMO	BT Power Level B	Simultaneously Transmission SAR						
		1	2	3	4	5	6	7	8	1+8	1+max (2,3,4)	1+max (5,6,7)	1+3+5	1+max (5,6,7) +8	1+3+8	1+3 +5+8
Head	Left cheek	0.501	0.477	0.001	0.576	0.310	0.089	0.399	0.175	0.676	1.077	0.900	0.812	1.075	0.677	0.987
	Left tilt	0.535	0.782	0.003	0.814	0.499	0.089	0.588	0.241	0.776	1.349	1.123	1.037	**1.364**	0.779	1.278
	Right cheek	0.516	0.184	0.037	0.191	0.073	0.025	0.513	0.065	0.581	0.707	1.029	0.626	1.094	0.618	0.691
	Right tilt	0.590	0.267	0.005	0.232	0.105	0.089	0.588	0.068	0.658	**0.857**	1.178	0.700	1.246	0.663	0.768
Body Worn	Front side	0.324	0.115	0.102	0.184	0.049	0.044	0.082	0.007	0.331	**0.508**	0.406	0.475	0.413	0.433	0.482
	Back side	0.333	0.056	0.102	0.170	0.057	0.044	0.090	0.005	0.338	0.503	0.423	0.492	0.428	0.440	0.497
Hotspot	Front side	0.765	0.132	0.302	/	0.049	0.124	0.300	0.023	0.788	1.067	1.065	1.116	1.088	1.090	1.139
	Back side	0.796	0.107	0.302	/	0.232	0.124	0.300	0.014	0.810	1.098	1.096	1.330	1.110	1.112	**1.344**
	Left side	0.343	/	0.120	/	0.028	0.065	0.197	/	0.343	0.463	0.540	0.491	0.540	0.463	0.491
	Right side	/	0.094	/	/	0.042	0.124	0.256	0.009	0.009	0.094	0.256	0.042	0.265	0.009	0.051
	Top side	0.548	0.370	0.302	/	0.232	0.124	0.300	0.035	0.583	0.918	0.848	1.082	0.883	0.885	1.117
	Bottom side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
Product Specific 10-g	Front side	/	/	/	1.174	0.758	0.061	0.814	/	/	1.174	0.814	0.758	0.814	/	0.758
	Back side	/	/	/	1.463	1.741	0.864	2.605	/	/	1.463	2.605	1.741	2.605	/	1.741
	Left side	/	/	/	0.649	1.741	0.864	2.605	/	/	0.649	2.605	1.741	2.605	/	1.741
	Right side	/	/	/	1.272	1.741	0.864	2.605	/	/	1.272	2.605	1.741	2.605	/	1.741
	Top side	/	/	/	1.440	1.741	0.864	2.605	/	/	1.440	2.605	1.741	2.605	/	1.741
	Bottom side	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

Table 239: SAR Simultaneous Tx Combination of Second antenna with WiFi/BT Scenario (BT: Power level B)

