

APPENDIX A5: FREQUENCY STABILITY

GSM 850& PCS 1900:

Voltage							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	190	VN	NT	-3.71	-0.004435	±2.5	PASS
GSM850	190	VL	NT	-2.13	-0.002546	±2.5	PASS
GSM850	190	VH	NT	-2.71	-0.003239	±2.5	PASS
EGPRS850	190	VN	NT	-4.04	-0.004829	±2.5	PASS
EGPRS850	190	VL	NT	-2.23	-0.002666	±2.5	PASS
EGPRS850	190	VH	NT	-4.13	-0.004937	±2.5	PASS
GSM1900	661	VN	NT	-3.81	-0.002027	±2.5	PASS
GSM1900	661	VL	NT	-5.62	-0.002989	±2.5	PASS
GSM1900	661	VH	NT	-7.78	-0.004138	±2.5	PASS
EGPRS1900	661	VN	NT	-7.49	-0.003984	±2.5	PASS
EGPRS1900	661	VL	NT	-10.69	-0.005686	±2.5	PASS
EGPRS1900	661	VH	NT	-10.59	-0.005633	±2.5	PASS
CDMA BC0	384	VN	NT	-4.74	-0.005666	±2.5	PASS
CDMA BC0	384	VL	NT	-3.89	-0.004650	±2.5	PASS
CDMA BC0	384	VH	NT	-5.41	-0.006467	±2.5	PASS

Temperature							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
GSM850	190	NV	-30	-4.49	-0.005367	±2.5	PASS
GSM850	190	NV	-20	-5.23	-0.006251	±2.5	PASS
GSM850	190	NV	-10	-2.03	-0.002426	±2.5	PASS
GSM850	190	NV	0	-2.62	-0.003132	±2.5	PASS
GSM850	190	NV	10	0.00	0.000000	±2.5	PASS
GSM850	190	NV	20	1.07	0.001279	±2.5	PASS
GSM850	190	NV	30	1.65	0.001972	±2.5	PASS
GSM850	190	NV	40	2.39	0.002857	±2.5	PASS
GSM850	190	NV	50	1.36	0.001626	±2.5	PASS
EGPRS850	190	NV	-30	-5.84	-0.006981	±2.5	PASS
EGPRS850	190	NV	-20	0.36	0.000430	±2.5	PASS
EGPRS850	190	NV	-10	-2.49	-0.002976	±2.5	PASS
EGPRS850	190	NV	0	-2.81	-0.003359	±2.5	PASS
EGPRS850	190	NV	10	-2.16	-0.002582	±2.5	PASS
EGPRS850	190	NV	20	-5.52	-0.006598	±2.5	PASS
EGPRS850	190	NV	30	-1.42	-0.001697	±2.5	PASS
EGPRS850	190	NV	40	-1.74	-0.002080	±2.5	PASS
EGPRS850	190	NV	50	1.68	0.002008	±2.5	PASS
GSM1900	661	NV	-30	-4.16	-0.002213	±2.5	PASS
GSM1900	661	NV	-20	-4.91	-0.002612	±2.5	PASS
GSM1900	661	NV	-10	-3.97	-0.002112	±2.5	PASS
GSM1900	661	NV	0	-4.29	-0.002282	±2.5	PASS
GSM1900	661	NV	10	-10.04	-0.005340	±2.5	PASS
GSM1900	661	NV	20	-11.14	-0.005926	±2.5	PASS
GSM1900	661	NV	30	-3.33	-0.001771	±2.5	PASS
GSM1900	661	NV	40	1.97	0.001048	±2.5	PASS
GSM1900	661	NV	50	-6.07	-0.003229	±2.5	PASS
EGPRS1900	661	NV	-30	-11.69	-0.006218	±2.5	PASS
EGPRS1900	661	NV	-20	-5.88	-0.003128	±2.5	PASS
EGPRS1900	661	NV	-10	-9.59	-0.005101	±2.5	PASS
EGPRS1900	661	NV	0	-10.46	-0.005564	±2.5	PASS
EGPRS1900	661	NV	10	-7.65	-0.004069	±2.5	PASS
EGPRS1900	661	NV	20	-9.36	-0.004979	±2.5	PASS
EGPRS1900	661	NV	30	-11.66	-0.006202	±2.5	PASS
EGPRS1900	661	NV	40	-6.20	-0.003298	±2.5	PASS

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Temperature							
Band	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
EGPRS1900	661	NV	50	-3.97	-0.002112	±2.5	PASS
CDMA BC0	384	NV	-30	-5.27	-0.006300	±2.5	PASS
CDMA BC0	384	NV	-20	-8.15	-0.009743	±2.5	PASS
CDMA BC0	384	NV	-10	-6.25	-0.007472	±2.5	PASS
CDMA BC0	384	NV	0	-8.17	-0.009767	±2.5	PASS
CDMA BC0	384	NV	10	-4.89	-0.005846	±2.5	PASS
CDMA BC0	384	NV	20	-3.58	-0.004280	±2.5	PASS
CDMA BC0	384	NV	30	-4.57	-0.005463	±2.5	PASS
CDMA BC0	384	NV	40	-7.58	-0.009062	±2.5	PASS
CDMA BC0	384	NV	50	-5.61	-0.006707	±2.5	PASS

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APPENDIX B: WCDMA

APPENDIX B1: PEAK-TO-AVERAGE RATIO

Test Result(WCDMA)

Band	Channel	Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
Band2	9262	2.96	13	PASS
Band2	9400	3.1	13	PASS
Band2	9538	2.97	13	PASS
Band5	4132	3.17	13	PASS
Band5	4182	3.18	13	PASS
Band5	4233	3.17	13	PASS

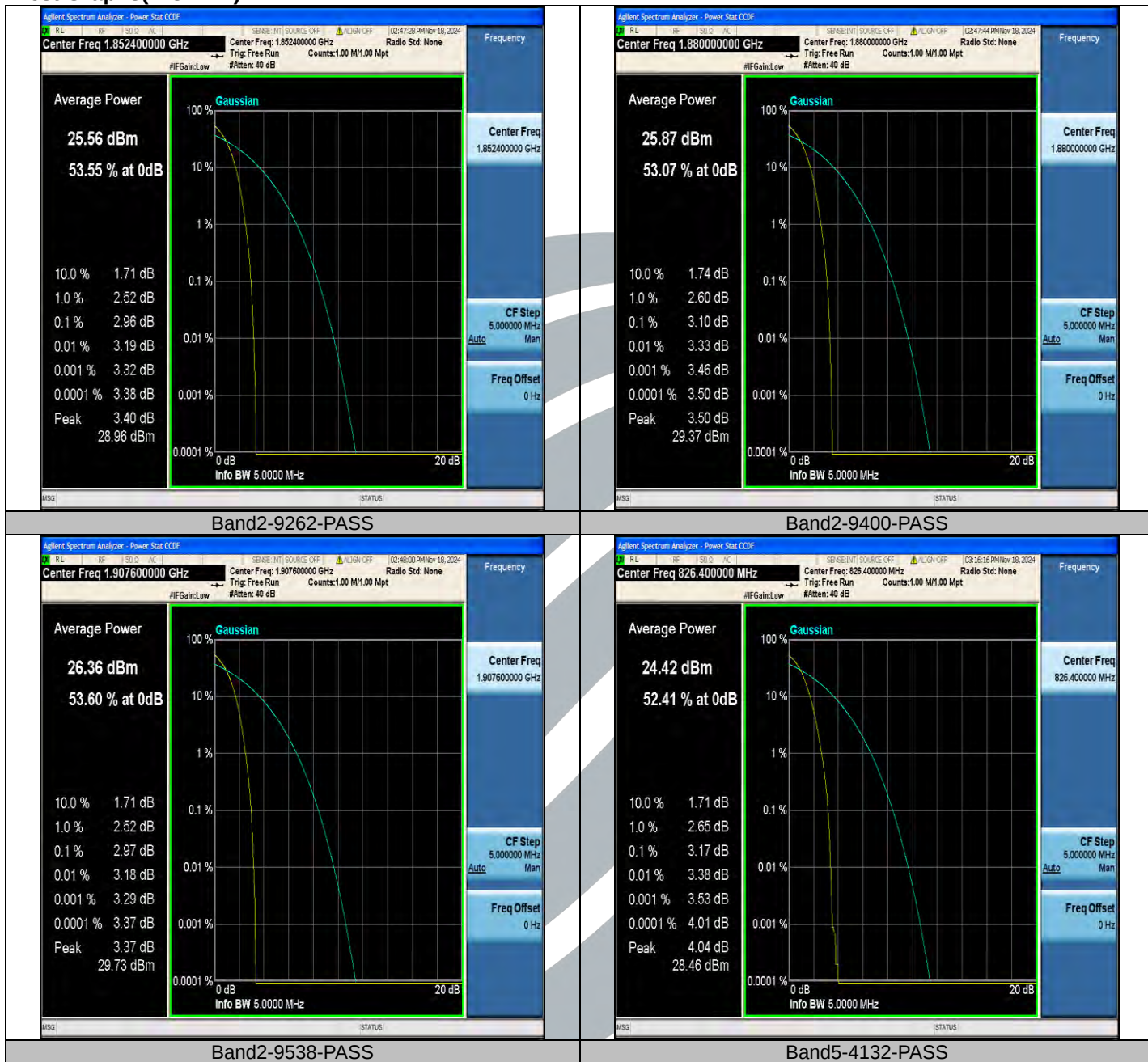
Test Result(HSDPA)

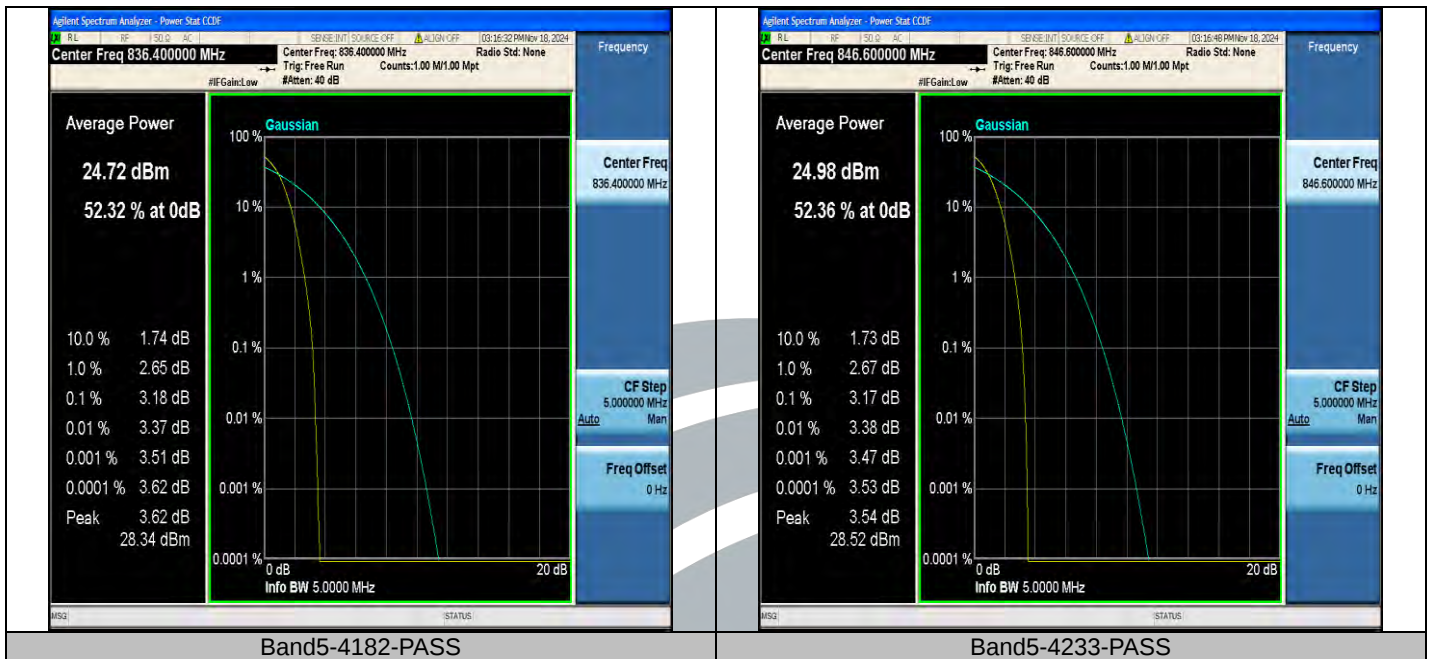
Band	Channel	Sub Test	Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
Band2	9262	1	3.1	13	PASS
Band2	9400	1	3.18	13	PASS
Band2	9538	1	3.11	13	PASS
Band5	4132	1	3.18	13	PASS
Band5	4182	1	3.19	13	PASS
Band5	4233	1	3.19	13	PASS

Test Result(HSUPA)

Band	Channel	Sub Test	Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
Band2	9262	1	4.5	13	PASS
Band2	9400	1	4.63	13	PASS
Band2	9538	1	4.58	13	PASS
Band5	4132	1	4.55	13	PASS
Band5	4182	1	4.6	13	PASS
Band5	4233	1	4.58	13	PASS

Test Graphs(WCDMA)



