

**APPENDIX B WCDMA RF TEST DATA**  
**B 1. PEAK-TO-AVERAGE RATIO**

**Test Result(WCDMA)**

Band	Channel	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band2	9262	3.19	13	PASS
Band2	9400	3.15	13	PASS
Band2	9538	3.15	13	PASS
Band5	4132	3.21	13	PASS
Band5	4182	3.17	13	PASS
Band5	4233	3.21	13	PASS

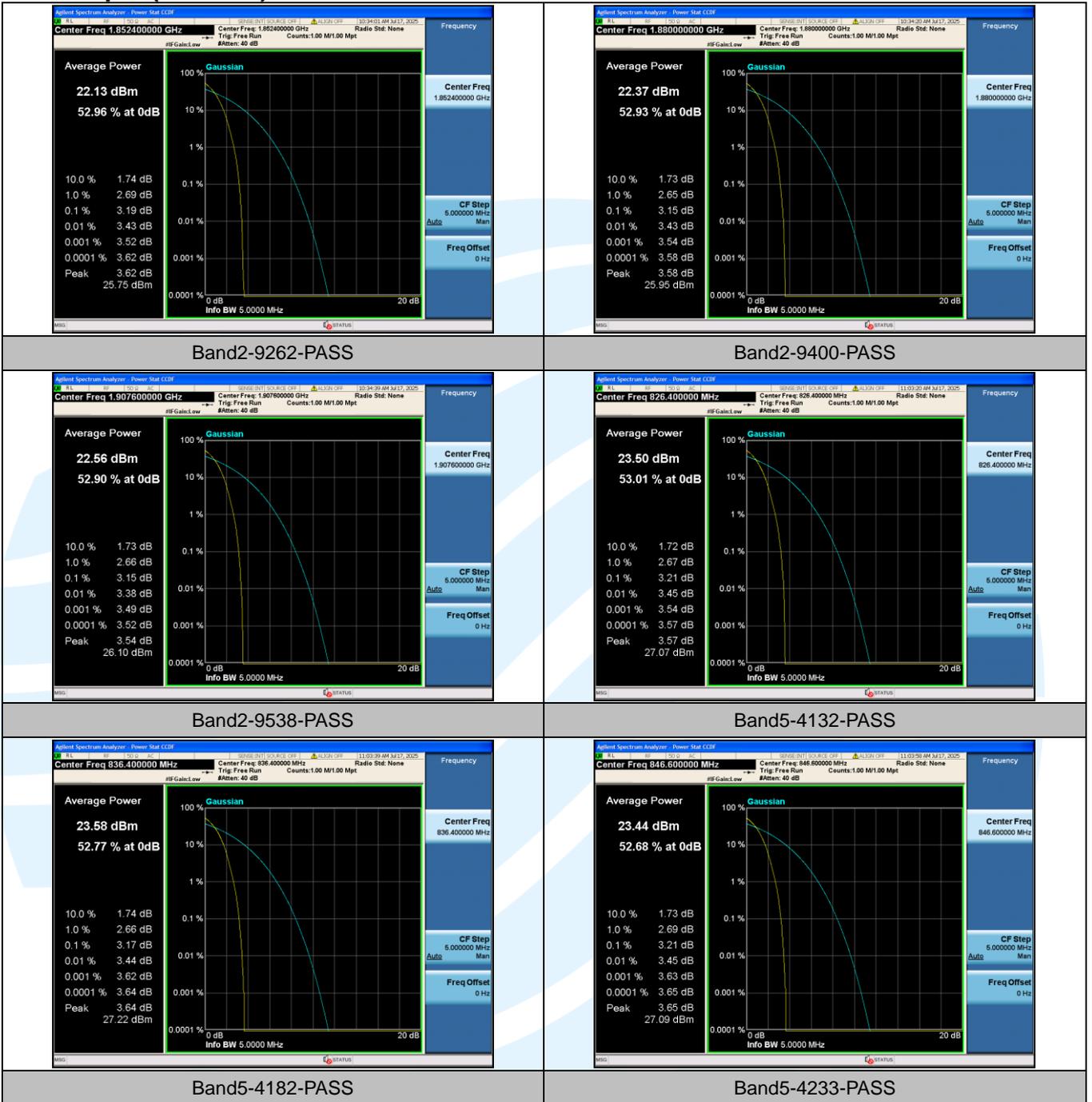
**Test Result(HSDPA)**

Band	Channel	SubTest	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band2	9262	1	3.27	13	PASS
Band2	9400	1	3.25	13	PASS
Band2	9538	1	3.25	13	PASS
Band5	4132	1	3.27	13	PASS
Band5	4182	1	3.28	13	PASS
Band5	4233	1	3.3	13	PASS

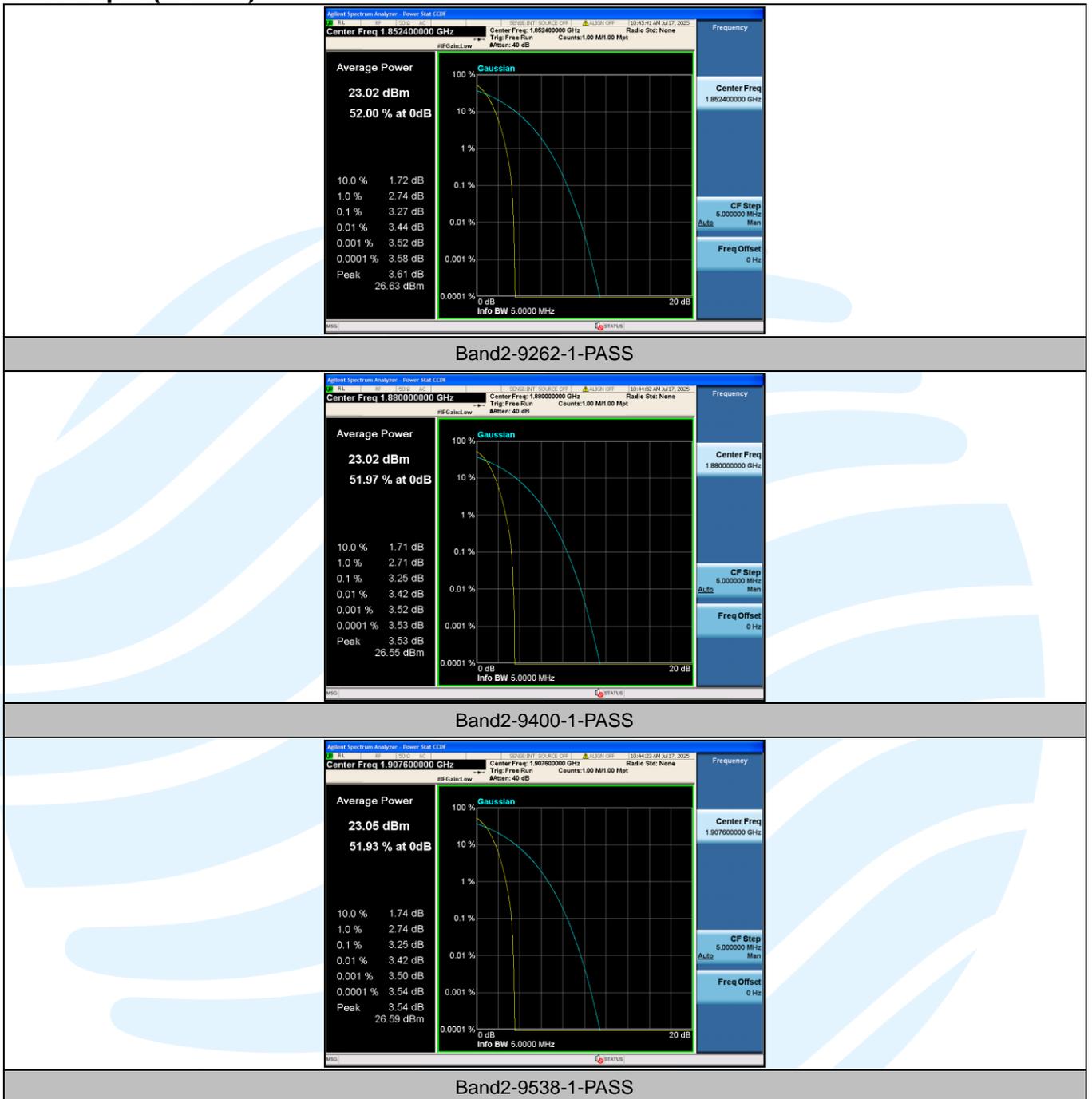
**Test Result(HSUPA)**

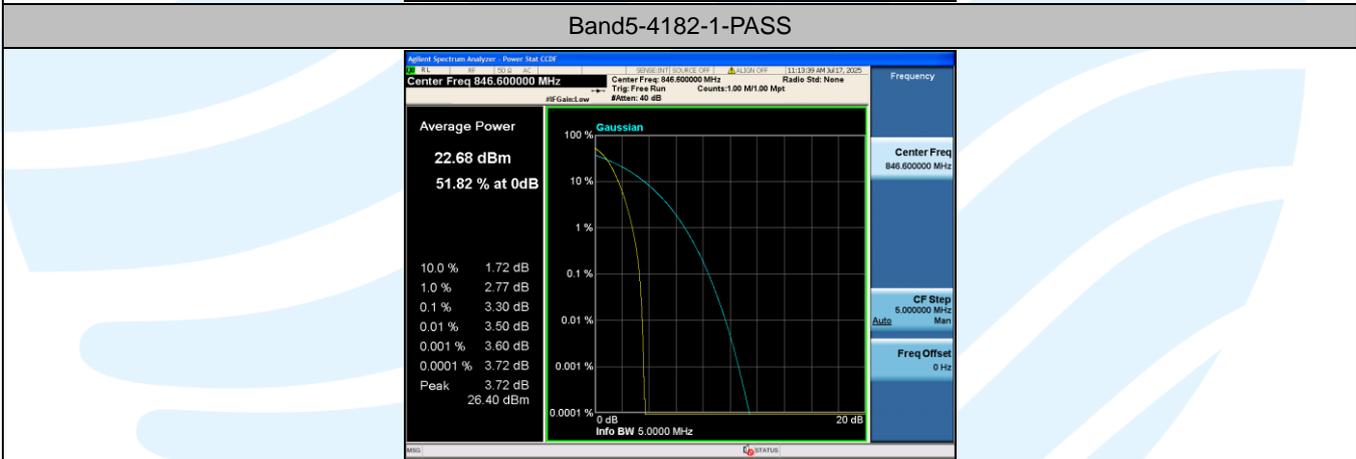
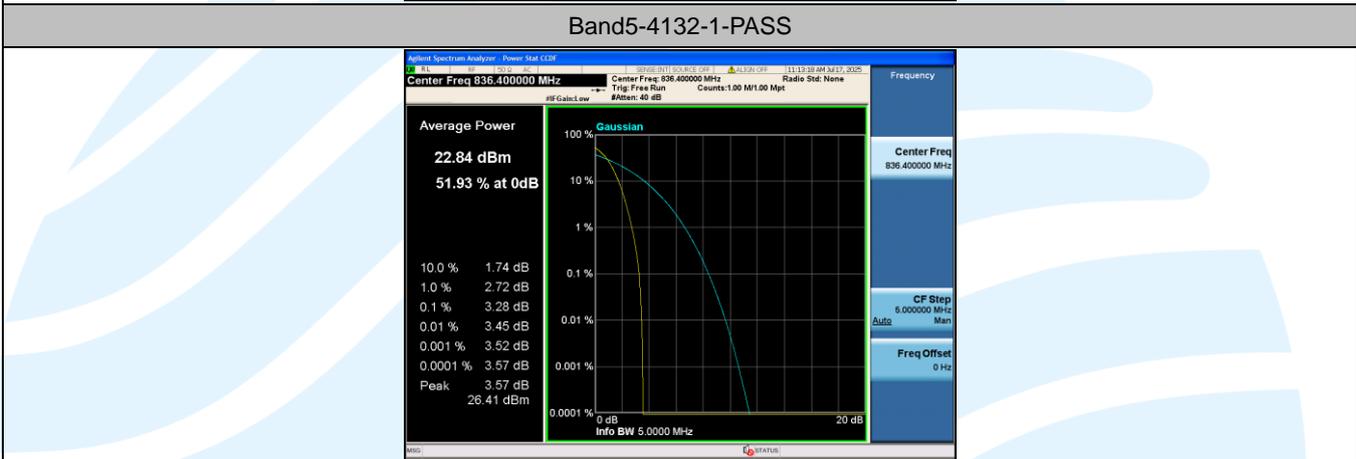
Band	Channel	SubTest	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band2	9262	1	4.64	13	PASS
Band2	9400	1	4.59	13	PASS
Band2	9538	1	4.64	13	PASS
Band5	4132	1	4.61	13	PASS
Band5	4182	1	4.64	13	PASS
Band5	4233	1	4.67	13	PASS

