

Project No.	SHT2203115002EW		
Test sample No.	YPHT22031150002	Model No.	S20
Start test date	2022/4/8	Finish date	2022/4/13
Temperature	22.4°C	Humidity	47%
Test Engineer	BoWang	Auditor	<i>Xiaodong Zhuo</i>

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		33.08	33.23	32.82	33.50	-9.03	24.05	24.20	23.79	24.47
GPRS (GMSK)	1Tx slot	33.11	33.27	32.90	33.50	-9.03	24.08	24.24	23.87	24.47
	2Tx slots	31.64	31.99	31.59	32.00	-6.02	25.62	25.97	25.57	25.98
	3Tx slots	29.97	29.96	29.56	30.00	-4.26	25.71	25.70	25.30	25.74
	4Tx slots	27.37	27.36	26.92	27.50	-3.01	24.36	24.35	23.91	24.49

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		29.27	29.31	29.29	29.50	-9.03	20.24	20.28	20.26	20.47
GPRS (GMSK)	1Tx slot	29.30	29.41	29.32	29.50	-9.03	20.27	20.38	20.29	20.47
	2Tx slots	27.75	27.71	27.46	28.00	-6.02	21.73	21.69	21.44	21.98
	3Tx slots	26.03	25.85	25.33	26.50	-4.26	21.77	21.59	21.07	22.24
	4Tx slots	23.57	23.37	23.02	24.00	-3.01	20.56	20.36	20.01	20.99

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		22.01	22.08	22.14	22.50
RMC 12.2K		22.04	22.11	22.17	22.50
HSDPA	Subtest-1	22.32	23.11	22.97	23.50
	Subtest-2	22.08	22.82	22.69	23.00
	Subtest-3	20.99	21.85	21.77	22.00
	Subtest-4	20.73	21.53	21.44	22.00
HSUPA	Subtest-1	19.21	20.10	19.88	20.50
	Subtest-2	19.58	20.44	20.20	20.50
	Subtest-3	19.38	20.25	20.01	20.50
	Subtest-4	19.62	20.45	20.24	20.50
	Subtest-5	21.65	22.42	22.36	22.50

WCDMA Band V		Conducted Power (dBm)			Tune-up limit (dBm)
		CH4132	CH4183	CH4233	
		826.4MHz	836.6MHz	846.6MHz	
AMR 12.2K		22.86	22.78	22.36	23.00
RMC 12.2K		22.89	22.81	22.39	23.00
HSDPA	Subtest-1	23.12	22.64	22.49	23.50
	Subtest-2	22.11	21.68	21.58	22.50
	Subtest-3	21.30	20.78	20.72	21.50
	Subtest-4	20.87	20.30	20.25	21.00
HSUPA	Subtest-1	20.15	19.51	19.50	20.50
	Subtest-2	20.27	19.68	19.61	20.50
	Subtest-3	19.98	19.46	19.33	20.00
	Subtest-4	19.79	19.13	19.34	20.00
	Subtest-5	23.48	22.86	22.89	23.50

Appendix A:Conducted Power Measurement Results-Bluetooth

Bluetooth						
Mode		Channel	Frequency (MHz)	Peak Power (dBm)	Average Power (dBm)	Tune-up limit (dBm)
EDR	GFSK	0	2402	6.97	6.95	7.00
		39	2441	8.42	8.41	8.50
		78	2480	7.76	7.72	8.00
	$\pi/4$ QPSK	0	2402	7.85	7.44	7.50
		39	2441	9.51	8.99	9.00
		78	2480	8.72	8.28	8.50
	8DPSK	0	2402	7.92	7.47	7.50
		39	2441	9.60	9.05	9.50
		78	2480	8.83	8.30	8.50

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 2Tx slots	Left-Cheek	128	824.2	31.64	32.00	1.086	-0.03	0.856	0.930	-
		190	836.6	31.99	32.00	1.002	-0.18	1.010	1.012	1
		251	848.8	31.59	32.00	1.099	-0.05	0.745	0.819	-
	Left-Tilt	128	824.2	31.64	32.00	1.086	-	-	-	-
		190	836.6	31.99	32.00	1.002	0.20	0.773	0.775	-
		251	848.8	31.59	32.00	1.099	-	-	-	-
	Right-Cheek	128	824.2	31.64	32.00	1.086	-0.09	0.810	0.880	-
		190	836.6	31.99	32.00	1.002	0.08	0.937	0.939	-
		251	848.8	31.59	32.00	1.099	0.02	0.765	0.841	-
	Right-Tilt	128	824.2	31.64	32.00	1.086	-	-	-	-
		190	836.6	31.99	32.00	1.002	-0.10	0.709	0.711	-
		251	848.8	31.59	32.00	1.099	-	-	-	-

