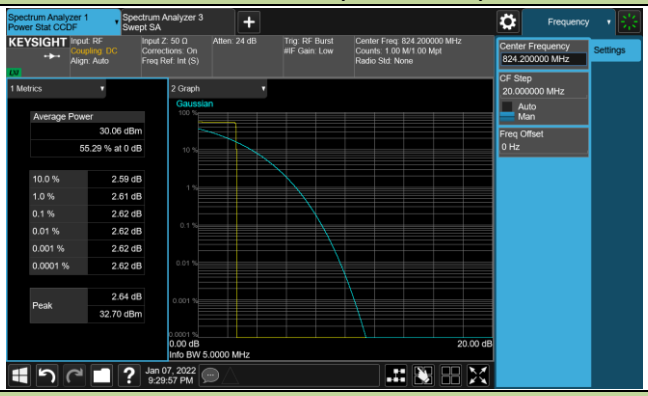
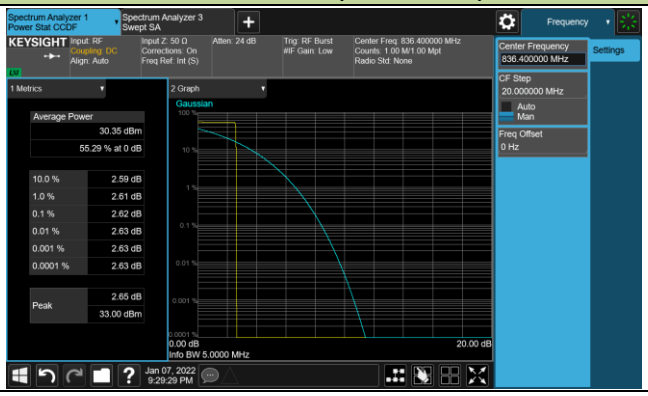
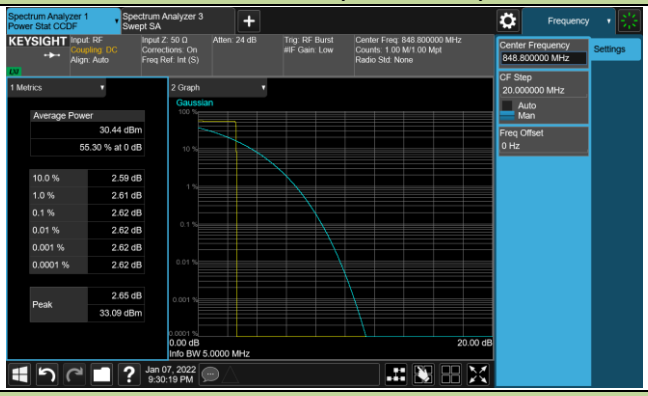
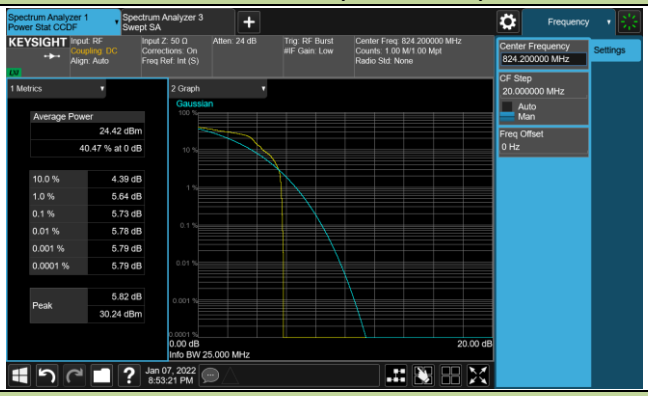