## Test Graphs(WCDMA)

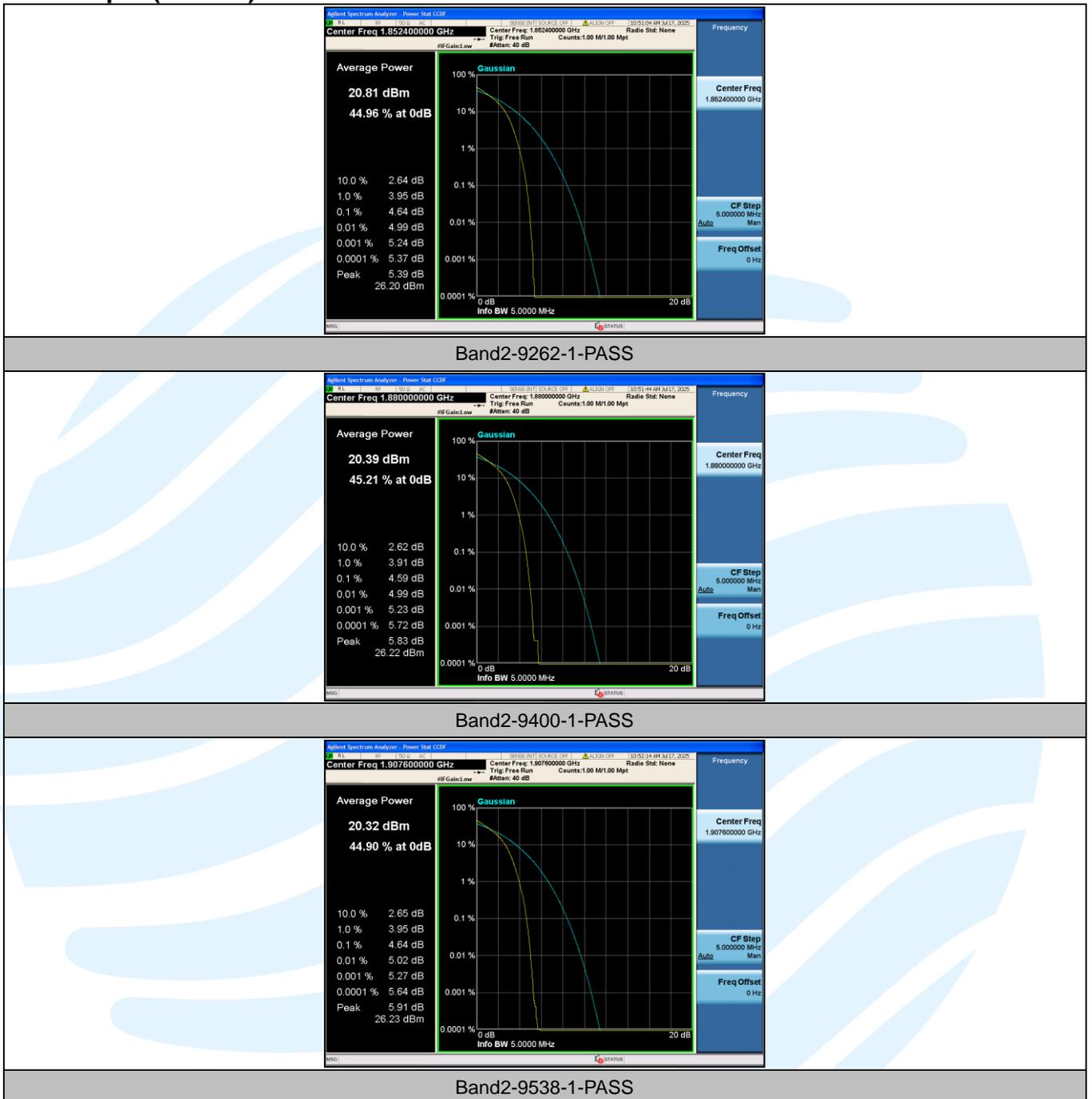


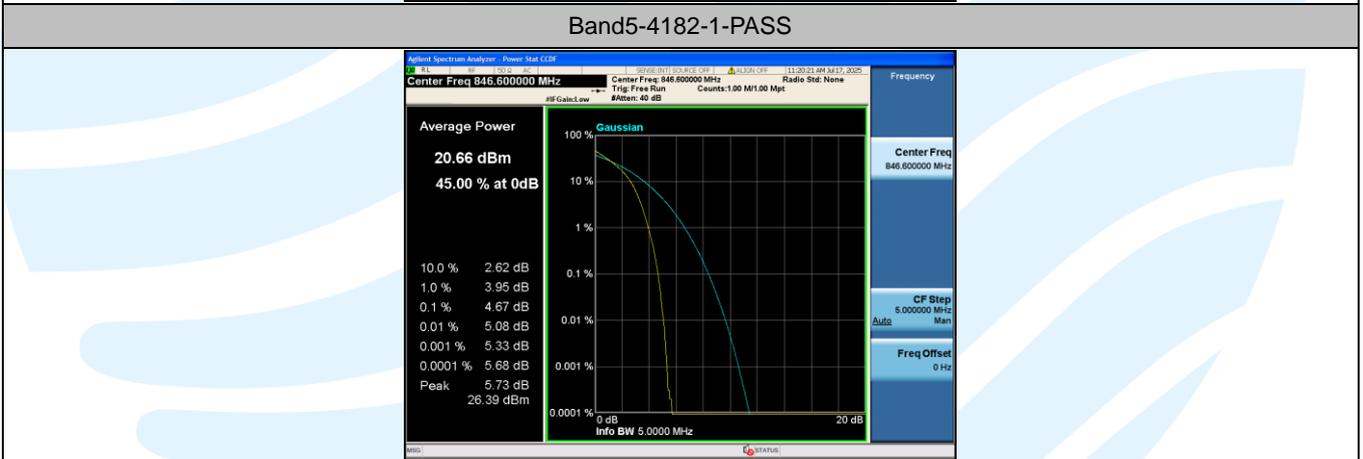
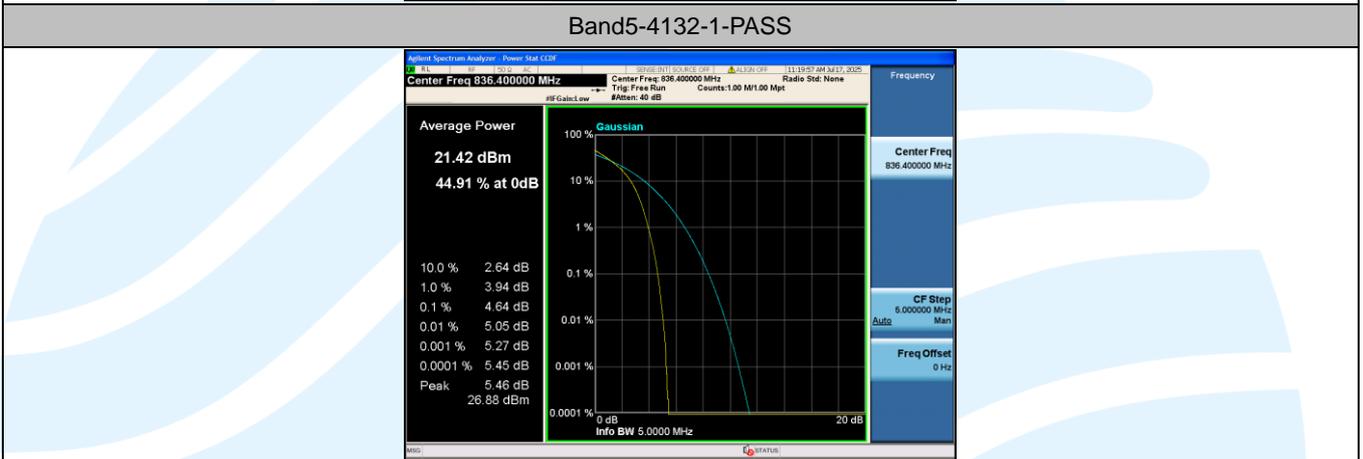
## Test Graphs(HSDPA)





## Test Graphs(HSUPPA)





## B 2. 26DB BANDWIDTH AND OCCUPIED BANDWIDTH

### Test Result(WCDMA)

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band2	9262	4.1426	4.661	---	PASS
Band2	9400	4.1414	4.653	---	PASS
Band2	9538	4.1427	4.661	---	PASS
Band5	4132	4.1382	4.665	---	PASS
Band5	4182	4.1491	4.664	---	PASS
Band5	4233	4.1383	4.650	---	PASS

