

Project No.	SHT2207115002EW		
Test sample No.	YPHT22071150004	Model No.	Star9 3G
Start test date	2022/8/18	Finish date	2022/9/13
Temperature	22.5℃	Humidity	41%
Test Engineer	Bo Wang	Auditor	Weyang.Xiang

Appendix clause	Test Item	Result
A	Conducted Power Measurement Results	PASS
B	SAR Measurement Results	PASS
C	Simultaneous Transmission analysis	PASS

Appendix A:Conducted Power Measurement Results-GSM

GSM850		Burst Average Power (dBm)			Tune-up limit (dBm)	Division Factors	Frame-Average Power (dBm)			Tune-up limit (dBm)
		CH128	CH190	CH251			CH128	CH190	CH251	
		824.2MHz	836.6MHz	848.8MHz			824.2MHz	836.6MHz	848.8MHz	
GSM		34.53	34.53	34.21	35.00	-9.03	25.50	25.50	25.18	25.97
GPRS (GMSK)	1Tx slot	34.61	34.52	34.18	35.00	-9.03	25.58	25.49	25.15	25.97
	2Tx slots	32.53	32.49	32.11	33.00	-6.02	26.51	26.47	26.09	26.98
	3Tx slots	30.86	30.73	30.29	31.00	-4.26	26.60	26.47	26.03	26.74
	4Tx slots	29.07	28.99	28.54	29.50	-3.01	26.06	25.98	25.53	26.49

GSM1900		Burst Average Power (dBm)			Tune-up limit (dBm)	Division Factors	Frame-Average Power (dBm)			Tune-up limit (dBm)
		CH512	CH661	CH810			CH512	CH661	CH810	
		1850.2MHz	1880MHz	1909.8MHz			1850.2MHz	1880.0MHz	1909.8MHz	
GSM		30.56	30.71	30.98	31.00	-9.03	21.53	21.68	21.95	21.97
GPRS (GMSK)	1Tx slot	30.32	30.27	30.47	30.50	-9.03	21.29	21.24	21.44	21.47
	2Tx slots	27.95	28.04	28.25	28.50	-6.02	21.93	22.02	22.23	22.48
	3Tx slots	26.40	26.33	26.56	27.00	-4.26	22.14	22.07	22.30	22.74
	4Tx slots	24.08	24.18	24.41	24.50	-3.01	21.07	21.17	21.40	21.49

Appendix A:Conducted Power Measurement Results-WCDMA

WCDMA Band II		Conducted Power (dBm)			Tune-up limit (dBm)
		CH9262	CH9400	CH9538	
		1852.4MHz	1880MHz	1907.6MHz	
AMR 12.2K		23.12	23.10	22.95	23.50
RMC 12.2K		23.15	23.13	22.98	23.50
HSDPA	Subtest-1	20.24	20.23	20.03	20.50
	Subtest-2	19.94	18.40	19.83	20.00
	Subtest-3	19.59	17.78	19.59	20.00
	Subtest-4	19.18	17.48	17.47	19.50
HSUPA	Subtest-1	17.20	17.58	17.12	18.00
	Subtest-2	17.35	17.74	17.33	18.00
	Subtest-3	17.00	17.40	17.00	17.50
	Subtest-4	17.41	17.73	17.39	18.00
	Subtest-5	20.56	20.62	20.35	21.00

WCDMA Band V		Conducted Power (dBm)			Tune-up limit (dBm)
		CH4132	CH4183	CH4233	
		826.4MHz	836.6MHz	846.6MHz	
AMR 12.2K		24.05	24.20	23.80	24.50
RMC 12.2K		24.09	24.24	23.84	24.50
HSDPA	Subtest-1	21.93	20.63	21.61	22.00
	Subtest-2	20.81	20.88	21.81	22.00
	Subtest-3	20.28	20.01	21.10	21.50
	Subtest-4	20.47	21.13	21.08	21.50
HSUPA	Subtest-1	18.76	19.12	18.95	19.50
	Subtest-2	19.13	19.42	19.19	19.50
	Subtest-3	19.52	19.73	19.47	20.00
	Subtest-4	19.43	19.54	19.30	20.00
	Subtest-5	22.75	23.21	22.95	23.50

