

# APPENDIX REPORT

Project No.	SHT2005099309EW	Radio Specification	WCDMA
Test sample No.	YPHT20050993037	Model No.	TE590P
Start test date	2020/07/15	Finish date	2020/07/15
Temperature	25°C	Humidity	50%
Test Engineer	Jiongsheng.Feng	Auditor	Xiaodong Zhu

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

## 8.1 Appendix A: Conducted Output Power

### Test Result

Band	Channel	Power(dBm)	Limit(dBm)	Verdict
Band II	9262	22.83	33	PASS
Band II	9400	23.14	33	PASS
Band II	9538	23.54	33	PASS
Band V	4132	23.25	38.5	PASS
Band V	4182	23.34	38.5	PASS
Band V	4233	23.49	38.5	PASS

Band	Channel	SubTest	Power(dBm)	Limit(dBm)	Verdict
Band II	9262	HSDPA_Sub1	21.80	33	PASS
Band II	9262	HSDPA_Sub2	21.24	33	PASS
Band II	9262	HSDPA_Sub3	21.27	33	PASS
Band II	9262	HSDPA_Sub4	21.27	33	PASS
Band II	9400	HSDPA_Sub1	22.15	33	PASS
Band II	9400	HSDPA_Sub2	21.60	33	PASS
Band II	9400	HSDPA_Sub3	21.62	33	PASS
Band II	9400	HSDPA_Sub4	21.63	33	PASS
Band II	9538	HSDPA_Sub1	22.51	33	PASS
Band II	9538	HSDPA_Sub2	21.96	33	PASS
Band II	9538	HSDPA_Sub3	21.92	33	PASS
Band II	9538	HSDPA_Sub4	21.95	33	PASS
Band V	4132	HSDPA_Sub1	22.10	38.5	PASS
Band V	4132	HSDPA_Sub2	21.53	38.5	PASS
Band V	4132	HSDPA_Sub3	21.54	38.5	PASS
Band V	4132	HSDPA_Sub4	21.53	38.5	PASS
Band V	4182	HSDPA_Sub1	22.16	38.5	PASS
Band V	4182	HSDPA_Sub2	21.66	38.5	PASS
Band V	4182	HSDPA_Sub3	21.67	38.5	PASS
Band V	4182	HSDPA_Sub4	21.65	38.5	PASS
Band V	4233	HSDPA_Sub1	22.29	38.5	PASS
Band V	4233	HSDPA_Sub2	21.71	38.5	PASS
Band V	4233	HSDPA_Sub3	21.74	38.5	PASS
Band V	4233	HSDPA_Sub4	21.70	38.5	PASS

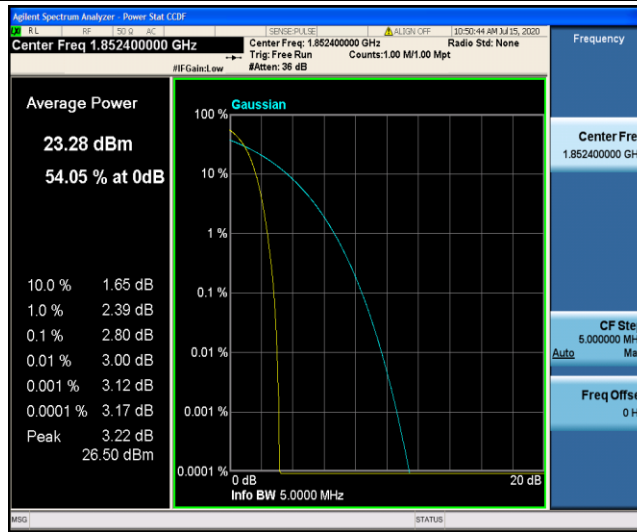
Band	Channel	SubTest	Power(dBm)	Limit(dBm)	Verdict
Band II	9262	HSUPA_Sub1	19.73	33	PASS
Band II	9262	HSUPA_Sub2	20.24	33	PASS
Band II	9262	HSUPA_Sub3	20.73	33	PASS
Band II	9262	HSUPA_Sub4	19.79	33	PASS
Band II	9262	HSUPA_Sub5	21.77	33	PASS
Band II	9400	HSUPA_Sub1	20.12	33	PASS
Band II	9400	HSUPA_Sub2	20.65	33	PASS
Band II	9400	HSUPA_Sub3	21.14	33	PASS
Band II	9400	HSUPA_Sub4	20.14	33	PASS
Band II	9400	HSUPA_Sub5	22.11	33	PASS
Band II	9538	HSUPA_Sub1	20.48	33	PASS
Band II	9538	HSUPA_Sub2	20.98	33	PASS
Band II	9538	HSUPA_Sub3	21.47	33	PASS
Band II	9538	HSUPA_Sub4	20.51	33	PASS
Band II	9538	HSUPA_Sub5	22.46	33	PASS
Band V	4132	HSUPA_Sub2	20.57	38.5	PASS
Band V	4132	HSUPA_Sub3	21.02	38.5	PASS
Band V	4132	HSUPA_Sub4	20.16	38.5	PASS
Band V	4132	HSUPA_Sub5	22.10	38.5	PASS
Band V	4182	HSUPA_Sub1	20.20	38.5	PASS
Band V	4182	HSUPA_Sub2	20.66	38.5	PASS
Band V	4182	HSUPA_Sub3	21.08	38.5	PASS
Band V	4182	HSUPA_Sub4	20.26	38.5	PASS
Band V	4182	HSUPA_Sub5	22.19	38.5	PASS
Band V	4233	HSUPA_Sub1	20.32	38.5	PASS
Band V	4233	HSUPA_Sub2	20.75	38.5	PASS
Band V	4233	HSUPA_Sub3	21.22	38.5	PASS
Band V	4233	HSUPA_Sub4	20.39	38.5	PASS
Band V	4233	HSUPA_Sub5	22.29	38.5	PASS