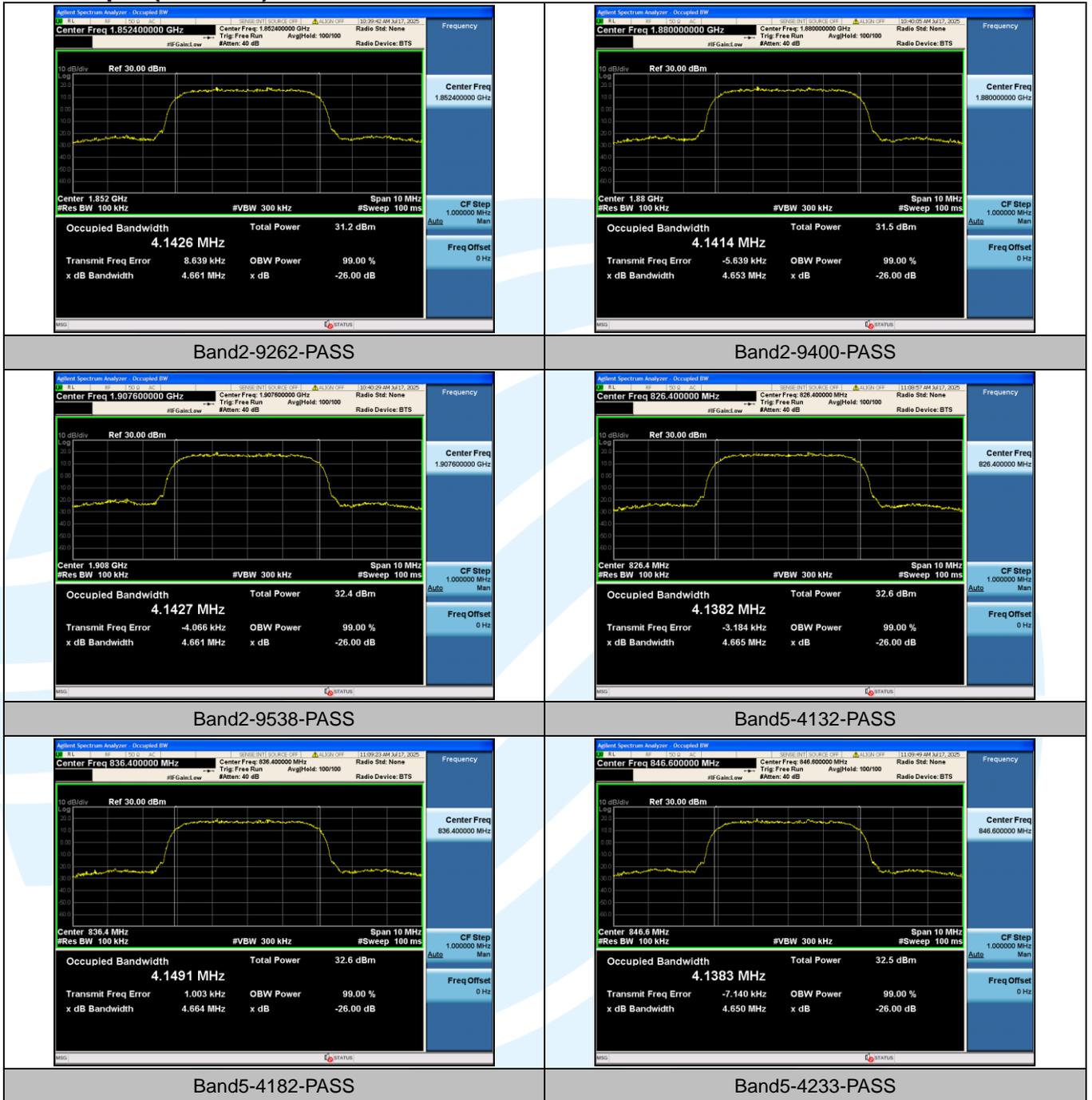
### Test Result(HSDPA)

Band	Channel	SubTest	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band2	9262	1	4.1354	4.660	---	PASS
Band2	9400	1	4.1409	4.661	---	PASS
Band2	9538	1	4.1489	4.658	---	PASS
Band5	4132	1	4.1460	4.672	---	PASS
Band5	4182	1	4.1593	4.665	---	PASS
Band5	4233	1	4.1477	4.668	---	PASS

### Test Result(HSUPA)

Band	Channel	SubTest	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band2	9262	1	4.1644	4.667	---	PASS
Band2	9400	1	4.1636	4.673	---	PASS
Band2	9538	1	4.1621	4.677	---	PASS
Band5	4132	1	4.1618	4.681	---	PASS
Band5	4182	1	4.1751	4.678	---	PASS
Band5	4233	1	4.1647	4.668	---	PASS

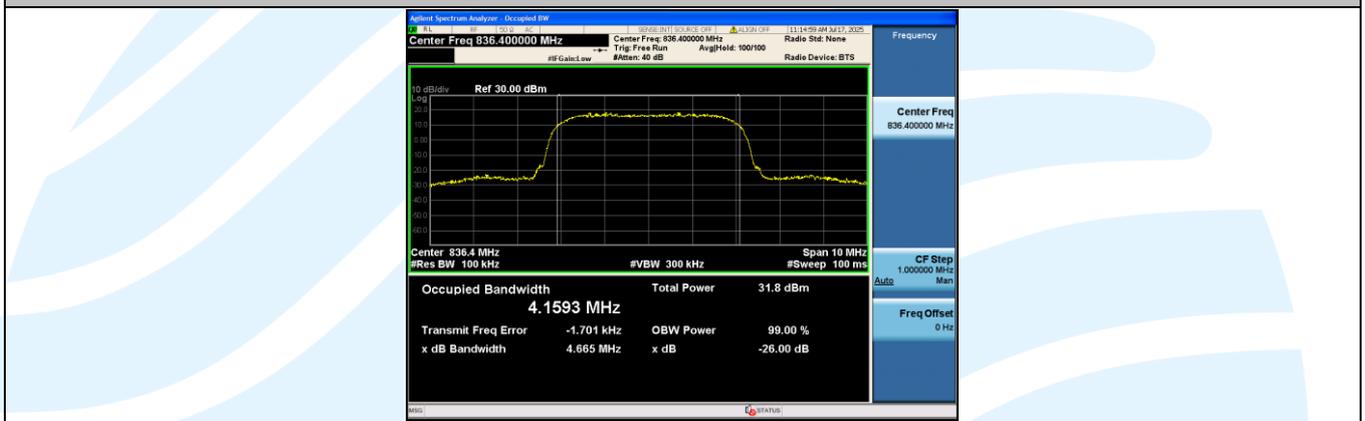
## Test Graphs(WCDMA)



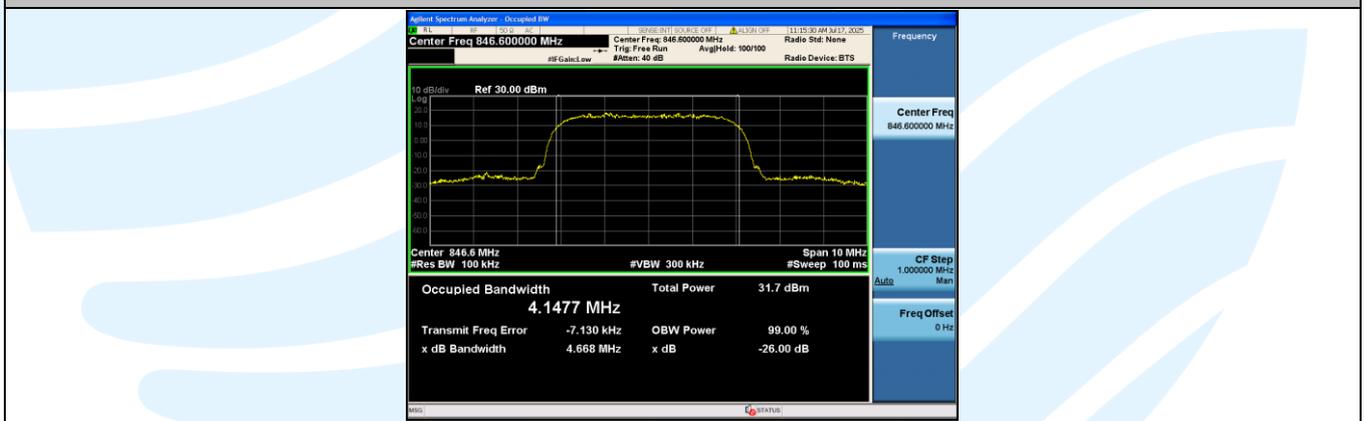




Band5-4132-1-PASS

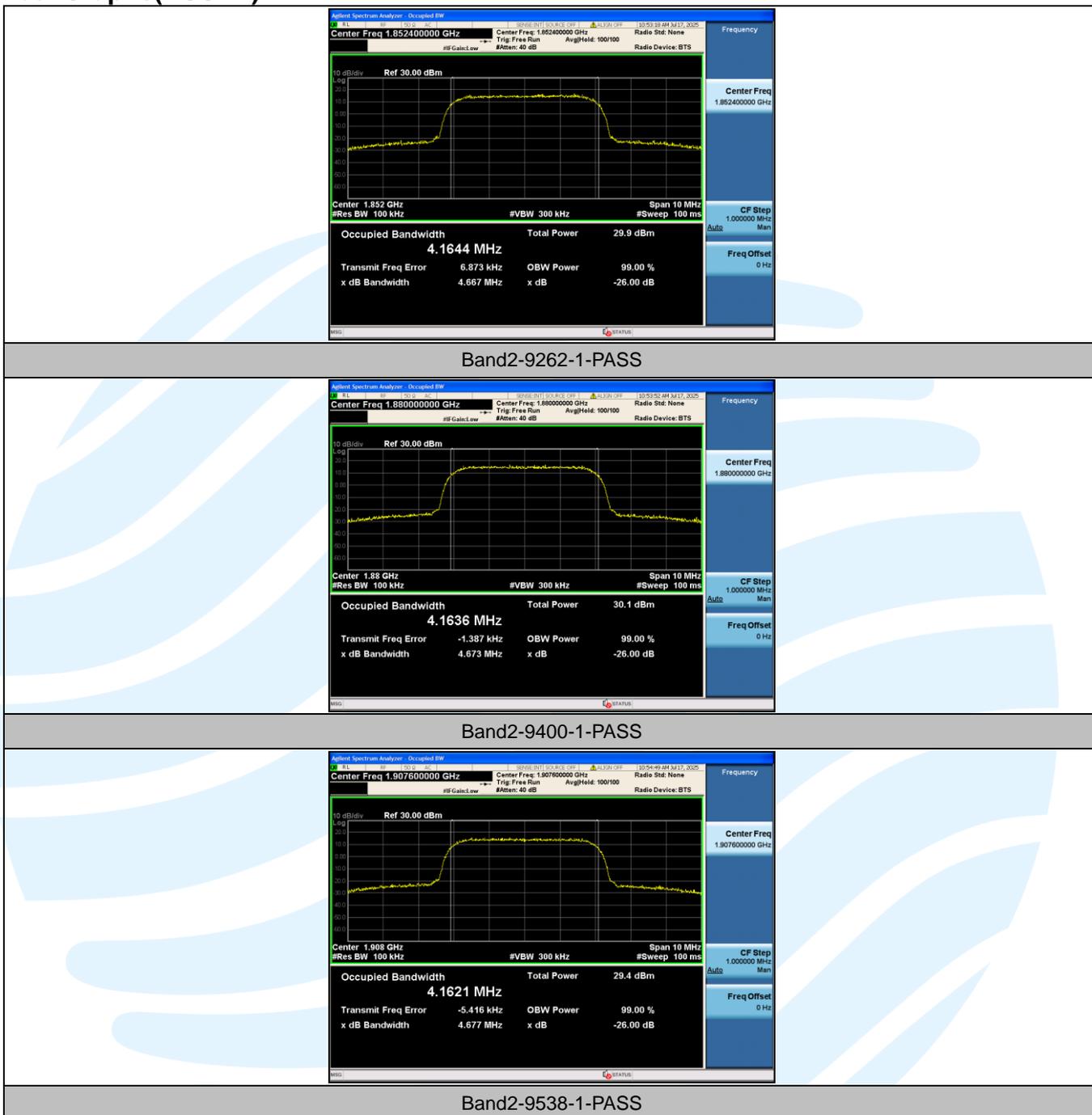


Band5-4182-1-PASS



Band5-4233-1-PASS

## Test Graphs(HSUPPA)





Band5-4132-1-PASS



Band5-4182-1-PASS



Band5-4233-1-PASS

### B 3. BAND EDGE

#### Test Result(WCDMA)

Band	Channel	Frequency (MHz)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	1849.95	-28.18	-13	PASS
Band2	9538	1910.06	-27.75	-13	PASS
Band5	4132	823.96	-28.04	-13	PASS
Band5	4233	849.08	-27.91	-13	PASS