Appendix A:Conducted Power Measurement Results-WIFI/Bluetooth

WIFI 2.4G					
Mode	Channel	Frequency (MHz)	Peak Power (dBm)	Average Power (dBm)	Tune-up limit (dBm)
802.11b	1	2412	15.33	12.84	13.00
	6	2437	16.43	13.96	14.00
	11	2462	16.22	13.75	14.00
802.11g	1	2412	15.12	12.20	12.50
	6	2437	16.28	13.57	14.00
	11	2462	15.87	13.06	13.50
802.11n (HT20)	1	2412	15.22	13.36	13.50
	6	2437	16.34	14.51	15.00
	11	2462	16.19	14.42	14.50

Bluetooth						
Mode	Channel	Frequency (MHz)	Peak Power (dBm)	Average Power (dBm)	Tune-up limit (dBm)	
EDR	GFSK	0	2402	5.11	5.07	5.50
		39	2441	6.05	6.02	6.50
		78	2480	5.83	5.81	6.00
	$\pi/4$ QPSK	0	2402	5.57	4.93	5.00
		39	2441	6.81	6.12	6.50
		78	2480	6.78	6.10	6.50
	8DPSK	0	2402	5.89	5.09	5.50
		39	2441	7.16	6.38	6.50
		78	2480	7.20	6.37	6.50
BLE	GFSK	0	2402	-5.54	-5.61	-5.50
		19	2440	-4.21	-4.26	-4.00
		39	2480	-4.32	-4.41	-4.00

Appendix B:SAR Measurement Results-Head

GSM850										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
GPRS 3Tx slots	Left Cheek	128	824.2	30.86	31.00	1.033	-0.06	0.024	0.025	-
		190	836.6	30.73	31.00	1.064	-	-	-	-
		251	848.8	30.29	31.00	1.178	-	-	-	-
	Left-Tilt	128	824.2	30.86	31.00	1.033	-0.08	0.018	0.019	-
		190	836.6	30.73	31.00	1.064	-	-	-	-
		251	848.8	30.29	31.00	1.178	-	-	-	-
	Right Cheek	128	824.2	30.86	31.00	1.033	-0.11	0.033	0.034	1
		190	836.6	30.73	31.00	1.064	-	-	-	-
		251	848.8	30.29	31.00	1.178	-	-	-	-
	Right-Tilt	128	824.2	30.86	31.00	1.033	-0.05	0.022	0.023	-
		190	836.6	30.73	31.00	1.064	-	-	-	-
		251	848.8	30.29	31.00	1.178	-	-	-	-

GSM1900										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
GPRS 3Tx slots	Left Cheek	512	1850.2	26.40	27.00	1.148	-	-	-	-
		661	1880.0	26.33	27.00	1.167	-	-	-	-
		810	1909.8	26.56	27.00	1.107	0.08	0.042	0.046	-
	Left-Tilt	512	1850.2	26.40	27.00	1.148	-	-	-	-
		661	1880.0	26.33	27.00	1.167	-	-	-	-
		810	1909.8	26.56	27.00	1.107	0.02	0.021	0.023	-
	Right Cheek	512	1850.2	26.40	27.00	1.148	-	-	-	-
		661	1880.0	26.33	27.00	1.167	-	-	-	-
		810	1909.8	26.56	27.00	1.107	-0.08	0.053	0.059	2
	Right-Tilt	512	1850.2	26.40	27.00	1.148	-	-	-	-
		661	1880.0	26.33	27.00	1.167	-	-	-	-
		810	1909.8	26.56	27.00	1.107	-0.06	0.030	0.033	-

WCDMA Band II										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Left Cheek	9262	1852.4	23.15	23.50	1.084	0.09	0.223	0.242	-
		9400	1880.0	23.13	23.50	1.089	-	-	-	-
		9538	1907.6	22.98	23.50	1.127	-	-	-	-
	Left-Tilt	9262	1852.4	23.15	23.50	1.084	-0.02	0.189	0.205	-
		9400	1880.0	23.13	23.50	1.089	-	-	-	-
		9538	1907.6	22.98	23.50	1.127	-	-	-	-
	Right Cheek	9262	1852.4	23.15	23.50	1.084	-0.05	0.241	0.261	3
		9400	1880.0	23.13	23.50	1.089	-	-	-	-
		9538	1907.6	22.98	23.50	1.127	-	-	-	-
	Right-Tilt	9262	1852.4	23.15	23.50	1.084	-0.09	0.203	0.220	-
		9400	1880.0	23.13	23.50	1.089	-	-	-	-
		9538	1907.6	22.98	23.50	1.127	-	-	-	-

