

**Test Date of WCDMA\_B4****EUT Description: Tablet****Model No.: C1**

<b>Temperature:</b>	23.5°C
<b>Relative Humidity:</b>	56%
<b>ATM Pressure:</b>	101.0 kPa
<b>Test Engineer:</b>	<i>Wayne Lin</i>
<b>Reviewed By:</b>	<i>Pencils.chen</i>

## Appendix A: Effective (Isotropic) Radiated Power Output Data

### Test Result

Band	Channel	Power(dBm)	Anenna Gain	ERP/EIRP(dBm)	Limit(dBm)	Verdict
Band4	1312	22.77	1.2	23.97	30.00	PASS
Band4	1413	22.90	1.2	24.1	30.00	PASS
Band4	1513	22.92	1.2	24.12	30.00	PASS

Band	Channel	SubTest	Power(dBm)	Anenna Gain	ERP/EIRP(dBm)	Limit(dBm)	Verdict
Band4	1312	1	20.45	1.2	21.65	30.00	PASS
Band4	1312	2	20.51	1.2	21.71	30.00	PASS
Band4	1312	3	20.51	1.2	21.71	30.00	PASS
Band4	1312	4	20.51	1.2	21.71	30.00	PASS
Band4	1413	1	20.47	1.2	21.67	30.00	PASS
Band4	1413	2	20.46	1.2	21.66	30.00	PASS
Band4	1413	3	20.46	1.2	21.66	30.00	PASS
Band4	1413	4	20.45	1.2	21.65	30.00	PASS
Band4	1513	1	20.49	1.2	21.69	30.00	PASS
Band4	1513	2	20.47	1.2	21.67	30.00	PASS
Band4	1513	3	20.47	1.2	21.67	30.00	PASS
Band4	1513	4	20.47	1.2	21.67	30.00	PASS

Band	Channel	SubTest	Power(dBm)	Anenna Gain	ERP/EIRP(dBm)	Limit(dBm)	Verdict
Band4	1312	1	15.36	1.2	16.56	30.00	PASS
Band4	1312	2	19.43	1.2	20.63	30.00	PASS
Band4	1312	3	19.42	1.2	20.62	30.00	PASS
Band4	1312	4	19.43	1.2	20.63	30.00	PASS
Band4	1312	5	20.95	1.2	22.15	30.00	PASS
Band4	1413	1	19.52	1.2	20.72	30.00	PASS
Band4	1413	2	19.77	1.2	20.97	30.00	PASS
Band4	1413	3	19.80	1.2	21	30.00	PASS
Band4	1413	4	19.73	1.2	20.93	30.00	PASS
Band4	1413	5	21.06	1.2	22.26	30.00	PASS
Band4	1513	1	19.64	1.2	20.84	30.00	PASS

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Band4	1513	2	19.63	1.2	20.83	30.00	PASS
Band4	1513	3	19.66	1.2	20.86	30.00	PASS
Band4	1513	4	19.64	1.2	20.84	30.00	PASS
Band4	1513	5	21.04	1.2	22.24	30.00	PASS

## Appendix B: Peak-to-Average Ratio

### Test Result

Band	Channel	Peak-to-Average Ratio(dB)	Limit(dBm)	Verdict
Band4	1312	2.99	13	PASS
Band4	1413	3.01	13	PASS
Band4	1513	2.94	13	PASS