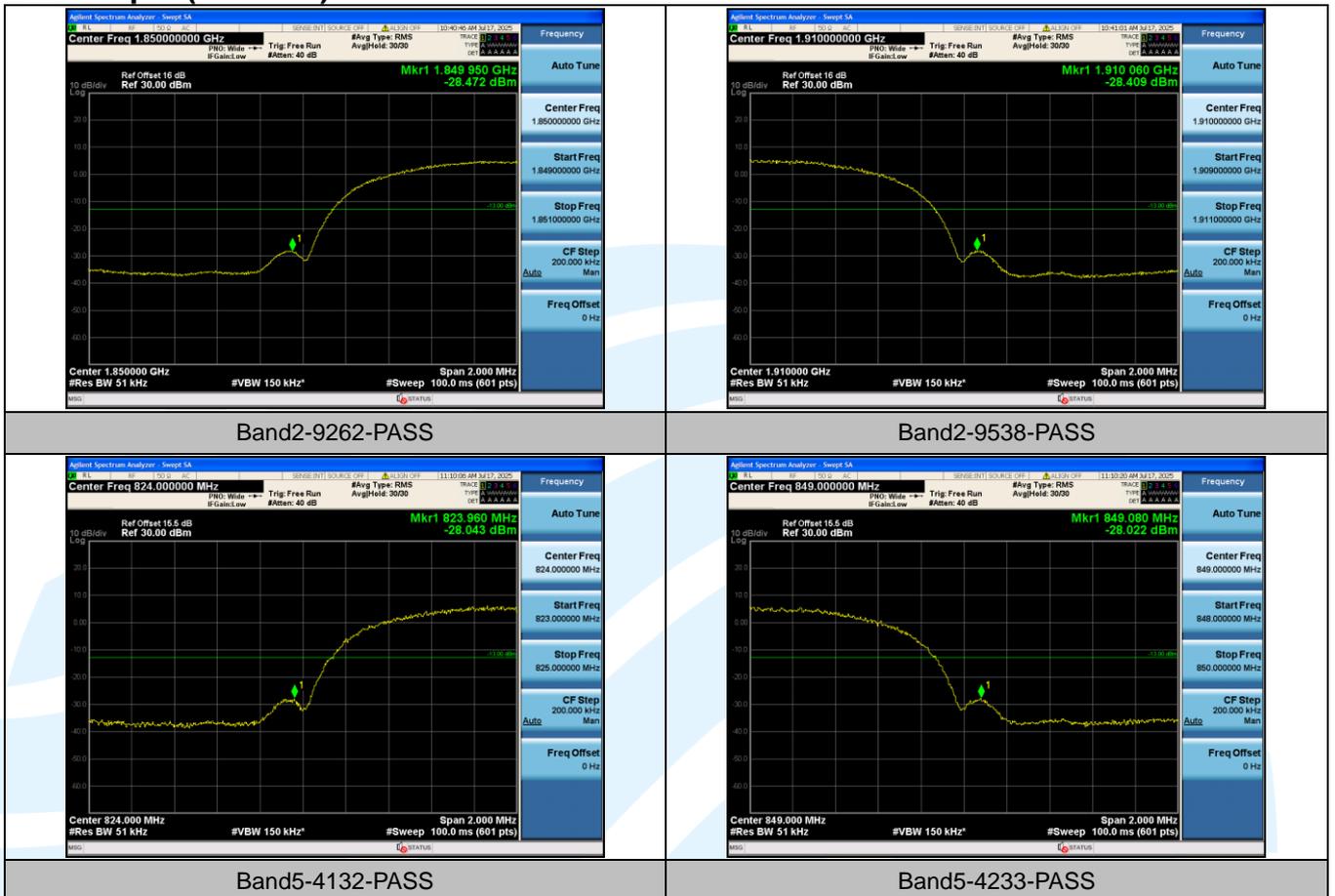
#### Test Result(HSDPA)

Band	Channel	SubTest	Frequency (MHz)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	1	1849.94	-28.07	-13	PASS
Band2	9538	1	1910.06	-27.70	-13	PASS
Band5	4132	1	823.94	-28.05	-13	PASS
Band5	4233	1	849.08	-27.83	-13	PASS

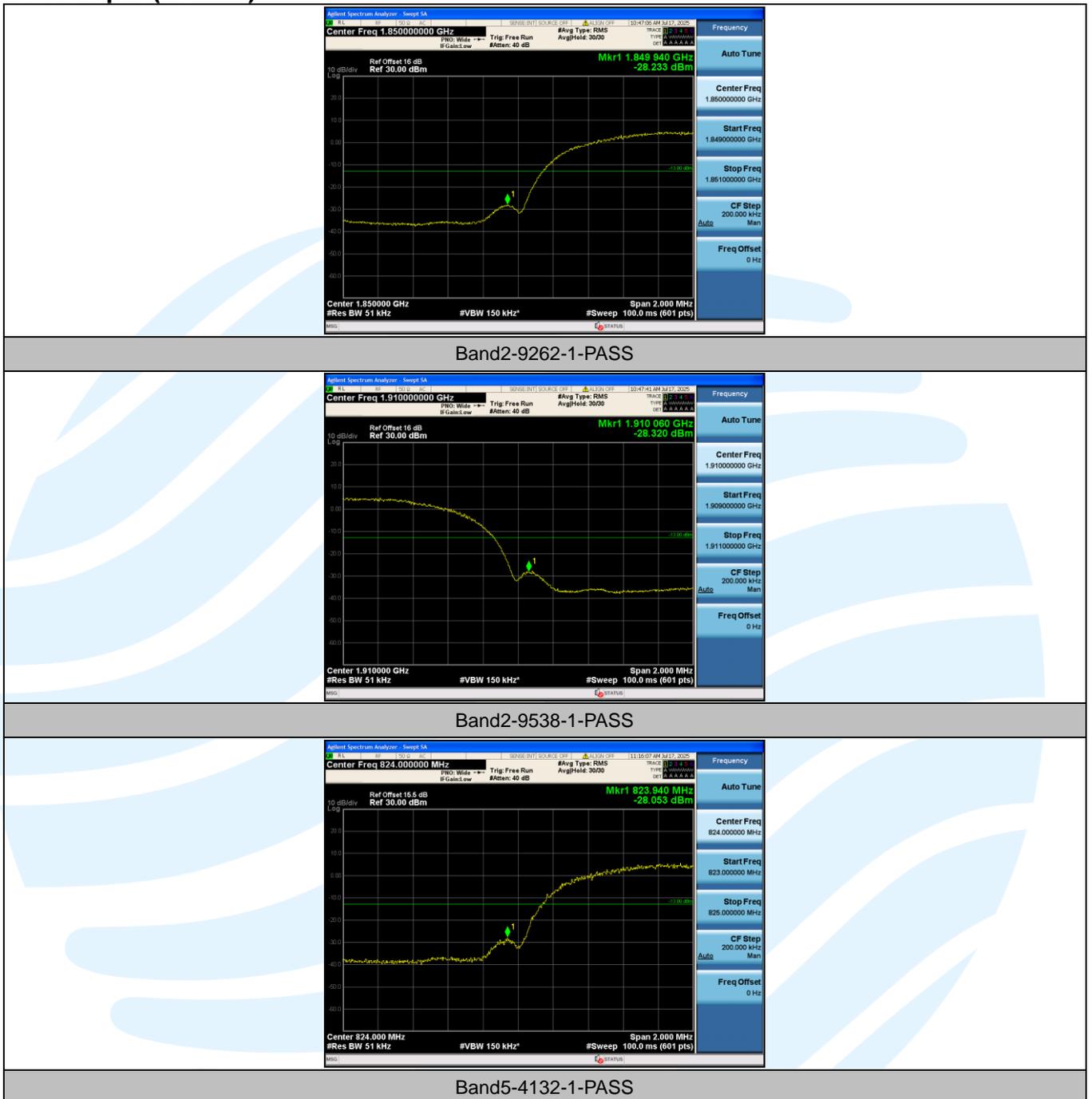
#### Test Result(HSUPA)

Band	Channel	SubTest	Frequency (MHz)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	1	1849.94	-30.71	-13	PASS
Band2	9538	1	1910.08	-30.48	-13	PASS
Band5	4132	1	823.95	-31.61	-13	PASS
Band5	4233	1	849.06	-31.80	-13	PASS

