

AppendixA: Effective (Isotropic) Radiated Power Output Data

Test Result(WCDMA)

Band	Type	Channel	Average Power (dBm)	Antenna Gain (dBi)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
Band2	Voice	9262	22.22	0.78	23.00	33.00	PASS
Band2	RMC	9262	22.24	0.78	23.02	33.00	PASS
Band2	Voice	9400	22.56	0.78	23.34	33.00	PASS
Band2	RMC	9400	22.57	0.78	23.35	33.00	PASS
Band2	Voice	9538	22.28	0.78	23.06	33.00	PASS
Band2	RMC	9538	22.33	0.78	23.11	33.00	PASS
Band4	Voice	1312	21.52	0.74	22.26	30.00	PASS
Band4	RMC	1312	21.53	0.74	22.27	30.00	PASS
Band4	Voice	1413	21.80	0.74	22.54	30.00	PASS
Band4	RMC	1413	21.82	0.74	22.56	30.00	PASS
Band4	Voice	1513	21.77	0.74	22.51	30.00	PASS
Band4	RMC	1513	21.84	0.74	22.58	30.00	PASS
Band5	Voice	4132	23.12	0.37	21.34	38.45	PASS
Band5	RMC	4132	23.14	0.37	21.36	38.45	PASS
Band5	Voice	4183	23.25	0.37	21.47	38.45	PASS
Band5	RMC	4183	23.31	0.37	21.53	38.45	PASS
Band5	Voice	4233	23.22	0.37	21.44	38.45	PASS
Band5	RMC	4233	23.23	0.37	21.45	38.45	PASS
Remark: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi). (For Band2 & Band4) ERP (dBm) = EIRP (dBm) - 2.15 (dB). (For Band5)							

Band	Type	Channel	SubTest	Average Power (dBm)	Antenna Gain (dBi)	ERP/EIRP (dBm)	ERP/EIRP Limit (dBm)	Verdict
Band2	HSDPA	9262	1	21.46	0.78	22.24	33.00	PASS
Band2	HSDPA	9262	2	20.92	0.78	21.70	33.00	PASS
Band2	HSDPA	9262	3	20.92	0.78	21.70	33.00	PASS
Band2	HSDPA	9262	4	20.89	0.78	21.67	33.00	PASS
Band2	HSDPA	9400	1	21.77	0.78	22.55	33.00	PASS
Band2	HSDPA	9400	2	21.21	0.78	21.99	33.00	PASS
Band2	HSDPA	9400	3	21.25	0.78	22.03	33.00	PASS
Band2	HSDPA	9400	4	21.19	0.78	21.97	33.00	PASS
Band2	HSDPA	9538	1	21.46	0.78	22.24	33.00	PASS
Band2	HSDPA	9538	2	20.89	0.78	21.67	33.00	PASS
Band2	HSDPA	9538	3	20.91	0.78	21.69	33.00	PASS
Band2	HSDPA	9538	4	20.97	0.78	21.75	33.00	PASS

Band2	HSUPA	9262	1	19.38	0.78	20.16	33.00	PASS
Band2	HSUPA	9262	2	19.88	0.78	20.66	33.00	PASS
Band2	HSUPA	9262	3	20.41	0.78	21.19	33.00	PASS
Band2	HSUPA	9262	4	19.40	0.78	20.18	33.00	PASS
Band2	HSUPA	9262	5	21.38	0.78	22.16	33.00	PASS
Band2	HSUPA	9400	1	19.68	0.78	20.46	33.00	PASS
Band2	HSUPA	9400	2	20.19	0.78	20.97	33.00	PASS
Band2	HSUPA	9400	3	20.71	0.78	21.49	33.00	PASS
Band2	HSUPA	9400	4	19.72	0.78	20.50	33.00	PASS
Band2	HSUPA	9400	5	21.71	0.78	22.49	33.00	PASS
Band2	HSUPA	9538	1	19.35	0.78	20.13	33.00	PASS
Band2	HSUPA	9538	2	19.87	0.78	20.65	33.00	PASS
Band2	HSUPA	9538	3	20.38	0.78	21.16	33.00	PASS
Band2	HSUPA	9538	4	19.39	0.78	20.17	33.00	PASS
Band2	HSUPA	9538	5	21.38	0.78	22.16	33.00	PASS
Band4	HSDPA	1312	1	20.58	0.74	21.32	30.00	PASS
Band4	HSDPA	1312	2	20.05	0.74	20.79	30.00	PASS
Band4	HSDPA	1312	3	20.11	0.74	20.85	30.00	PASS
Band4	HSDPA	1312	4	20.05	0.74	20.79	30.00	PASS
Band4	HSDPA	1413	1	20.82	0.74	21.56	30.00	PASS
Band4	HSDPA	1413	2	20.35	0.74	21.09	30.00	PASS
Band4	HSDPA	1413	3	20.36	0.74	21.10	30.00	PASS
Band4	HSDPA	1413	4	20.32	0.74	21.06	30.00	PASS
Band4	HSDPA	1513	1	20.85	0.74	21.59	30.00	PASS
Band4	HSDPA	1513	2	20.35	0.74	21.09	30.00	PASS
Band4	HSDPA	1513	3	20.38	0.74	21.12	30.00	PASS
Band4	HSDPA	1513	4	20.33	0.74	21.07	30.00	PASS
Band4	HSUPA	1312	1	18.54	0.74	19.28	30.00	PASS
Band4	HSUPA	1312	2	19.05	0.74	19.79	30.00	PASS
Band4	HSUPA	1312	3	19.55	0.74	20.29	30.00	PASS
Band4	HSUPA	1312	4	18.53	0.74	19.27	30.00	PASS
Band4	HSUPA	1312	5	20.58	0.74	21.32	30.00	PASS
Band4	HSUPA	1413	1	18.79	0.74	19.53	30.00	PASS
Band4	HSUPA	1413	2	19.32	0.74	20.06	30.00	PASS
Band4	HSUPA	1413	3	19.81	0.74	20.55	30.00	PASS
Band4	HSUPA	1413	4	18.83	0.74	19.57	30.00	PASS
Band4	HSUPA	1413	5	20.83	0.74	21.57	30.00	PASS
Band4	HSUPA	1513	1	18.82	0.74	19.56	30.00	PASS
Band4	HSUPA	1513	2	19.32	0.74	20.06	30.00	PASS
Band4	HSUPA	1513	3	19.82	0.74	20.56	30.00	PASS