## 8.2 Appendix B: Peak-to-Average Ratio

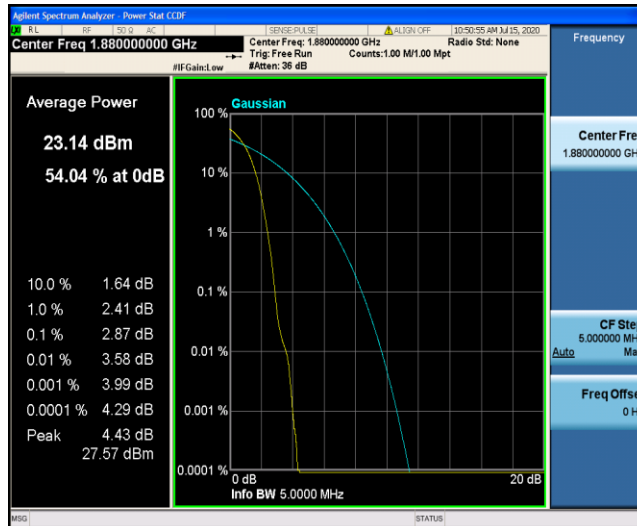
### Test Result

Band	Channel	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band II	9262	2.80	13	PASS
Band II	9400	2.87	13	PASS
Band II	9538	2.76	13	PASS
Band V	4132	2.91	13	PASS
Band V	4182	2.97	13	PASS
Band V	4233	2.97	13	PASS