## Test Graphs(WCDMA)

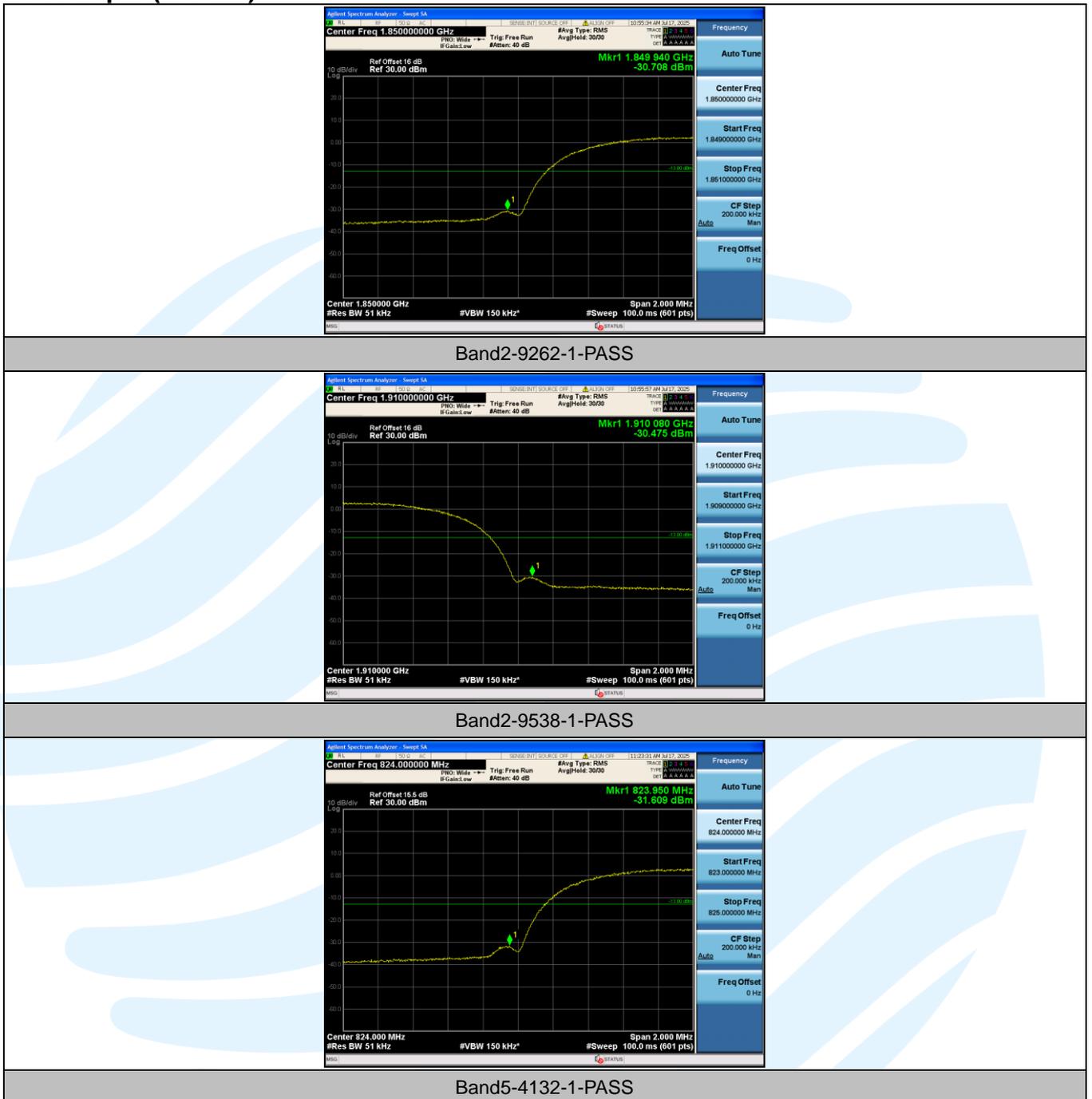


## Test Graphs(HSDPA)





## Test Graphs(HSUPPA)





### B 4. CONDUCTED SPURIOUSEMISSION

#### Test Result(WCDMA)

Band	Channel	Frequency Range (MHz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	30~1000MHz	978.18	-34.31	-13	PASS
Band2	9262	1000~20000MHz	18947.4	-27.33	-13	PASS
Band2	9400	30~1000MHz	877.78	-33.93	-13	PASS
Band2	9400	1000~20000MHz	18982.55	-26.64	-13	PASS
Band2	9538	30~1000MHz	899.12	-34.09	-13	PASS
Band2	9538	1000~20000MHz	16584.75	-27.48	-13	PASS
Band5	4132	30~1000MHz	669.23	-46.26	-13	PASS
Band5	4132	1000~10000MHz	3591.55	-32.14	-13	PASS
Band5	4182	30~1000MHz	148.34	-45.77	-13	PASS
Band5	4182	1000~10000MHz	6292.9	-32.17	-13	PASS
Band5	4233	30~1000MHz	540.22	-45.96	-13	PASS
Band5	4233	1000~10000MHz	5364.55	-31.95	-13	PASS

#### Test Result(HSDPA)

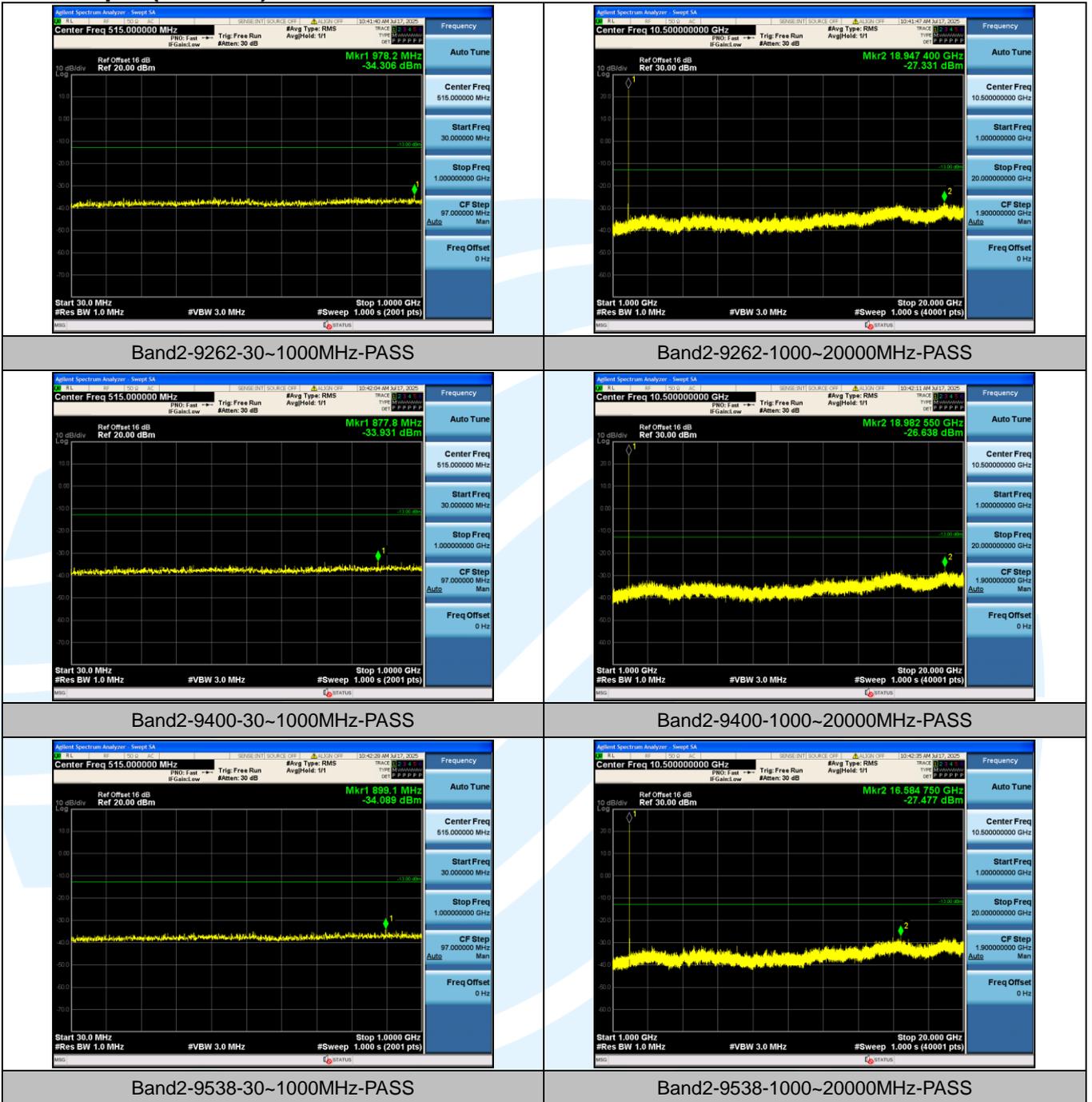
Band	Channel	SubTest	Frequency Range (MHz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	1	30~1000MHz	860.32	-34.27	-13	PASS
Band2	9262	1	1000~20000 MHz	18934.1	-27.13	-13	PASS
Band2	9400	1	30~1000MHz	854.99	-34.42	-13	PASS
Band2	9400	1	1000~20000 MHz	19536.4	-27.76	-13	PASS
Band2	9538	1	30~1000MHz	900.09	-35.07	-13	PASS
Band2	9538	1	1000~20000 MHz	16531.08	-27.22	-13	PASS
Band5	4132	1	30~1000MHz	340.4	-46.54	-13	PASS
Band5	4132	1	1000~10000 MHz	5444.65	-32.01	-13	PASS
Band5	4182	1	30~1000MHz	977.21	-46.35	-13	PASS
Band5	4182	1	1000~10000 MHz	5825.35	-32.19	-13	PASS
Band5	4233	1	30~1000MHz	955.38	-46.23	-13	PASS
Band5	4233	1	1000~10000 MHz	5491.45	-31.9	-13	PASS

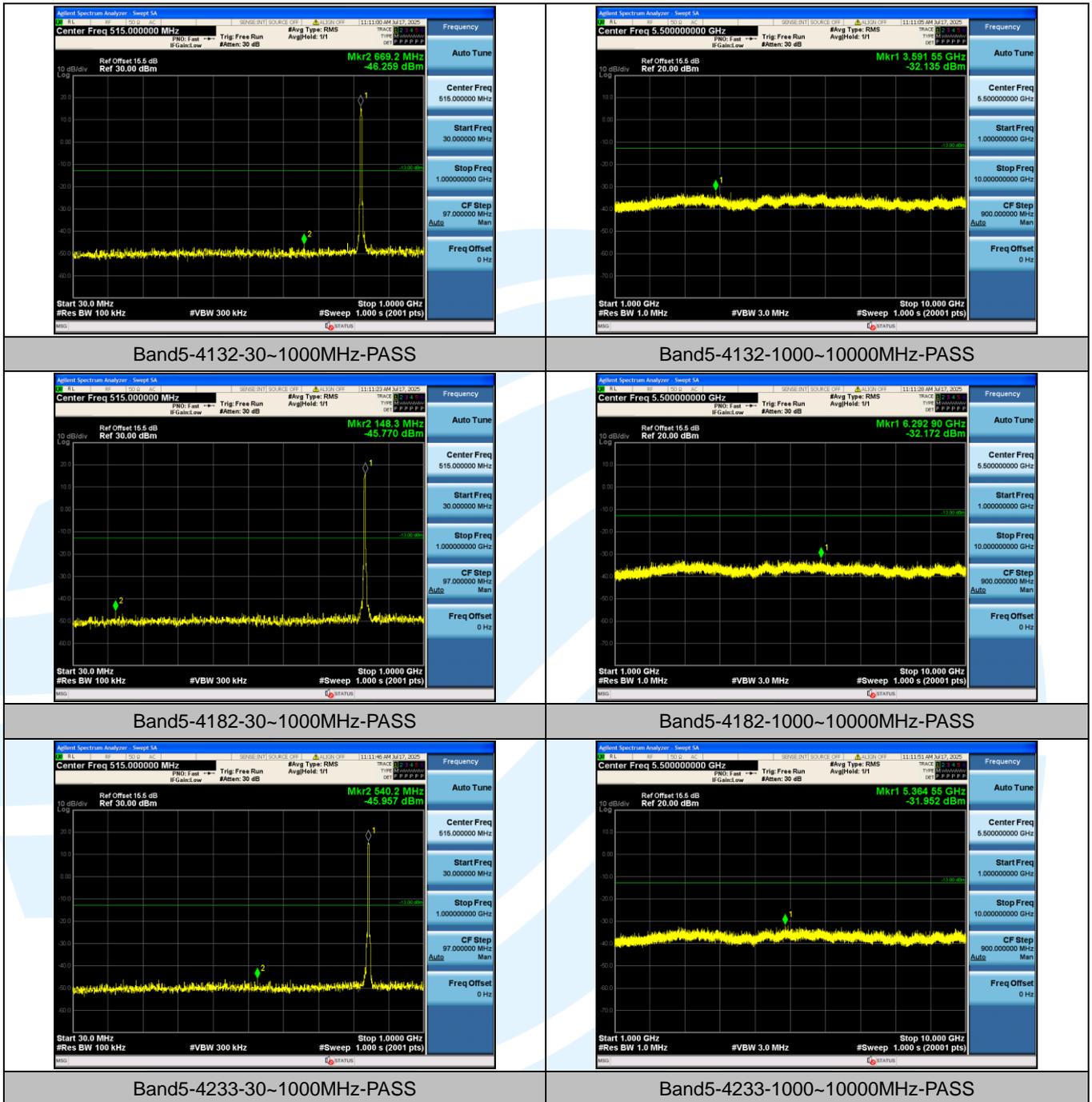
#### Test Result(HSUPA)

Band	Channel	SubTest	Frequency Range (MHz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	1	30~1000MHz	863.72	-33.63	-13	PASS
Band2	9262	1	1000~20000	16382.4	-26.78	-13	PASS

