

APPENDIX REPORT

Project No.	SHT2202043703EW	Radio Specification	WCDMA
Test sample No.	YPHT22020437006	Model No.	L681
Start test date	2022/3/3	Finish date	2022/3/3
Temperature	22.7℃	Humidity	36%
Test Engineer	Tiancheng.Huang	Auditor	Xiaodong Zhe

Appendix clause	Test item	Result
A	Conducted Output Power	PASS
B	Peak-to-Average Ratio	PASS
C	26 dB Bandwidth and Occupied Bandwidth	PASS
D	Band edge	PASS
E	Conducted Spurious Emission	PASS
F	Frequency Stability	PASS
G	ERP and EIRP	PASS

8.1 Appendix A: Conducted Output Power

Test Result

Band	Channel	Power(dBm)	Limit(dBm)	Verdict
Band II	9262	22.17	33	PASS
Band II	9400	22.32	33	PASS
Band II	9538	22.42	33	PASS
Band V	4132	24.76	38.5	PASS
Band V	4182	24.56	38.5	PASS
Band V	4233	24.17	38.5	PASS

Band	Channel	SubTest	Power(dBm)	Limit(dBm)	Verdict
Band II	9262	HSDPA_Sub1	21.33	33	PASS
Band II	9262	HSDPA_Sub2	20.88	33	PASS
Band II	9262	HSDPA_Sub3	20.98	33	PASS
Band II	9262	HSDPA_Sub4	20.96	33	PASS
Band II	9400	HSDPA_Sub1	21.64	33	PASS
Band II	9400	HSDPA_Sub2	21.14	33	PASS
Band II	9400	HSDPA_Sub3	21.15	33	PASS
Band II	9400	HSDPA_Sub4	21.15	33	PASS
Band II	9538	HSDPA_Sub1	21.64	33	PASS
Band II	9538	HSDPA_Sub2	21.18	33	PASS
Band II	9538	HSDPA_Sub3	21.22	33	PASS
Band II	9538	HSDPA_Sub4	21.19	33	PASS
Band V	4132	HSDPA_Sub1	22.22	38.5	PASS
Band V	4132	HSDPA_Sub2	21.67	38.5	PASS
Band V	4132	HSDPA_Sub3	21.71	38.5	PASS
Band V	4132	HSDPA_Sub4	21.72	38.5	PASS
Band V	4182	HSDPA_Sub1	22.25	38.5	PASS
Band V	4182	HSDPA_Sub2	21.77	38.5	PASS
Band V	4182	HSDPA_Sub3	21.78	38.5	PASS
Band V	4182	HSDPA_Sub4	21.72	38.5	PASS
Band V	4233	HSDPA_Sub1	21.96	38.5	PASS
Band V	4233	HSDPA_Sub2	21.44	38.5	PASS
Band V	4233	HSDPA_Sub3	21.42	38.5	PASS
Band V	4233	HSDPA_Sub4	21.43	38.5	PASS

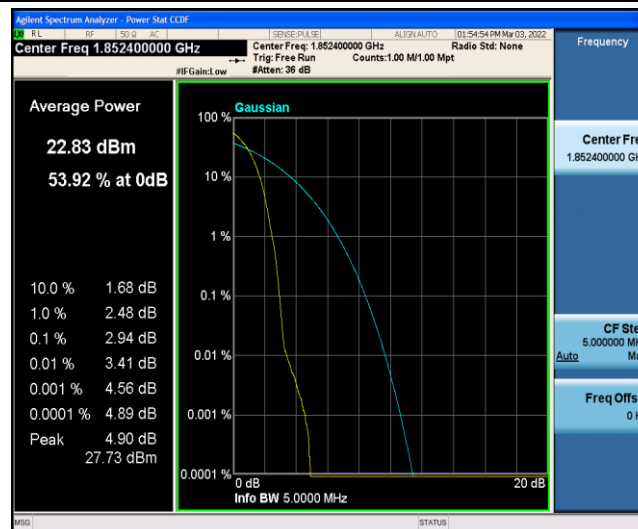
Band	Channel	SubTest	Power(dBm)	Limit(dBm)	Verdict
Band II	9262	HSUPA_Sub1	19.38	33	PASS
Band II	9262	HSUPA_Sub2	19.96	33	PASS
Band II	9262	HSUPA_Sub3	20.51	33	PASS
Band II	9262	HSUPA_Sub4	19.54	33	PASS
Band II	9262	HSUPA_Sub5	21.56	33	PASS
Band II	9400	HSUPA_Sub1	19.66	33	PASS
Band II	9400	HSUPA_Sub2	20.17	33	PASS
Band II	9400	HSUPA_Sub3	20.71	33	PASS
Band II	9400	HSUPA_Sub4	19.76	33	PASS
Band II	9400	HSUPA_Sub5	21.70	33	PASS
Band II	9538	HSUPA_Sub1	19.72	33	PASS
Band II	9538	HSUPA_Sub2	20.25	33	PASS
Band II	9538	HSUPA_Sub3	20.68	33	PASS
Band II	9538	HSUPA_Sub4	19.77	33	PASS
Band II	9538	HSUPA_Sub5	21.72	33	PASS
Band V	4132	HSUPA_Sub1	20.23	38.5	PASS
Band V	4132	HSUPA_Sub2	20.71	38.5	PASS
Band V	4132	HSUPA_Sub3	21.13	38.5	PASS
Band V	4132	HSUPA_Sub4	20.24	38.5	PASS
Band V	4132	HSUPA_Sub5	22.22	38.5	PASS
Band V	4182	HSUPA_Sub1	20.28	38.5	PASS
Band V	4182	HSUPA_Sub2	20.77	38.5	PASS
Band V	4182	HSUPA_Sub3	21.38	38.5	PASS
Band V	4182	HSUPA_Sub4	20.41	38.5	PASS
Band V	4182	HSUPA_Sub5	22.37	38.5	PASS
Band V	4233	HSUPA_Sub1	20.09	38.5	PASS
Band V	4233	HSUPA_Sub2	20.59	38.5	PASS
Band V	4233	HSUPA_Sub3	21.04	38.5	PASS
Band V	4233	HSUPA_Sub4	20.08	38.5	PASS
Band V	4233	HSUPA_Sub5	22.10	38.5	PASS