Band4	HSUPA	1513	4	18.83	0.74	19.57	30.00	PASS
Band4	HSUPA	1513	5	20.84	0.74	21.58	30.00	PASS
Band5	HSDPA	4132	1	22.20	0.37	20.42	38.45	PASS
Band5	HSDPA	4132	2	21.68	0.37	19.90	38.45	PASS
Band5	HSDPA	4132	3	21.72	0.37	19.94	38.45	PASS
Band5	HSDPA	4132	4	21.67	0.37	19.89	38.45	PASS
Band5	HSDPA	4183	1	22.37	0.37	20.59	38.45	PASS
Band5	HSDPA	4183	2	21.85	0.37	20.07	38.45	PASS
Band5	HSDPA	4183	3	21.89	0.37	20.11	38.45	PASS
Band5	HSDPA	4183	4	21.85	0.37	20.07	38.45	PASS
Band5	HSDPA	4233	1	22.25	0.37	20.47	38.45	PASS
Band5	HSDPA	4233	2	21.76	0.37	19.98	38.45	PASS
Band5	HSDPA	4233	3	21.80	0.37	20.02	38.45	PASS
Band5	HSDPA	4233	4	21.76	0.37	19.98	38.45	PASS
Band5	HSUPA	4132	1	20.15	0.37	18.37	38.45	PASS
Band5	HSUPA	4132	2	20.66	0.37	18.88	38.45	PASS
Band5	HSUPA	4132	3	21.18	0.37	19.40	38.45	PASS
Band5	HSUPA	4132	4	20.20	0.37	18.42	38.45	PASS
Band5	HSUPA	4132	5	22.19	0.37	20.41	38.45	PASS
Band5	HSUPA	4183	1	20.31	0.37	18.53	38.45	PASS
Band5	HSUPA	4183	2	20.84	0.37	19.06	38.45	PASS
Band5	HSUPA	4183	3	20.32	0.37	18.54	38.45	PASS
Band5	HSUPA	4183	4	22.05	0.37	20.27	38.45	PASS
Band5	HSUPA	4183	5	22.35	0.37	20.57	38.45	PASS
Band5	HSUPA	4233	1	20.26	0.37	18.48	38.45	PASS
Band5	HSUPA	4233	2	20.77	0.37	18.99	38.45	PASS
Band5	HSUPA	4233	3	21.25	0.37	19.47	38.45	PASS
Band5	HSUPA	4233	4	20.28	0.37	18.50	38.45	PASS
Band5	HSUPA	4233	5	22.27	0.37	20.49	38.45	PASS

Remark: EIRP (dBm) = Average power (dBm) + Antenna Gain (dBi). (For Band2 & Band4)

ERP (dBm) = EIRP (dBm) - 2.15 (dB). (For Band5)