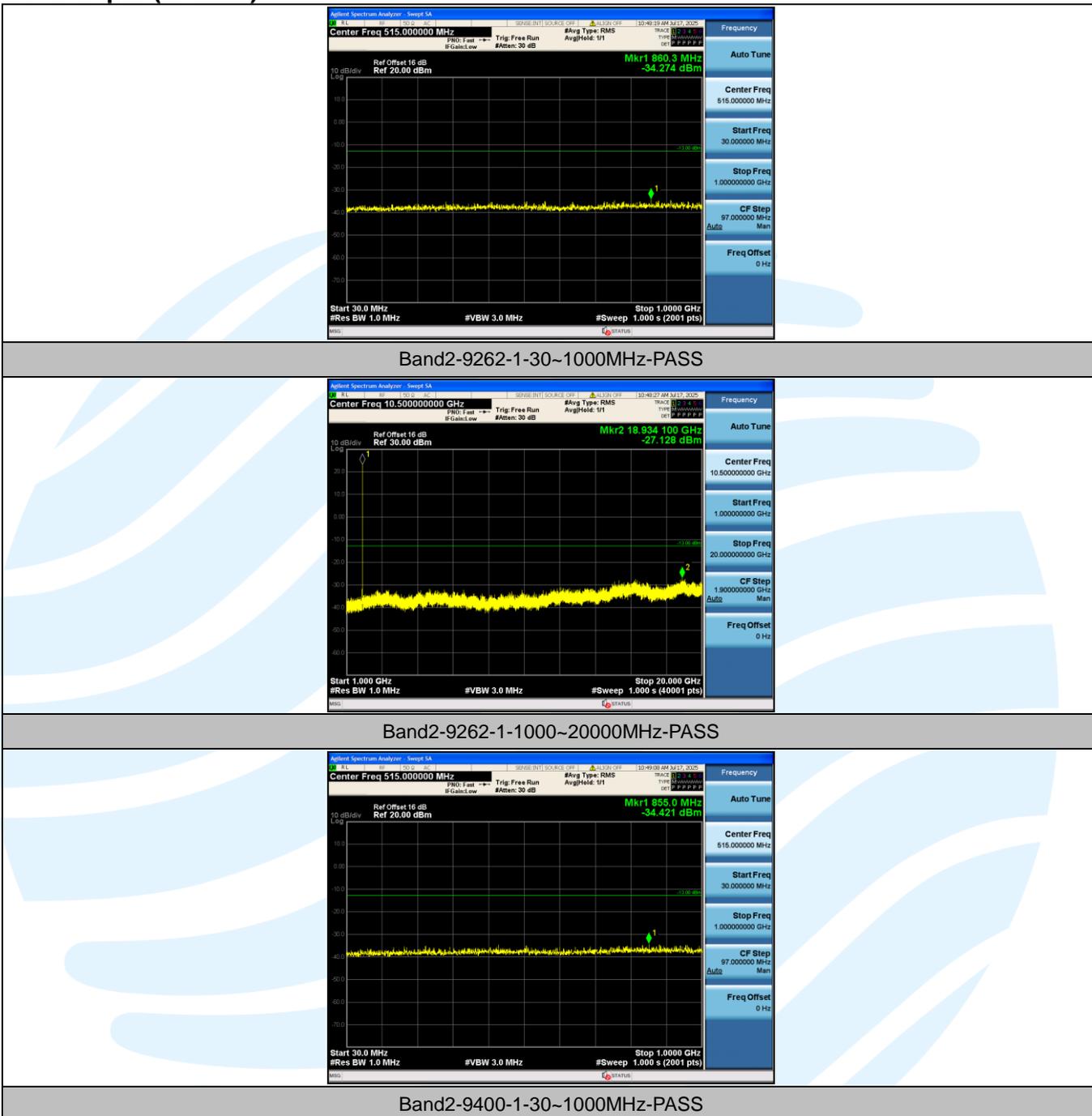
			MHz				
Band2	9400	1	30~1000MHz	919.49	-33.77	-13	PASS
Band2	9400	1	1000~20000 MHz	19039.55	-27.78	-13	PASS
Band2	9538	1	30~1000MHz	931.13	-34.48	-13	PASS
Band2	9538	1	1000~20000 MHz	19463.73	-27.13	-13	PASS
Band5	4132	1	30~1000MHz	944.71	-45.15	-13	PASS
Band5	4132	1	1000~10000 MHz	5369.05	-31.99	-13	PASS
Band5	4182	1	30~1000MHz	967.99	-44.23	-13	PASS
Band5	4182	1	1000~10000 MHz	2634.85	-31.93	-13	PASS
Band5	4233	1	30~1000MHz	973.33	-46.15	-13	PASS
Band5	4233	1	1000~10000 MHz	2640.7	-32.2	-13	PASS

## Test Graphs(WCDMA)



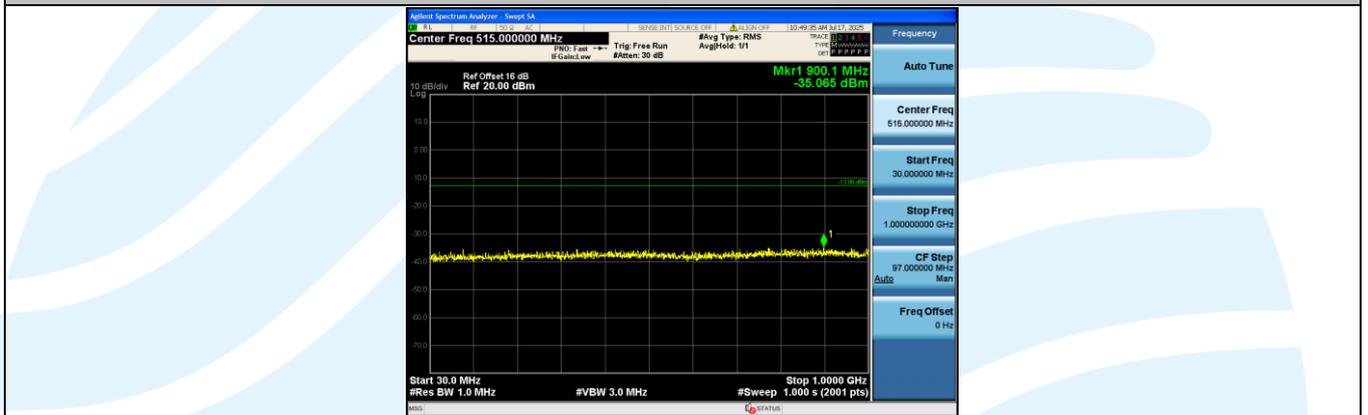


Test Graphs(HSDPA)