8.2 Appendix B: Peak-to-Average Ratio

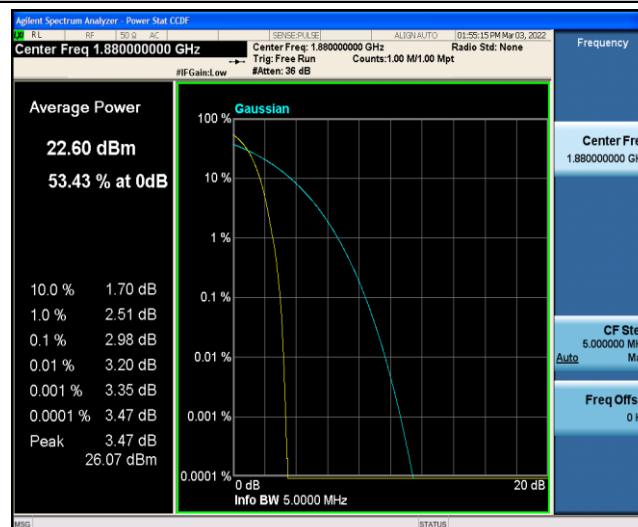
Test Result

Band	Channel	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band II	9262	2.94	13	PASS
Band II	9400	2.98	13	PASS
Band II	9538	2.81	13	PASS
Band V	4132	2.74	13	PASS
Band V	4182	2.84	13	PASS
Band V	4233	2.82	13	PASS