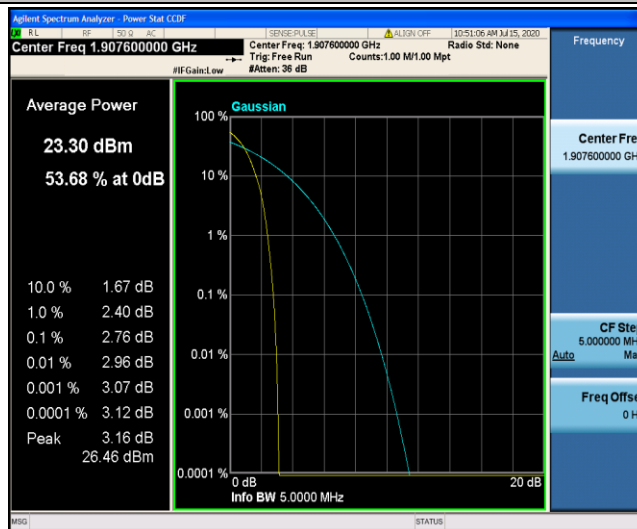
Test Graphs



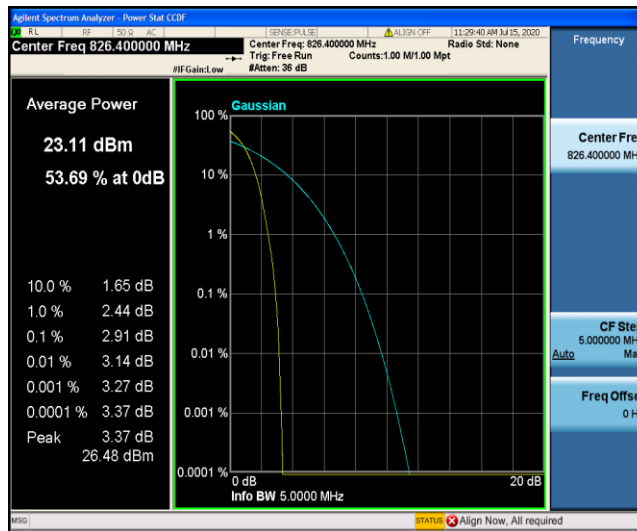
Band II\_9262



Band II\_9400



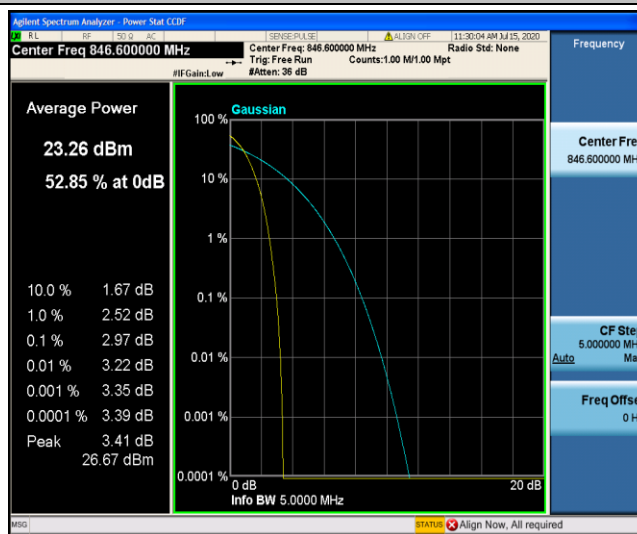
Band II\_9538



Band V\_4132



Band V\_4182



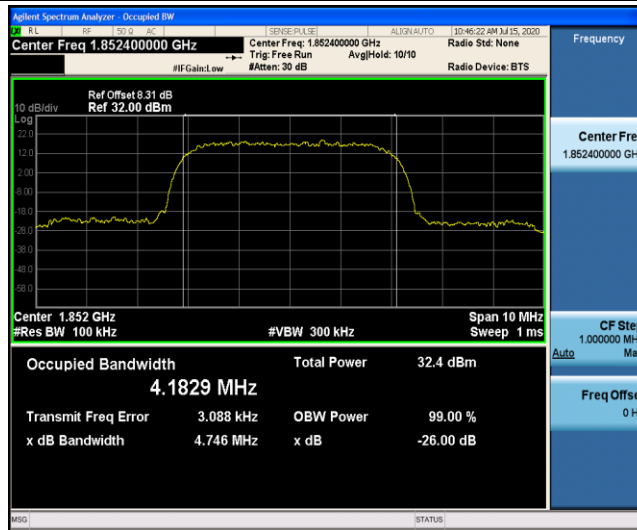
Band V\_4233

### 8.3 Appendix C: 26dB Bandwidth and Occupied Bandwidth

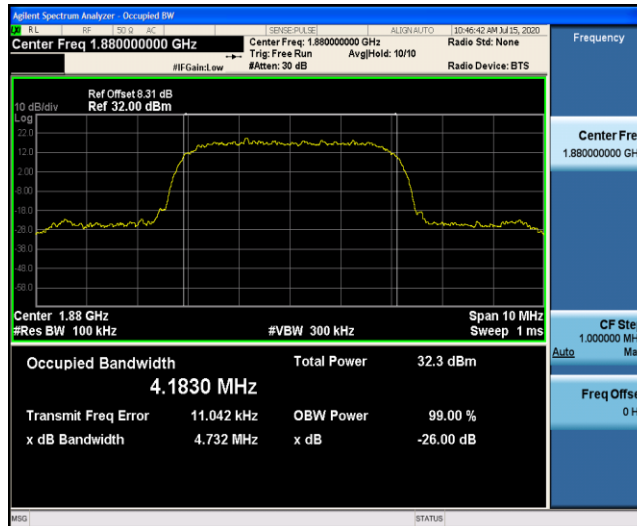
#### Test Result

Band	Channel	Occupied Bandwidth (kHz)	26dB Bandwidth (kHz)	Limit(kHz)	Verdict
Band II	9262	4182.9	4746	---	PASS
Band II	9400	4183.0	4732	---	PASS
Band II	9538	4163.1	4725	---	PASS
Band V	4132	4176.7	4742	---	PASS
Band V	4182	4188.8	4961	---	PASS
Band V	4233	4172.3	4707	---	PASS