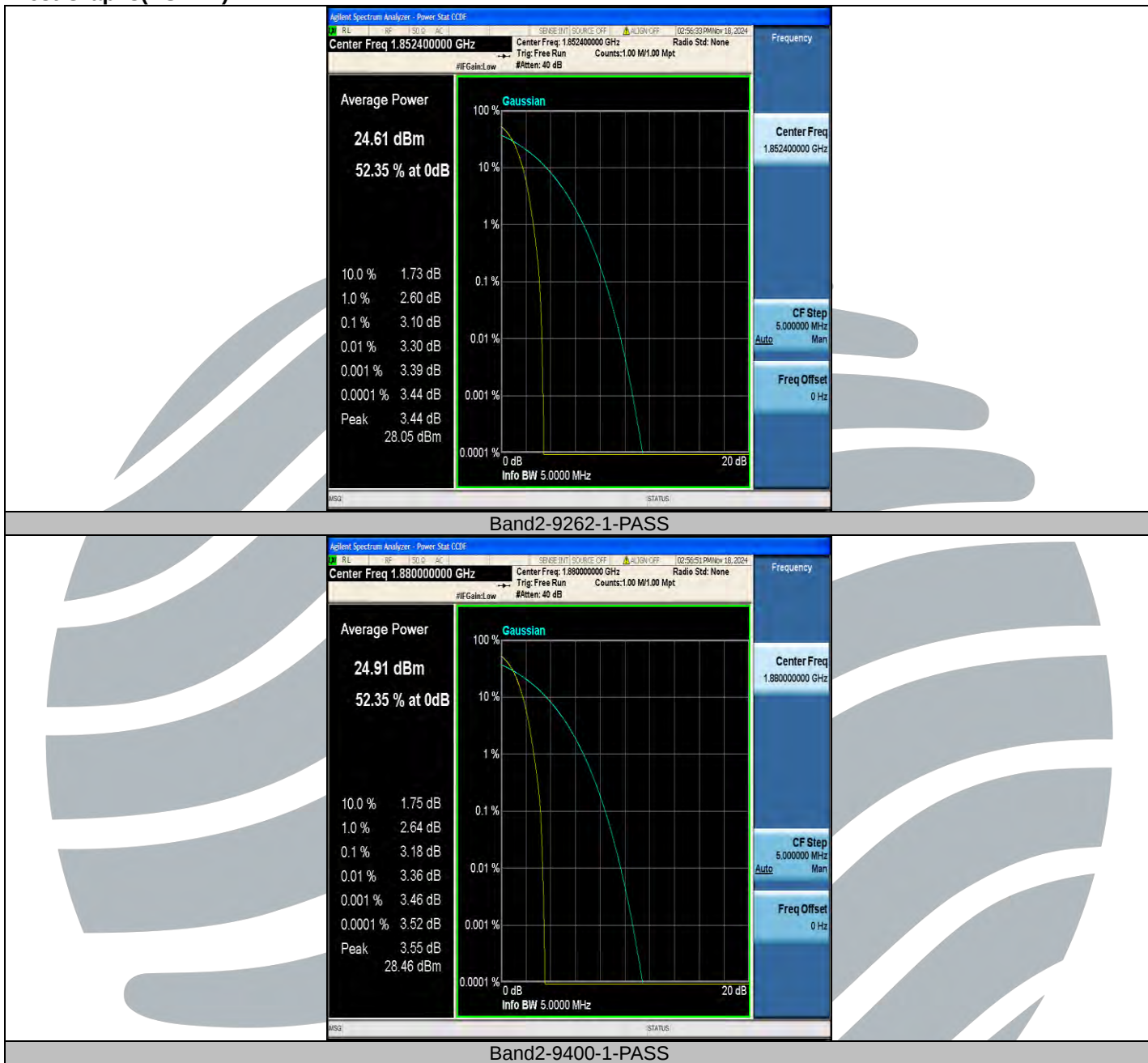


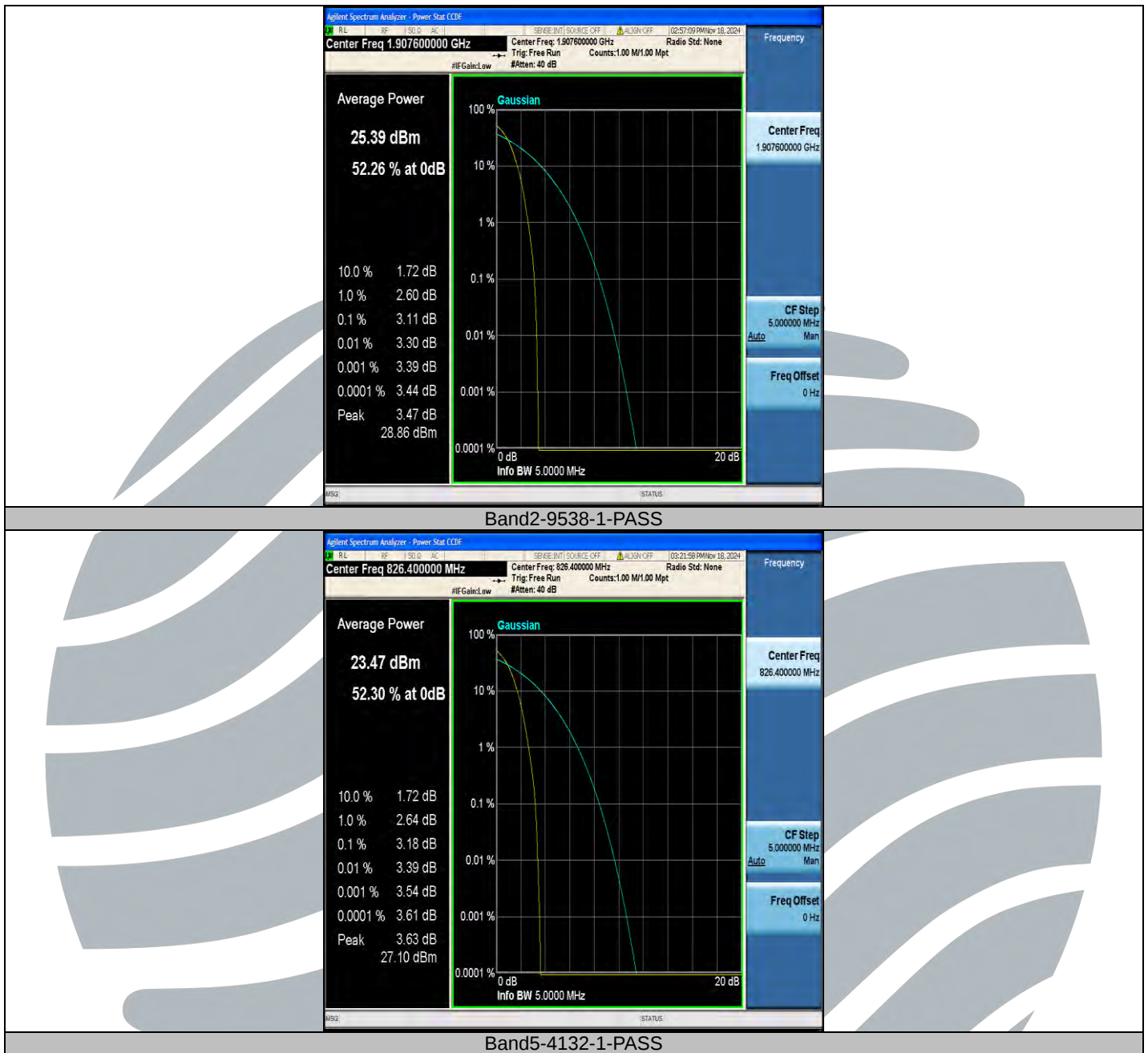
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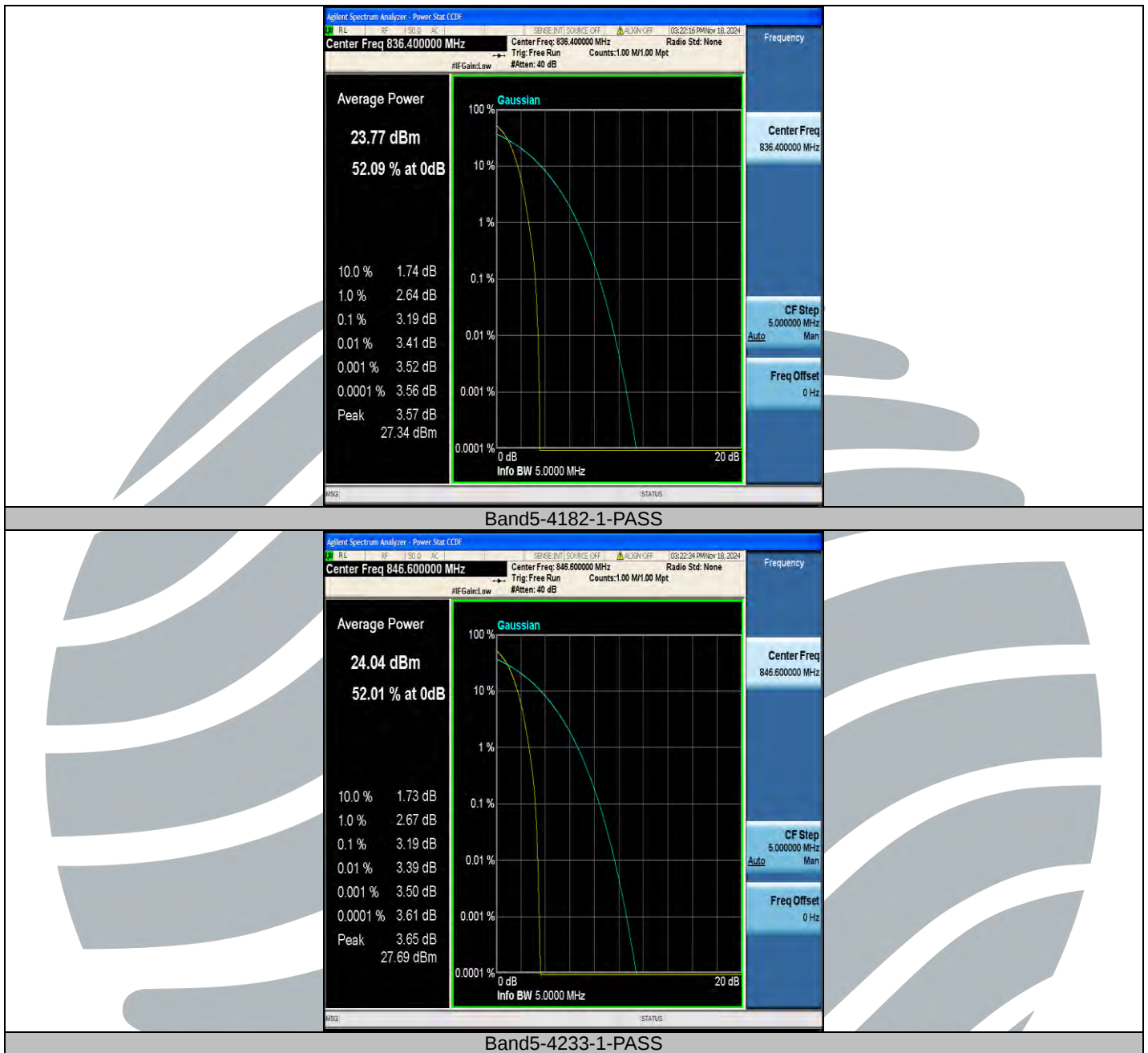
Address: 16/F, Block A, Building 6th, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, China
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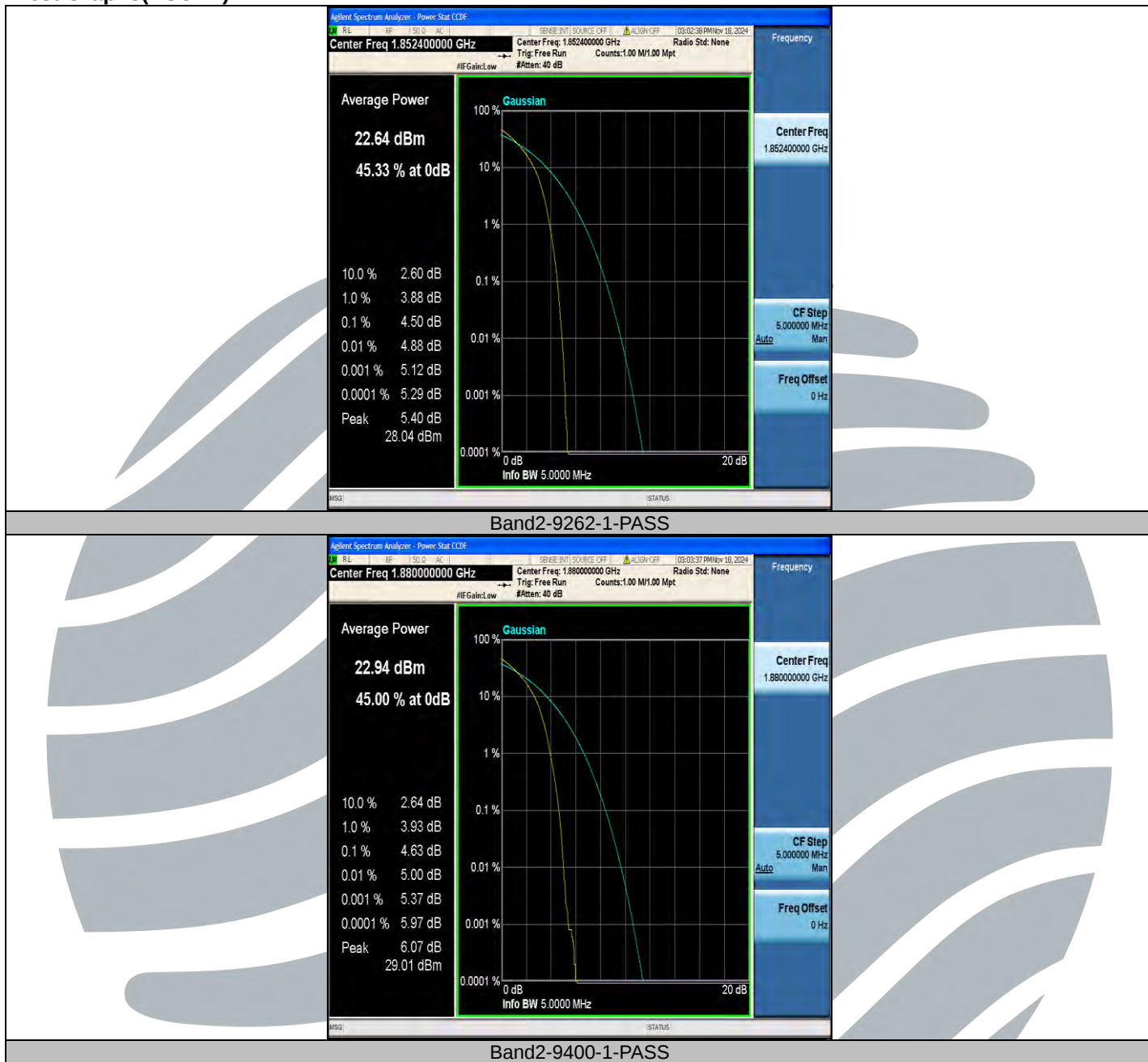
Test Graphs(HSDPA)