WCDMA Band V										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Left Cheek	4132	826.4	24.09	24.50	1.099	-	-	-	-
		4183	836.6	24.24	24.50	1.062	0.05	0.091	0.097	-
		4233	846.6	23.84	24.50	1.164	-	-	-	-
	Left-Tilt	4132	826.4	24.09	24.50	1.099	-	-	-	-
		4183	836.6	24.24	24.50	1.062	0.06	0.075	0.080	-
		4233	846.6	23.84	24.50	1.164	-	-	-	-
	Right Cheek	4132	826.4	24.09	24.50	1.099	-	-	-	-
		4183	836.6	24.24	24.50	1.062	-0.09	0.109	0.116	4
		4233	846.6	23.84	24.50	1.164	-	-	-	-
	Right-Tilt	4132	826.4	24.09	24.50	1.099	-	-	-	-
		4183	836.6	24.24	24.50	1.062	0.03	0.086	0.091	-
		4233	846.6	23.84	24.50	1.164	-	-	-	-

WiFi 2.4G												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11b	Left Cheek	1	2412	12.84	13.00	1.038	99.90%	1.001	-	-	-	-
		6	2437	13.96	14.00	1.009	99.90%	1.001	-0.15	0.515	0.520	5
		11	2462	13.75	14.00	1.059	99.90%	1.001	-	-	-	-
	Left-Tilt	1	2412	12.84	13.00	1.038	99.90%	1.001	-	-	-	-
		6	2437	13.96	14.00	1.009	99.90%	1.001	-0.02	0.456	0.461	-
		11	2462	13.75	14.00	1.059	99.90%	1.001	-	-	-	-
	Right Cheek	1	2412	12.84	13.00	1.038	99.90%	1.001	-	-	-	-
		6	2437	13.96	14.00	1.009	99.90%	1.001	-0.09	0.482	0.487	-
		11	2462	13.75	14.00	1.059	99.90%	1.001	-	-	-	-
	Right-Tilt	1	2412	12.84	13.00	1.038	99.90%	1.001	-	-	-	-
		6	2437	13.96	14.00	1.009	99.90%	1.001	-0.03	0.411	0.415	-
		11	2462	13.75	14.00	1.059	99.90%	1.001	-	-	-	-

Bluetooth												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
EDR 8DPSK	Left Cheek	0	2402	5.09	5.50	1.099	86.30%	1.159	-	-	-	-
		39	2441	6.38	6.50	1.028	86.30%	1.159	-0.07	0.095	0.113	6
		78	2480	6.37	6.50	1.030	86.30%	1.159	-	-	-	-
	Left-Tilt	0	2402	5.09	5.50	1.099	86.30%	1.159	-	-	-	-
		39	2441	6.38	6.50	1.028	86.30%	1.159	-0.04	0.080	0.095	-
		78	2480	6.37	6.50	1.030	86.30%	1.159	-	-	-	-
	Right Cheek	0	2402	5.09	5.50	1.099	86.30%	1.159	-	-	-	-
		39	2441	6.38	6.50	1.028	86.30%	1.159	-0.06	0.090	0.107	-
		78	2480	6.37	6.50	1.030	86.30%	1.159	-	-	-	-
	Right-Tilt	0	2402	5.09	5.50	1.099	86.30%	1.159	-	-	-	-
		39	2441	6.38	6.50	1.028	86.30%	1.159	-0.03	0.075	0.089	-
		78	2480	6.37	6.50	1.030	86.30%	1.159	-	-	-	-

Appendix B:SAR Measurement Results-Body

GSM850										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
GPRS 3Tx slots	Rear	128	824.2	30.86	31.00	1.033	-0.09	0.467	0.482	7
		190	836.6	30.73	31.00	1.064	-	-	-	-
		251	848.8	30.29	31.00	1.178	-	-	-	-
	Left	128	824.2	30.86	31.00	1.033	-0.05	0.261	0.270	-
		190	836.6	30.73	31.00	1.064	-	-	-	-
		251	848.8	30.29	31.00	1.178	-	-	-	-
	Right	128	824.2	30.86	31.00	1.033	-0.02	0.422	0.436	-
		190	836.6	30.73	31.00	1.064	-	-	-	-
		251	848.8	30.29	31.00	1.178	-	-	-	-
	Bottom	128	824.2	30.86	31.00	1.033	0.03	0.447	0.462	-
		190	836.6	30.73	31.00	1.064	-	-	-	-
		251	848.8	30.29	31.00	1.178	-	-	-	-