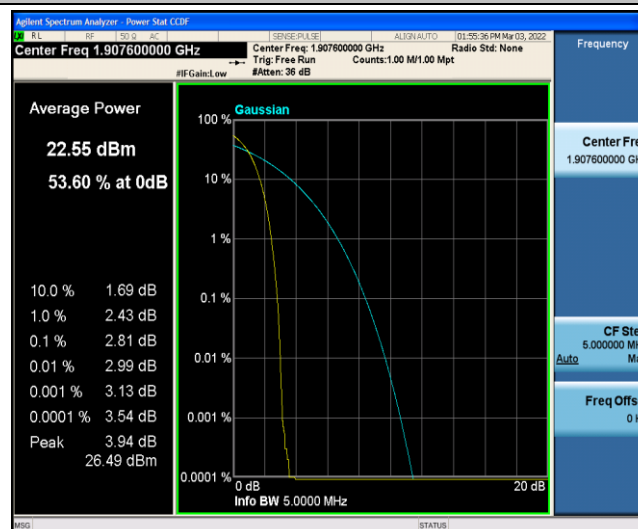
Test Graphs



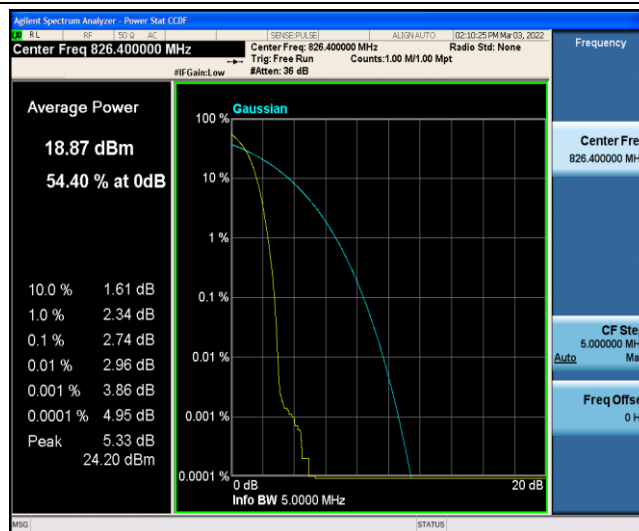
Band II_9262



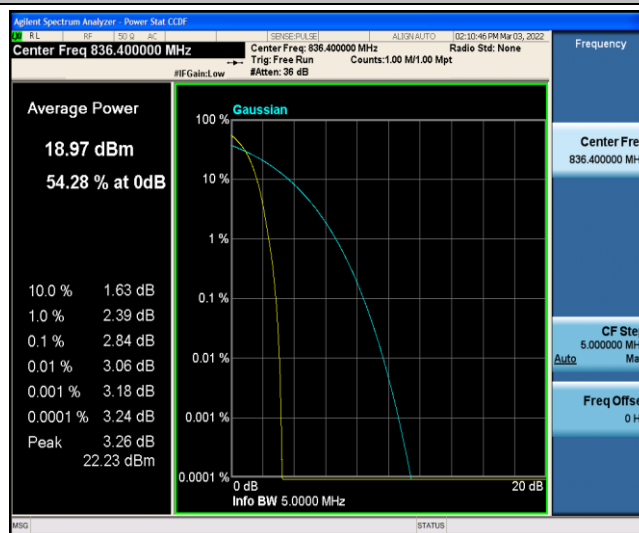
Band II_9400



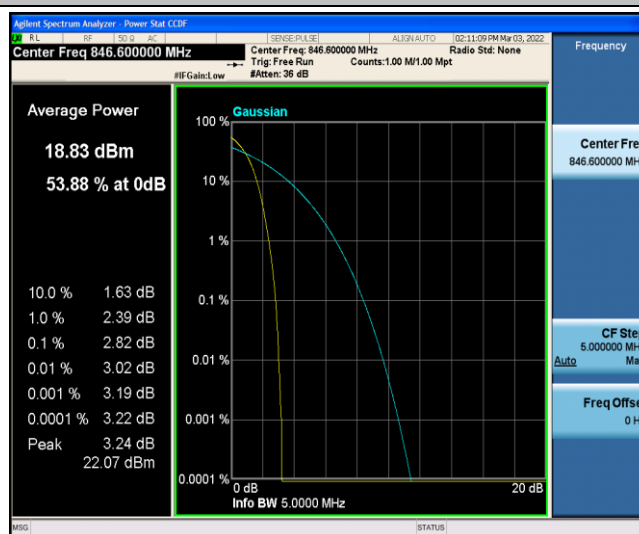
Band II_9538



Band V_4132



Band V_4182



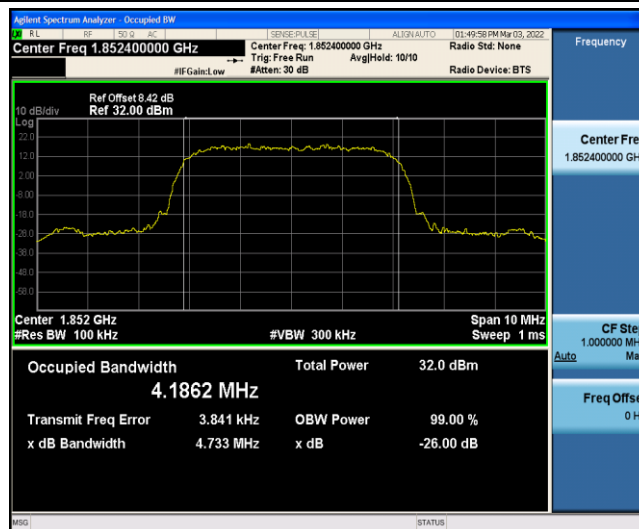
Band V_4233

8.3 Appendix C: 26dB Bandwidth and Occupied Bandwidth

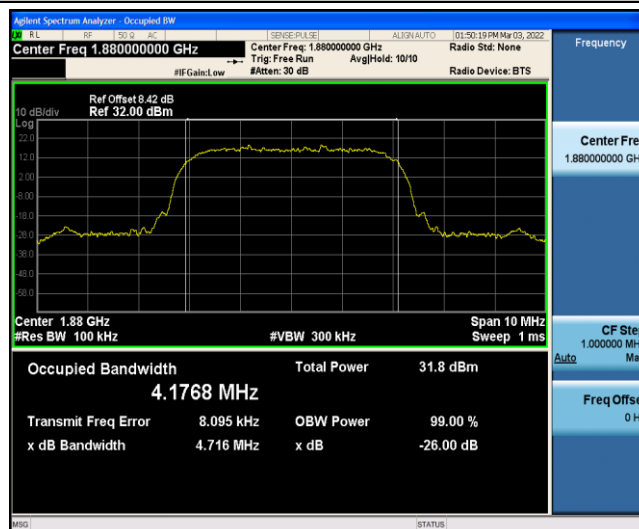
Test Result

Band	Channel	Occupied Bandwidth (kHz)	26dB Bandwidth (kHz)	Limit(kHz)	Verdict
Band II	9262	4186.2	4733	---	PASS
Band II	9400	4176.8	4716	---	PASS
Band II	9538	4165.1	4721	---	PASS
Band V	4132	4188.2	4729	---	PASS
Band V	4182	4191.7	4735	---	PASS
Band V	4233	4181.8	4741	---	PASS