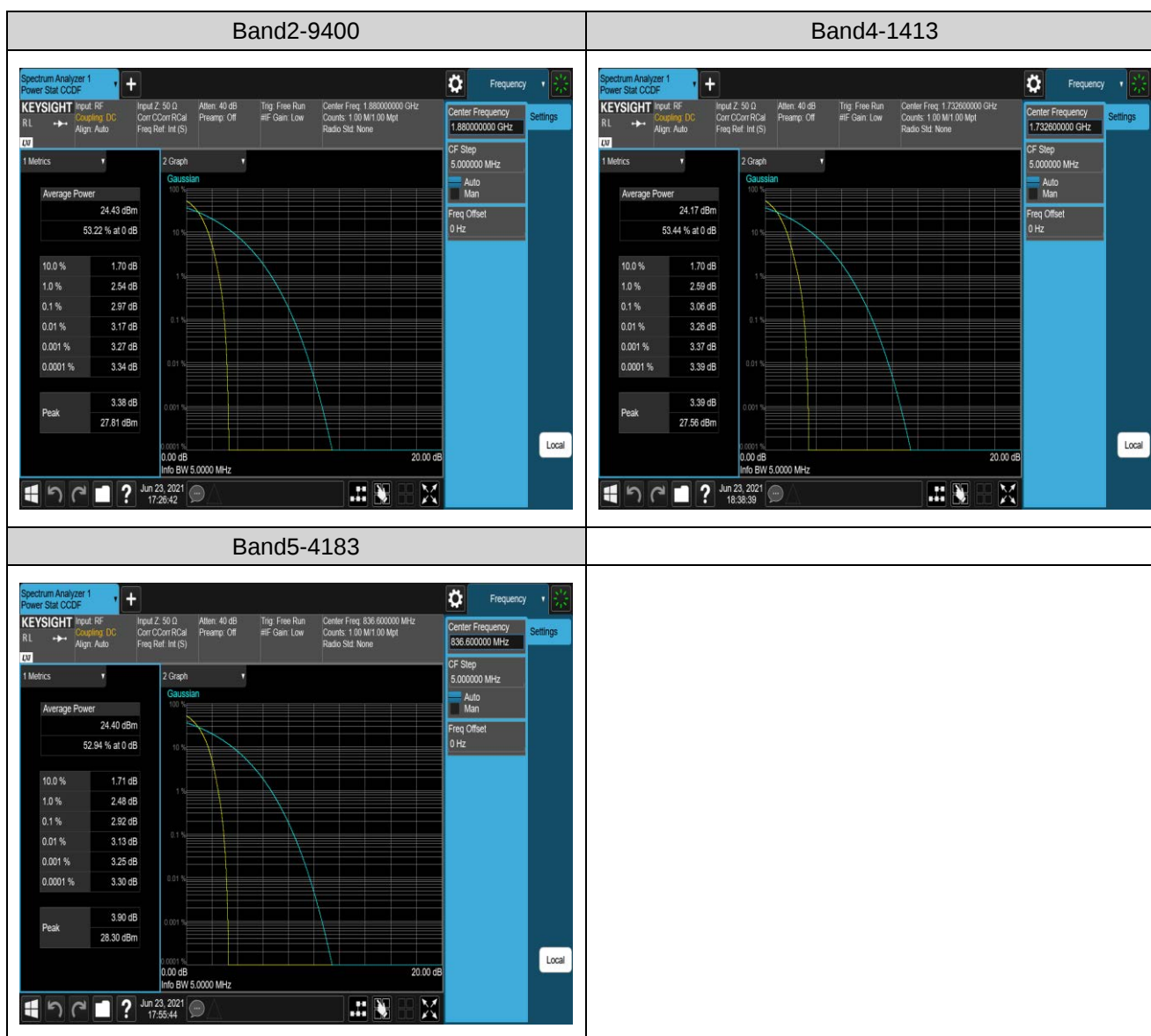
AppendixB:Peak-to-Average Ratio

Test Result(WCDMA)

Band	Channel	Peak-to-Average Ratio(dB)	Limit(dB)	Verdict
Band2	9400	2.97	13	PASS
Band4	1413	3.06	13	PASS
Band5	4183	2.92	13	PASS

Remark: All channel had been tested, but only the worst case data displayed in this report.

Test Graphs(WCDMA)



AppendixC:26dB Bandwidth andOccupied Bandwidth

Test Result(WCDMA)

Band	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Limit(kHz)	Verdict
Band2	9262	4.1435	4.689	---	PASS
Band2	9400	4.1440	4.697	---	PASS
Band2	9538	4.1510	4.718	---	PASS
Band4	1312	4.1652	4.785	---	PASS
Band4	1413	4.1442	4.699	---	PASS
Band4	1513	4.1529	4.734	---	PASS
Band5	4132	4.1733	4.770	---	PASS
Band5	4183	4.1561	4.719	---	PASS
Band5	4233	4.1727	4.730	---	PASS