GSM1900										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
GPRS 3Tx slots	Rear	512	1850.2	26.40	27.00	1.148	-	-	-	-
		661	1880.0	26.33	27.00	1.167	-	-	-	-
		810	1909.8	26.56	27.00	1.107	-0.10	0.391	0.433	8
	Left	512	1850.2	26.40	27.00	1.148	-	-	-	-
		661	1880.0	26.33	27.00	1.167	-	-	-	-
		810	1909.8	26.56	27.00	1.107	0.06	0.172	0.190	-
	Right	512	1850.2	26.40	27.00	1.148	-	-	-	-
		661	1880.0	26.33	27.00	1.167	-	-	-	-
		810	1909.8	26.56	27.00	1.107	0.03	0.330	0.365	-
	Bottom	512	1850.2	26.40	27.00	1.148	-	-	-	-
		661	1880.0	26.33	27.00	1.167	-	-	-	-
		810	1909.8	26.56	27.00	1.107	-0.10	0.364	0.403	-

WCDMA Band II										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Rear	9262	1852.4	23.15	23.50	1.084	-0.03	0.781	0.847	9
		9400	1880.0	23.13	23.50	1.089	0.14	0.759	0.826	-
		9538	1907.6	22.98	23.50	1.127	-0.08	0.726	0.818	-
	Left	9262	1852.4	23.15	23.50	1.084	-0.10	0.433	0.469	-
		9400	1880.0	23.13	23.50	1.089	-	-	-	-
		9538	1907.6	22.98	23.50	1.127	-	-	-	-
	Right	9262	1852.4	23.15	23.50	1.084	-0.02	0.706	0.765	-
		9400	1880.0	23.13	23.50	1.089	-	-	-	-
		9538	1907.6	22.98	23.50	1.127	-	-	-	-
	Bottom	9262	1852.4	23.15	23.50	1.084	-0.06	0.720	0.780	-
		9400	1880.0	23.13	23.50	1.089	-	-	-	-
		9538	1907.6	22.98	23.50	1.127	-	-	-	-

WCDMA Band V										
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz					(W/kg)	(W/kg)	
RMC 12.2Kbps	Rear	4132	826.4	24.09	24.50	1.099	-0.06	0.818	0.899	-
		4183	836.6	24.24	24.50	1.062	0.03	0.859	0.912	10
		4233	846.6	23.84	24.50	1.164	0.14	0.778	0.906	-
	Left	4132	826.4	24.09	24.50	1.099	-	-	-	-
		4183	836.6	24.24	24.50	1.062	-0.10	0.725	0.770	-
		4233	846.6	23.84	24.50	1.164	-	-	-	-
	Right	4132	826.4	24.09	24.50	1.099	-0.01	0.733	0.806	-
		4183	836.6	24.24	24.50	1.062	0.06	0.780	0.828	-
		4233	846.6	23.84	24.50	1.164	0.11	0.702	0.817	-
	Bottom	4132	826.4	24.09	24.50	1.099	0.14	0.780	0.857	-
		4183	836.6	24.24	24.50	1.062	-0.02	0.821	0.872	-
		4233	846.6	23.84	24.50	1.164	-0.05	0.742	0.864	-

WIFI 2.4G												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
802.11b	Rear	1	2412	12.84	13.00	1.038	99.90%	1.001	-	-	-	-
		6	2437	13.96	14.00	1.009	99.90%	1.001	-0.08	0.320	0.323	11
		11	2462	13.75	14.00	1.059	99.90%	1.001	-	-	-	-
	Top	1	2412	12.84	13.00	1.038	99.90%	1.001	-	-	-	-
		6	2437	13.96	14.00	1.009	99.90%	1.001	-0.10	0.302	0.305	-
		11	2462	13.75	14.00	1.059	99.90%	1.001	-	-	-	-

Bluetooth												
Mode	Test Position	Frequency		Conducted Power (dBm)	Tune-up limit (dBm)	Tune-up scaling factor	Duty Cycle	Duty Cycle Scaling Factor	Power Drift(dB)	Measured SAR(1g)	Report SAR(1g)	Plot No.
		CH	MHz							(W/kg)	(W/kg)	
EDR 8DPSK	Rear	0	2402	5.09	5.50	1.099	86.30%	1.159	-	-	-	-
		39	2441	6.38	6.50	1.028	86.30%	1.159	-0.11	0.151	0.180	12
		78	2480	6.37	6.50	1.030	86.30%	1.159	-	-	-	-
	Top	0	2402	5.09	5.50	1.099	86.30%	1.159	-	-	-	-
		39	2441	6.38	6.50	1.028	86.30%	1.159	0.05	0.142	0.169	-
		78	2480	6.37	6.50	1.030	86.30%	1.159	-	-	-	-