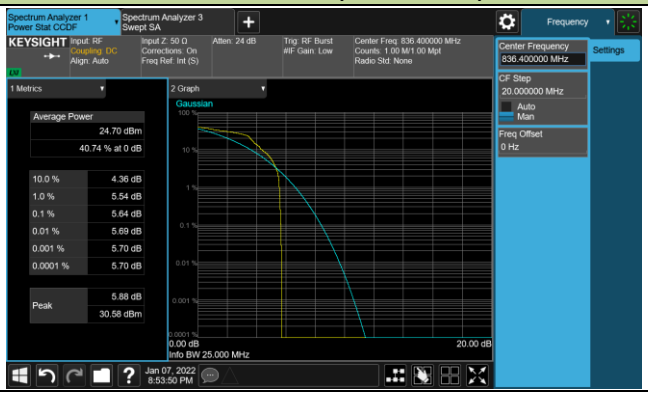
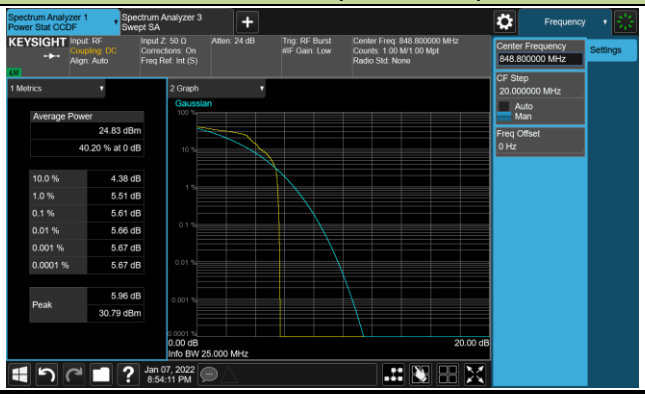
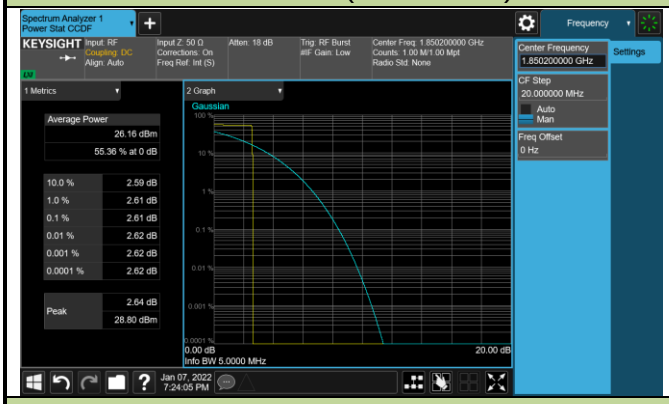
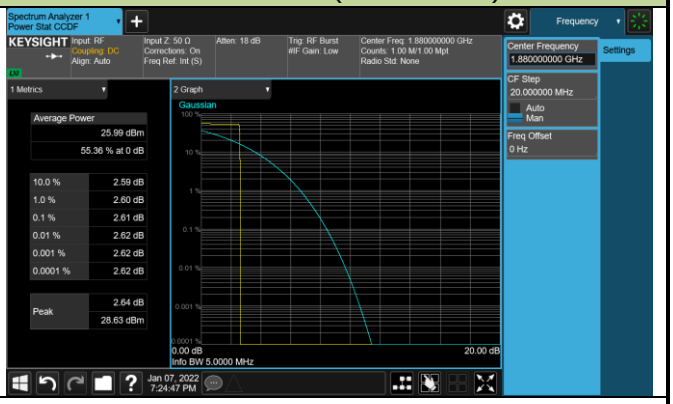