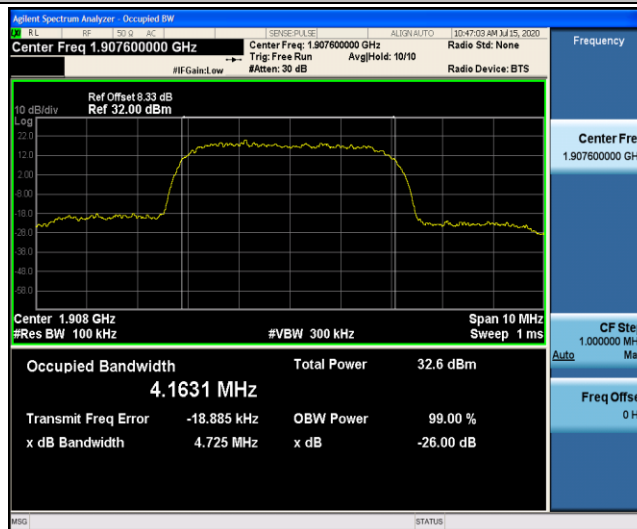
Test Graphs



Band II\_9262

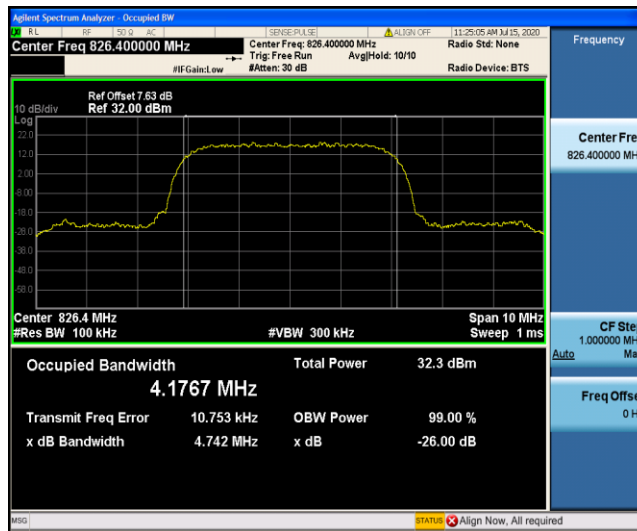


Band II\_9400

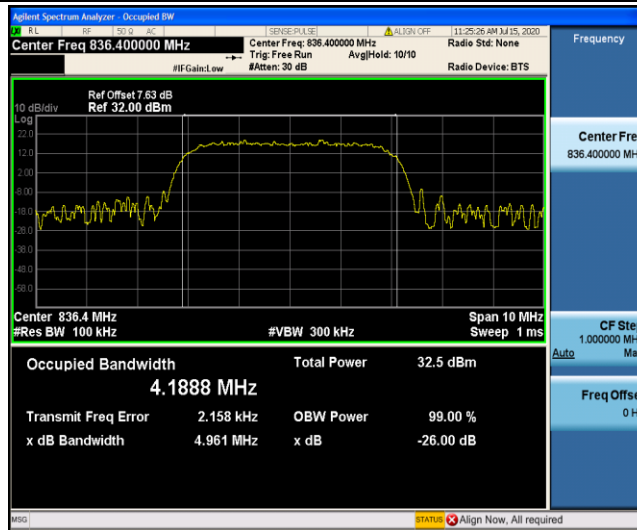


Band II\_9538

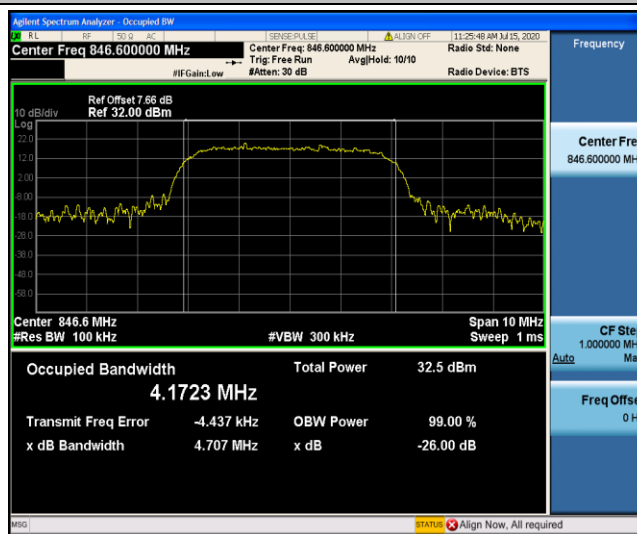




Band V\_4132



Band V\_4182



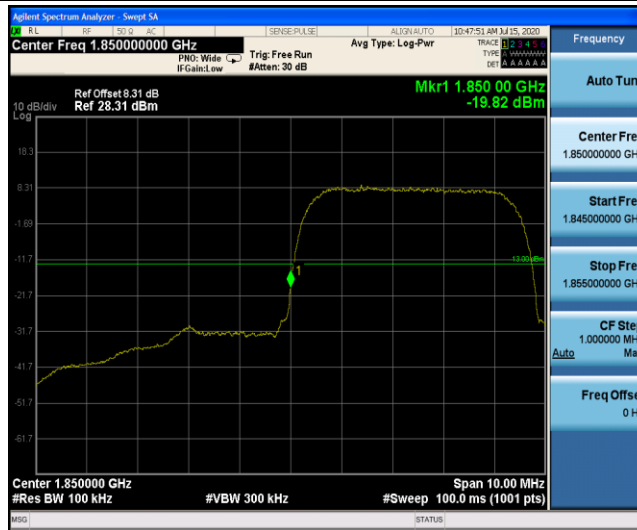
Band V\_4233

#### 8.4 Appendix D: Band Edge

##### Test Result

Band	Channel	Value(dBm)	Limit(dBm)	Verdict
Band II	9262	-19.82	-13	PASS
Band II	9538	-20.99	-13	PASS
Band V	4132	-21.33	-13	PASS
Band V	4233	-22.40	-13	PASS