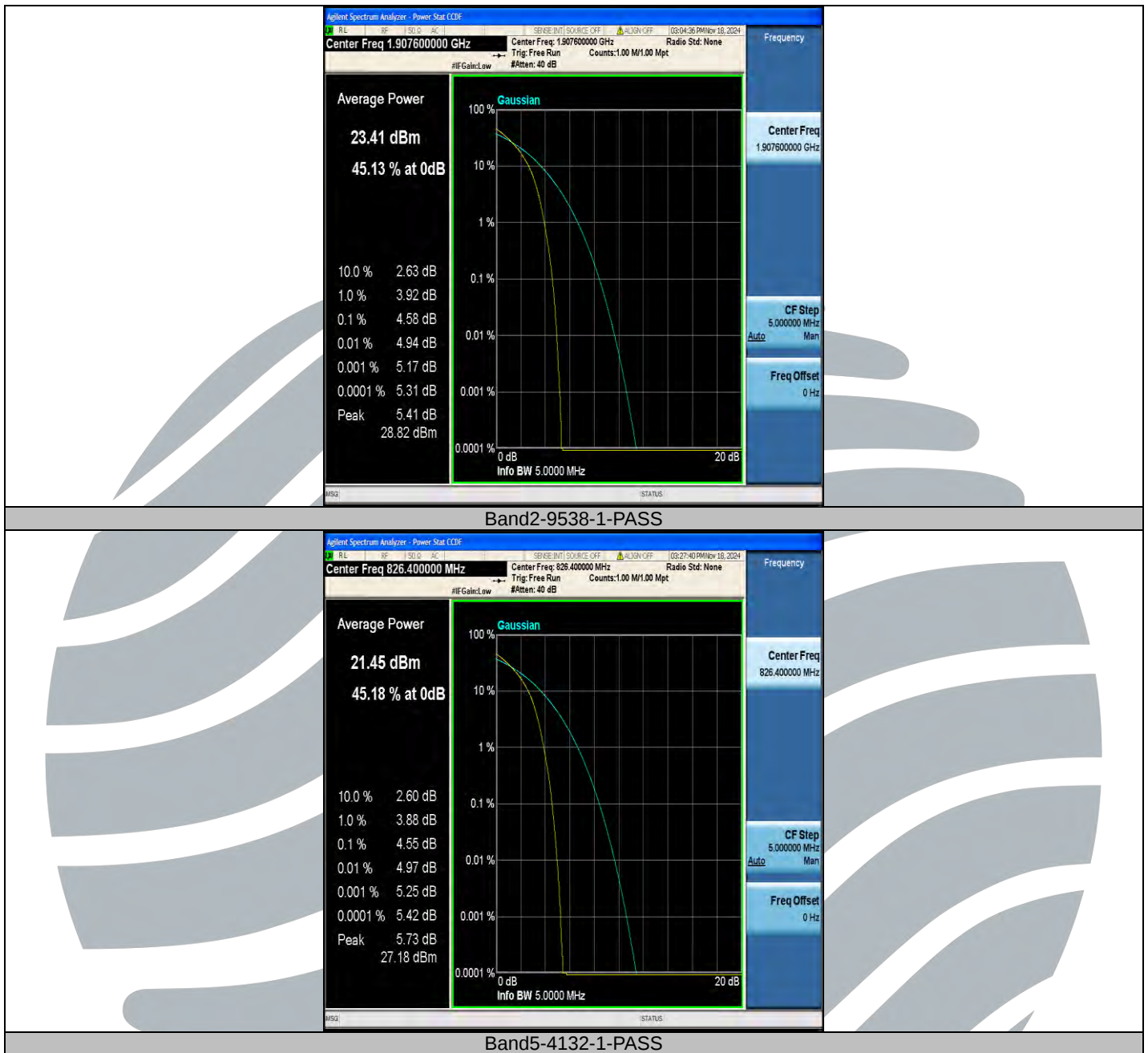


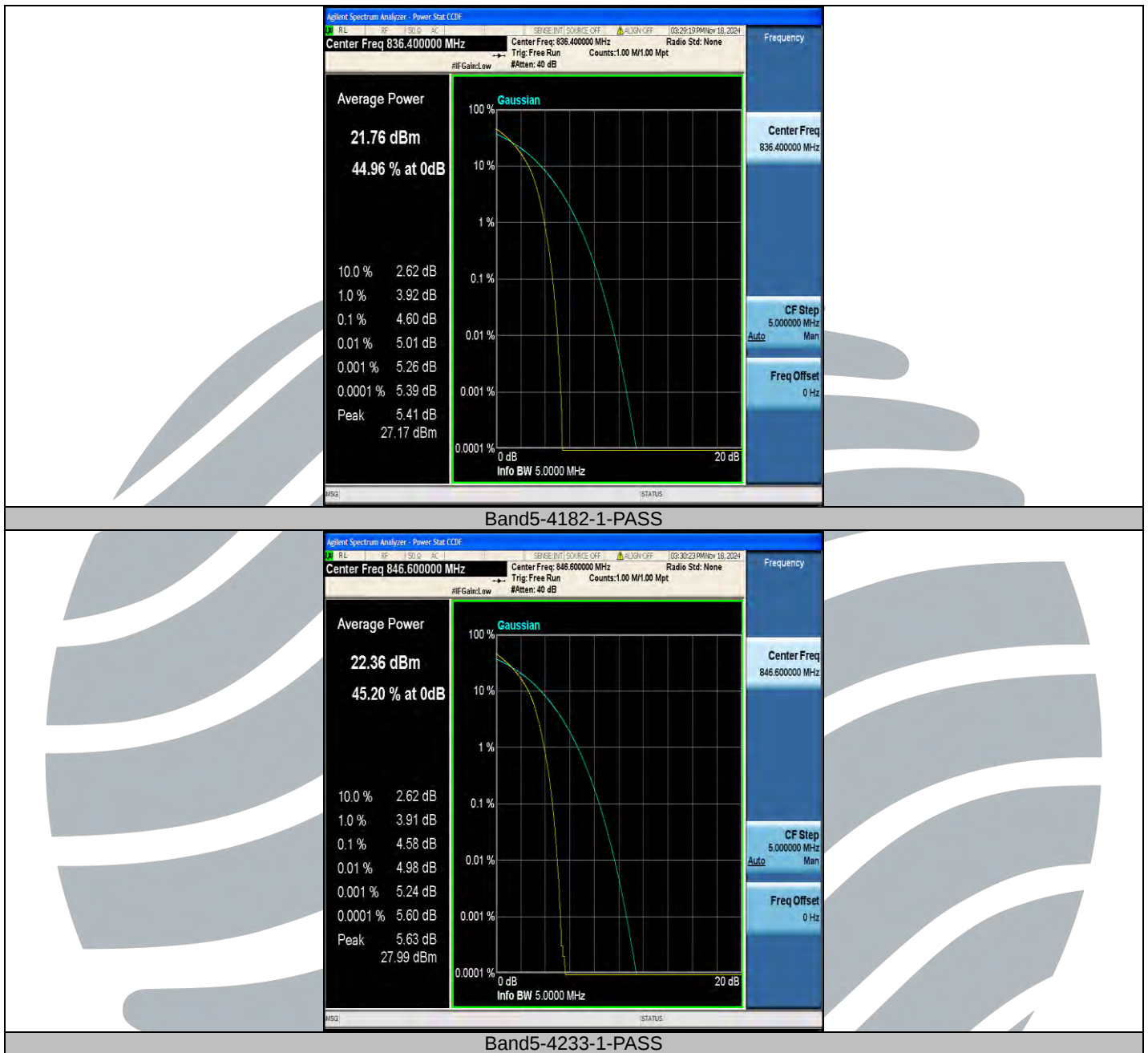




Test Graphs(HSUPA)







APPENDIX B2: 26DB BANDWIDTH AND OCCUPIED BANDWIDTH

Test Result(WCDMA)

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band2	9262	4.1546	4.707	---	PASS
Band2	9400	4.1590	4.687	---	PASS
Band2	9538	4.1501	4.698	---	PASS
Band5	4132	4.1439	4.673	---	PASS
Band5	4182	4.1515	4.687	---	PASS
Band5	4233	4.1476	4.680	---	PASS

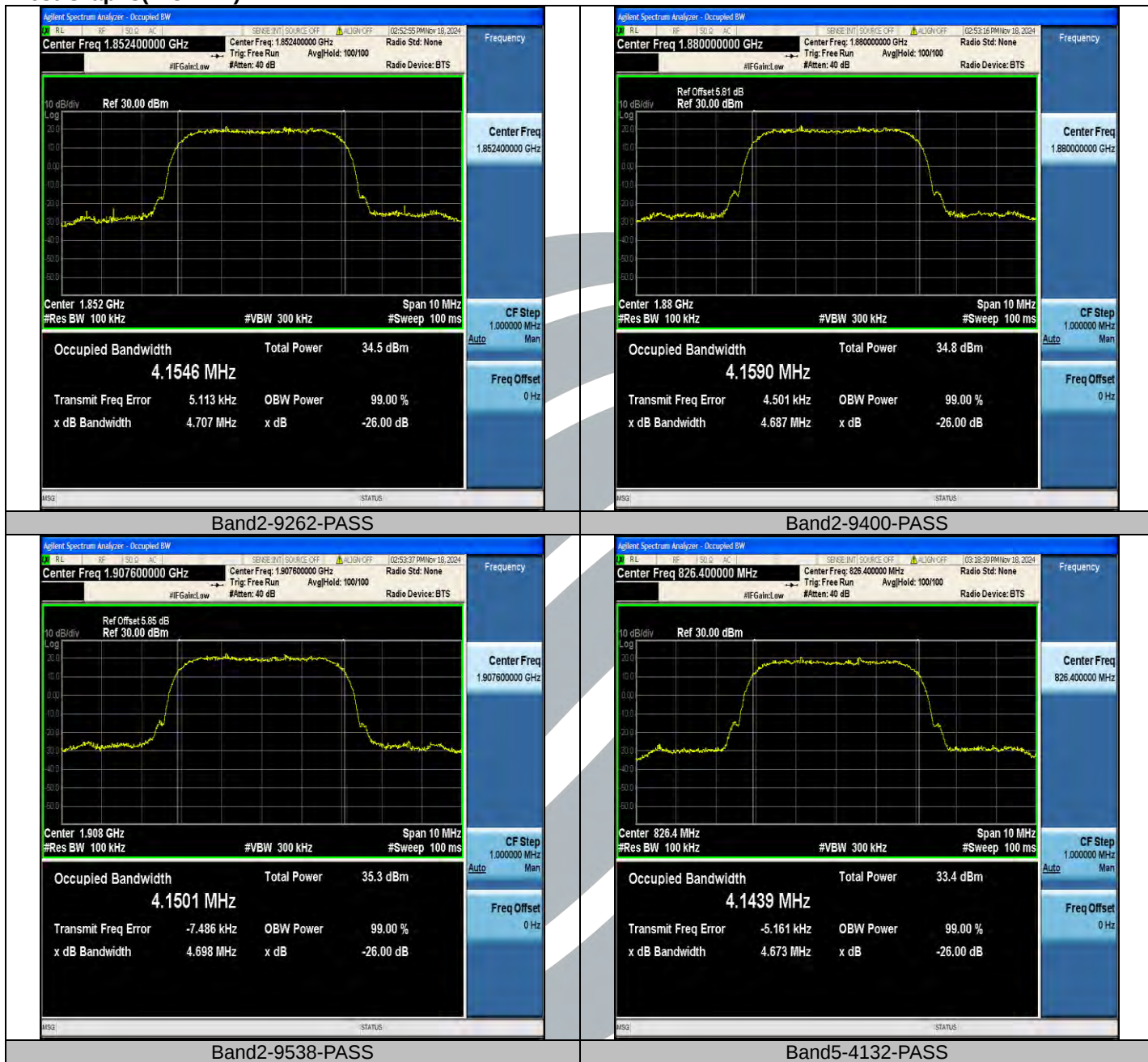
Test Result(HSDPA)

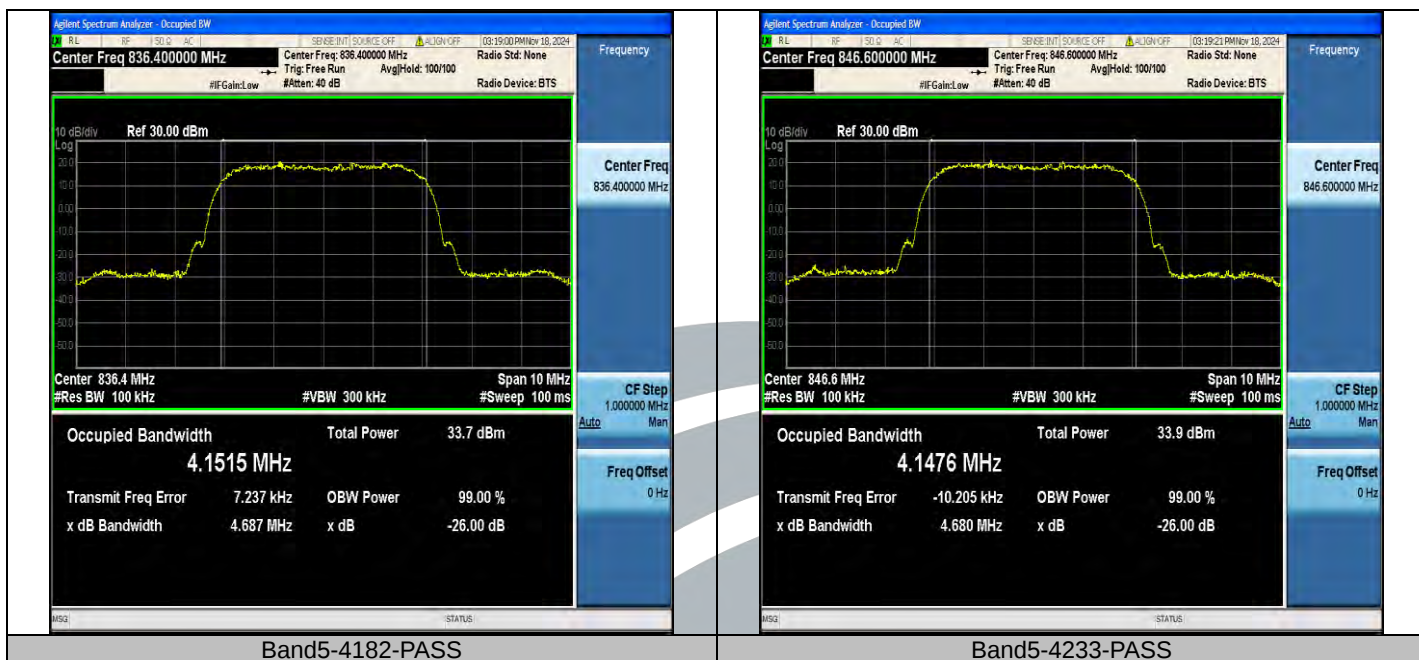
Band	Channel	Sub Test	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band2	9262	1	4.1568	4.689	---	PASS
Band2	9400	1	4.1594	4.702	---	PASS
Band2	9538	1	4.1539	4.702	---	PASS
Band5	4132	1	4.1488	4.687	---	PASS
Band5	4182	1	4.1643	4.707	---	PASS
Band5	4233	1	4.1474	4.683	---	PASS

Test Result(HSUPA)

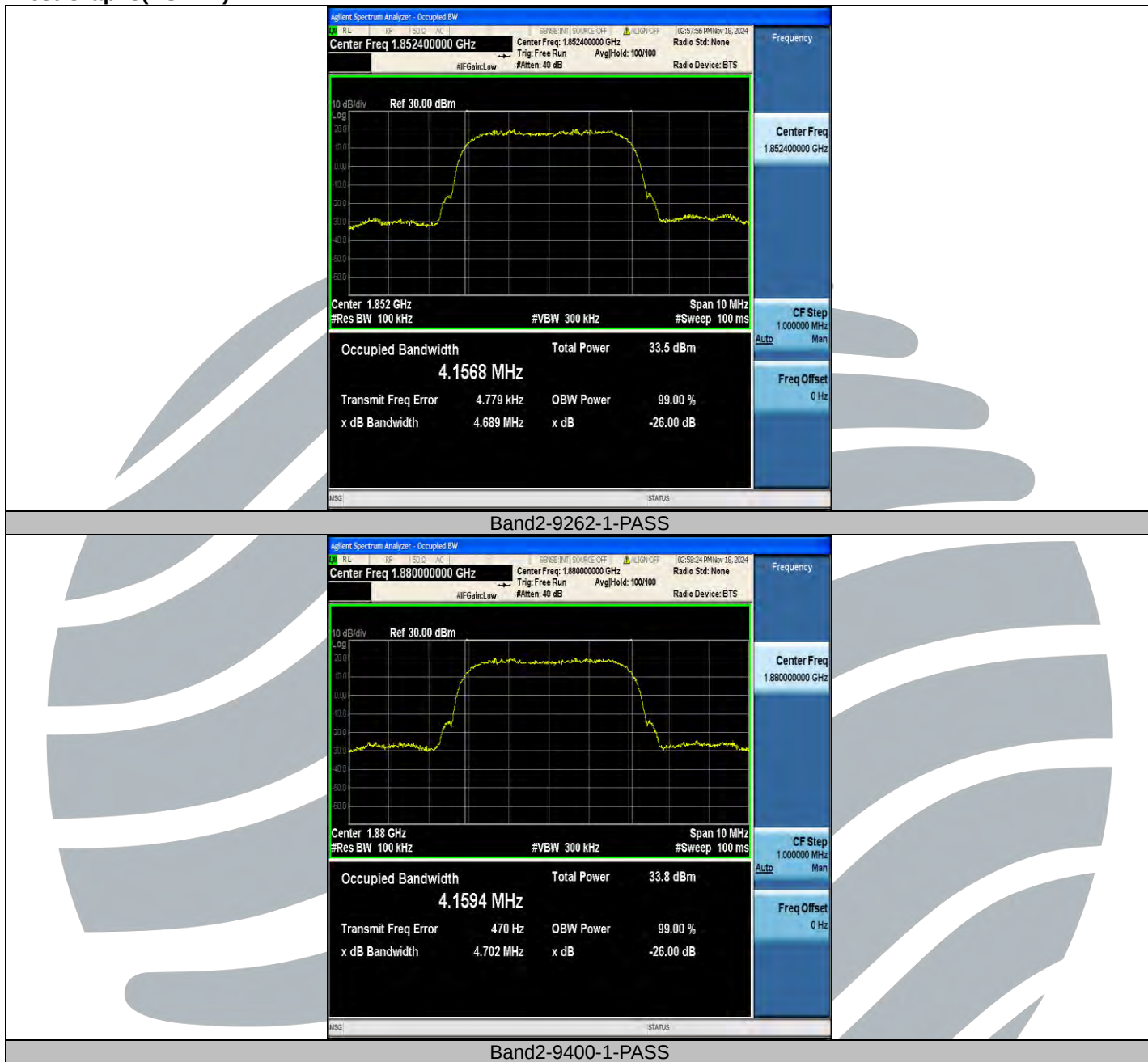
Band	Channel	Sub Test	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(MHz)	Verdict
Band2	9262	1	4.1837	4.712	---	PASS
Band2	9400	1	4.1740	4.703	---	PASS
Band2	9538	1	4.1809	4.707	---	PASS
Band5	4132	1	4.1761	4.704	---	PASS
Band5	4182	1	4.1808	4.707	---	PASS
Band5	4233	1	4.1658	4.698	---	PASS