Test Graphs

Band4-1312



Band4-1413



Band4-1513

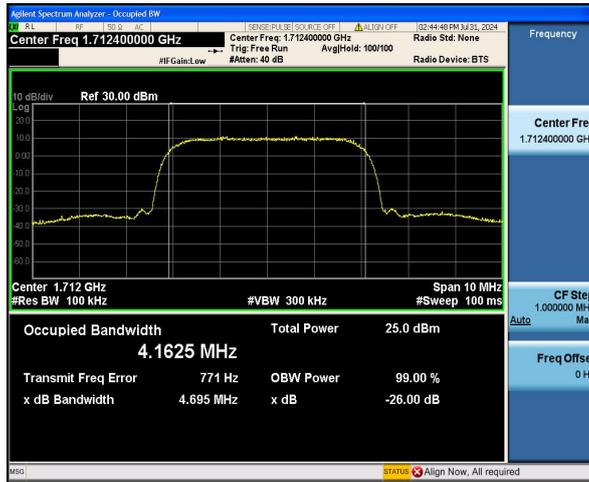


**Appendix C: 26dB Bandwidth and Occupied Bandwidth****Test Result**

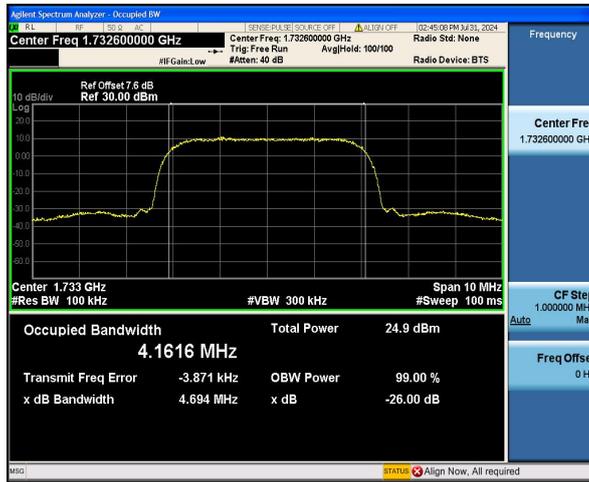
Band	Channel	Occupied Bandwidth (kHz)	26dB Bandwidth (kHz)	Limit(kHz)	Verdict
Band4	1312	4.1625	4.695	---	PASS
Band4	1413	4.1616	4.694	---	PASS
Band4	1513	4.1705	4.694	---	PASS

Test Graphs

Band4-1312



Band4-1413



Band4-1513



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**Appendix D: Band Edge****Test Result**

Band	Channel	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band4	1312	1710.00	-31.64	-13	PASS
Band4	1513	1755.00	-29.35	-13	PASS

### Test Graphs

Band4-1312



Band4-1513



**Appendix E: Conducted Spurious Emission****Test Result**

Band	Channel	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band4	1312	0.009~0.15MHz	0.01	-53.96	-43	PASS
Band4	1312	0.15~30MHz	0.15	-46.71	-23	PASS
Band4	1312	30~1000MHz	818.55	-49.54	-13	PASS
Band4	1312	1000~20000MHz	19882.2	-34.59	-13	PASS
Band4	1413	0.009~0.15MHz	0.01	-52.11	-43	PASS
Band4	1413	0.15~30MHz	0.15	-45.82	-23	PASS
Band4	1413	30~1000MHz	925.73	-49.26	-13	PASS
Band4	1413	1000~20000MHz	19221	-35.02	-13	PASS
Band4	1513	0.009~0.15MHz	0.01	-53.72	-43	PASS
Band4	1513	0.15~30MHz	0.17	-47.41	-23	PASS
Band4	1513	30~1000MHz	393.36	-49.26	-13	PASS
Band4	1513	1000~20000MHz	19740.33	-34.97	-13	PASS