Test Graphs



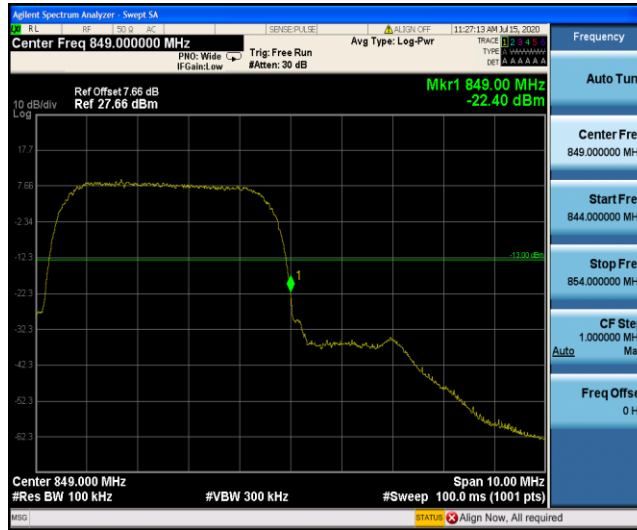
Band II\_9262



Band II\_9538



Band V\_4132



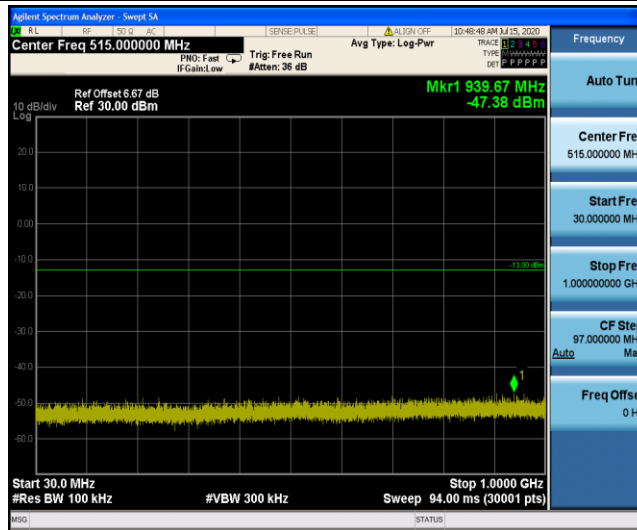
Band V\_4233

## 8.5 Appendix E: Conducted Spurious Emission

### Test Result

Band	Channel	Frequency Rang(Mhz)	Value(dBm)	Limit(dBm)	Verdict
Band II	9262	30~1000	-47.38	-13	PASS
Band II	9262	1000~20000	-25.89	-13	PASS
Band II	9400	30~1000	-47.05	-13	PASS
Band II	9400	1000~20000	-26.37	-13	PASS
Band II	9538	30~1000	-47.29	-13	PASS
Band II	9538	1000~20000	-25.66	-13	PASS
Band V	4132	30~1000	-47.38	-13	PASS
Band V	4132	1000~10000	-32.07	-13	PASS
Band V	4182	30~1000	-47.51	-13	PASS
Band V	4182	1000~10000	-33.10	-13	PASS
Band V	4233	30~1000	-47.93	-13	PASS
Band V	4233	1000~10000	-30.97	-13	PASS