Test Position		Main antenna MaxSAR	WiFi 2.4G Ant3 (Core0)	WiFi 2.4G Ant4 (Core1)	WiFi 2.4G MIMO	WiFi 5G Ant3 (Core0)	WiFi 5G Ant4 (Core1)	WiFi 5G MIMO	BT Power Level B	Simultaneously Transmission SAR						
		1	2	3	4	5	6	7	8	1+8	1+max (2,3,4)	1+max (5,6,7)	1+3+5	1+max (5,6,7) +8	1+3+8	1+3 +5+8
Head	Left cheek	0.372	0.477	0.001	0.576	0.310	0.089	0.399	0.175	0.547	0.948	0.771	0.683	0.946	0.548	0.858
	Left tilt	0.134	0.782	0.003	0.814	0.499	0.089	0.588	0.241	0.375	0.948	0.722	0.636	**0.963**	0.378	0.877
	Right cheek	0.296	0.184	0.037	0.191	0.073	0.025	0.513	0.065	0.361	0.487	0.809	0.406	0.874	0.398	0.471
	Right tilt	0.193	0.267	0.005	0.232	0.105	0.089	0.588	0.068	0.261	0.460	0.781	0.303	0.849	0.266	0.371
Body Worn	Front side	0.536	0.115	0.102	0.184	0.049	0.044	0.082	0.007	0.543	0.720	0.618	0.687	0.625	0.645	0.694
	Back side	0.641	0.056	0.102	0.170	0.057	0.044	0.090	0.005	0.646	**0.811**	0.731	0.800	0.736	0.748	0.805
Hotspot	Front side	0.472	0.132	0.302	/	0.049	0.124	0.300	0.023	0.495	0.774	0.772	0.823	0.795	0.797	0.846
	Back side	0.652	0.107	0.302	/	0.232	0.124	0.300	0.014	0.666	0.954	0.952	1.186	0.966	0.968	**1.200**
	Left side	0.370	/	0.120	/	0.028	0.065	0.197	/	0.370	0.490	0.567	0.518	0.567	0.490	0.518
	Right side	0.199	0.094	/	/	0.042	0.124	0.256	0.009	0.208	0.293	0.455	0.241	0.464	0.208	0.051
	Top side	0.000	0.370	0.302	/	0.232	0.124	0.300	0.035	0.035	0.370	0.300	0.534	0.335	0.337	0.569
	Bottom side	0.881	/	/	/	/	/	/	/	0.881	0.881	0.881	0.881	0.881	0.881	0.881
Product Specific 10-g	Front side	/	/	/	1.174	0.758	0.061	0.814	/	/	1.174	0.814	0.758	0.814	/	0.758
	Back side	/	/	/	1.463	1.741	0.864	2.605	/	/	1.463	2.605	1.741	2.605	/	1.741
	Left side	/	/	/	0.649	1.741	0.864	2.605	/	/	0.649	2.605	1.741	2.605	/	1.741
	Right side	/	/	/	1.272	1.741	0.864	2.605	/	/	1.272	2.605	1.741	2.605	/	1.741
	Top side	/	/	/	1.440	1.741	0.864	2.605	/	/	1.440	2.605	1.741	2.605	/	1.741
	Bottom side	2.961	/	/	/	/	/	/	/	/	2.961	2.961	2.961	2.961	2.961	2.961

Table 240: SAR Simultaneous Tx Combination of Main antenna with WiFi/BT Scenario (BT: Power level B)

Test Position		Second antenna MaxSAR	WiFi 2.4G Ant3 (Core0)	WiFi 2.4G Ant4 (Core1)	WiFi 2.4G MIMO	WiFi 5G Ant3 (Core0)	WiFi 5G Ant4 (Core1)	WiFi 5G MIMO	BT Power Level A	Simultaneously Transmission SAR		
		1	2	3	4	5	6	7	8	1+8	1+3+8	1+6+8
Body Worn	Front side	0.324	0.115	0.102	0.184	0.049	0.044	0.082	0.057	0.381	**0.483**	0.425
	Back side	0.333	0.056	0.102	0.170	0.057	0.044	0.090	0.037	0.370	0.472	0.414
Hotspot	Front side	0.765	0.132	0.302	/	0.049	0.124	0.300	0.082	0.847	1.149	0.971
	Back side	0.796	0.107	0.302	/	0.232	0.124	0.300	0.076	0.872	**1.174**	0.996
	Left side	0.343	/	0.120	/	0.028	0.065	0.197	/	0.343	0.463	0.408
	Right side	/	0.094	/	/	0.042	0.124	0.256	0.057	0.057	0.057	0.181
	Top side	0.548	0.370	0.302	/	0.232	0.124	0.300	0.216	0.764	1.066	0.888
	Bottom side	/	/	/	/	/	/	/	/	/	/	/
Product Specific 10-g	Front side	/	/	/	1.174	0.758	0.061	0.814	/	/	/	0.061
	Back side	/	/	/	1.463	1.741	0.864	2.605	/	/	/	0.864
	Left side	/	/	/	0.649	1.741	0.864	2.605	/	/	/	0.864
	Right side	/	/	/	1.272	1.741	0.864	2.605	/	/	/	0.864
	Top side	/	/	/	1.440	1.741	0.864	2.605	/	/	/	0.864
	Bottom side	/	/	/	/	/	/	/	/	/	/	/

Table 241: SAR Simultaneous Tx Combination of Second antenna with WiFi/BT Scenario (BT: Power level A)