Test Graphs

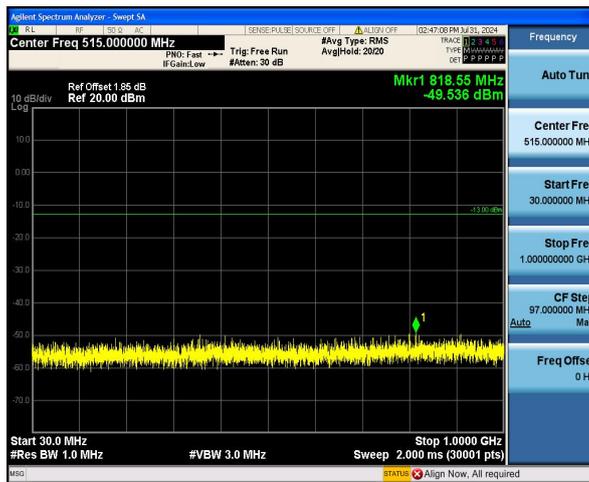
Band4-1312-0.009~0.15MHz



Band4-1312-0.15~30MHz



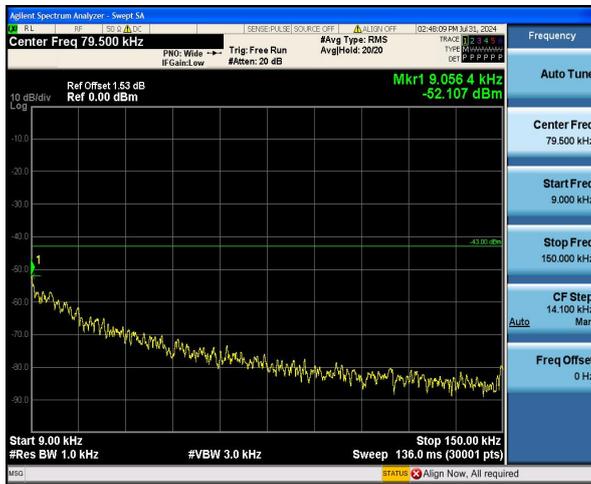
Band4-1312-30~1000MHz



Band4-1312-1000~20000MHz



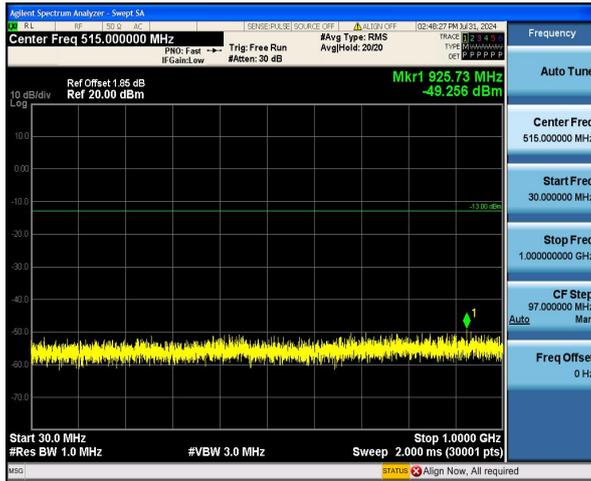
Band4-1413-0.009~0.15MHz



Band4-1413-0.15~30MHz



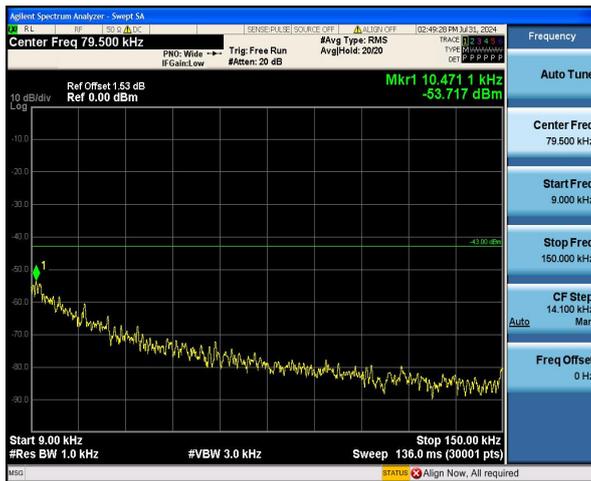
Band4-1413-30~1000MHz



Band4-1413-1000~20000MHz



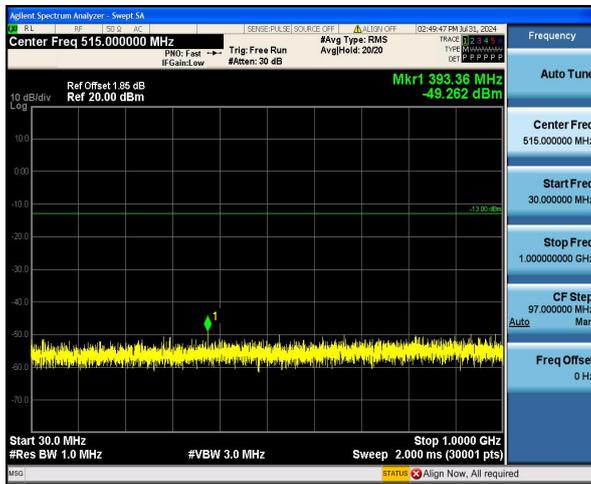
Band4-1513-0.009~0.15MHz



Band4-1513-0.15~30MHz



Band4-1513-30~1000MHz



Band4-1513-1000~20000MHz



## Appendix F: Frequency Stability

### Test Result

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	VL	NT	-0.49	-0.000286	±2.5	PASS
Band4	1312	VN	NT	5.28	0.003083	±2.5	PASS
Band4	1312	VH	NT	-0.14	-0.000082	±2.5	PASS
Band4	1413	VL	NT	-4.42	-0.002551	±2.5	PASS
Band4	1413	VN	NT	2.89	0.001668	±2.5	PASS
Band4	1413	VH	NT	-1.92	-0.001108	±2.5	PASS
Band4	1513	VL	NT	7.99	0.004559	±2.5	PASS
Band4	1513	VN	NT	3.62	0.002066	±2.5	PASS
Band4	1513	VH	NT	-0.11	-0.000063	±2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band4	1312	NV	-30	-0.28	-0.000164	±2.5	PASS