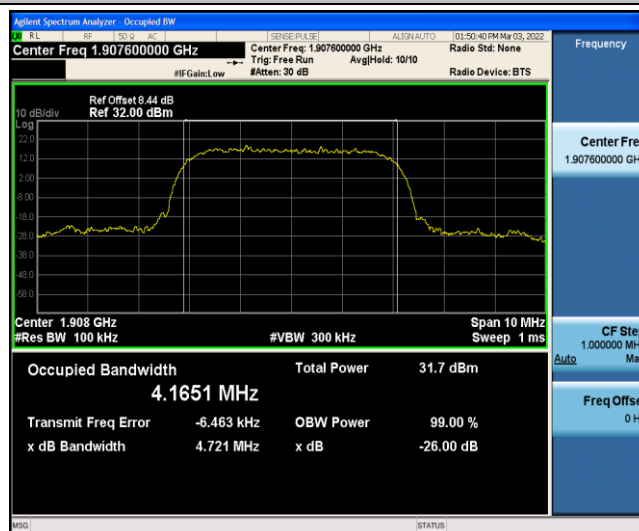
Test Graphs



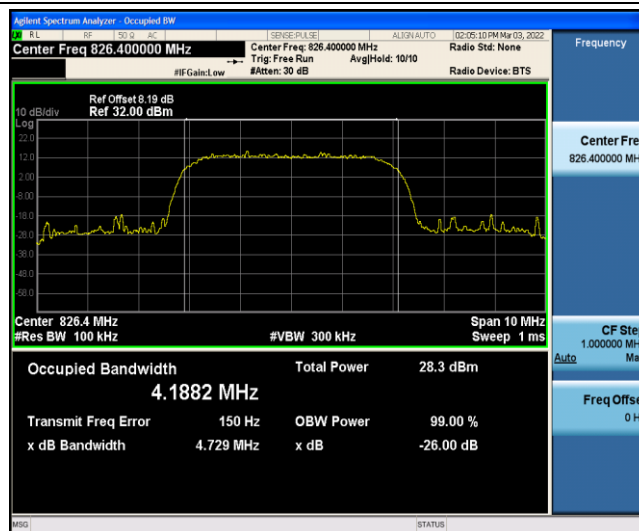
Band II_9262



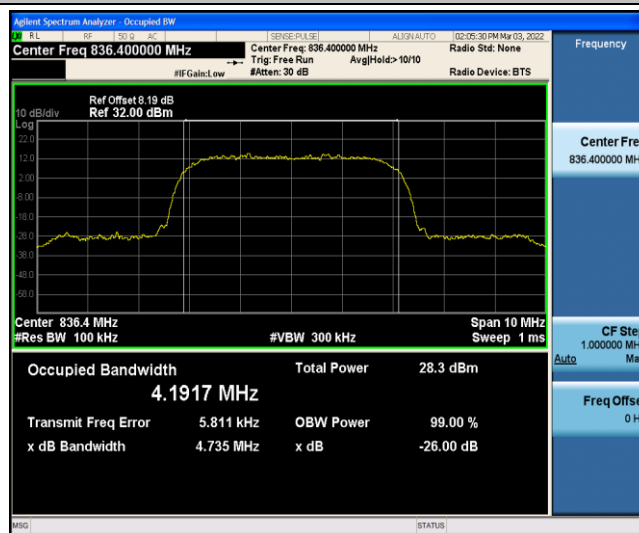
Band II_9400



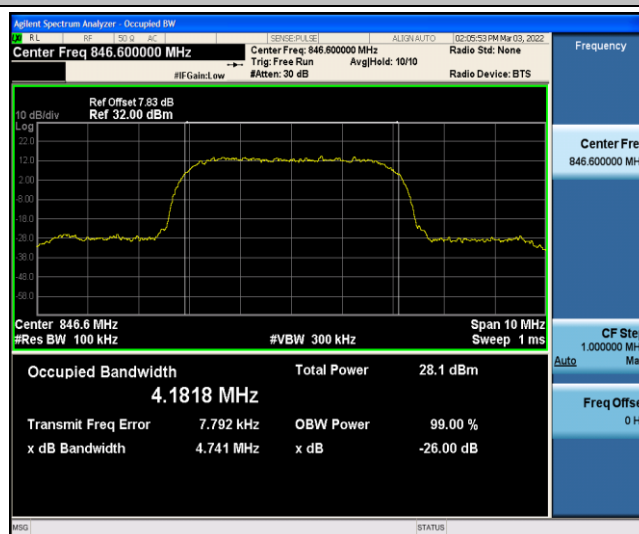
Band II_9538



Band V_4132



Band V_4182



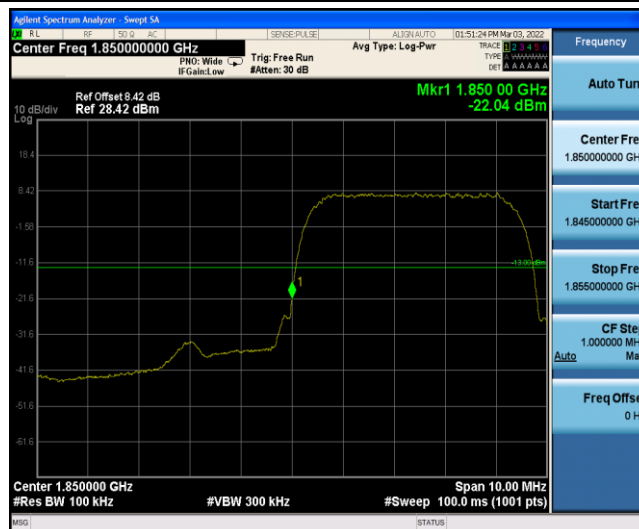
Band V_4233

8.4 Appendix D: Band Edge

Test Result

Band	Channel	Value(dBm)	Limit(dBm)	Verdict
Band II	9262	-22.04	-13	PASS
Band II	9538	-23.92	-13	PASS
Band V	4132	-24.83	-13	PASS
Band V	4233	-25.68	-13	PASS