Band2-9262-4.689

Center Frequency: 1.852400000 GHz

Span: 10.000 MHz

CF Step: 1.000000 MHz

Scale/Div: 10.0 dB

Ref Lvl Offset: 10.35 dB

Ref Value: 30.0 dBm

Occupied Bandwidth: 4.1435 MHz

Total Power: 33.2 dBm

Transmit Freq Error: -6.446 kHz

x dB Bandwidth: 4.689 MHz

x dB Power: -26.0 dB

Band2-9400-4.697

Center Frequency: 1.880000000 GHz

Span: 10.000 MHz

CF Step: 1.000000 MHz

Scale/Div: 10.0 dB

Ref Lvl Offset: 10.30 dB

Ref Value: 30.0 dBm

Occupied Bandwidth: 4.1440 MHz

Total Power: 33.4 dBm

Transmit Freq Error: -11.490 kHz

x dB Bandwidth: 4.697 MHz

x dB Power: -26.0 dB

Band2-9538-4.718

Center Frequency: 1.907600000 GHz

Span: 10.000 MHz

CF Step: 1.000000 MHz

Scale/Div: 10.0 dB

Ref Lvl Offset: 10.54 dB

Ref Value: 30.0 dBm

Occupied Bandwidth: 4.1510 MHz

Total Power: 33.9 dBm

Transmit Freq Error: -7.620 kHz

x dB Bandwidth: 4.718 MHz

x dB Power: -26.0 dB

Band4-1312-4.785

Center Frequency: 1.712400000 GHz

Span: 10.000 MHz

CF Step: 1.000000 MHz

Scale/Div: 10.0 dB

Ref Lvl Offset: 10.26 dB

Ref Value: 30.0 dBm

Occupied Bandwidth: 4.1652 MHz

Total Power: 33.3 dBm

Transmit Freq Error: -3.106 kHz

x dB Bandwidth: 4.785 MHz

x dB Power: -26.0 dB

Band4-1413-4.699

Center Frequency: 1.732600000 GHz

Span: 10.000 MHz

CF Step: 1.000000 MHz

Scale/Div: 10.0 dB

Ref Lvl Offset: 10.26 dB

Ref Value: 30.0 dBm

Occupied Bandwidth: 4.1442 MHz

Total Power: 33.1 dBm

Transmit Freq Error: 441 Hz

x dB Bandwidth: 4.699 MHz

x dB Power: -26.0 dB

Band4-1513-4.734

Center Frequency: 1.752600000 GHz

Span: 10.000 MHz

CF Step: 1.000000 MHz

Scale/Div: 10.0 dB

Ref Lvl Offset: 10.31 dB

Ref Value: 30.0 dBm

Occupied Bandwidth: 4.1529 MHz

Total Power: 32.9 dBm

Transmit Freq Error: -18.897 kHz

x dB Bandwidth: 4.734 MHz

x dB Power: -26.0 dB

Band5-4132-4.770



Band5-4183-4.719



Band5-4233-4.730

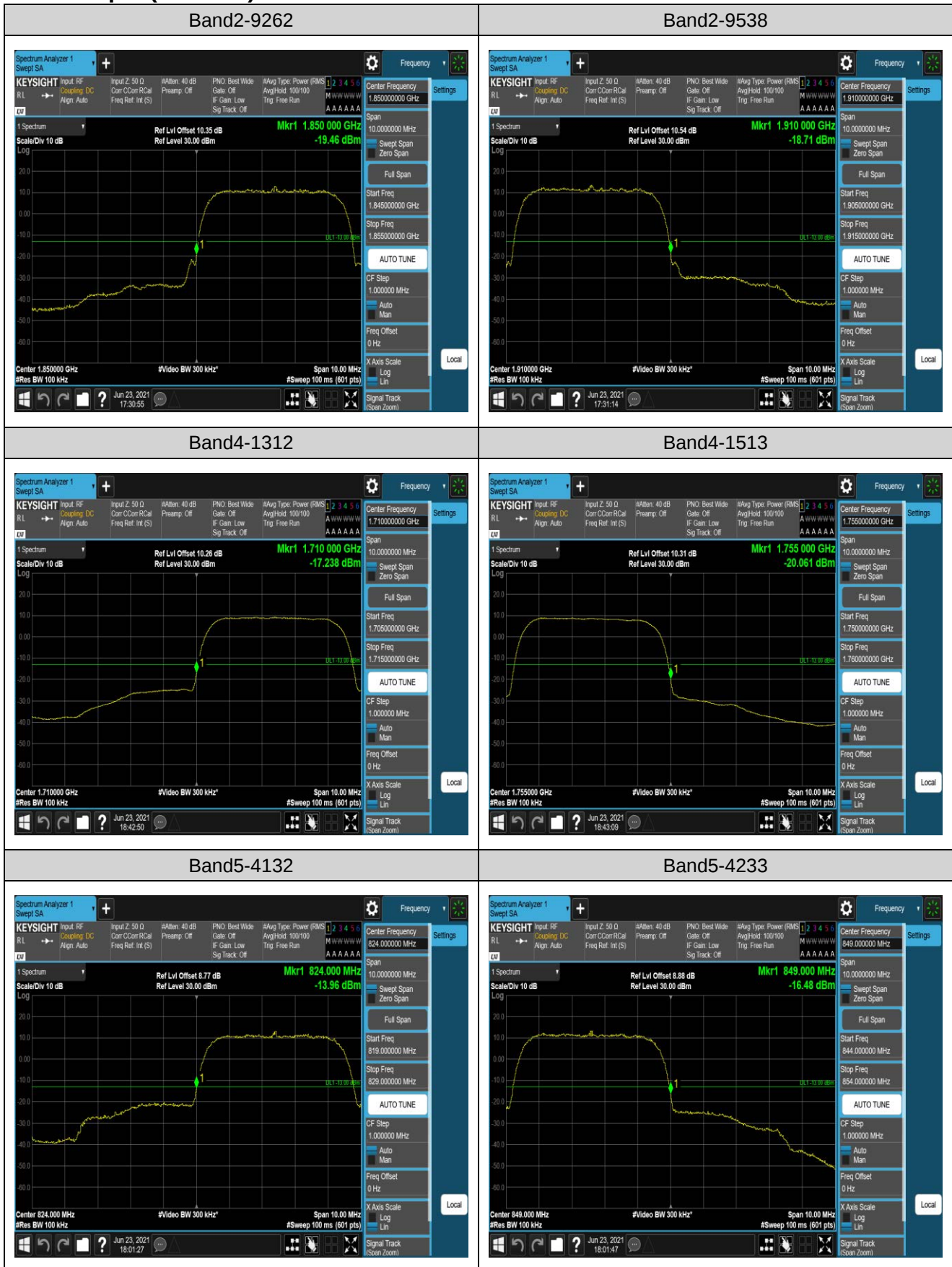


AppendixD:Band Edge

Test Result(WCDMA)