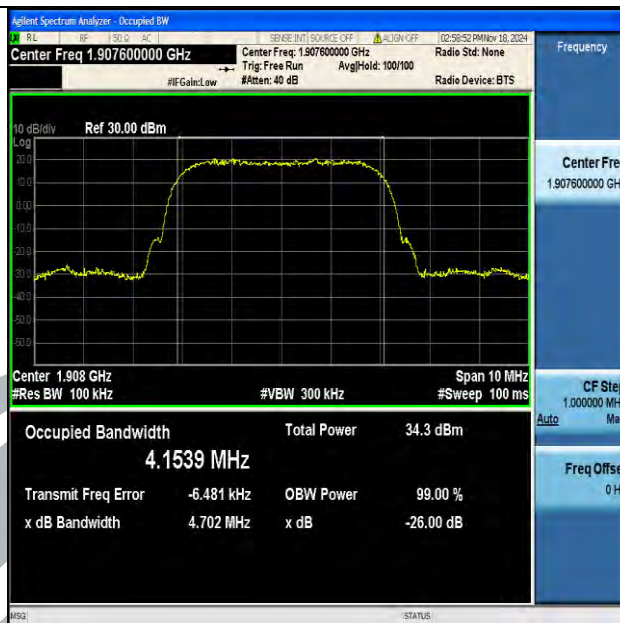
Test Graphs(WCDMA)



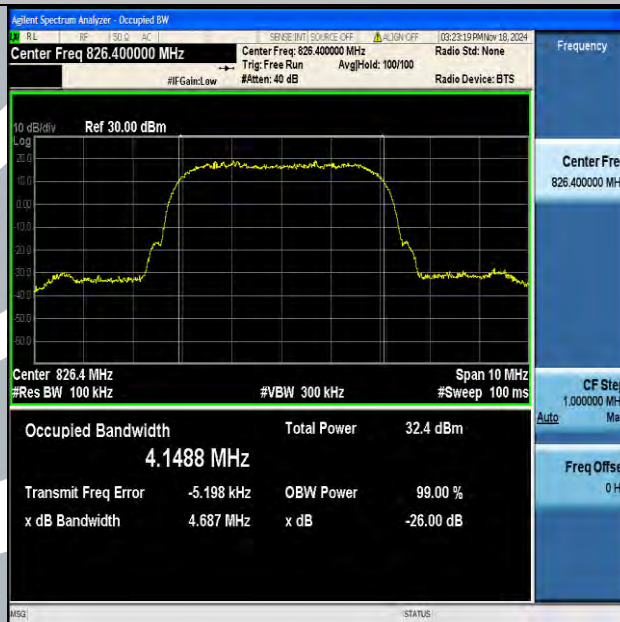


Test Graphs(HSDPA)

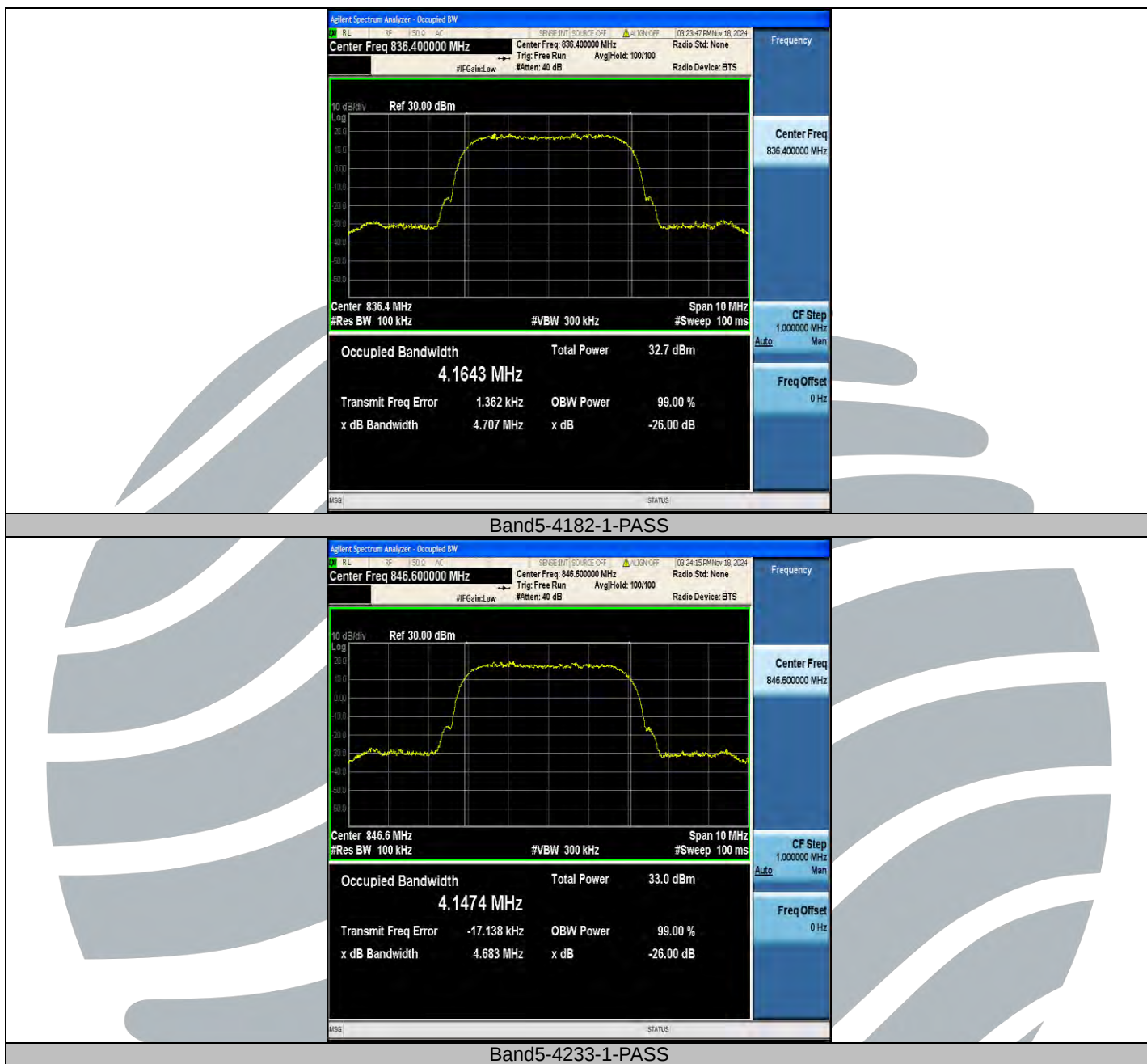




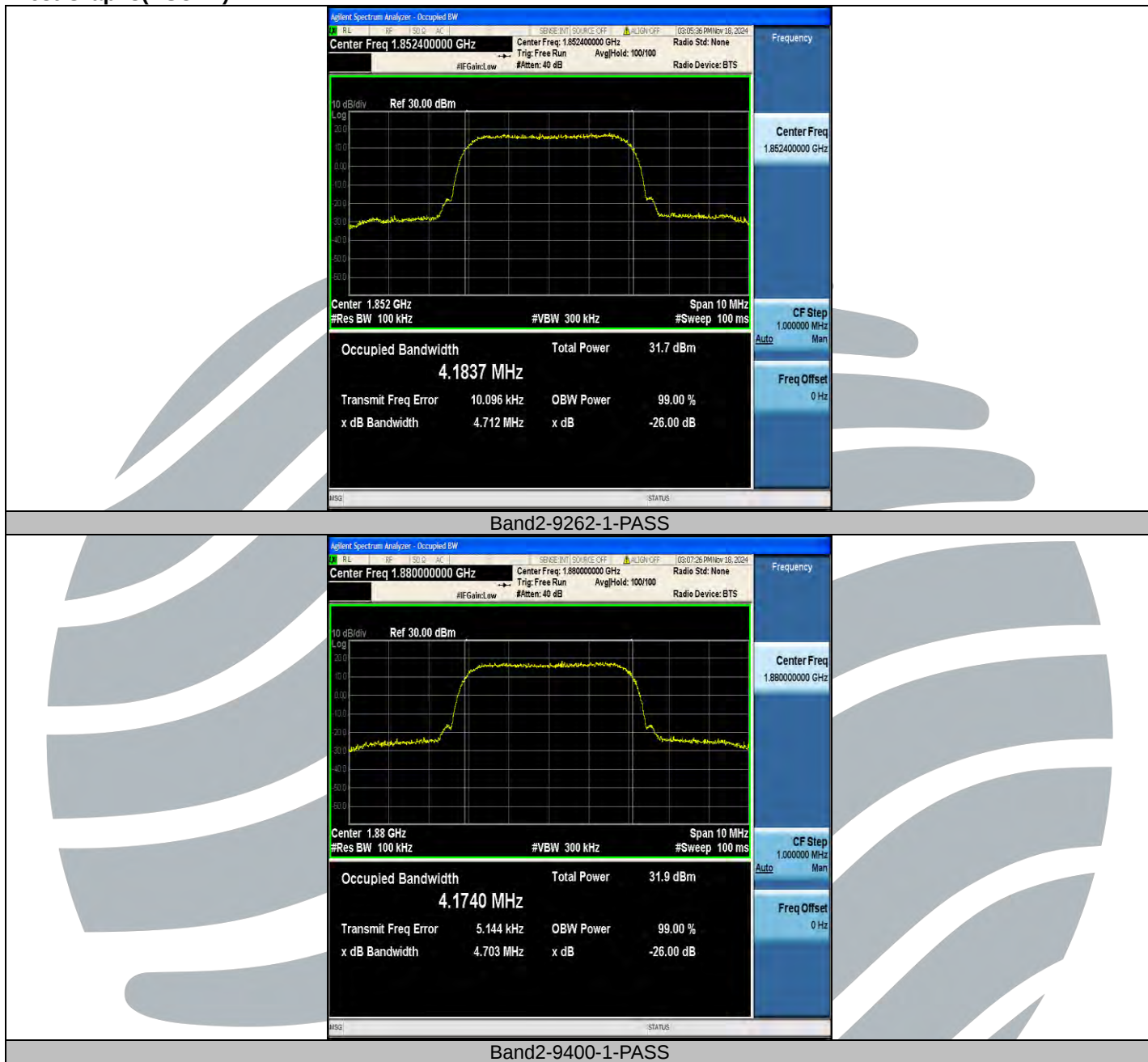
Band2-9538-1-PASS

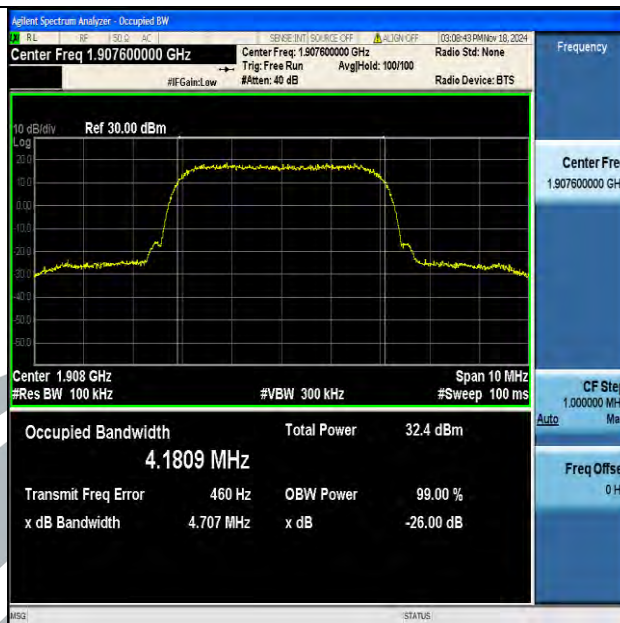


Band5-4132-1-PASS

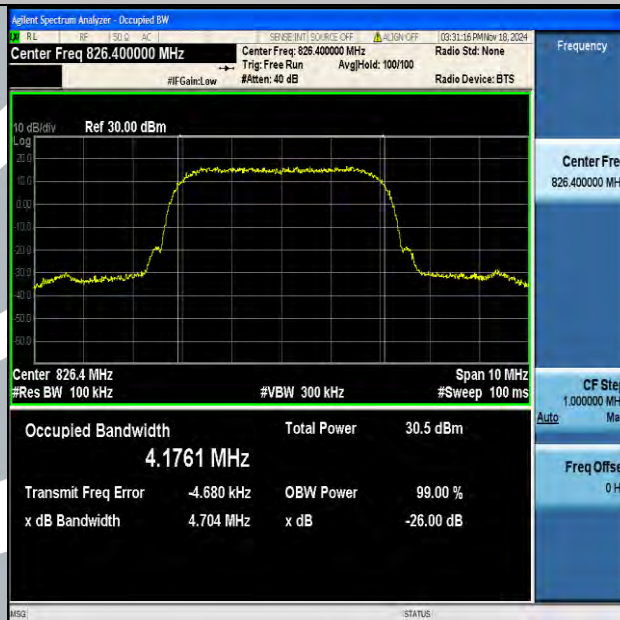


Test Graphs(HSUPA)

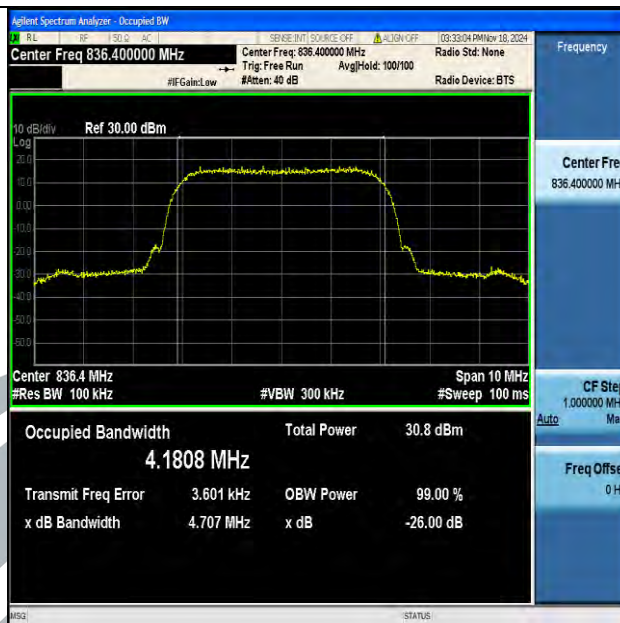




Band2-9538-1-PASS



Band5-4132-1-PASS



Band5-4182-1-PASS



Band5-4233-1-PASS

APPENDIX B3: BAND EDGE

Test Result(WCDMA)