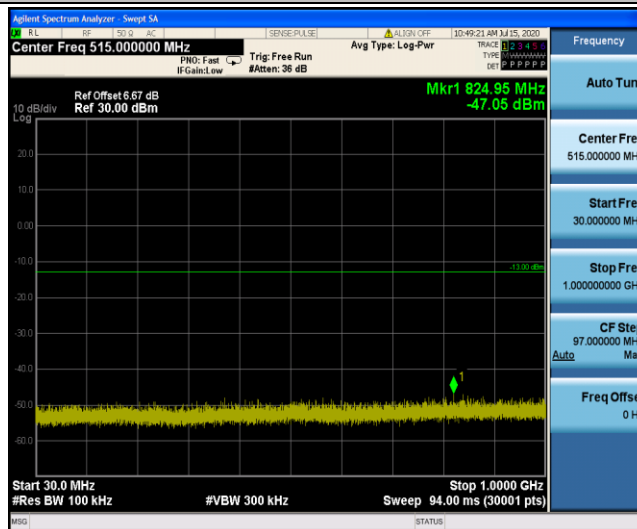
Test Graphs



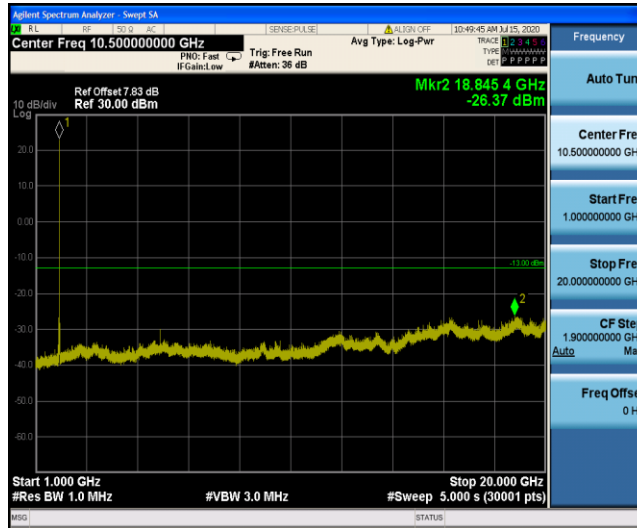
Band II\_9262



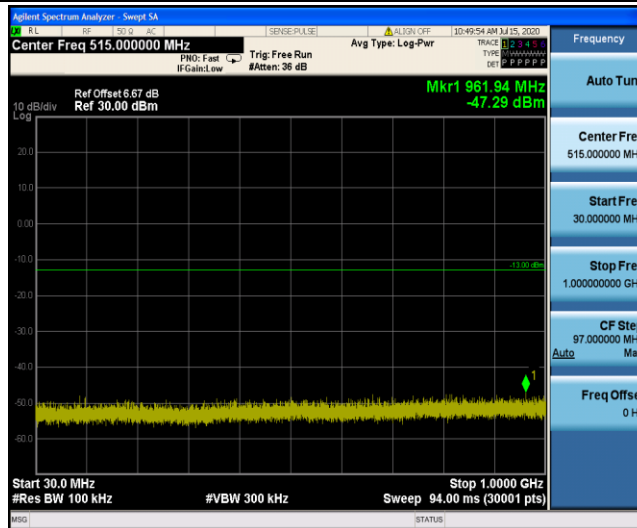
Band II\_9262



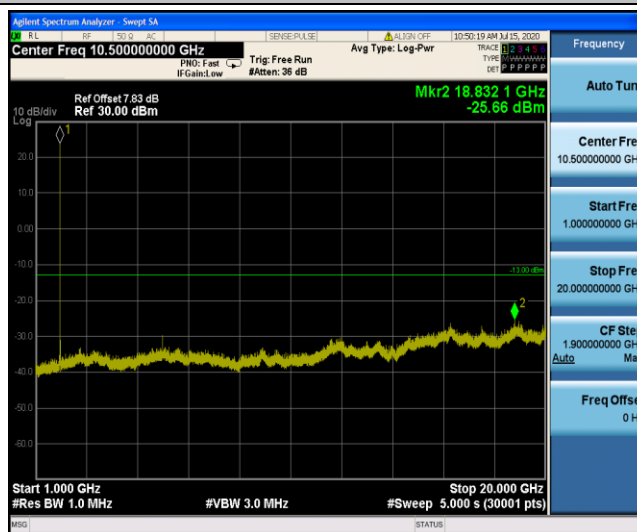
Band II\_9400



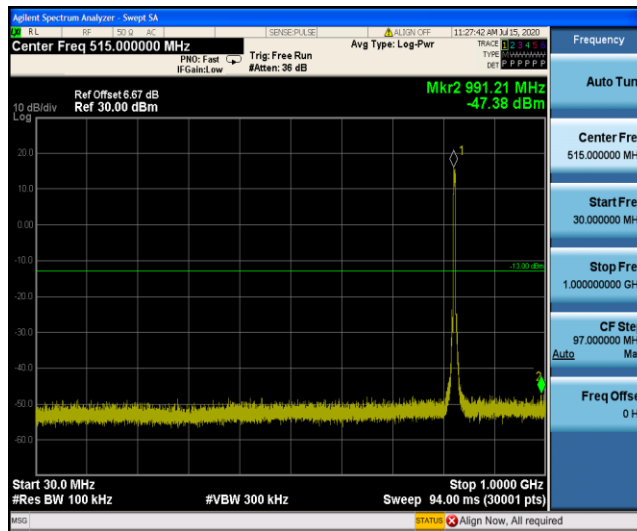
Band II\_9400



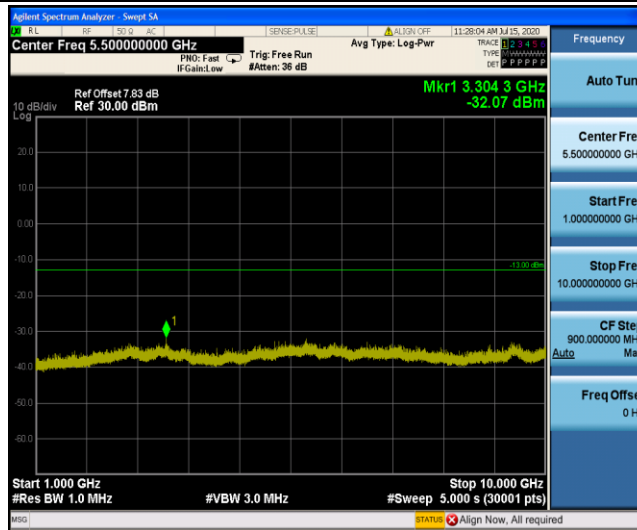
Band II\_9538



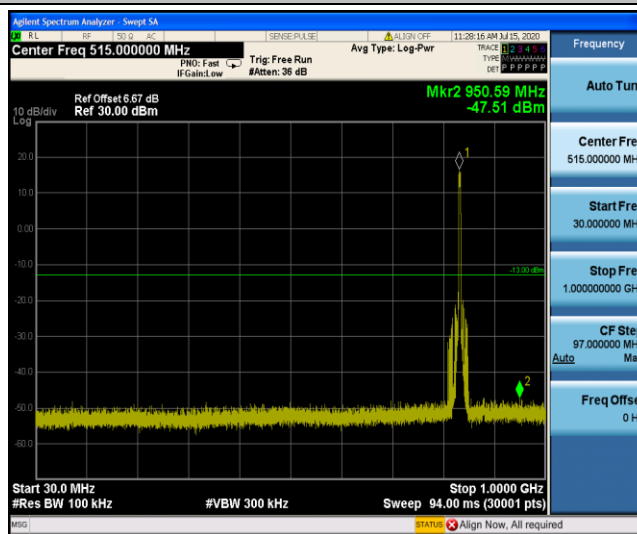
Band II\_9538



Band V\_4132

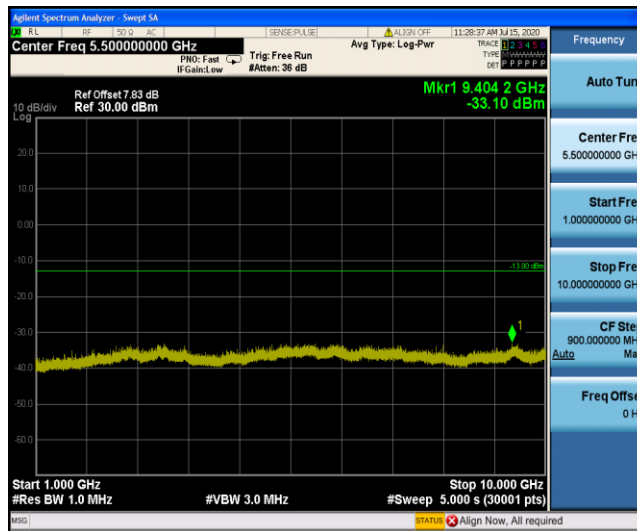


Band V\_4132

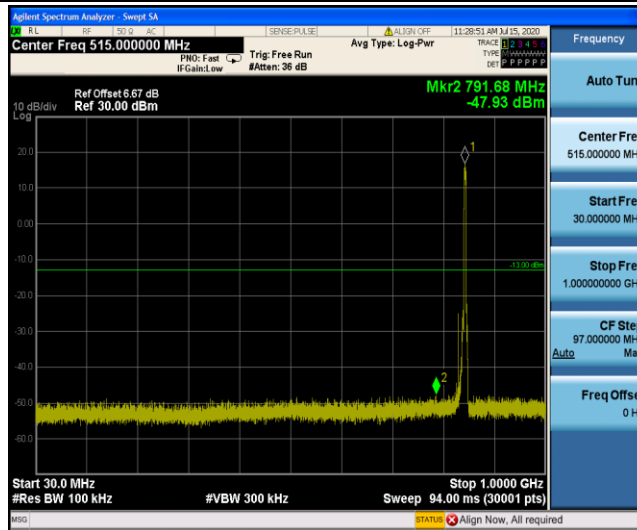


Band V\_4182

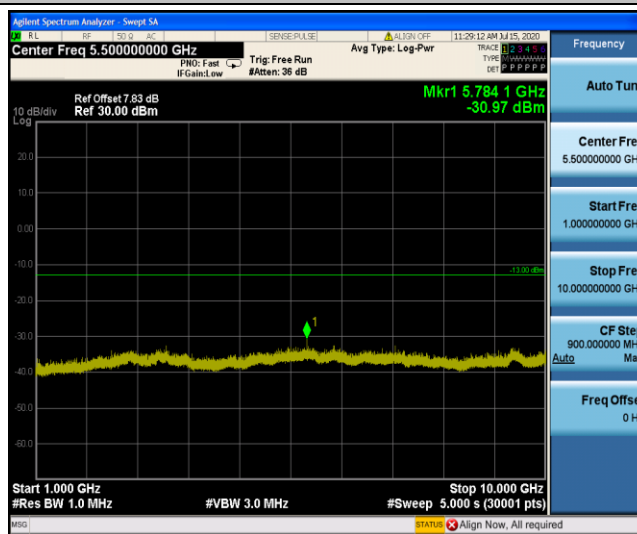




Band V\_4182



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	-10.44	-0.005634	2.5	PASS
Band II	9262	VN	TN	-13.95	-0.007529	2.5	PASS