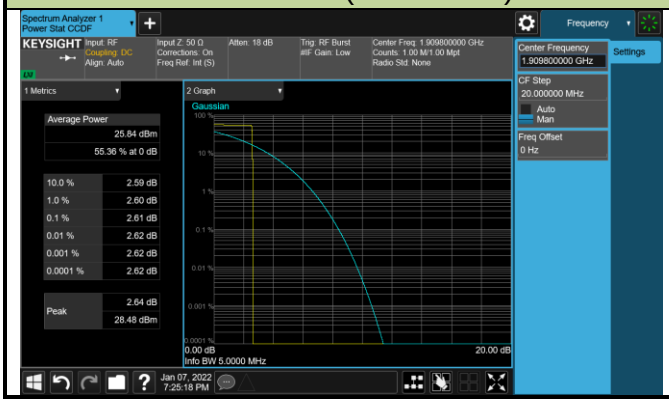
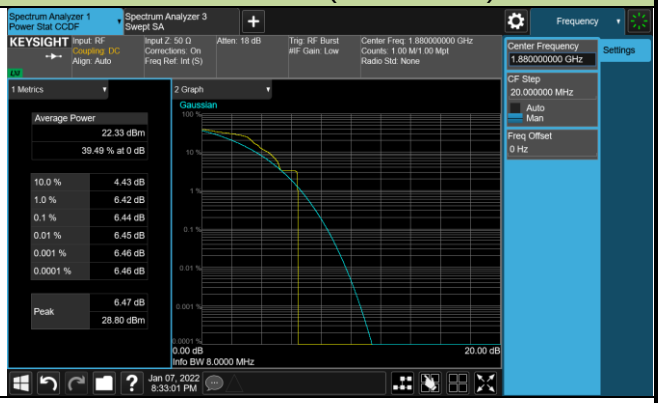
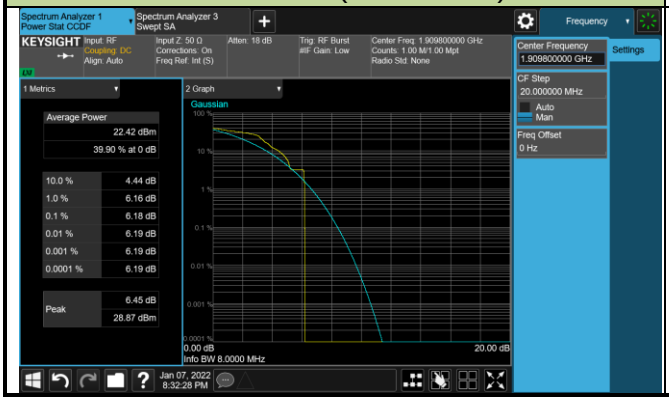
GSM 850_GPRS	
Channel 128 (824.2MHz)	Channel 189 (836.4MHz)
	