Band	Channel	Frequency (MHz)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	1849.86	-27.70	-13	PASS
Band2	9538	1910.12	-26.60	-13	PASS
Band5	4132	823.88	-26.41	-13	PASS
Band5	4233	849.12	-25.89	-13	PASS

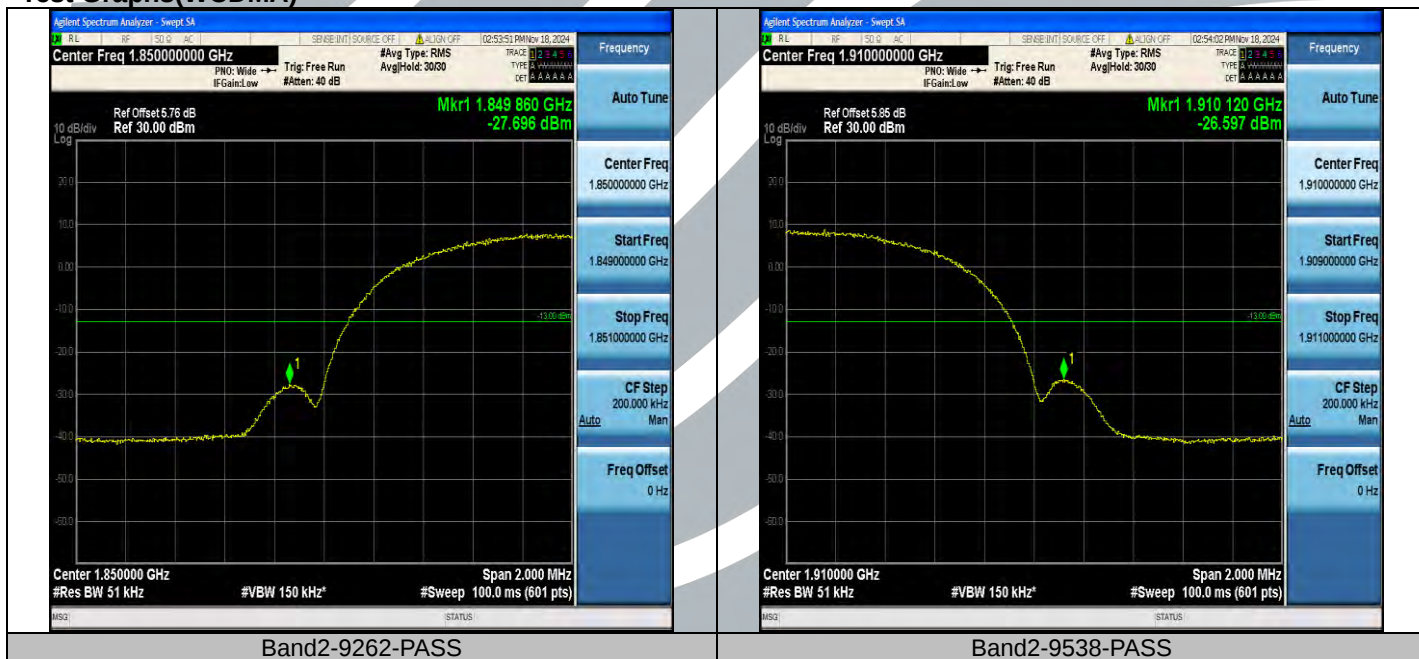
Test Result(HSDPA)

Band	Channel	Sub Test	Frequency (MHz)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	1	1849.88	-27.33	-13	PASS
Band2	9538	1	1910.10	-26.21	-13	PASS
Band5	4132	1	823.87	-27.44	-13	PASS
Band5	4233	1	849.12	-26.95	-13	PASS

Test Result(HSUPA)

Band	Channel	Sub Test	Frequency (MHz)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	1	1849.88	-28.97	-13	PASS
Band2	9538	1	1910.12	-27.53	-13	PASS
Band5	4132	1	823.88	-30.28	-13	PASS
Band5	4233	1	849.13	-30.01	-13	PASS

Test Graphs(WCDMA)





Test Graphs(HSDPA)



Band2-9262-1-PASS



Band2-9538-1-PASS

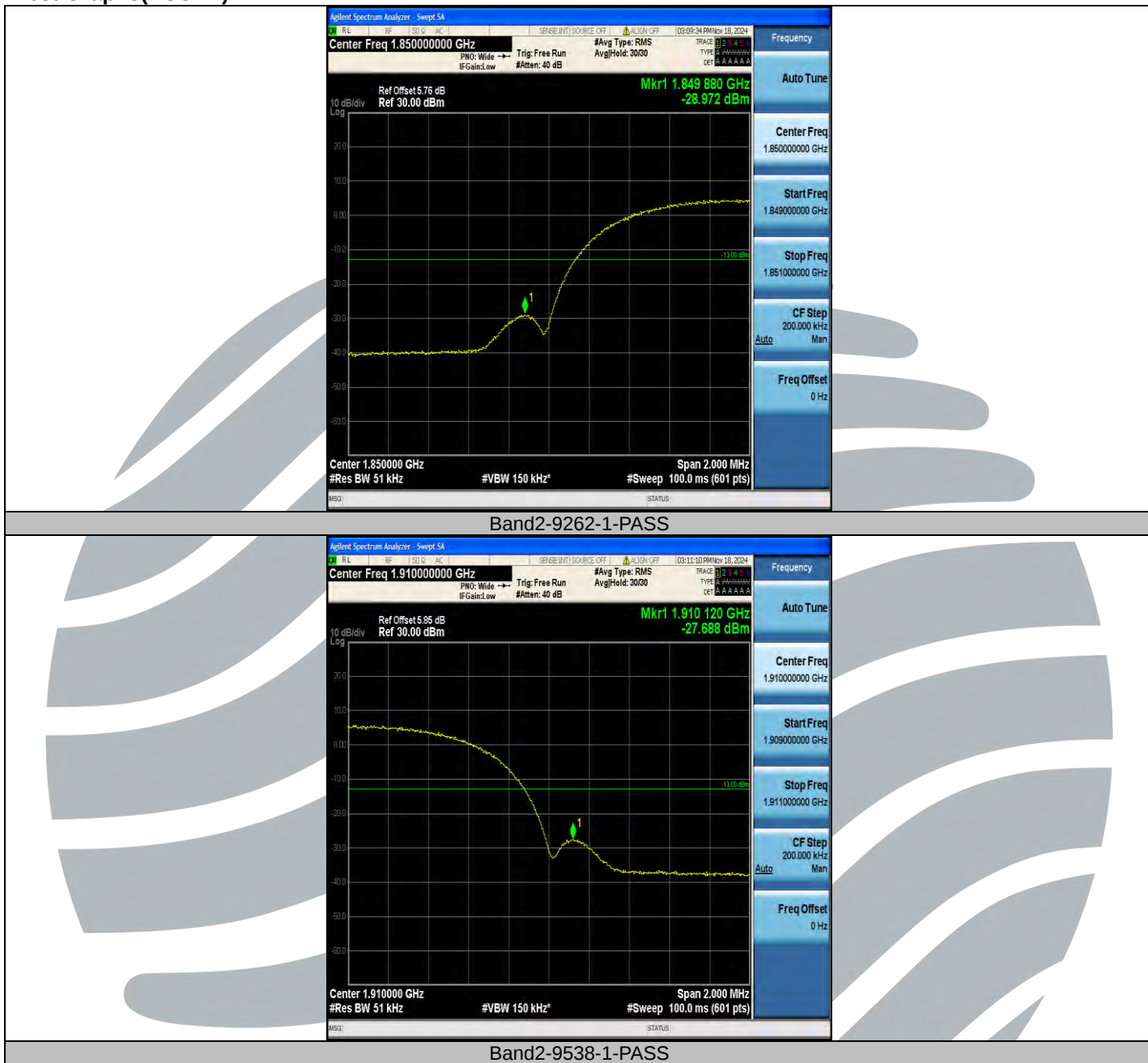


Band5-4132-1-PASS



Band5-4233-1-PASS

Test Graphs(HSUPA)





Band5-4132-1-PASS



Band5-4233-1-PASS

APPENDIX B4: CONDUCTED SPURIOUS EMISSION

Test Result(WCDMA)

Band	Channel	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	30~1000MHz	709.49	-45.92	-13	PASS
Band2	9262	1000~20000MHz	18829.6	-32.91	-13	PASS
Band2	9400	30~1000MHz	857.41	-45.47	-13	PASS
Band2	9400	1000~20000MHz	18938.38	-33.06	-13	PASS
Band2	9538	30~1000MHz	952.47	-45.86	-13	PASS
Band2	9538	1000~20000MHz	16289.3	-33.28	-13	PASS
Band5	4132	30~1000MHz	453.41	-51.14	-13	PASS
Band5	4132	1000~10000MHz	3309.4	-34.79	-13	PASS
Band5	4182	30~1000MHz	954.9	-50.36	-13	PASS
Band5	4182	1000~10000MHz	3341.8	-35.08	-13	PASS
Band5	4233	30~1000MHz	955.38	-51.42	-13	PASS
Band5	4233	1000~10000MHz	3382.75	-36.96	-13	PASS

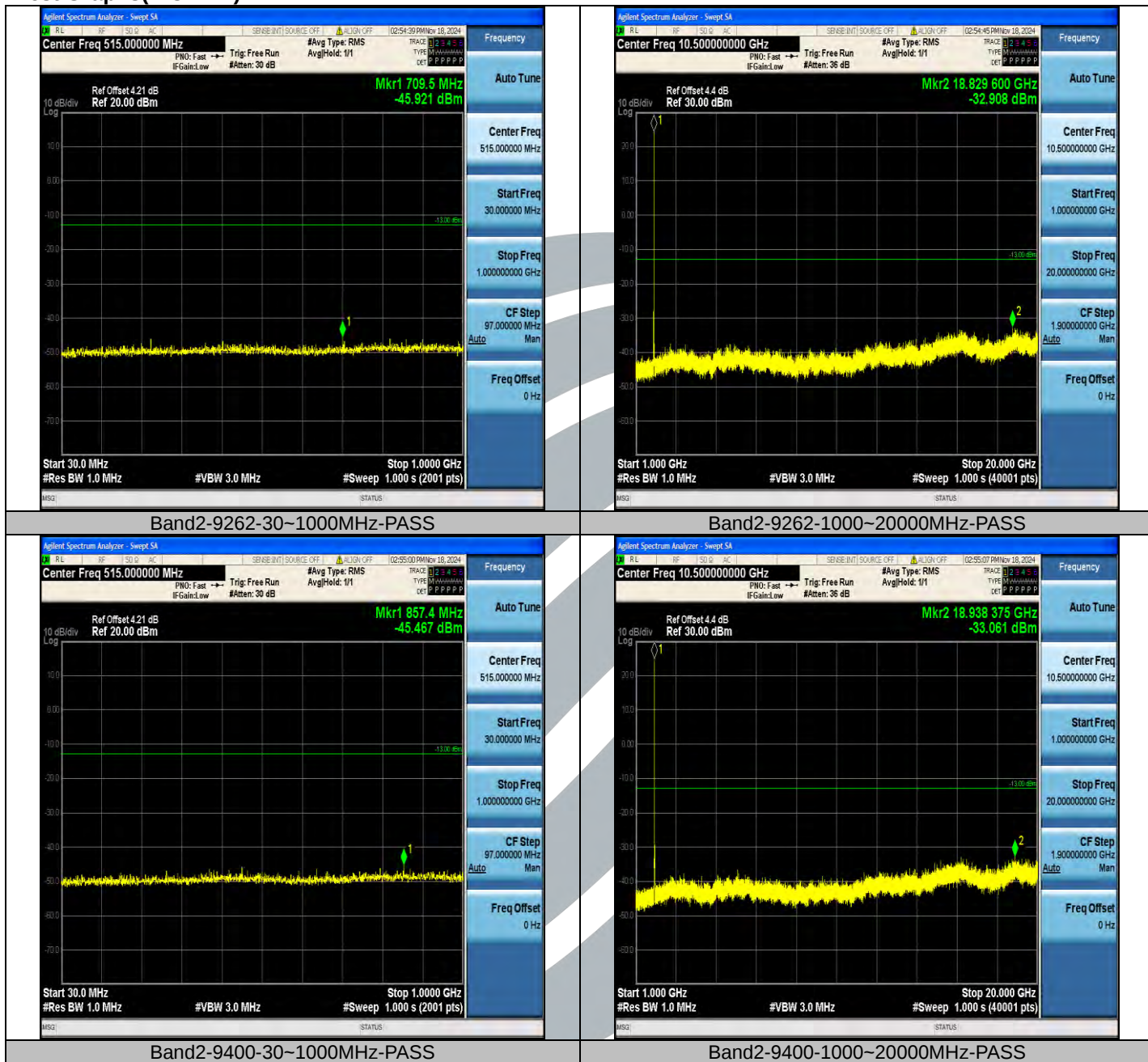
Test Result(HSDPA)

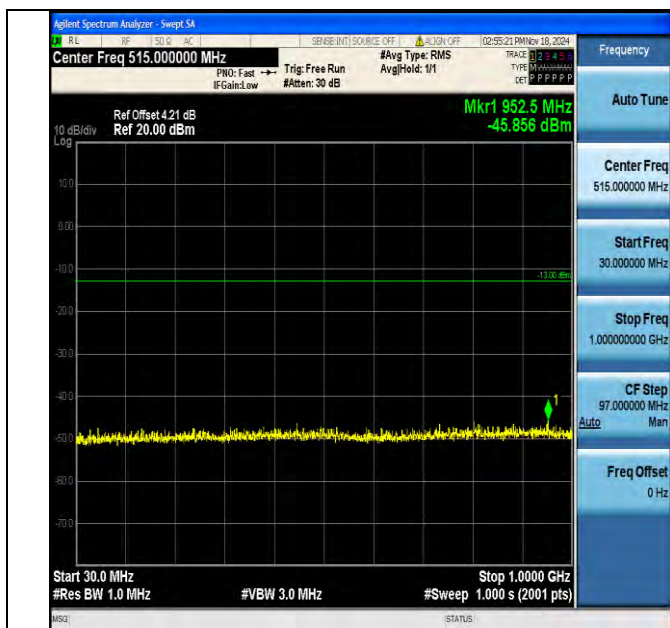
Band	Channel	Sub Test	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	1	30~1000MHz	896.7	-45.94	-13	PASS
Band2	9262	1	1000~20000MHz	19012.95	-32.61	-13	PASS
Band2	9400	1	30~1000MHz	780.78	-46.43	-13	PASS
Band2	9400	1	1000~20000MHz	19068.05	-31.42	-13	PASS
Band2	9538	1	30~1000MHz	827.83	-46.45	-13	PASS
Band2	9538	1	1000~20000MHz	19041.93	-32.43	-13	PASS
Band5	4132	1	30~1000MHz	190.05	-51.62	-13	PASS
Band5	4132	1	1000~10000MHz	3309.4	-34.32	-13	PASS
Band5	4182	1	30~1000MHz	954.9	-50.99	-13	PASS
Band5	4182	1	1000~10000MHz	3341.8	-35.99	-13	PASS
Band5	4233	1	30~1000MHz	729.37	-50.75	-13	PASS
Band5	4233	1	1000~10000MHz	3382.3	-36.64	-13	PASS

Test Result(HSUPA)