Band II	9262	VH	TN	-11.19	-0.006039	2.5	PASS
Band II	9400	VL	TN	-7.07	-0.003759	2.5	PASS
Band II	9400	VN	TN	-12.85	-0.006837	2.5	PASS
Band II	9400	VH	TN	-10.58	-0.005627	2.5	PASS
Band II	9538	VL	TN	-8.90	-0.004668	2.5	PASS
Band II	9538	VN	TN	-8.54	-0.004477	2.5	PASS
Band II	9538	VH	TN	-9.31	-0.004878	2.5	PASS
Band V	4132	VL	TN	-7.59	-0.009183	2.5	PASS
Band V	4132	VN	TN	-6.16	-0.007452	2.5	PASS
Band V	4132	VH	TN	-8.39	-0.010152	2.5	PASS
Band V	4182	VL	TN	-7.34	-0.008774	2.5	PASS
Band V	4182	VN	TN	-13.03	-0.015581	2.5	PASS
Band V	4182	VH	TN	-11.44	-0.013683	2.5	PASS
Band V	4233	VL	TN	-2.95	-0.003481	2.5	PASS
Band V	4233	VN	TN	-7.60	-0.008972	2.5	PASS
Band V	4233	VH	TN	-1.83	-0.002163	2.5	PASS