Appendix C: Simultaneous Transmission analysis-Head

WWAN + WLAN DTS					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR
			WWAN	WLAN DTS	(W/kg)
GSM	GSM850	Left Cheek	0.025	0.520	0.545
		Left-Tilt	0.019	0.461	0.480
		Right Cheek	0.034	0.487	0.521
		Right-Tilt	0.023	0.415	0.438
	GSM1900	Left Cheek	0.046	0.520	0.566
		Left-Tilt	0.023	0.461	0.484
		Right Cheek	0.059	0.487	0.546
		Right-Tilt	0.033	0.415	0.448
WCDMA	Band II	Left Cheek	0.242	0.520	0.762
		Left-Tilt	0.205	0.461	0.666
		Right Cheek	0.261	0.487	0.748
		Right-Tilt	0.220	0.415	0.635
	Band V	Left Cheek	0.097	0.520	0.617
		Left-Tilt	0.080	0.461	0.541
		Right Cheek	0.116	0.487	0.603
		Right-Tilt	0.091	0.415	0.506

WWAN + BT					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR
			WWAN	BT	(W/kg)
GSM	GSM850	Left Cheek	0.025	0.113	0.138
		Left-Tilt	0.019	0.095	0.114
		Right Cheek	0.034	0.107	0.141
		Right-Tilt	0.023	0.089	0.112
	GSM1900	Left Cheek	0.046	0.113	0.159
		Left-Tilt	0.023	0.095	0.118
		Right Cheek	0.059	0.107	0.166
		Right-Tilt	0.033	0.089	0.122
WCDMA	Band II	Left Cheek	0.242	0.113	0.355
		Left-Tilt	0.205	0.095	0.300
		Right Cheek	0.261	0.107	0.368
		Right-Tilt	0.220	0.089	0.309
	Band V	Left Cheek	0.097	0.113	0.210
		Left-Tilt	0.080	0.095	0.175
		Right Cheek	0.116	0.107	0.223
		Right-Tilt	0.091	0.089	0.180

Appendix C: Simultaneous Transmission analysis-Body

WWAN + WLAN DTS					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR
			WWAN	WLAN DTS	(W/kg)
GSM	GSM850	Rear	0.482	0.323	0.805
		Left side	0.270	-	0.263
		Right side	0.436	-	0.410
		Top side	-	0.305	0.305
		Bottom side	0.462	-	0.439
	GSM1900	Rear	0.433	0.323	0.756
		Left side	0.190	-	0.186
		Right side	0.365	-	0.349
		Top side	-	0.305	0.305
		Bottom side	0.403	-	0.393
WCDMA	Band II	Rear	0.847	0.323	1.170
		Left side	0.469	-	0.459
		Right side	0.765	-	0.740
		Top side	-	0.305	0.309
		Bottom side	0.780	-	0.764
	Band V	Rear	0.912	0.323	1.235
		Left side	0.770	-	0.671
		Right side	0.828	-	0.812
		Top side	-	0.305	0.309
		Bottom side	0.872	-	0.862

WWAN + BT					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR
			WWAN	BT	(W/kg)
GSM	GSM850	Rear	0.482	0.180	0.662
		Left side	0.270	-	0.263
		Right side	0.436	-	0.415
		Top side	-	0.169	0.080
		Bottom side	0.462	-	0.462
	GSM1900	Rear	0.433	0.180	0.613
		Left side	0.190	-	0.190
		Right side	0.365	-	0.365
		Top side	-	0.169	0.169
		Bottom side	0.403	-	0.393
WCDMA	Band II	Rear	0.847	0.180	1.027
		Left side	0.469	-	0.459
		Right side	0.765	-	0.740
		Top side	-	0.169	0.080
		Bottom side	0.780	-	0.764
	Band V	Rear	0.912	0.180	1.092
		Left side	0.770	-	0.671
		Right side	0.828	-	0.812
		Top side	-	0.169	0.080
		Bottom side	0.872	-	0.862