Band4	1312	NV	-20	-1.57	-0.000917	±2.5	PASS
Band4	1312	NV	0	-2.35	-0.001372	±2.5	PASS
Band4	1312	NV	10	8.87	0.005180	±2.5	PASS
Band4	1312	NV	20	3.83	0.002237	±2.5	PASS
Band4	1413	NV	-30	7.27	0.004196	±2.5	PASS
Band4	1413	NV	-20	2.25	0.001299	±2.5	PASS
Band4	1413	NV	0	5.01	0.002892	±2.5	PASS
Band4	1413	NV	10	1.65	0.000952	±2.5	PASS
Band4	1413	NV	20	0.49	0.000283	±2.5	PASS
Band4	1513	NV	-30	-6.34	-0.003617	±2.5	PASS
Band4	1513	NV	-20	1.00	0.000571	±2.5	PASS
Band4	1513	NV	0	0.97	0.000553	±2.5	PASS
Band4	1513	NV	10	-4.31	-0.002459	±2.5	PASS
Band4	1513	NV	20	-3.16	-0.001803	±2.5	PASS

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**Appendix G: Modulation Characteristics****Test Result**

Band	Channel	Result	Verdict
Band4	1312	PASS	PASS
Band4	1413	PASS	PASS
Band4	1513	PASS	PASS

Test Graphs

Band4-1312

WCDMA UE TX Measurement - V3.7.22 - Base V 3.7.160

Multi Evaluation TPC Measurement PRACH DPCCH Open Loop Power Out-of-Sync Handling

UL Frequency: 1712.4000000 MHz Ref. Level: 32.40 dBm Connector:RF1COM Meas. Period:Full Slot