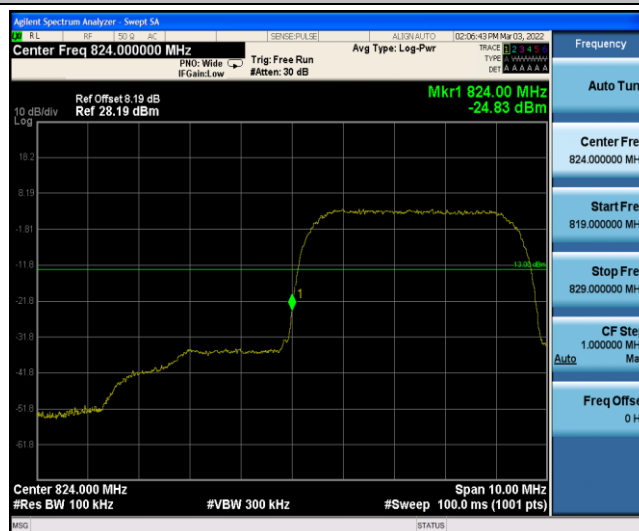
Test Graphs



Band II_9262



Band II_9538



Band V_4132



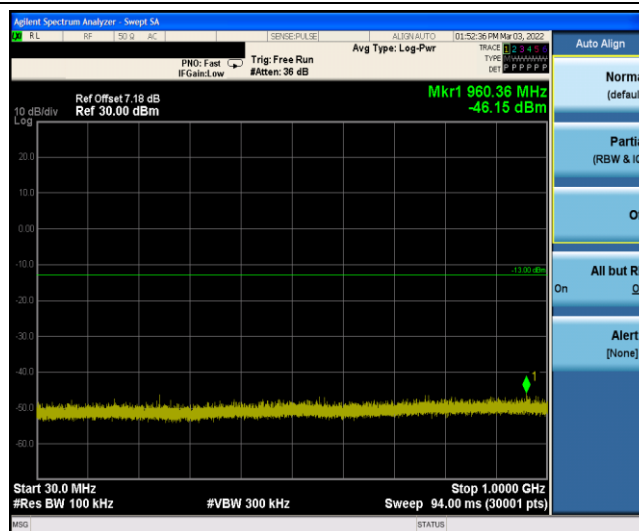
Band V_4233

8.5 Appendix E: Conducted Spurious Emission

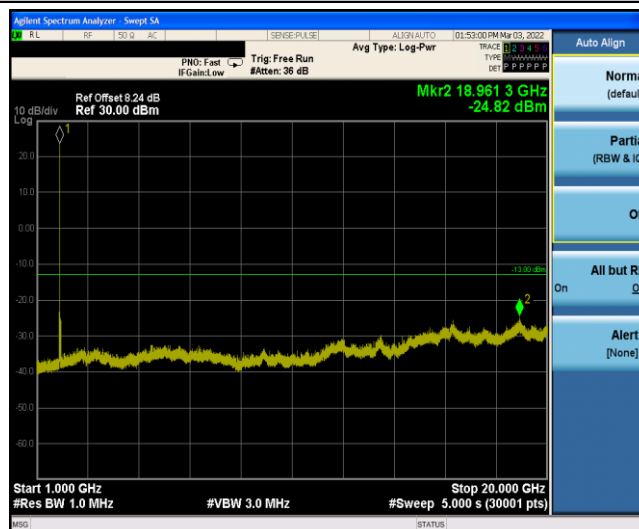
Test Result

Band	Channel	Frequency Rang(Mhz)	Value(dBm)	Limit(dBm)	Verdict
Band II	9262	30~1000	-46.15	-13	PASS
Band II	9262	1000~20000	-24.82	-13	PASS
Band II	9400	30~1000	-45.61	-13	PASS
Band II	9400	1000~20000	-25.45	-13	PASS
Band II	9538	30~1000	-46.35	-13	PASS
Band II	9538	1000~20000	-25.34	-13	PASS
Band V	4132	30~1000	-47.43	-13	PASS
Band V	4132	1000~10000	-32.23	-13	PASS
Band V	4182	30~1000	-46.30	-13	PASS
Band V	4182	1000~10000	-32.17	-13	PASS
Band V	4233	30~1000	-45.63	-13	PASS
Band V	4233	1000~10000	-32.01	-13	PASS