Channel 254 (848.8MHz)	
	

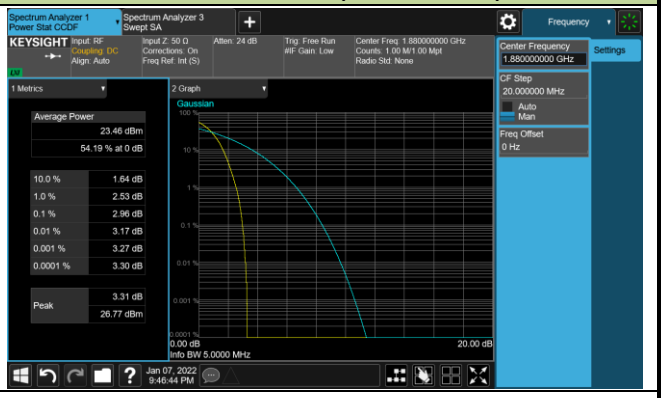
GSM 850_EGPRS	
Channel 128 (824.2MHz)	Channel 189 (836.4MHz)
	
Channel 254 (848.8MHz)	
	

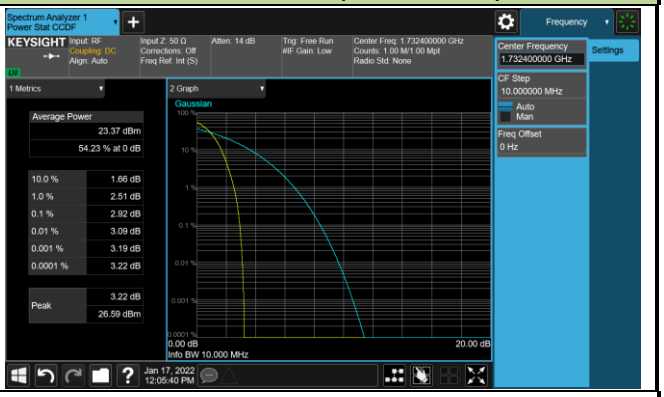
PCS 1900_GPRS	
Channel 512 (1850.2MHz)	Channel 661 (1880.0MHz)
	
Channel 810 (1909.8MHz)	
	

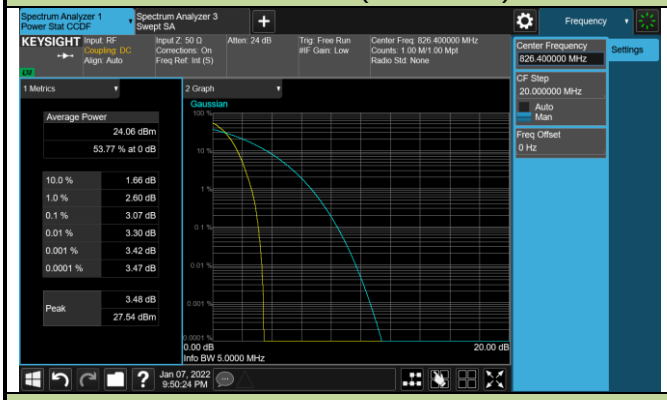
PCS 1900_EGPRS	
Channel 512 (1850.2MHz)	Channel 661 (1880.0MHz)
	
Channel 810 (1909.8MHz)	
	

Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2022/01/07 ~ 2022/01/17
Test Band	WCDMA Band II, IV, V		

Channel No.	Frequency (MHz)	Channel Bandwidth (MHz)	Peak to Average Ratio (dB)	Limit (dB)	Result
Band II					
9262	1852.4	5	2.94	≤ 13.00	Pass
9400	1880.0	5	2.96	≤ 13.00	Pass
9538	1907.6	5	3.01	≤ 13.00	Pass
Band IV					
1312	1712.4	5	2.93	≤ 13.00	Pass
1412	1732.4	5	2.92	≤ 13.00	Pass
1513	1752.6	5	3.09	≤ 13.00	Pass
Band V (Report Only)					
4132	826.4	5	3.07	≤ 13.00	Pass
4183	836.4	5	3.05	≤ 13.00	Pass
4233	846.6	5	2.96	≤ 13.00	Pass

WCDMA Band II	
Channel 9262 (1852.4MHz)	Channel 9400 (1880.0MHz)
	
Channel 9538 (1907.6MHz)	
	

WCDMA Band IV	
Channel 1312 (1712.4MHz)	Channel 1412 (1732.4MHz)
	
Channel 1513 (1752.6MHz)	
	

WCDMA Band V	
Channel 4132 (826.4MHz)	Channel 4183 (836.4MHz)
	
Channel 4233 (846.6MHz)	
	

5.7. Conducted Spurious Emission Measurement

5.7.1.Test Limit

The level of the carrier and the various conducted spurious and harmonic frequencies is measured by means of a calibrated spectrum analyzer. The spectrum is scanned from the Low frequency generated in the equipment up to a frequency including its 10^{th} harmonic. All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst-case configuration. All modes of operation were investigated and the worst-case configuration results are reported in this section.

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.