TX Measurement

1st Measured Slot No 0 Statistic Count 20 / 20

Statistics @ Pre. Slot 0	Current	Average	Maximum	StdDev.
Power [dBm]	NCAP	NCAP	NCAP	NCAP
Power Steps [dB]	NCAP	NCAP	NCAP	NCAP
EVM RMS [%]	NCAP	NCAP	NCAP	NCAP
EVM Peak [%]	NCAP	NCAP	NCAP	NCAP
Magnitude Error RMS [%]	NCAP	NCAP	NCAP	NCAP
Magnitude Error Peak [%]	NCAP	NCAP	NCAP	NCAP
Phase Error RMS [°]	NCAP	NCAP	NCAP	NCAP
Phase Error Peak [°]	NCAP	NCAP	NCAP	NCAP
IQ Origin Offset [dB]	NCAP	NCAP	NCAP	NCAP
IQ Imbalance [dB]	NCAP	NCAP	NCAP	NCAP
CF Error [Hz]	NCAP	NCAP	NCAP	NCAP
Trans. Time Error [Chip]	NCAP	NCAP	NCAP	NCAP
Phase Disc. [°]	NCAP	NCAP	NCAP	NCAP
OBW [MHz]	NCAP	NCAP	NCAP	NCAP

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Band4-1413

WCDMA UE TX Measurement - V3.7.22 - Base V 3.7.160

Multi Evaluation TPC Measurement PRACH DPCCH Open Loop Power Out-of-Sync Handling

UL Frequency: 1732.6000000 MHz Ref. Level: 32.40 dBm Connector:RF1COM Meas. Period:Full Slot

TX Measurement

1st Measured Slot No 0 Statistic Count 20 / 20

Statistics @ Pre. Slot 0	Current	Average	Maximum	StdDev.
Power [dBm]	NCAP	NCAP	NCAP	NCAP
Power Steps [dB]	NCAP	NCAP	NCAP	NCAP
EVM RMS [%]	NCAP	NCAP	NCAP	NCAP
EVM Peak [%]	NCAP	NCAP	NCAP	NCAP
Magnitude Error RMS [%]	NCAP	NCAP	NCAP	NCAP
Magnitude Error Peak [%]	NCAP	NCAP	NCAP	NCAP
Phase Error RMS [°]	NCAP	NCAP	NCAP	NCAP
Phase Error Peak [°]	NCAP	NCAP	NCAP	NCAP
IQ Origin Offset [dB]	NCAP	NCAP	NCAP	NCAP
IQ Imbalance [dB]	NCAP	NCAP	NCAP	NCAP
CF Error [Hz]	NCAP	NCAP	NCAP	NCAP
Trans. Time Error [Chip]	NCAP	NCAP	NCAP	NCAP
Phase Disc. [°]	NCAP	NCAP	NCAP	NCAP
OBW [MHz]	NCAP	NCAP	NCAP	NCAP

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Band4-1513

WCDMA UE TX Measurement - V3.7.22 - Base V 3.7.160

Multi Evaluation TPC Measurement PRACH DPCCH Open Loop Power Out-of-Sync Handling

UL Frequency: 1752.6000000 MHz Ref. Level: 32.40 dBm Connector:RF1COM Meas. Period:Full Slot

TX Measurement

1st Measured Slot No 0 Statistic Count 20 / 20

Statistics @ Pre. Slot 0	Current	Average	Maximum	StdDev.
Power [dBm]	NCAP	NCAP	NCAP	NCAP
Power Steps [dB]	NCAP	NCAP	NCAP	NCAP
EVM RMS [%]	NCAP	NCAP	NCAP	NCAP
EVM Peak [%]	NCAP	NCAP	NCAP	NCAP
Magnitude Error RMS [%]	NCAP	NCAP	NCAP	NCAP
Magnitude Error Peak [%]	NCAP	NCAP	NCAP	NCAP
Phase Error RMS [°]	NCAP	NCAP	NCAP	NCAP
Phase Error Peak [°]	NCAP	NCAP	NCAP	NCAP
IQ Origin Offset [dB]	NCAP	NCAP	NCAP	NCAP
IQ Imbalance [dB]	NCAP	NCAP	NCAP	NCAP
CF Error [Hz]	NCAP	NCAP	NCAP	NCAP
Trans. Time Error [Chip]	NCAP	NCAP	NCAP	NCAP
Phase Disc. [°]	NCAP	NCAP	NCAP	NCAP
OBW [MHz]	NCAP	NCAP	NCAP	NCAP

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