Band	Channel	Frequency (MHz)	Result (dBm)	Limit(dBm)	Verdict
Band2	9262	1850.00	-19.46	-13	PASS
Band2	9538	1910.00	-18.71	-13	PASS
Band4	1312	1710.00	-17.24	-13	PASS
Band4	1513	1755.00	-20.06	-13	PASS
Band5	4132	824.00	-13.96	-13	PASS
Band5	4233	849.00	-16.48	-13	PASS

Test Graphs(WCDMA)



AppendixE:Conducted SpuriousEmission

Test Result(WCDMA)

Band	Channel	Frequency Range (Mhz)	Frequency (dBm)	Result (dBm)	Limit (dBm)	Verdict
Band2	9262	0.009~0.15MHz	0.14	-73.21	-43	PASS
Band2	9262	0.15~30MHz	0.29	-56.19	-23	PASS
Band2	9262	30~1000MHz	866.17	-47.09	-13	PASS
Band2	9262	1000~3000MHz	2617.2	-28.59	-13	PASS
Band2	9262	3000~10000MHz	3987.23	-41.65	-13	PASS
Band2	9262	10000~20000MHz	19003.33	-33.75	-13	PASS
Band2	9400	0.009~0.15MHz	0.13	-74.87	-43	PASS
Band2	9400	0.15~30MHz	0.28	-53.67	-23	PASS
Band2	9400	30~1000MHz	851.2	-47.45	-13	PASS
Band2	9400	1000~3000MHz	2435.8	-28.98	-13	PASS
Band2	9400	3000~10000MHz	3761.83	-40.28	-13	PASS
Band2	9400	10000~20000MHz	19278.67	-34.09	-13	PASS
Band2	9538	0.009~0.15MHz	0.1	-74.66	-43	PASS
Band2	9538	0.15~30MHz	0.28	-53.52	-23	PASS
Band2	9538	30~1000MHz	900.77	-47.11	-13	PASS
Band2	9538	1000~3000MHz	2927.53	-29.16	-13	PASS
Band2	9538	3000~10000MHz	3813.17	-37.88	-13	PASS
Band2	9538	10000~20000MHz	19297	-33.98	-13	PASS
Band4	1312	0.009~0.15MHz	0.11	-73.95	-43	PASS
Band4	1312	0.15~30MHz	0.28	-55.95	-23	PASS
Band4	1312	30~1000MHz	873.77	-47.17	-13	PASS
Band4	1312	1000~3000MHz	2638.93	-29.09	-13	PASS
Band4	1312	3000~10000MHz	3422.8	-41.05	-13	PASS
Band4	1312	10000~20000MHz	19907.33	-33.96	-13	PASS
Band4	1413	0.009~0.15MHz	0.14	-74.26	-43	PASS
Band4	1413	0.15~30MHz	0.32	-55.09	-23	PASS
Band4	1413	30~1000MHz	863.1	-48.07	-13	PASS
Band4	1413	1000~3000MHz	2477.2	-28.8	-13	PASS
Band4	1413	3000~10000MHz	3462.93	-40.79	-13	PASS
Band4	1413	10000~20000MHz	18944.67	-33.57	-13	PASS
Band4	1513	0.009~0.15MHz	0.13	-74.09	-43	PASS
Band4	1513	0.15~30MHz	0.28	-54.7	-23	PASS
Band4	1513	30~1000MHz	886.77	-46.82	-13	PASS
Band4	1513	1000~3000MHz	2478.07	-28.59	-13	PASS
Band4	1513	3000~10000MHz	3502.83	-40.15	-13	PASS
Band4	1513	10000~20000MHz	19039.33	-33.22	-13	PASS

Band5	4132	0.009~0.15MHz	0.14	-73.84	-33	PASS
Band5	4132	0.15~30MHz	0.28	-54.54	-13	PASS
Band5	4132	30~1000MHz	603.85	-38.13	-13	PASS
Band5	4132	1000~3000MHz	2611	-36.91	-13	PASS
Band5	4132	3000~10000MHz	8397.7	-40.39	-13	PASS
Band5	4132	10000~18000MHz	17686.13	-43.06	-13	PASS
Band5	4183	0.009~0.15MHz	0.04	-75.12	-33	PASS
Band5	4183	0.15~30MHz	0.29	-55.25	-13	PASS
Band5	4183	30~1000MHz	985.84	-38.48	-13	PASS
Band5	4183	1000~3000MHz	2434.47	-33.24	-13	PASS
Band5	4183	3000~10000MHz	4811.13	-41.63	-13	PASS
Band5	4183	10000~18000MHz	16414.13	-42.71	-13	PASS
Band5	4233	0.009~0.15MHz	0.14	-73.76	-33	PASS
Band5	4233	0.15~30MHz	0.28	-56.01	-13	PASS
Band5	4233	30~1000MHz	60.59	-37.45	-13	PASS
Band5	4233	1000~3000MHz	2927.27	-36.57	-13	PASS
Band5	4233	3000~10000MHz	3768.83	-42.4	-13	PASS
Band5	4233	10000~18000MHz	14255.47	-43.41	-13	PASS