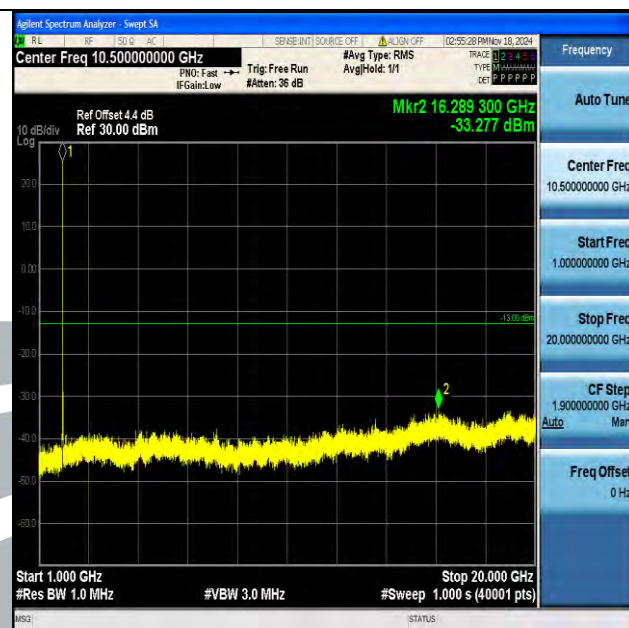
Band	Channel	Sub Test	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	1	30~1000MHz	990.3	-46.13	-13	PASS
Band2	9262	1	1000~20000MHz	16307.35	-32.61	-13	PASS
Band2	9400	1	30~1000MHz	799.21	-45.58	-13	PASS
Band2	9400	1	1000~20000MHz	19012	-33.38	-13	PASS
Band2	9538	1	30~1000MHz	975.27	-45.88	-13	PASS
Band2	9538	1	1000~20000MHz	16168.18	-33.03	-13	PASS
Band5	4132	1	30~1000MHz	545.07	-51.77	-13	PASS
Band5	4132	1	1000~10000MHz	3302.2	-37.02	-13	PASS
Band5	4182	1	30~1000MHz	959.75	-51.57	-13	PASS
Band5	4182	1	1000~10000MHz	3349.9	-36.8	-13	PASS
Band5	4233	1	30~1000MHz	367.08	-50.69	-13	PASS
Band5	4233	1	1000~10000MHz	5931.55	-37.33	-13	PASS

Test Graphs(WCDMA)

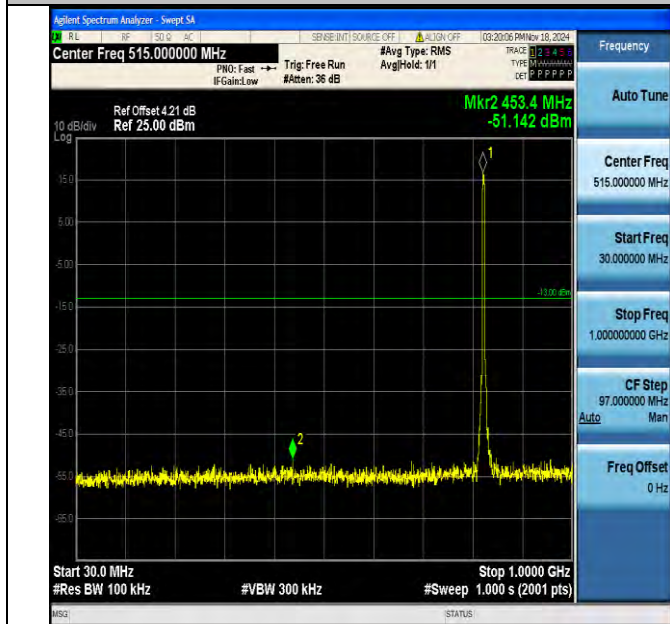




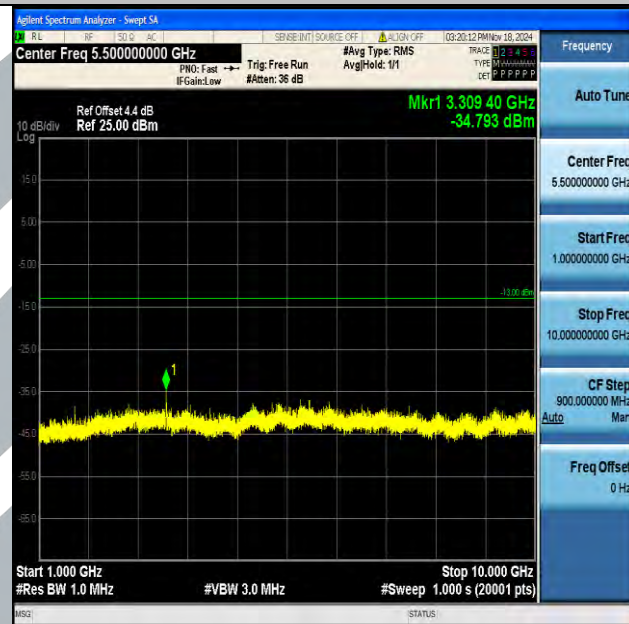
Band2-9538-30~1000MHz-PASS



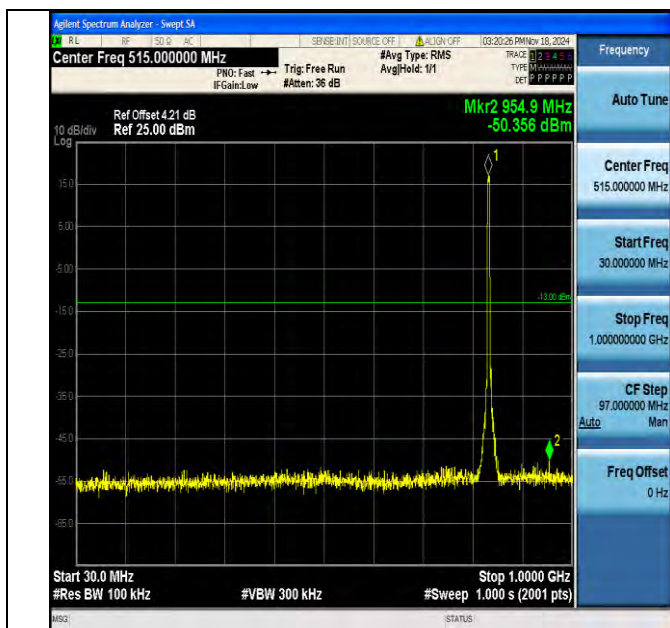
Band2-9538-1000~20000MHz-PASS



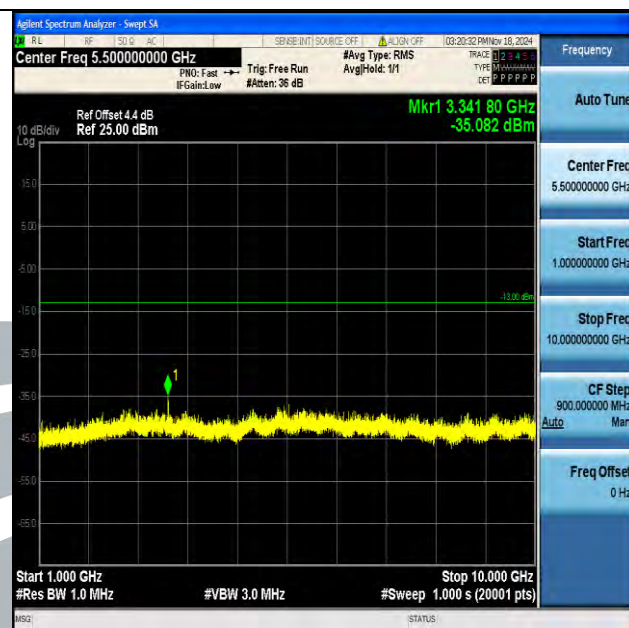
Band5-4132-30~1000MHz-PASS



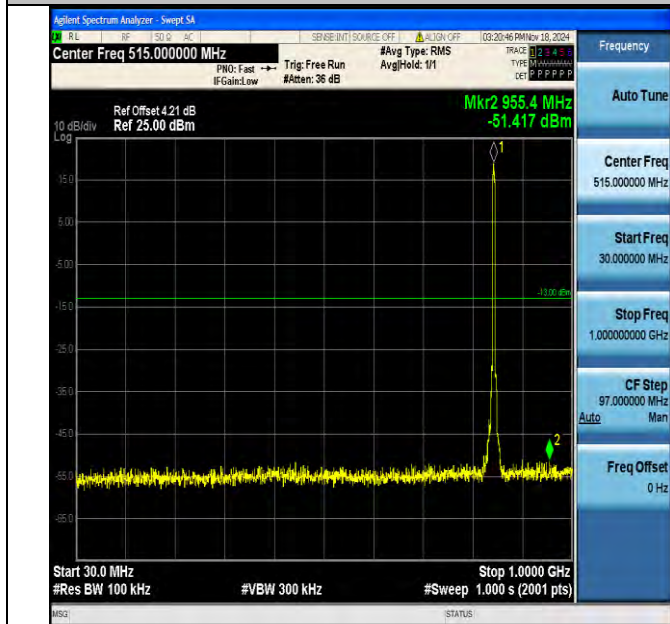
Band5-4132-1000~10000MHz-PASS



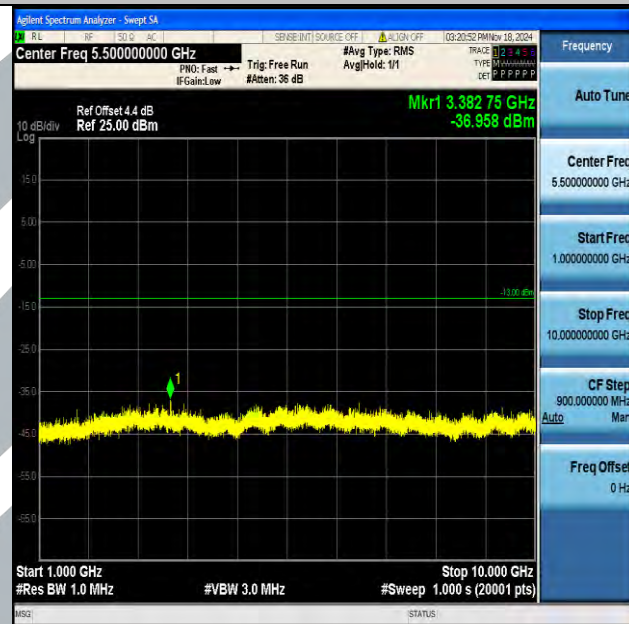
Band5-4182-30-1000MHz-PASS



Band5-4182-1000-10000MHz-PASS

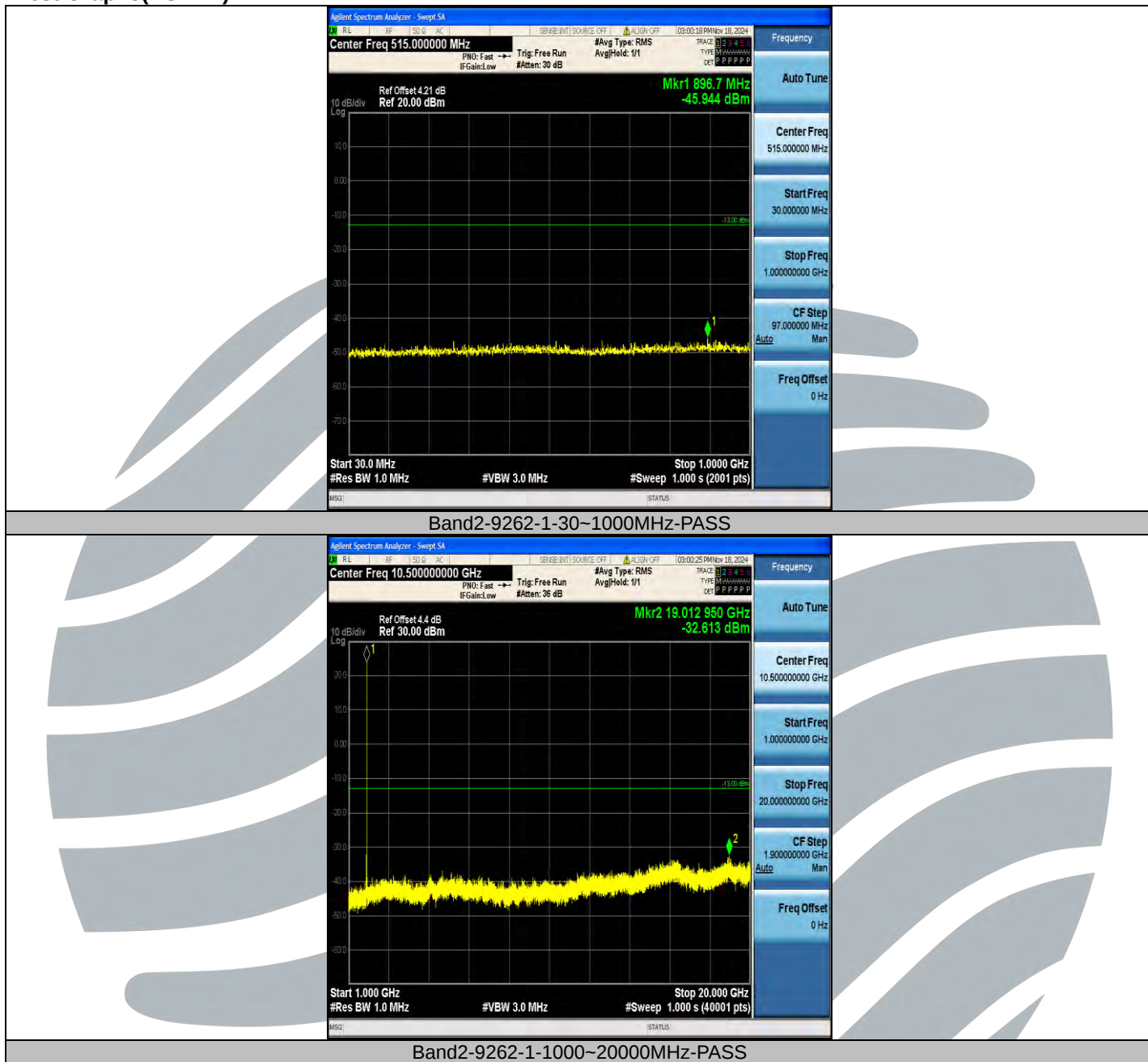


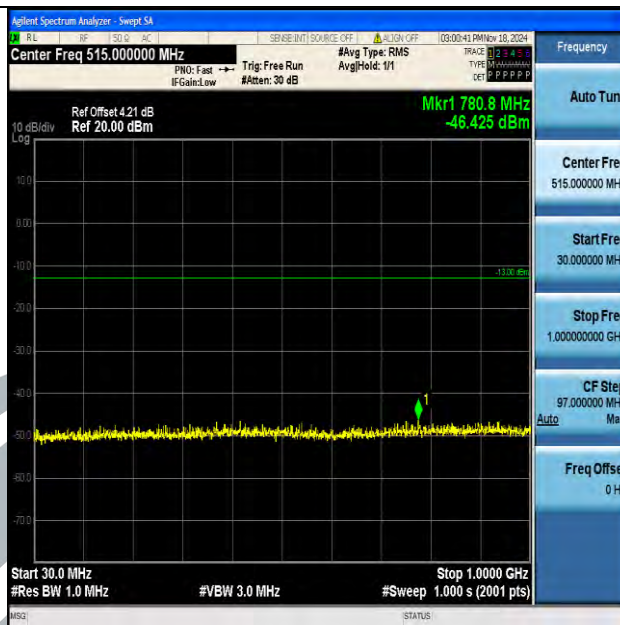
Band5-4233-30-1000MHz-PASS



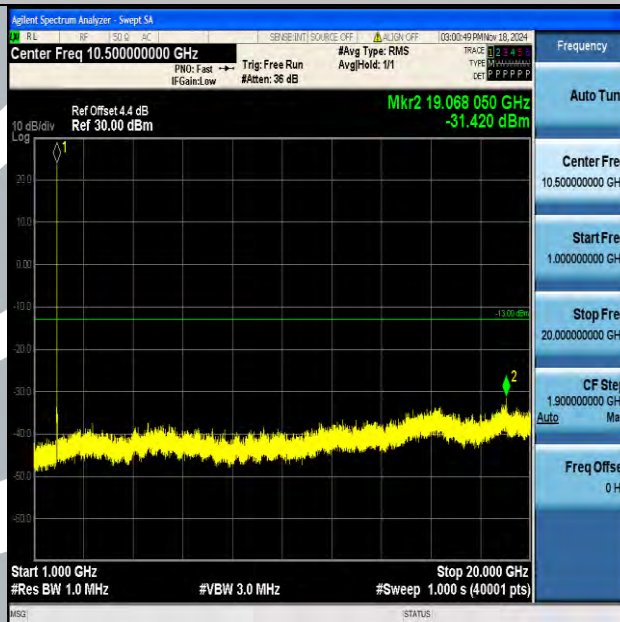
Band5-4233-1000-10000MHz-PASS

Test Graphs(HSDPA)