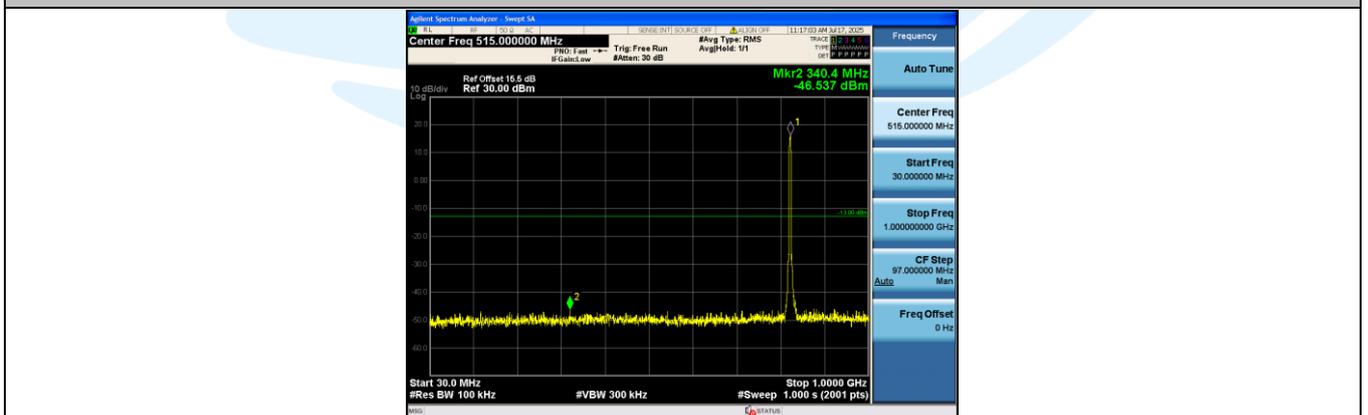
Band2-9400-1-1000~20000MHz-PASS



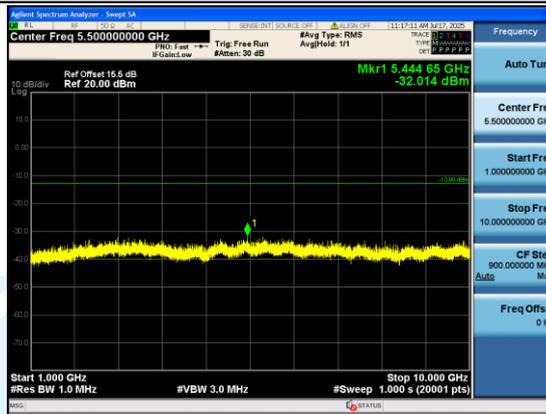
Band2-9538-1-30~1000MHz-PASS



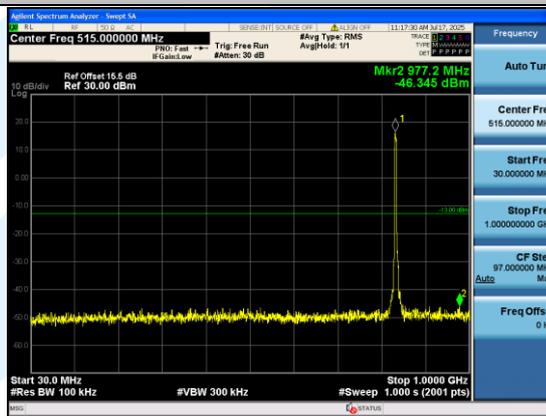
Band2-9538-1-1000~20000MHz-PASS



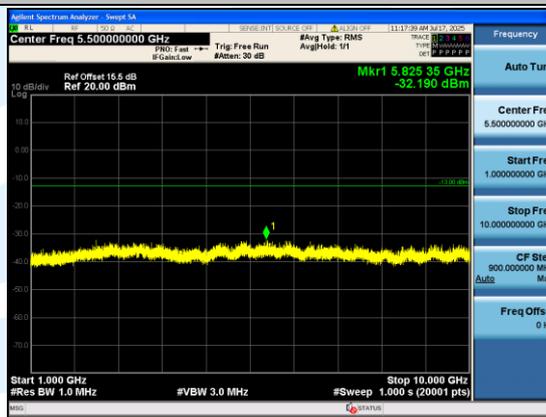
Band5-4132-1-30~1000MHz-PASS



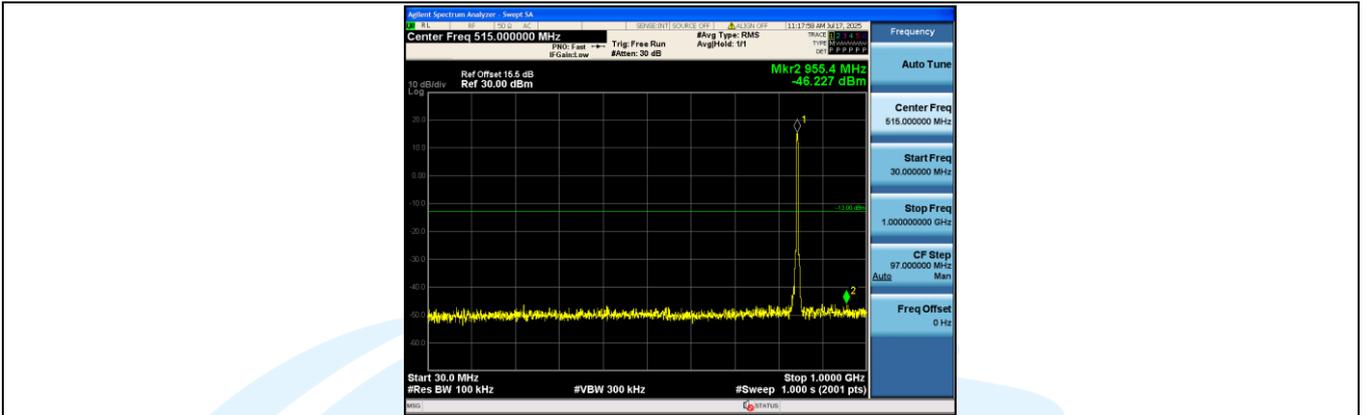
Band5-4132-1-1000~10000MHz-PASS



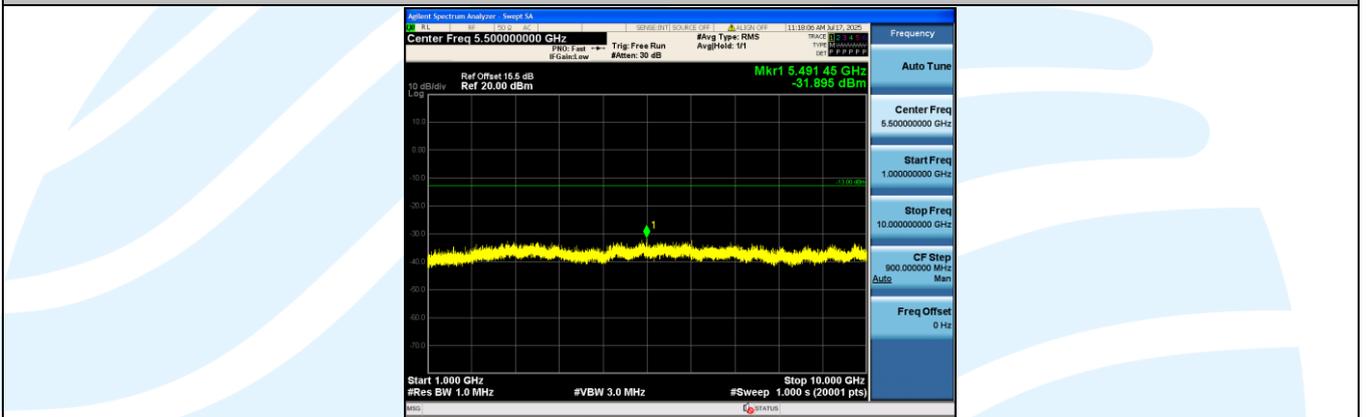
Band5-4182-1-30~1000MHz-PASS



Band5-4182-1-1000~10000MHz-PASS

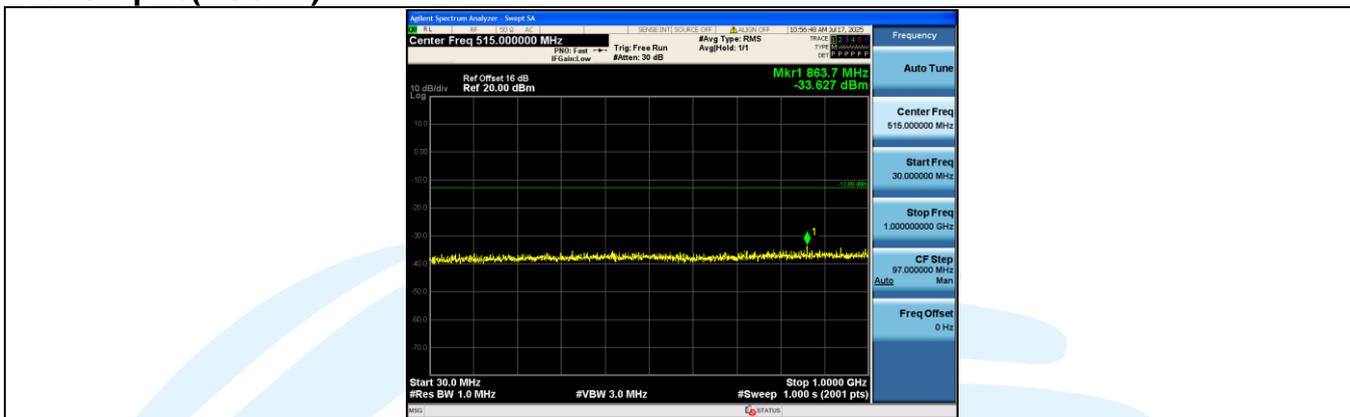


Band5-4233-1-30~1000MHz-PASS

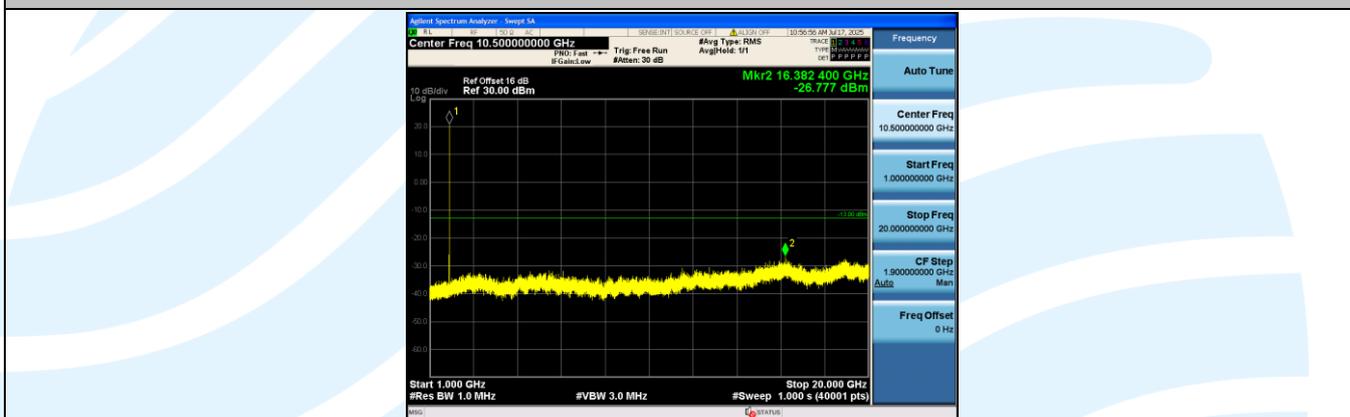


Band5-4233-1-1000~10000MHz-PASS

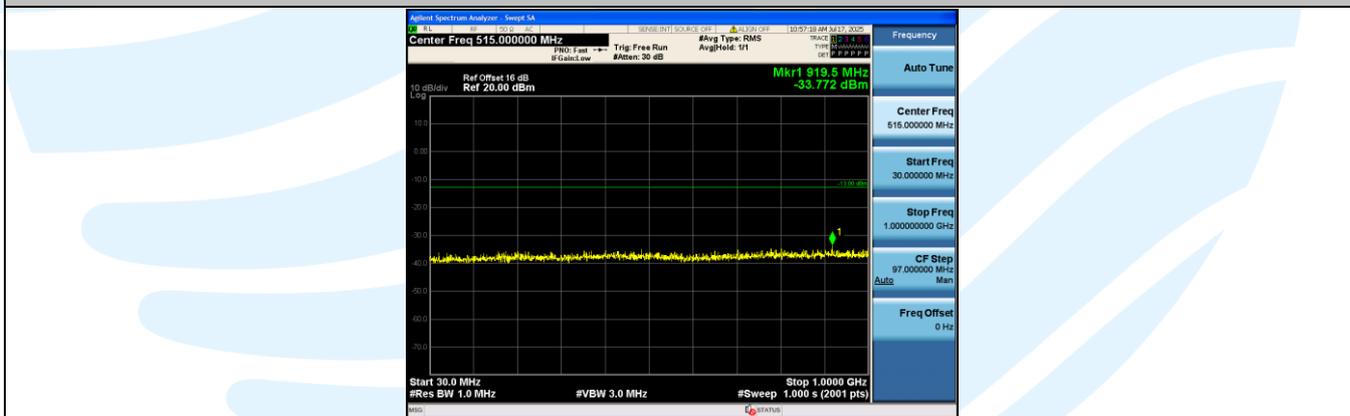
Test Graphs(HSUPA)