Test Graphs(WCDMA)

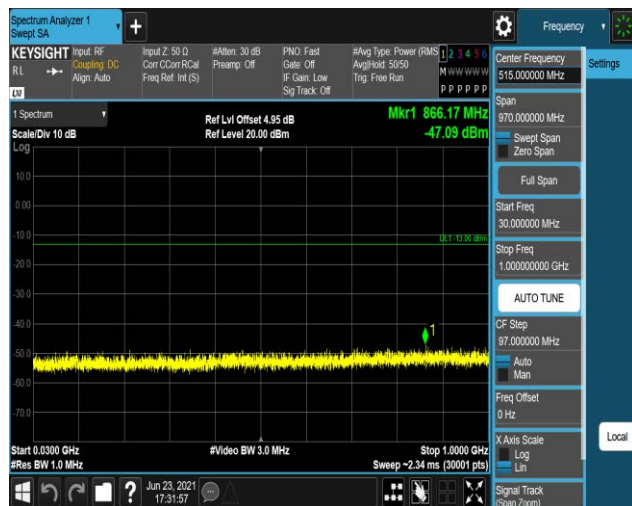
Band2-9262-0.009~0.15MHz



Band2-9262-0.15~30MHz



Band2-9262-30~1000MHz



Band2-9262-1000~3000MHz



Band2-9262-3000~10000MHz



Band2-9262-10000~20000MHz



Band2-9400-0.009~0.15MHz



Band2-9400-0.15~30MHz



Band2-9400-30~1000MHz



Band2-9400-1000~3000MHz



Band2-9400-3000~10000MHz



Band2-9400-10000~20000MHz



Band2-9538-0.009~0.15MHz



Band2-9538-0.15~30MHz



Band2-9538-30~1000MHz



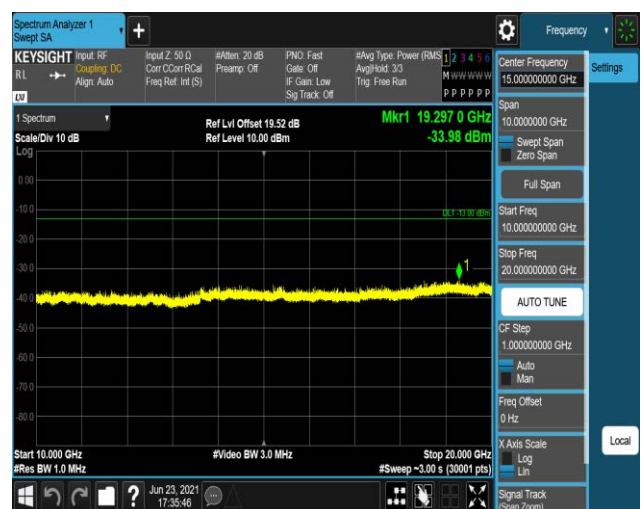
Band2-9538-1000~3000MHz



Band2-9538-3000~10000MHz



Band2-9538-10000~20000MHz



Band4-1312-0.009~0.15MHz



Band4-1312-0.15~30MHz



Band4-1312-30~1000MHz



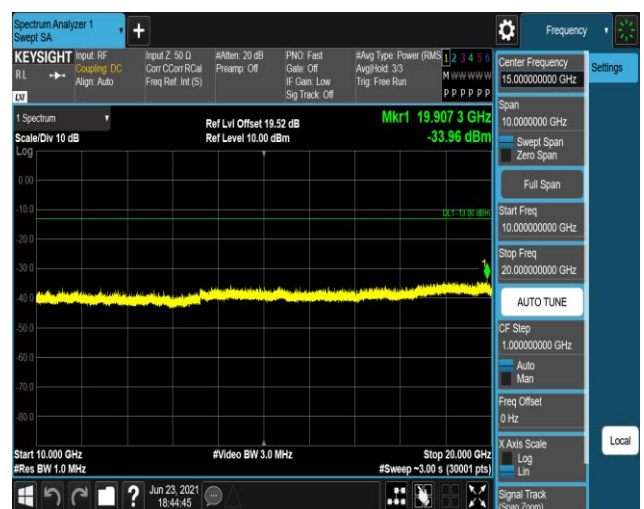
Band4-1312-1000~3000MHz



Band4-1312-3000~10000MHz



Band4-1312-10000~20000MHz



Band4-1413-0.009~0.15MHz



Band4-1413-0.15~30MHz



Band4-1413-30~1000MHz



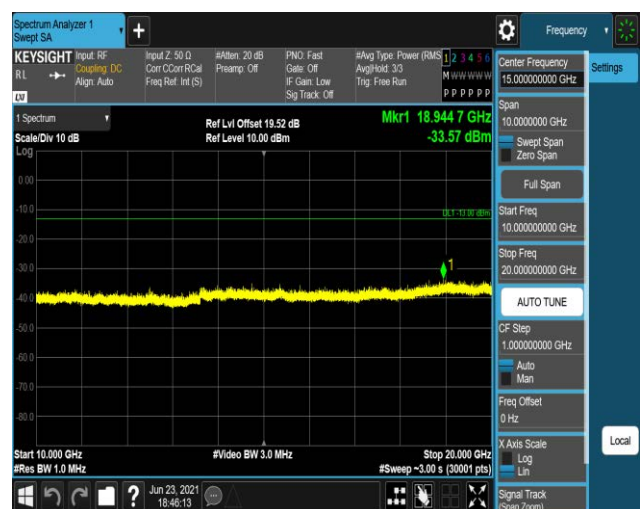
Band4-1413-1000~3000MHz



Band4-1413-3000~10000MHz



Band4-1413-10000~20000MHz



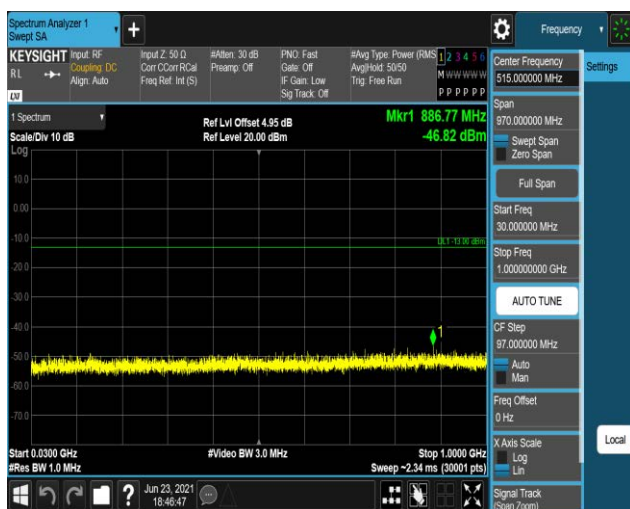
Band4-1513-0.009~0.15MHz



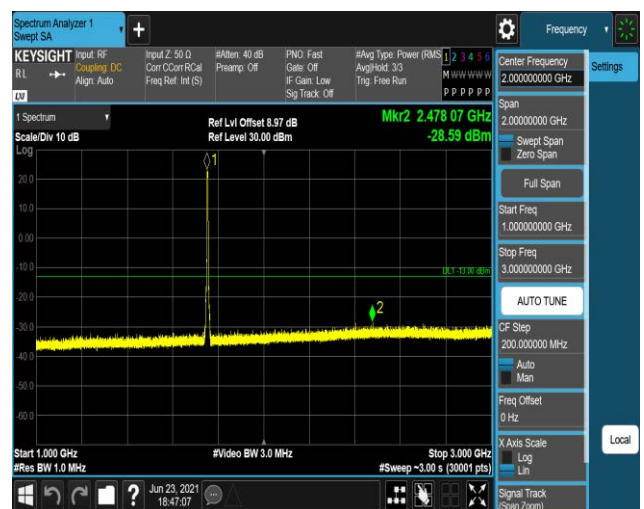
Band4-1513-0.15~30MHz



Band4-1513-30~1000MHz



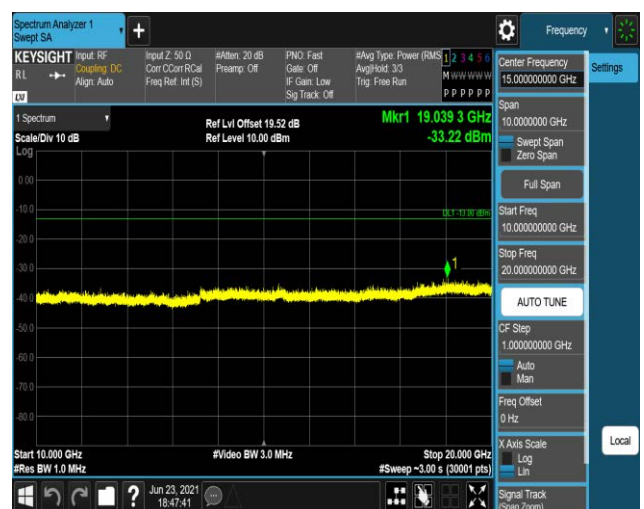
Band4-1513-1000~3000MHz



Band4-1513-3000~10000MHz



Band4-1513-10000~20000MHz



Band5-4132-0.009~0.15MHz