Test Position		Main antenna MaxSAR	WiFi 2.4G Ant3 (Core0)	WiFi 2.4G Ant4 (Core1)	WiFi 2.4G MIMO	WiFi 5G Ant3 (Core0)	WiFi 5G Ant4 (Core1)	WiFi 5G MIMO	BT Power Level A	Simultaneously Transmission SAR		
		1	2	3	4	5	6	7	8	1+8	1+3+8	1+6+8
Body Worn	Front side	0.536	0.115	0.102	0.184	0.049	0.044	0.082	0.057	0.593	0.695	0.637
	Back side	0.641	0.056	0.102	0.170	0.057	0.044	0.090	0.037	0.678	**0.780**	0.722
Hotspot	Front side	0.472	0.132	0.302	/	0.049	0.124	0.300	0.082	0.554	0.856	0.678
	Back side	0.652	0.107	0.302	/	0.232	0.124	0.300	0.076	0.728	**1.030**	0.852
	Left side	0.370	/	0.120	/	0.028	0.065	0.197	/	0.370	0.490	0.435
	Right side	0.199	0.094	/	/	0.042	0.124	0.256	0.057	0.254	0.254	0.378
	Top side	0.000	0.370	0.302	/	0.232	0.124	0.300	0.216	0.216	0.518	0.34
	Bottom side	0.881	/	/	/	/	/	/	/	0.881	0.881	0.881
Product Specific 10-g	Front side	/	/	/	1.174	0.758	0.061	0.814	0.000	/	/	0.061
	Back side	/	/	/	1.463	1.741	0.864	2.605	0.000	/	/	0.864
	Left side	/	/	/	0.649	1.741	0.864	2.605	0.000	/	/	0.864
	Right side	/	/	/	1.272	1.741	0.864	2.605	0.000	/	/	0.864
	Top side	/	/	/	1.440	1.741	0.864	2.605	0.000	/	/	0.864
	Bottom side	2.961	/	/	/	/	/	/	/	2.961	2.961	2.961

Table 242: SAR Simultaneous Tx Combination of Main antenna with WiFi/BT Scenario (BT: Power level A)

The device also supports Tx wireless charging function. When the device is working on Tx wireless charging mode, other Tx antennas(2G/3G/4G/WIFI/BT) can still work. So this simultaneous transmission should also be considered.
Per KDB 447498D01, the following test exclusion conditions should be satisfied for all combinations of simultaneous transmission configurations:
The [Σ of (the highest measured or estimated SAR for each standalone antenna configuration, adjusted for maximum tune-up tolerance) / 1.6 W/kg] + [Σ of MPE ratios] is ≤ 1.0.

Similarly For Product Specific 10-g SAR, the test exclusion conditions should be:
The [Σ of (the highest measured or estimated SAR for each standalone antenna configuration, adjusted for maximum tune-up tolerance) / 4.0 W/kg] + [Σ of MPE ratios] is ≤ 1.0.

The RF exposure ratios for all combinations of simultaneous transmission configurations are calculated as below:

exposure condition	MAX Simultaneous Transmission SAR (W/kg)	SAR Limit (W/kg)	Max E-field (V/m)	MPE Limit (V/m)	RF exposure ratio (≤ 1.0)	Conclusion
Head	1.364	1.6	1.75	614	0.86	PASS
Body-worn	0.811	1.6	1.75	614	0.51	PASS
Hotspot	1.344	1.6	1.75	614	0.84	PASS
Product Specific 10-g SAR	2.961	4.0	1.75	614	0.74	PASS

Table 243: Simultaneous transmission RF exposure ratios for SAR & MPE(E-Field)

exposure condition	MAX Simultaneous Transmission SAR (W/kg)	SAR Limit (W/kg)	Max H-field (A/m)	MPE Limit (A/m)	RF exposure ratio (≤ 1.0)	Conclusion
Head	1.364	1.6	0.046	1.63	0.88	PASS
Body-worn	0.811	1.6	0.046	1.63	0.54	PASS
Hotspot	1.344	1.6	0.046	1.63	0.87	PASS
Product Specific 10-g SAR	2.961	4.0	0.046	1.63	0.77	PASS

Table 244: Simultaneous transmission RF exposure ratios for SAR & MPE(H-Field)
Note: Please refer to the Partial RF exposure test report of Wireless Charging for detailed E-field and H-field results.

7.3.3 Simultaneous Transmission Conclusion

The above numeral summed SAR results is sufficient to determine that simultaneous transmission cases will not exceed the SAR limit and therefore simultaneous transmission SAR with Volume Scans is not required per KDB 447498 D01.

Appendix A. System Check Plots
(Please See Appendix No.: SYBH(Z-SAR)20200307015001-2A, total: 61 pages)

Appendix B. SAR Measurement Plots
(Please See Appendix No.: SYBH(Z-SAR)20200307015001-2B, total: 105 pages)

Appendix C. Calibration Certificate
(Please See Appendix No.: SYBH(Z-SAR)20200307015001-2C, total: 328 pages)

Appendix D. Photo documentation
(Please See Appendix No.: SYBH(Z-SAR)20200307015001-2D, total: 10 pages)

Appendix E. Antenna Location
(Please See Appendix No.: SYBH(Z-SAR)20200307015001-2E, total: 2 page)

End