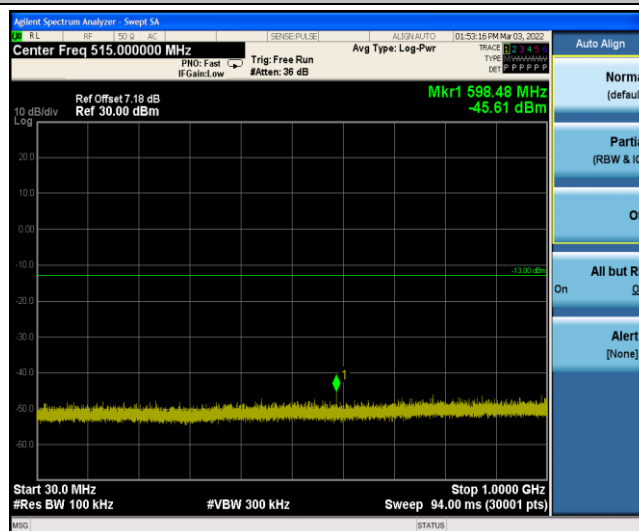
Test Graphs



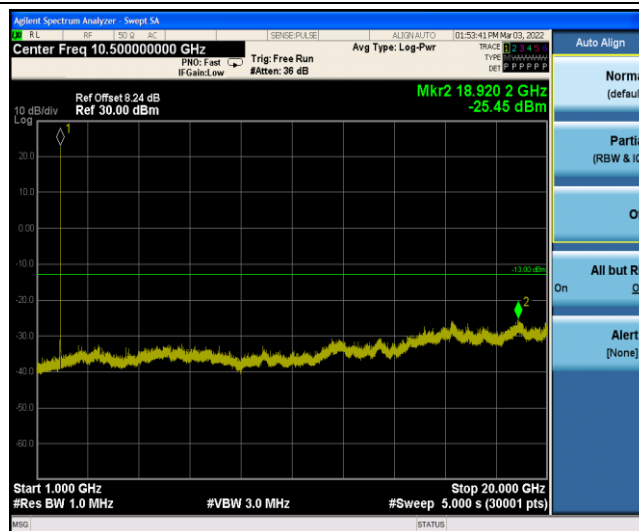
Band II_9262



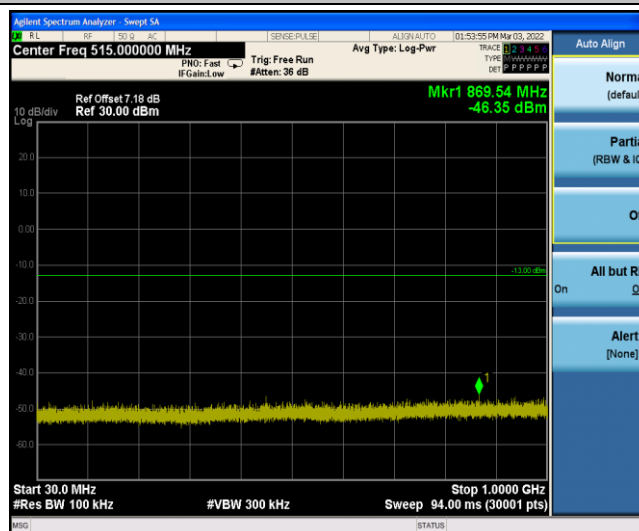
Band II_9262



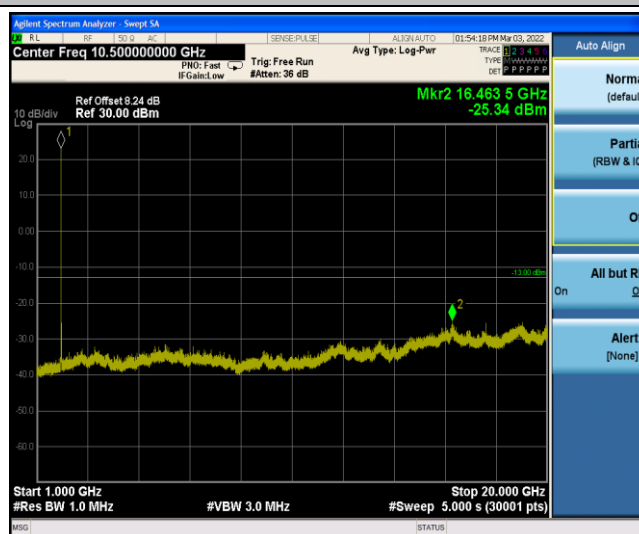
Band II_9400



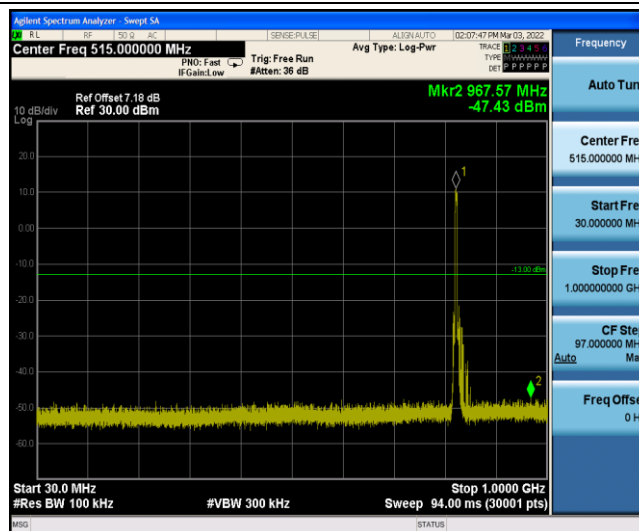
Band II_9400



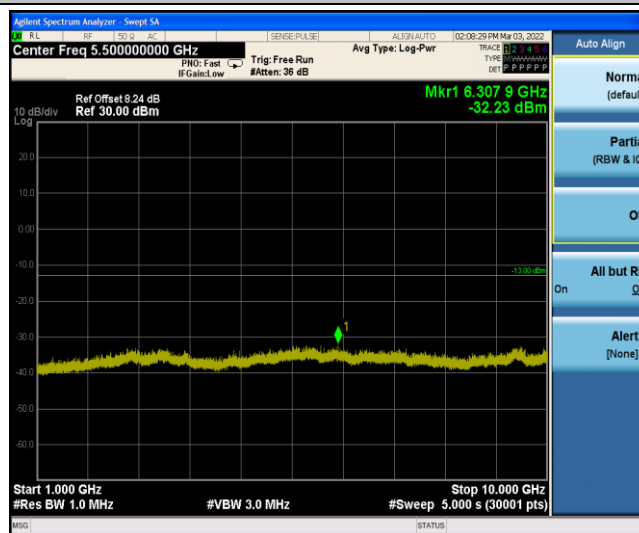
Band II_9538



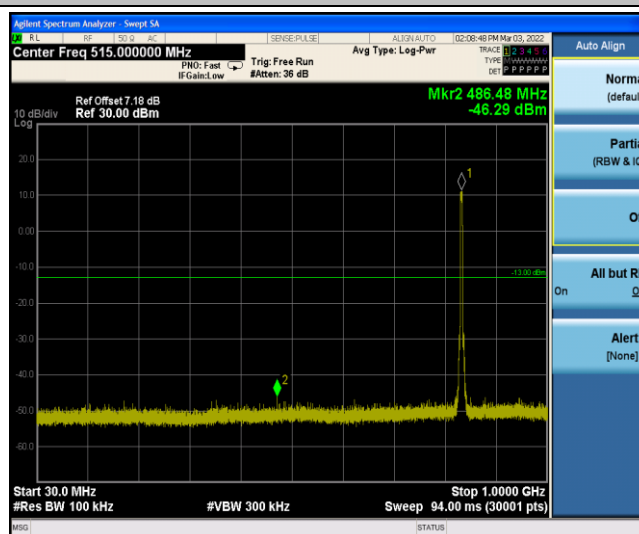
Band II_9538



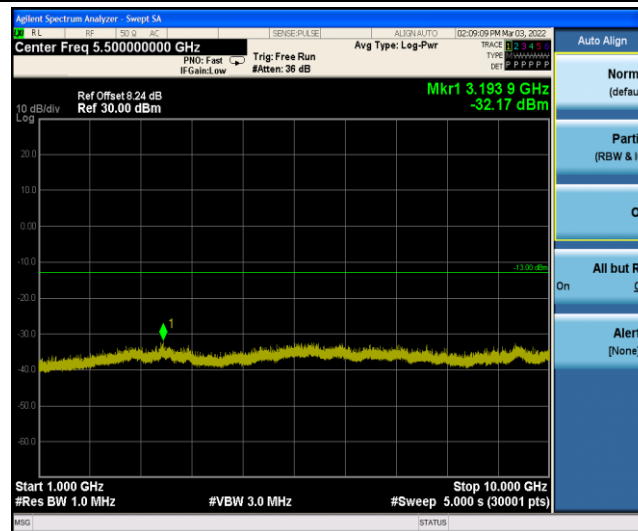
Band V_4132



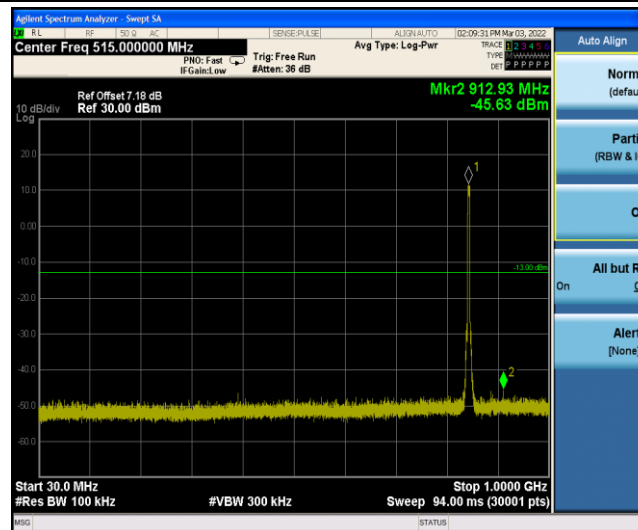
Band V_4132



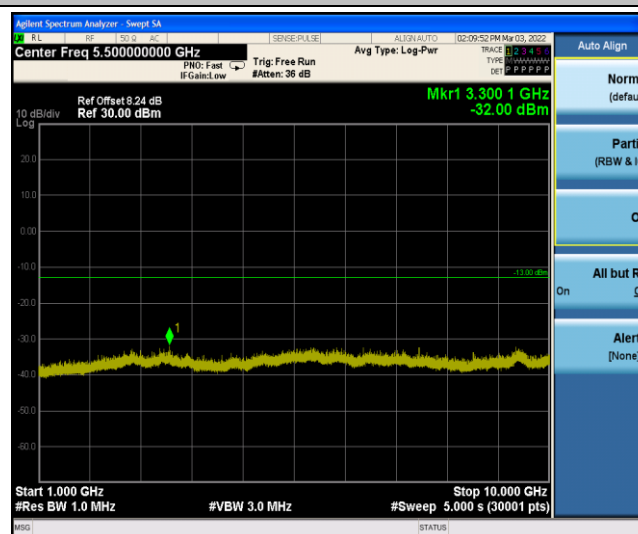
Band V_4182



Band V_4182



Band V_4233



Band V_4233

8.6 Appendix F: Frequency Stability

Test Result

Voltage							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band II	9262	VL	TN	-7.90	-0.004265	2.5	PASS
Band II	9262	VN	TN	-7.27	-0.003925	2.5	PASS
Band II	9262	VH	TN	-8.92	-0.004815	2.5	PASS
Band II	9400	VL	TN	-3.24	-0.001723	2.5	PASS
Band II	9400	VN	TN	-9.13	-0.004856	2.5	PASS
Band II	9400	VH	TN	-11.66	-0.006202	2.5	PASS
Band II	9538	VL	TN	-12.50	-0.006553	2.5	PASS
Band II	9538	VN	TN	-13.88	-0.007276	2.5	PASS
Band II	9538	VH	TN	-15.00	-0.007863	2.5	PASS
Band V	4132	VL	TN	-10.36	-0.012536	2.5	PASS
Band V	4132	VN	TN	-11.36	-0.013746	2.5	PASS
Band V	4132	VH	TN	-9.81	-0.011871	2.5	PASS
Band V	4182	VL	TN	-12.09	-0.014455	2.5	PASS
Band V	4182	VN	TN	-13.03	-0.015579	2.5	PASS
Band V	4182	VH	TN	-7.34	-0.008776	2.5	PASS
Band V	4233	VL	TN	-4.03	-0.004760	2.5	PASS
Band V	4233	VN	TN	-11.83	-0.013974	2.5	PASS