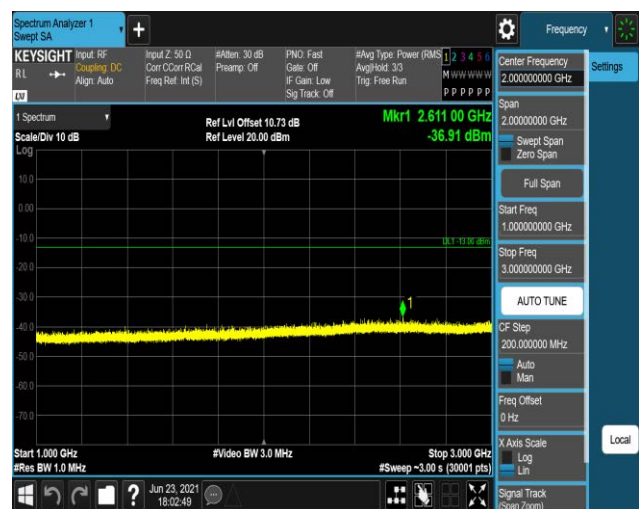
Band5-4132-0.15~30MHz



Band5-4132-30~1000MHz



Band5-4132-1000~3000MHz



Band5-4132-3000~10000MHz



Band5-4132-10000~18000MHz



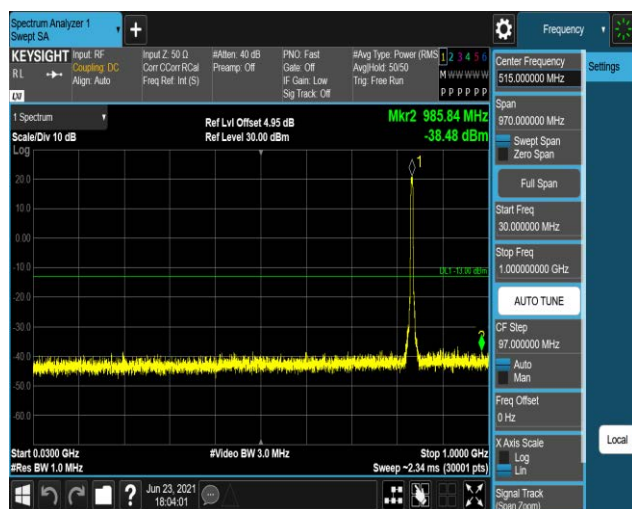
Band5-4183-0.009~0.15MHz



Band5-4183-0.15~30MHz



Band5-4183-30~1000MHz



Band5-4183-1000~3000MHz



Band5-4183-3000~10000MHz



Band5-4183-10000~18000MHz



Band5-4233-0.009~0.15MHz



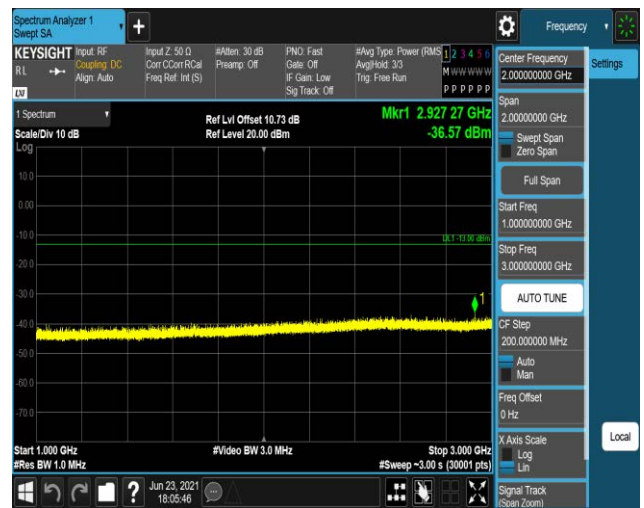
Band5-4233-0.15~30MHz



Band5-4233-30~1000MHz



Band5-4233-1000~3000MHz



Band5-4233-3000~10000MHz



Band5-4233-10000~18000MHz



AppendixF:Frequency Stability

Test Result

Reference Frequency: WCDMA BAND II 12.2k RMC Middle Frequency=9400 channel=1880MHz					
Temperature					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	3.15	0.001676	Within authorized band for BAND II	Pass
	-20	3.25	0.001729		
	-10	3.66	0.001947		
	0	3.11	0.001654		
	10	3.07	0.001633		
	20	2.93	0.001559		
	30	2.95	0.001569		
	40	2.87	0.001527		
	50	3.50	0.001862		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	3.45	0.001835	Within authorized band for BAND II	Pass
	3.87	3.58	0.001904		
	4.45	3.13	0.001665		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Reference Frequency: WCDMA BAND IV 12.2k RMC Middle channel=1413 Frequency=1732.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	0.25	0.000144	Within authorized band for BAND IV	Pass