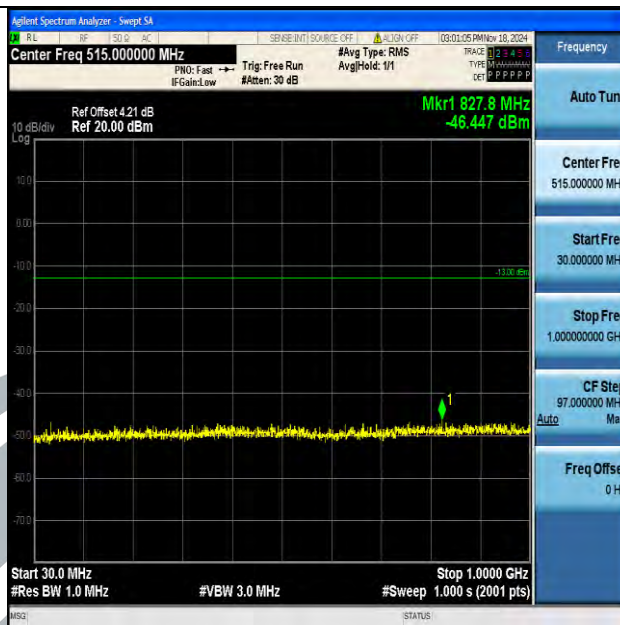




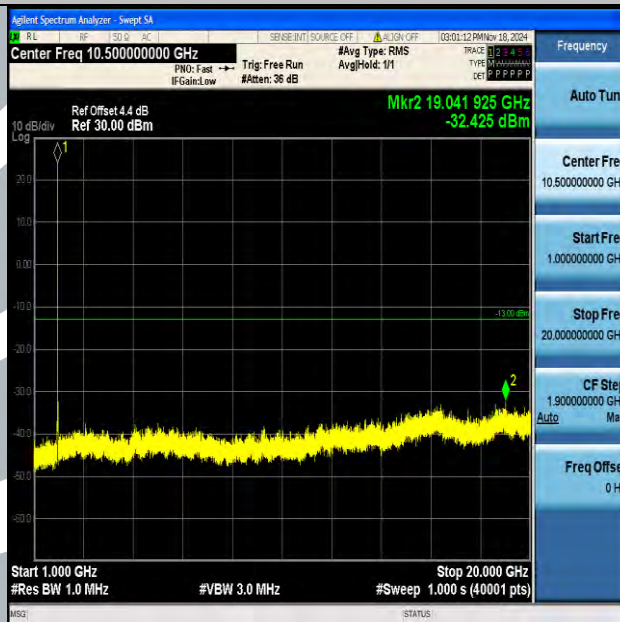
Band2-9400-1-30~1000MHz-PASS



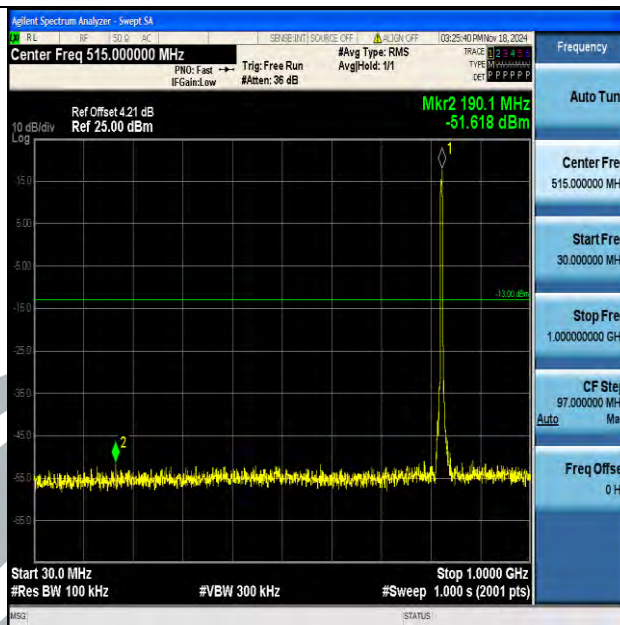
Band2-9400-1-1000~20000MHz-PASS



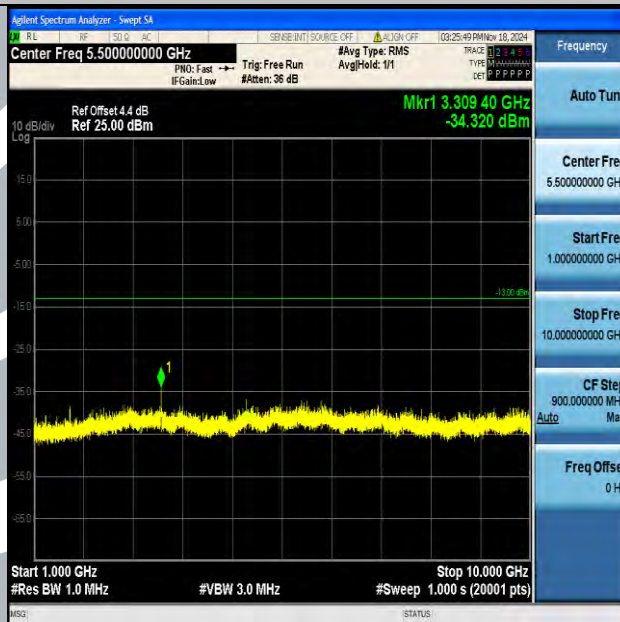
Band2-9538-1-30~1000MHz-PASS



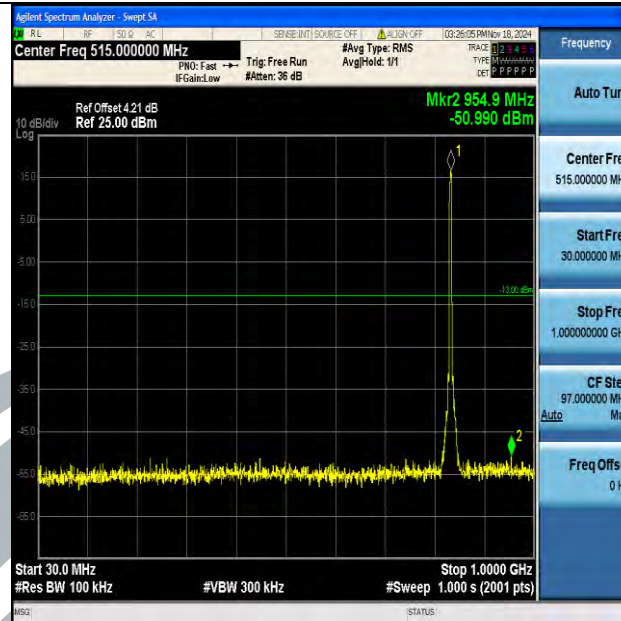
Band2-9538-1-1000~20000MHz-PASS



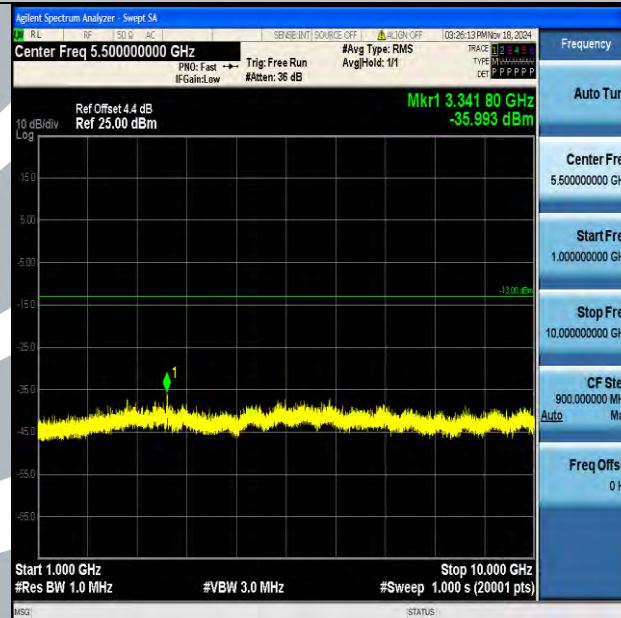
Band5-4132-1-30~1000MHz-PASS



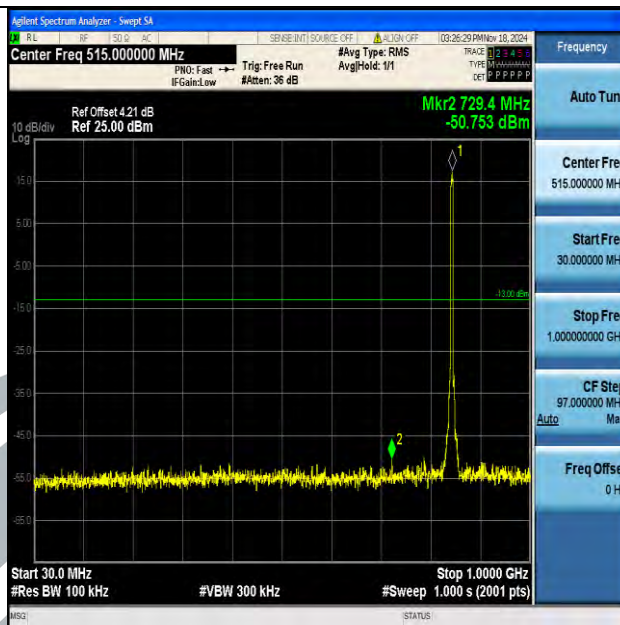
Band5-4132-1-1000~10000MHz-PASS



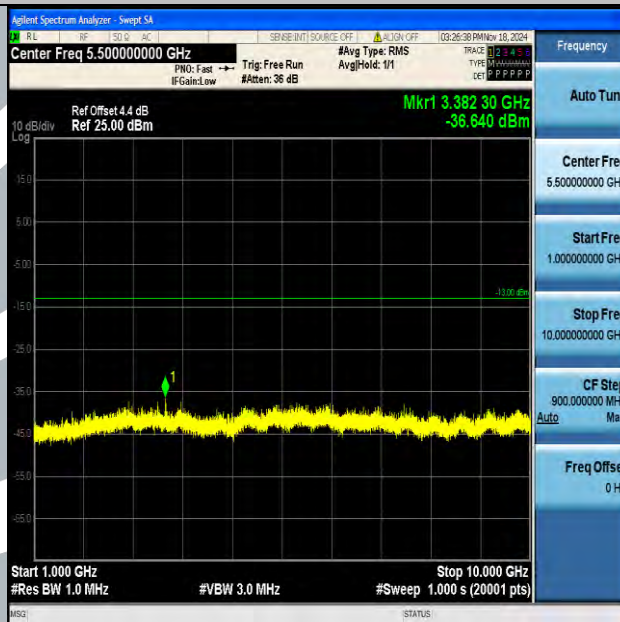
Band5-4182-1-30~1000MHz-PASS



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

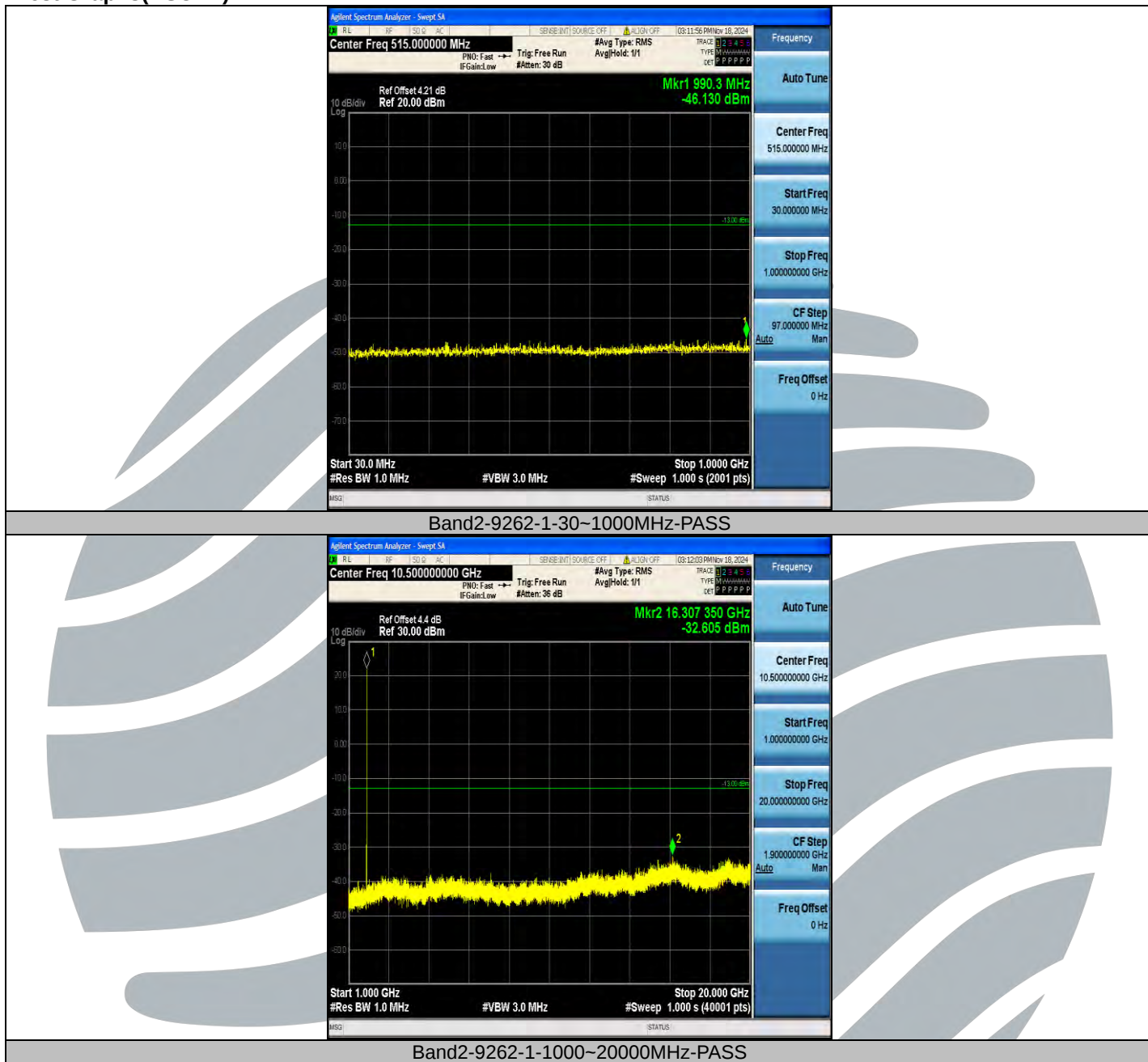


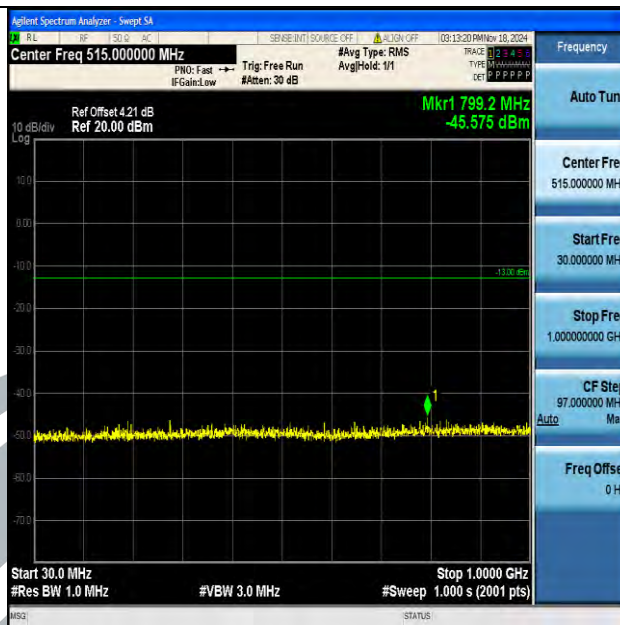
Band5-4233-1-30~1000MHz-PASS



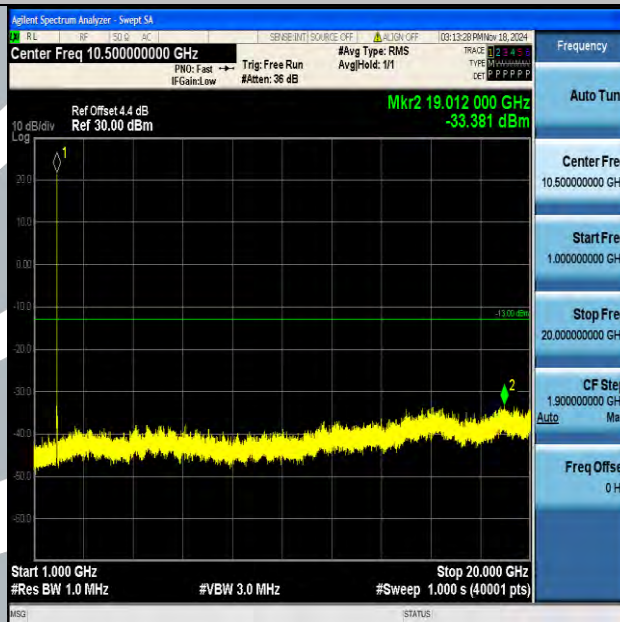
Band5-4233-1-1000~10000MHz-PASS

Test Graphs(HSUPA)

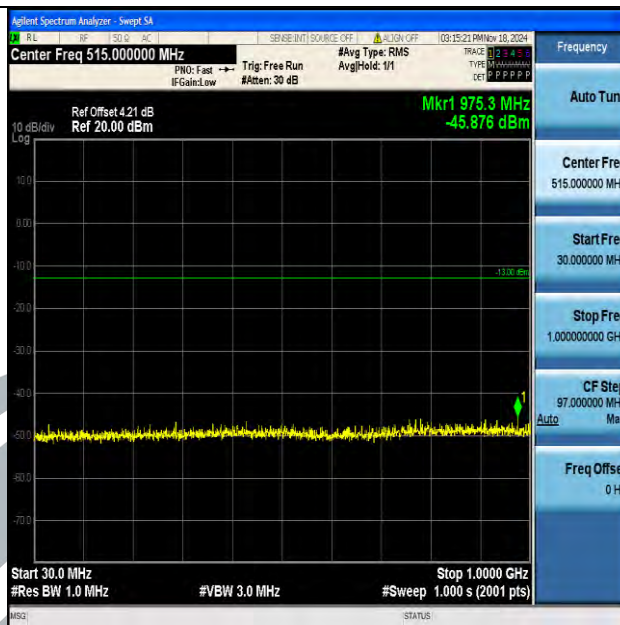




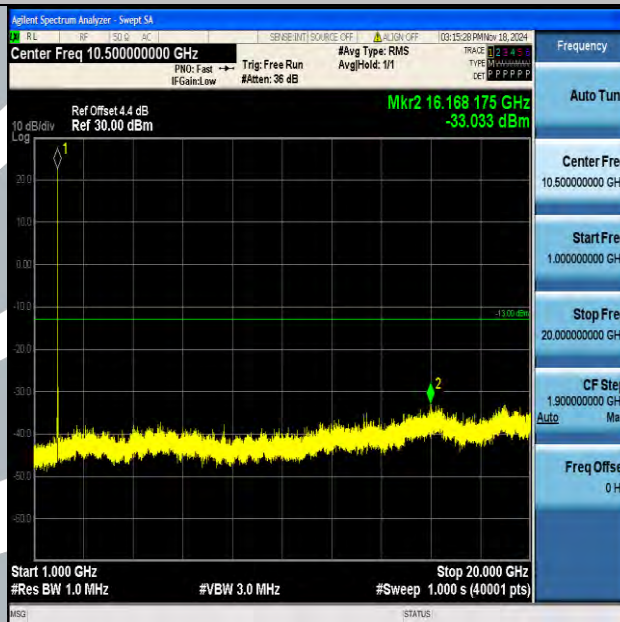
Band2-9400-1-30~1000MHz-PASS



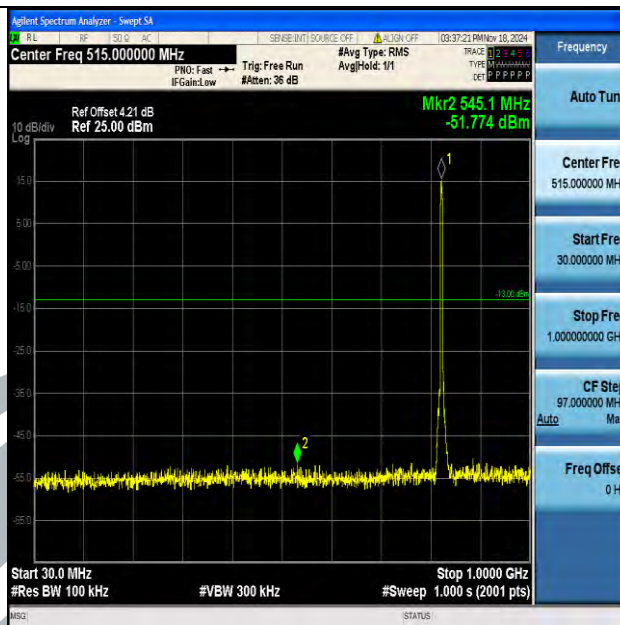
Band2-9400-1-1000~20000MHz-PASS



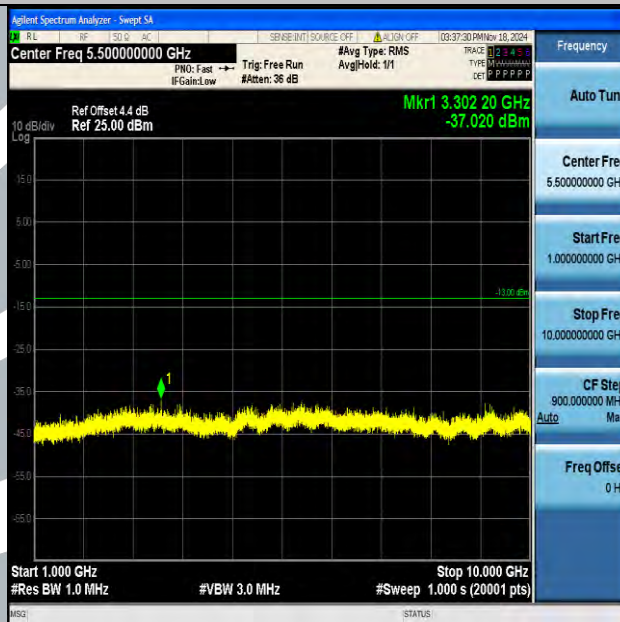
Band2-9538-1-30~1000MHz-PASS



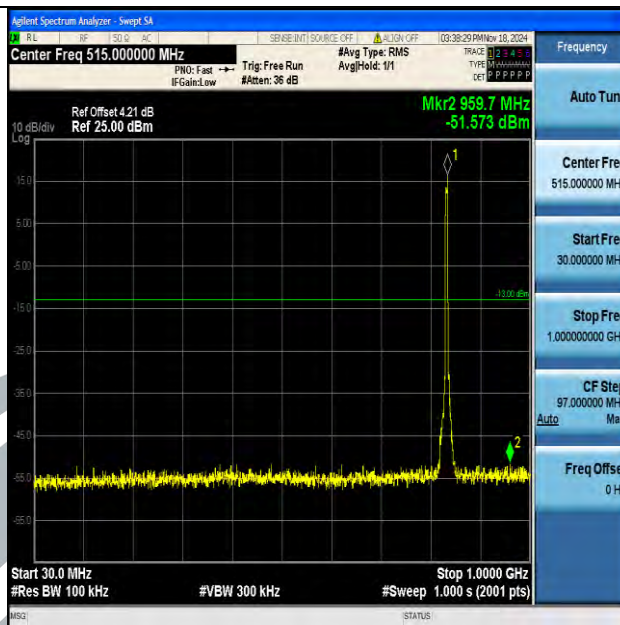
Band2-9538-1-1000~20000MHz-PASS



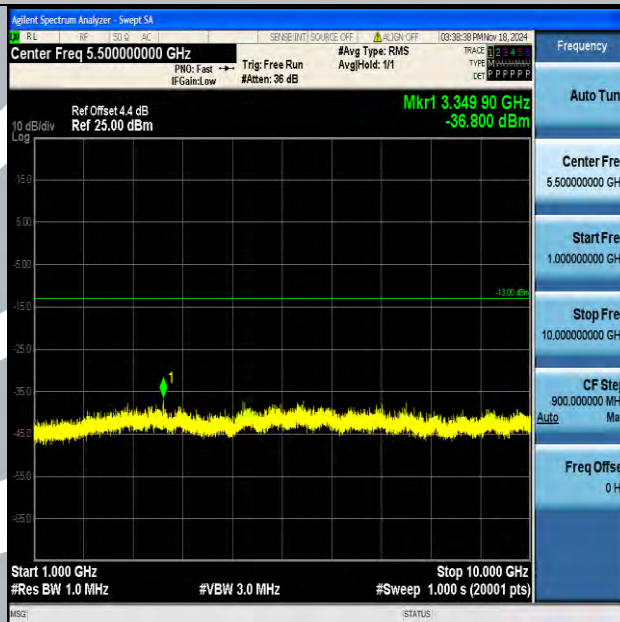
Band5-4132-1-30~1000MHz-PASS



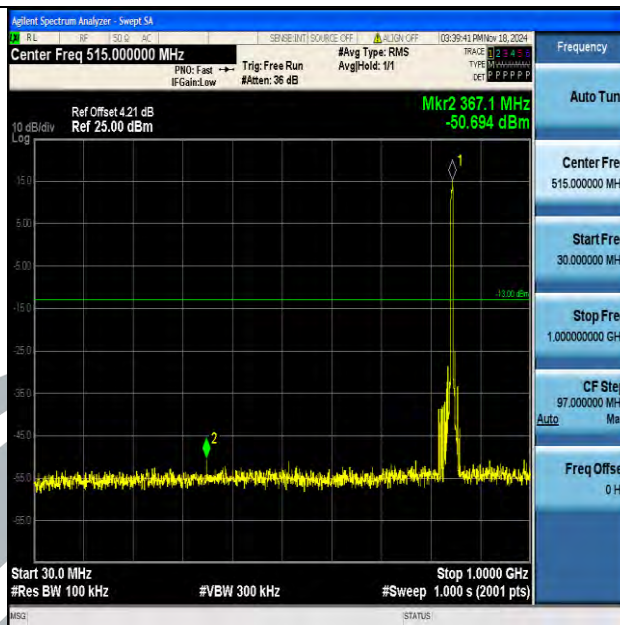
Band5-4132-1-1000~10000MHz-PASS



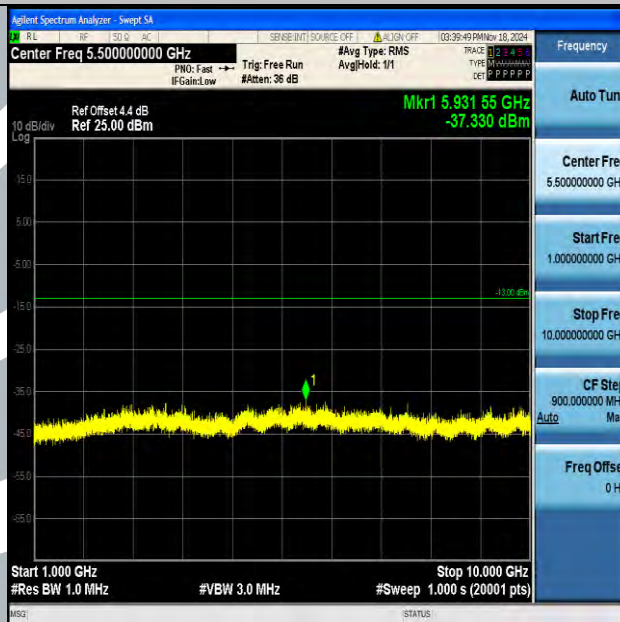