Temperature							
Band	Channel	Voltage (Vdc)	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band II	9262	VN	-30	-9.46	-0.005105	2.5	PASS
Band II	9262	VN	-20	-10.48	-0.005657	2.5	PASS
Band II	9262	VN	-10	-8.33	-0.004498	2.5	PASS
Band II	9262	VN	0	-10.59	-0.005718	2.5	PASS
Band II	9262	VN	10	-12.60	-0.006800	2.5	PASS
Band II	9262	VN	20	-9.80	-0.005290	2.5	PASS
Band II	9262	VN	30	-13.01	-0.007024	2.5	PASS
Band II	9262	VN	40	-12.65	-0.006827	2.5	PASS
Band II	9262	VN	50	-17.84	-0.009630	2.5	PASS
Band II	9400	VN	-30	-6.21	-0.003302	2.5	PASS
Band II	9400	VN	-20	-5.97	-0.003173	2.5	PASS
Band II	9400	VN	-10	-3.93	-0.002093	2.5	PASS
Band II	9400	VN	0	-8.75	-0.004657	2.5	PASS
Band II	9400	VN	10	-9.48	-0.005045	2.5	PASS
Band II	9400	VN	20	-9.80	-0.005212	2.5	PASS
Band II	9400	VN	30	-8.51	-0.004527	2.5	PASS
Band II	9400	VN	40	-10.33	-0.005494	2.5	PASS
Band II	9400	VN	50	-5.64	-0.003002	2.5	PASS
Band II	9538	VN	-30	-7.22	-0.003787	2.5	PASS
Band II	9538	VN	-20	-8.50	-0.004458	2.5	PASS
Band II	9538	VN	-10	-6.37	-0.003337	2.5	PASS
Band II	9538	VN	0	-6.00	-0.003146	2.5	PASS
Band II	9538	VN	10	-8.45	-0.004432	2.5	PASS
Band II	9538	VN	20	-3.50	-0.001837	2.5	PASS
Band II	9538	VN	30	-7.47	-0.003918	2.5	PASS
Band II	9538	VN	40	-7.40	-0.003877	2.5	PASS
Band II	9538	VN	50	-13.11	-0.006873	2.5	PASS
Band V	4132	VN	-30	-10.29	-0.012455	2.5	PASS
Band V	4132	VN	-20	-11.29	-0.013658	2.5	PASS
Band V	4132	VN	-10	-12.13	-0.014679	2.5	PASS
Band V	4132	VN	0	-3.75	-0.004535	2.5	PASS
Band V	4132	VN	10	-6.49	-0.007859	2.5	PASS
Band V	4132	VN	20	-9.57	-0.011580	2.5	PASS
Band V	4132	VN	30	-11.42	-0.013814	2.5	PASS
Band V	4132	VN	40	-6.13	-0.007417	2.5	PASS
Band V	4132	VN	50	-8.48	-0.010265	2.5	PASS
Band V	4182	VN	-30	-9.60	-0.011476	2.5	PASS
Band V	4182	VN	-20	-7.15	-0.008543	2.5	PASS
Band V	4182	VN	-10	-2.22	-0.002660	2.5	PASS
Band V	4182	VN	0	-11.55	-0.013811	2.5	PASS
Band V	4182	VN	10	-6.11	-0.007303	2.5	PASS
Band V	4182	VN	20	-7.48	-0.008945	2.5	PASS
Band V	4182	VN	30	-6.86	-0.008201	2.5	PASS
Band V	4182	VN	40	-10.87	-0.012998	2.5	PASS
Band V	4182	VN	50	-8.53	-0.010194	2.5	PASS
Band V	4233	VN	-30	-8.40	-0.009927	2.5	PASS

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Band V	4233	VN	-20	-3.35	-0.003962	2.5	PASS
Band V	4233	VN	-10	-6.32	-0.007460	2.5	PASS
Band V	4233	VN	0	-2.24	-0.002644	2.5	PASS
Band V	4233	VN	10	-8.29	-0.009792	2.5	PASS
Band V	4233	VN	20	-4.51	-0.005323	2.5	PASS
Band V	4233	VN	30	-11.42	-0.013492	2.5	PASS
Band V	4233	VN	40	-7.49	-0.008846	2.5	PASS
Band V	4233	VN	50	-9.56	-0.011296	2.5	PASS

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