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	26.03	26.50	1.114	0.07	0.423	0.471	2
		661	1880.0	25.85	26.50	1.161	-	-	-	-
		810	1909.8	25.33	26.50	1.309	-	-	-	-
	Left-Tilt	512	1850.2	26.03	26.50	1.114	0.05	0.340	0.379	-
		661	1880.0	25.85	26.50	1.161	-	-	-	-
		810	1909.8	25.33	26.50	1.309	-	-	-	-
	Right-Cheek	512	1850.2	26.03	26.50	1.114	-0.04	0.407	0.454	-
		661	1880.0	25.85	26.50	1.161	-	-	-	-
		810	1909.8	25.33	26.50	1.309	-	-	-	-
	Right-Tilt	512	1850.2	26.03	26.50	1.114	-0.04	0.320	0.357	-
		661	1880.0	25.85	26.50	1.161	-	-	-	-
		810	1909.8	25.33	26.50	1.309	-	-	-	-

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	22.04	22.50	1.112	-	-	-	-
		9400	1880.0	22.11	22.50	1.094	-	-	-	-
		9538	1907.6	22.17	22.50	1.079	0.14	0.727	0.784	3
	Left-Tilt	9262	1852.4	22.04	22.50	1.112	-	-	-	-
		9400	1880.0	22.11	22.50	1.094	-	-	-	-
		9538	1907.6	22.17	22.50	1.079	0.12	0.598	0.645	-
	Right-Cheek	9262	1852.4	22.04	22.50	1.112	-	-	-	-
		9400	1880.0	22.11	22.50	1.094	-	-	-	-
		9538	1907.6	22.17	22.50	1.079	0.19	0.694	0.749	-
	Right-Tilt	9262	1852.4	22.04	22.50	1.112	-	-	-	-
		9400	1880.0	22.11	22.50	1.094	-	-	-	-
		9538	1907.6	22.17	22.50	1.079	-0.06	0.556	0.600	-

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	22.89	23.00	1.026	-0.16	0.553	0.567	4
		4183	836.6	22.81	23.00	1.045	-	-	-	-
		4233	846.6	22.39	23.00	1.151	-	-	-	-
	Left-Tilt	4132	826.4	22.89	23.00	1.026	-0.11	0.445	0.456	-
		4183	836.6	22.81	23.00	1.045	-	-	-	-
		4233	846.6	22.39	23.00	1.151	-	-	-	-
	Right-Cheek	4132	826.4	22.89	23.00	1.026	0.08	0.532	0.546	-
		4183	836.6	22.81	23.00	1.045	-	-	-	-
		4233	846.6	22.39	23.00	1.151	-	-	-	-
	Right-Tilt	4132	826.4	22.89	23.00	1.026	0.10	0.418	0.429	-
		4183	836.6	22.81	23.00	1.045	-	-	-	-
		4233	846.6	22.39	23.00	1.151	-	-	-	-

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)	
GFSK	Left-Cheek	0	2402	6.95	7.00	1.012	77.55%	1.289	-	-	-	-
		39	2441	8.41	8.50	1.021	77.55%	1.289	0.07	0.086	0.113	5
		78	2480	7.72	8.00	1.067	77.55%	1.289	-	-	-	-
	Left-Tilt	0	2402	6.95	7.00	1.012	77.55%	1.289	-	-	-	-
		39	2441	8.41	8.50	1.021	77.55%	1.289	-0.09	0.073	0.096	-
		78	2480	7.72	8.00	1.067	77.55%	1.289	-	-	-	-
	Right-Cheek	0	2402	6.95	7.00	1.012	77.55%	1.289	-	-	-	-
		39	2441	8.41	8.50	1.021	77.55%	1.289	-0.04	0.083	0.109	-
		78	2480	7.72	8.00	1.067	77.55%	1.289	-	-	-	-
	Right-Tilt	0	2402	6.95	7.00	1.012	77.55%	1.289	-	-	-	-
		39	2441	8.41	8.50	1.021	77.55%	1.289	0.05	0.069	0.091	-
		78	2480	7.72	8.00	1.067	77.55%	1.289	-	-	-	-