	-20	0.15	0.000087		
	-10	0.66	0.000381		
	0	2.07	0.001195		
	10	1.56	0.000900		
	20	0.55	0.000317		
	30	0.61	0.000352		
	40	0.42	0.000242		
	50	0.08	0.000046		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	0.61	0.000352	Within authorized band for BAND IV	Pass
	3.87	0.35	0.000202		
	4.45	0.05	0.000029		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Reference Frequency: WCDMA BAND V 12.2k RMC Middle channel=4183 Frequency=836.6MHz					
Temperature					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.87	-30	0.48	0.000574	±2.5	Pass
	-20	0.47	0.000562		
	-10	0.14	0.000167		
	0	-0.21	-0.000251		
	10	0.11	0.000131		
	20	0.57	0.000681		
	30	-0.09	-0.000108		
	40	0.26	0.000311		
	50	-0.12	-0.000143		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	3.50	-0.76	-0.000908	±2.5	Pass
	3.87	-0.10	-0.000120		
	4.45	-0.06	-0.000072		
Remark: All channel had been tested, but only the worst case data displayed in this report.					

Appendix G: Modulation Characteristics

Test Result

Band	Channel	Result	Verdict
Band2	9400	PASS	PASS
Band4	1413	PASS	PASS
Band5	4183	PASS	PASS

Remark: All channel had been tested, but only the worst case data displayed in this report.

Test Graphs