Band5-4182-1-30~1000MHz-PASS



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



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



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

APPENDIX B5: FREQUENCY STABILITY

Test Result(WCDMA)

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	9400	VN	NT	-3.45	-0.001835	±2.5	PASS
Band2	9400	VL	NT	-2.18	-0.001160	±2.5	PASS
Band2	9400	VH	NT	-2.27	-0.001207	±2.5	PASS
Band5	4182	VN	NT	-3.58	-0.004280	±2.5	PASS
Band5	4182	VL	NT	-2.84	-0.003396	±2.5	PASS
Band5	4182	VH	NT	-3.55	-0.004244	±2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	9400	NV	-30	-2.80	-0.001489	±2.5	PASS
Band2	9400	NV	-20	-1.09	-0.000580	±2.5	PASS
Band2	9400	NV	-10	-1.99	-0.001059	±2.5	PASS
Band2	9400	NV	0	-0.38	-0.000202	±2.5	PASS
Band2	9400	NV	10	-0.53	-0.000282	±2.5	PASS
Band2	9400	NV	20	-2.25	-0.001197	±2.5	PASS
Band2	9400	NV	30	-3.03	-0.001612	±2.5	PASS
Band2	9400	NV	40	-2.16	-0.001149	±2.5	PASS
Band2	9400	NV	50	-1.01	-0.000537	±2.5	PASS
Band5	4182	NV	-30	-3.01	-0.003599	±2.5	PASS
Band5	4182	NV	-20	-6.09	-0.007281	±2.5	PASS
Band5	4182	NV	-10	-6.07	-0.007257	±2.5	PASS
Band5	4182	NV	0	-5.07	-0.006062	±2.5	PASS
Band5	4182	NV	10	-4.00	-0.004782	±2.5	PASS
Band5	4182	NV	20	-5.11	-0.006110	±2.5	PASS
Band5	4182	NV	30	-3.76	-0.004495	±2.5	PASS
Band5	4182	NV	40	-5.48	-0.006552	±2.5	PASS
Band5	4182	NV	50	-6.82	-0.008154	±2.5	PASS