Band V	4233	VH	TN	-12.95	-0.015296	2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band II	9262	VN	-30	-27.22	-0.014694	2.5	PASS
Band II	9262	VN	-20	-11.83	-0.006386	2.5	PASS
Band II	9262	VN	-10	-6.58	-0.003552	2.5	PASS
Band II	9262	VN	0	-12.25	-0.006613	2.5	PASS
Band II	9262	VN	10	-11.26	-0.006079	2.5	PASS
Band II	9262	VN	20	-13.18	-0.007115	2.5	PASS
Band II	9262	VN	30	-10.53	-0.005685	2.5	PASS
Band II	9262	VN	40	-9.71	-0.005242	2.5	PASS
Band II	9262	VN	50	-1.90	-0.001026	2.5	PASS
Band II	9400	VN	-30	-10.24	-0.005447	2.5	PASS
Band II	9400	VN	-20	-9.03	-0.004803	2.5	PASS
Band II	9400	VN	-10	-10.49	-0.005580	2.5	PASS
Band II	9400	VN	0	-7.56	-0.004021	2.5	PASS
Band II	9400	VN	10	-6.56	-0.003489	2.5	PASS
Band II	9400	VN	20	-7.10	-0.003777	2.5	PASS
Band II	9400	VN	30	-18.69	-0.009941	2.5	PASS
Band II	9400	VN	40	-13.98	-0.007436	2.5	PASS
Band II	9400	VN	50	-14.61	-0.007771	2.5	PASS
Band II	9538	VN	-30	-9.02	-0.004728	2.5	PASS
Band II	9538	VN	-20	-12.12	-0.006354	2.5	PASS
Band II	9538	VN	-10	-8.23	-0.004314	2.5	PASS
Band II	9538	VN	0	-8.35	-0.004377	2.5	PASS
Band II	9538	VN	10	-7.49	-0.003926	2.5	PASS
Band II	9538	VN	20	-9.32	-0.004886	2.5	PASS
Band II	9538	VN	30	-8.25	-0.004325	2.5	PASS
Band II	9538	VN	40	-10.13	-0.005310	2.5	PASS
Band II	9538	VN	50	-13.88	-0.007276	2.5	PASS
Band V	4132	VN	-30	-7.57	-0.009160	2.5	PASS
Band V	4132	VN	-20	-8.96	-0.010842	2.5	PASS
Band V	4132	VN	-10	-9.23	-0.011169	2.5	PASS
Band V	4132	VN	0	-11.12	-0.013456	2.5	PASS
Band V	4132	VN	10	-9.93	-0.012016	2.5	PASS