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 2Tx slots	Front	128	824.2	31.64	32.00	1.086	-	-	-	-
		190	836.6	31.99	32.00	1.002	0.08	0.552	0.553	-
		251	848.8	31.59	32.00	1.099	-	-	-	-
	Rear	128	824.2	31.64	32.00	1.086	0.05	0.721	0.783	-
		190	836.6	31.99	32.00	1.002	-0.16	0.836	0.838	6
		251	848.8	31.59	32.00	1.099	-0.11	0.655	0.720	-

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	Front	512	1850.2	26.03	26.50	1.114	0.05	0.291	0.324	-
		661	1880.0	25.85	26.50	1.161	-	-	-	-
		810	1909.8	25.33	26.50	1.309	-	-	-	-
	Rear	512	1850.2	26.03	26.50	1.114	-0.07	0.460	0.513	7
		661	1880.0	25.85	26.50	1.161	-	-	-	-
		810	1909.8	25.33	26.50	1.309	-	-	-	-

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	Front	9262	1852.4	22.04	22.50	1.112	-	-	-	-
		9400	1880.0	22.11	22.50	1.094	-	-	-	-
		9538	1907.6	22.17	22.50	1.079	0.02	0.711	0.767	-
	Rear	9262	1852.4	22.04	22.50	1.112	-0.08	0.712	0.792	-
		9400	1880.0	22.11	22.50	1.094	0.04	0.855	0.935	-
		9538	1907.6	22.17	22.50	1.079	-0.05	1.170	1.262	8

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	Front	4132	826.4	22.89	23.00	1.026	-0.01	0.389	0.399	-
		4183	836.6	22.81	23.00	1.045	-	-	-	-
		4233	846.6	22.39	23.00	1.151	-	-	-	-
	Rear	4132	826.4	22.89	23.00	1.026	0.01	0.615	0.631	9
		4183	836.6	22.81	23.00	1.045	-	-	-	-
		4233	846.6	22.39	23.00	1.151	-	-	-	-

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)	
GFSK	Front	0	2402	6.95	7.00	1.012	0.776	1.289	-	-	-	-
		39	2441	8.41	8.50	1.021	0.776	1.289	0.04	0.128	0.169	-
		78	2480	7.72	8.00	1.067	0.776	1.289	-	-	-	-
	Rear	0	2402	6.95	7.00	1.012	0.776	1.289	-	-	-	-
		39	2441	8.41	8.50	1.021	0.776	1.289	-0.09	0.165	0.217	10
		78	2480	7.72	8.00	1.067	0.776	1.289	-	-	-	-

Appendix C: Simultaneous Transmission analysis-Head

WWAN + BT					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR (W/kg)
			WWAN	BT	
GSM	GSM850	Left Cheek	1.012	0.113	1.125
		Left Tilted	0.775	0.096	0.871
		Right Cheek	0.939	0.109	1.048
		Right Tilted	0.711	0.091	0.802
	GSM1900	Left Cheek	0.471	0.113	0.584
		Left Tilted	0.379	0.096	0.475
		Right Cheek	0.454	0.109	0.563
		Right Tilted	0.357	0.091	0.448
WCDMA	Band II	Left Cheek	0.784	0.113	0.897
		Left Tilted	0.645	0.096	0.741
		Right Cheek	0.749	0.109	0.858
		Right Tilted	0.600	0.091	0.691
	Band V	Left Cheek	0.567	0.113	0.680
		Left Tilted	0.456	0.096	0.552
		Right Cheek	0.546	0.109	0.655
		Right Tilted	0.429	0.091	0.520

Appendix C: Simultaneous Transmission analysis-Body

WWAN + BT					
WWAN Band		Exposure Position	Max SAR (W/kg)		Summed SAR
			WWAN	BT	(W/kg)
GSM	GSM850	Front	0.553	0.169	0.722
		Rear	0.838	0.217	1.055
	GSM1900	Front	0.324	0.169	0.493
		Rear	0.513	0.217	0.730
WCDMA	Band II	Front	0.767	0.169	0.936
		Rear	1.262	0.217	1.479
	Band V	Front	0.399	0.169	0.568
		Rear	0.631	0.217	0.848