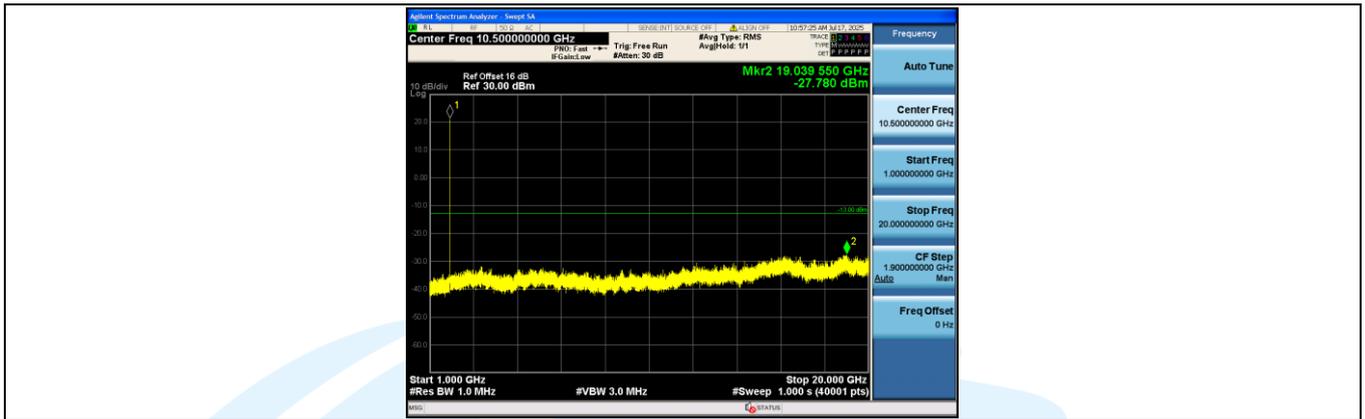
Band2-9262-1-30~1000MHz-PASS



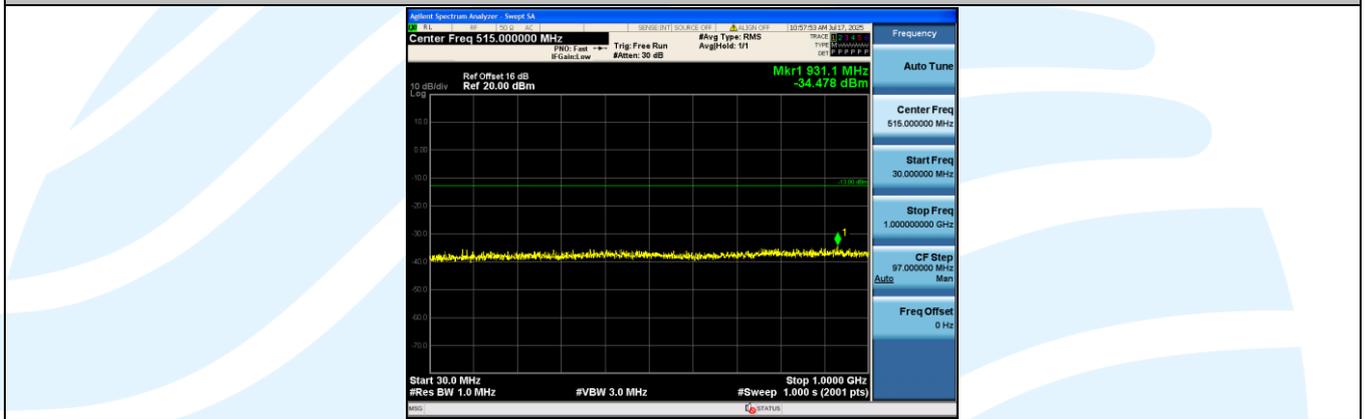
Band2-9262-1-1000~20000MHz-PASS



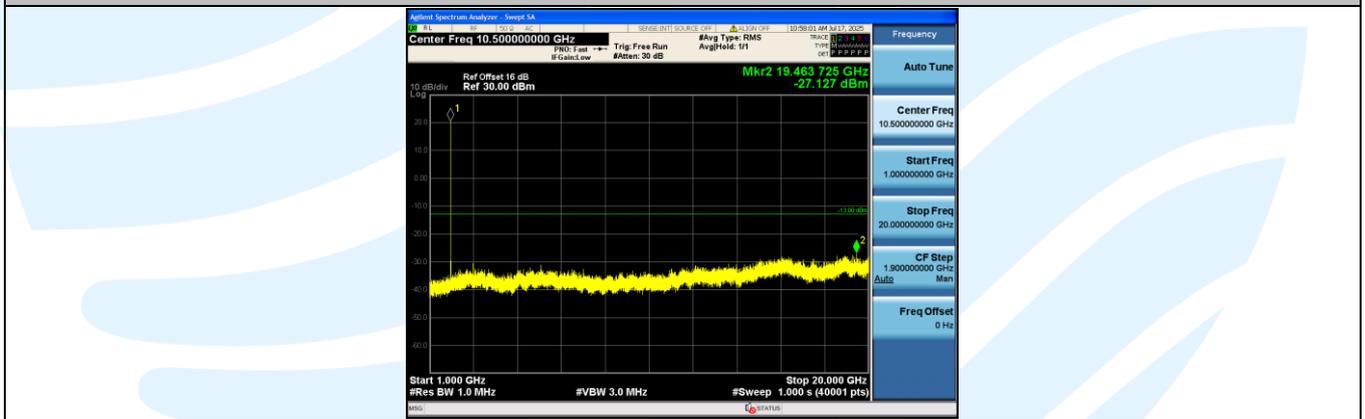
Band2-9400-1-30~1000MHz-PASS



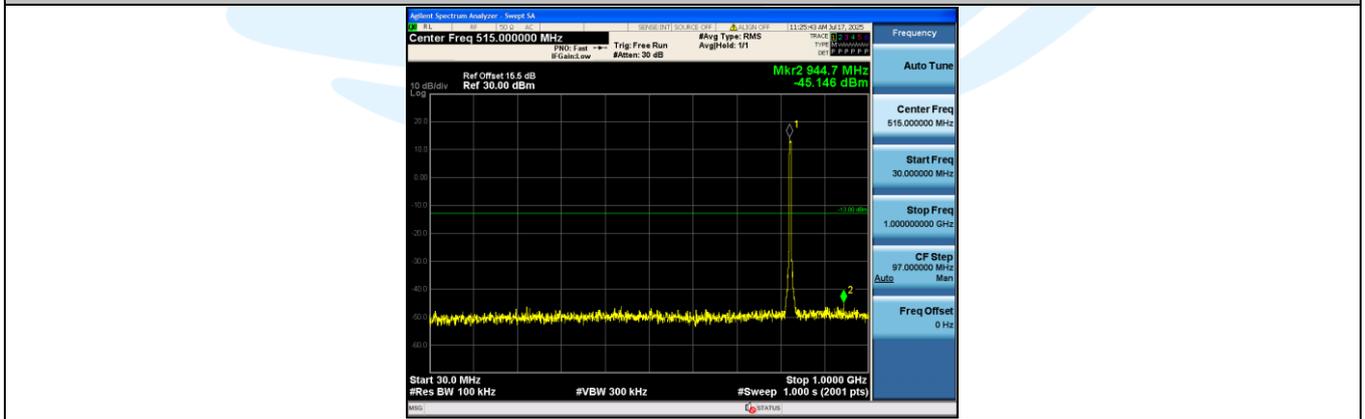
Band2-9400-1-1000~20000MHz-PASS



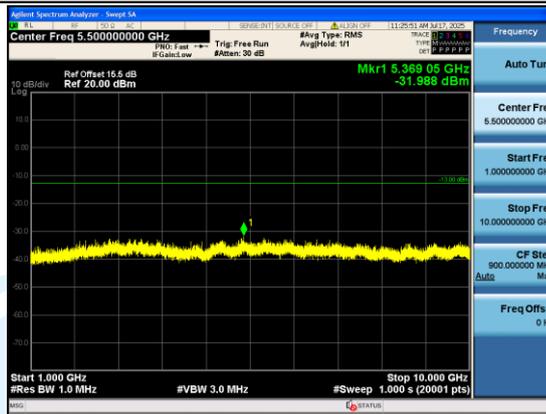
Band2-9538-1-30~1000MHz-PASS



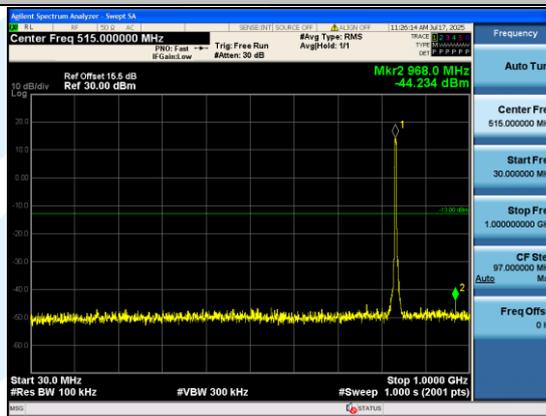
Band2-9538-1-1000~20000MHz-PASS



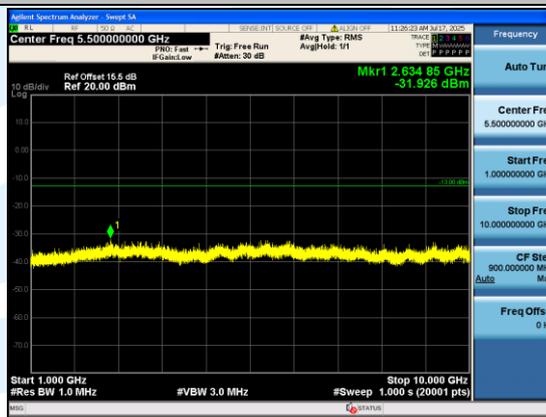
Band5-4132-1-30~1000MHz-PASS



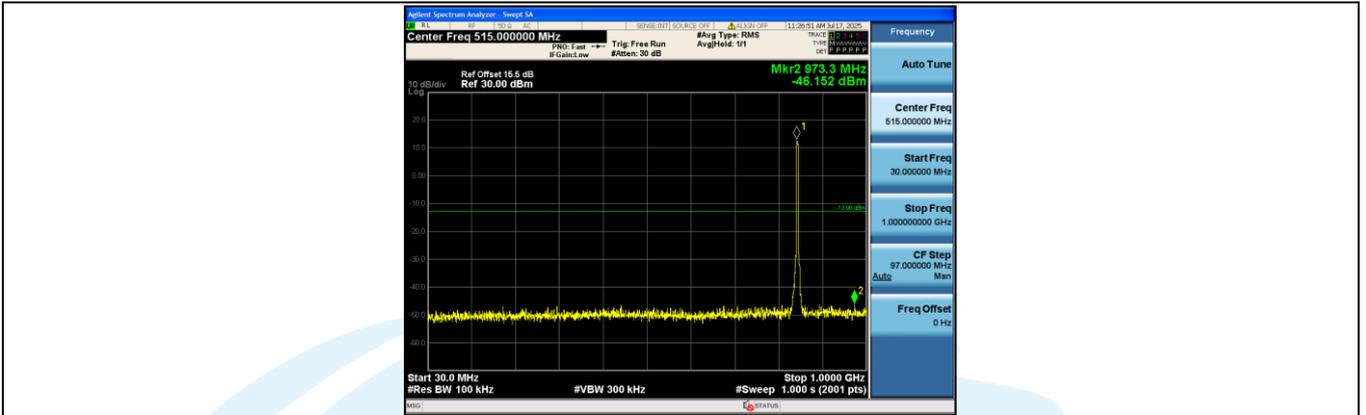
Band5-4132-1-1000~10000MHz-PASS



Band5-4182-1-30~1000MHz-PASS



Band5-4182-1-1000~10000MHz-PASS



Band5-4233-1-30~1000MHz-PASS



Band5-4233-1-1000~10000MHz-PASS

### B 5. FREQUENCY STABILITY

#### Test Result(WCDMA)

Voltage							
Band	Channel	Voltage (Vdc)	Temp. (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	9400	VN	NT	5.40	0.002872	±2.5	PASS
Band2	9400	VL	NT	2.95	0.001569	±2.5	PASS
Band2	9400	VH	NT	1.87	0.000995	±2.5	PASS
Band5	4182	VN	NT	0.41	0.000490	±2.5	PASS
Band5	4182	VL	NT	-0.59	-0.000705	±2.5	PASS
Band5	4182	VH	NT	0.08	0.000096	±2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Tempe. (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	9400	NV	-30	4.48	0.002383	±2.5	PASS
Band2	9400	NV	-20	4.38	0.002330	±2.5	PASS
Band2	9400	NV	-10	6.49	0.003452	±2.5	PASS
Band2	9400	NV	0	9.44	0.005021	±2.5	PASS
Band2	9400	NV	10	4.66	0.002479	±2.5	PASS
Band2	9400	NV	20	2.69	0.001431	±2.5	PASS
Band2	9400	NV	30	8.51	0.004527	±2.5	PASS
Band2	9400	NV	40	5.71	0.003037	±2.5	PASS
Band2	9400	NV	50	6.67	0.003548	±2.5	PASS
Band5	4182	NV	-30	-0.91	-0.001088	±2.5	PASS
Band5	4182	NV	-20	-0.12	-0.000143	±2.5	PASS
Band5	4182	NV	-10	0.33	0.000395	±2.5	PASS
Band5	4182	NV	0	1.37	0.001638	±2.5	PASS
Band5	4182	NV	10	-0.41	-0.000490	±2.5	PASS
Band5	4182	NV	20	-0.55	-0.000658	±2.5	PASS
Band5	4182	NV	30	0.67	0.000801	±2.5	PASS
Band5	4182	NV	40	0.07	0.000084	±2.5	PASS
Band5	4182	NV	50	-0.05	-0.000060	±2.5	PASS