Band V	4132	VN	20	-8.92	-0.010794	2.5	PASS
Band V	4132	VN	30	-9.48	-0.011471	2.5	PASS
Band V	4132	VN	40	-11.62	-0.014061	2.5	PASS
Band V	4132	VN	50	-9.92	-0.012004	2.5	PASS
Band V	4182	VN	-30	-10.73	-0.012829	2.5	PASS
Band V	4182	VN	-20	-7.65	-0.009146	2.5	PASS
Band V	4182	VN	-10	-11.38	-0.013606	2.5	PASS
Band V	4182	VN	0	-13.08	-0.015638	2.5	PASS
Band V	4182	VN	10	-12.82	-0.015328	2.5	PASS
Band V	4182	VN	20	-12.22	-0.014610	2.5	PASS
Band V	4182	VN	30	-12.17	-0.014550	2.5	PASS
Band V	4182	VN	40	-11.72	-0.014012	2.5	PASS
Band V	4182	VN	50	-13.68	-0.016356	2.5	PASS
Band V	4233	VN	-30	-11.17	-0.013194	2.5	PASS

Band V	4233	VN	-20	-5.76	-0.006804	2.5	PASS
Band V	4233	VN	-10	-6.84	-0.008079	2.5	PASS
Band V	4233	VN	0	-5.63	-0.006650	2.5	PASS
Band V	4233	VN	10	-11.73	-0.013855	2.5	PASS
Band V	4233	VN	20	-10.59	-0.012509	2.5	PASS
Band V	4233	VN	30	-11.01	-0.013005	2.5	PASS
Band V	4233	VN	40	-8.30	-0.009804	2.5	PASS
Band V	4233	VN	50	-12.52	-0.014789	2.5	PASS

8.7 Appendix G: ERP and EIRP

Test Result

Band	Mode	Conducted Power (dBm)	Antenna Gain (dBi)	EIRP		Limit (W)	Verdict
				(dBm)	(W)		
Band II	WCMDA	22.42	-0.65	21.77	0.1503	2	PASS
	HSDPA	21.64	-0.65	20.99	0.1256	2	PASS
	HSUPA	21.72	-0.65	21.07	0.1279	2	PASS

Band	Mode	Conducted Power (dBm)	Antenna Gain (dBi)	ERP		Limit (W)	Verdict
				(dBm)	(W)		
Band V	WCMDA	24.76	-2.70	19.91	0.0979	7	PASS
	HSDPA	22.25	-2.70	17.40	0.0550	7	PASS
	HSUPA	22.37	-2.70	17.52	0.0565	7	PASS

-----End of the Report -----