5.7.2.Test Procedure

ANSI C63.26-2015 - Section 5.7

5.7.3.Test Setting

1. Set the analyzer frequency to low, mid, high channel.
2. RBW = 1MHz
3. VBW ≥ 3*RBW
4. Sweep time = auto
5. Detector = power averaging (rms)
6. Set sweep trigger to “free run.”
7. User gate triggered such that the analyzer only sweeps when the device is transmitting at full power.
8. Trace average at least 100 traces in power averaging (rms) mode if sweep is set to auto-couple. To accurately determine the average power over the on and off time of the transmitter, it can be necessary to increase the number of traces to be averaged above 100, or if using a manually configured sweep time, increase the sweep time.

5.7.4.Test Setup

5.7.5.Test Result

Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2022/01/07
Test Band	GSM 850, PCS 1900		

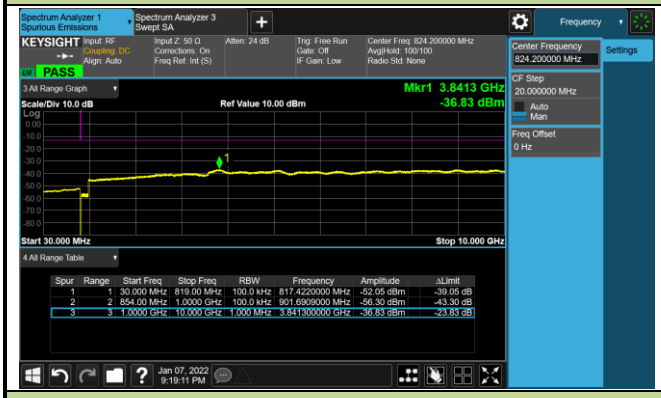
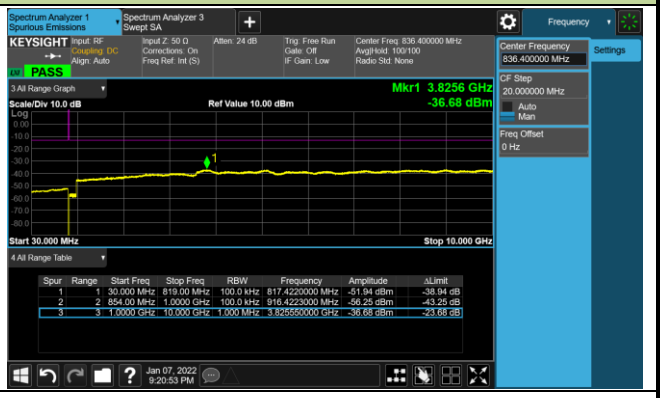
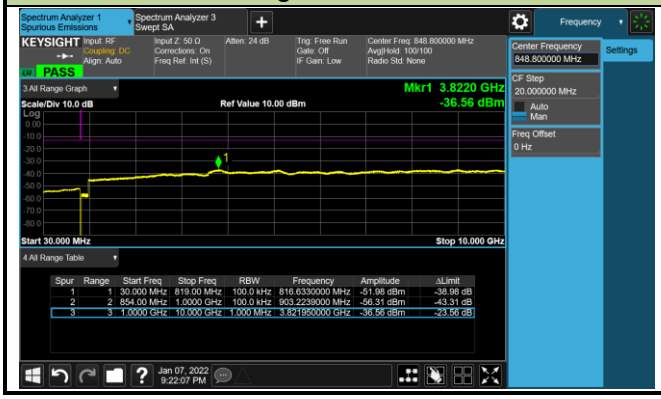
Mode (GPRS)	Frequency (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
GSM 850	824.2	30 ~ 10000	-36.83	≤ -13.00	Pass
	836.4	30 ~ 10000	-36.68	≤ -13.00	Pass
	848.8	30 ~ 10000	-36.56	≤ -13.00	Pass
PCS 1900	1850.2	30 ~ 20000	-37.58	≤ -13.00	Pass
	1880.0	30 ~ 20000	-37.50	≤ -13.00	Pass
	1909.8	30 ~ 20000	-37.54	≤ -13.00	Pass

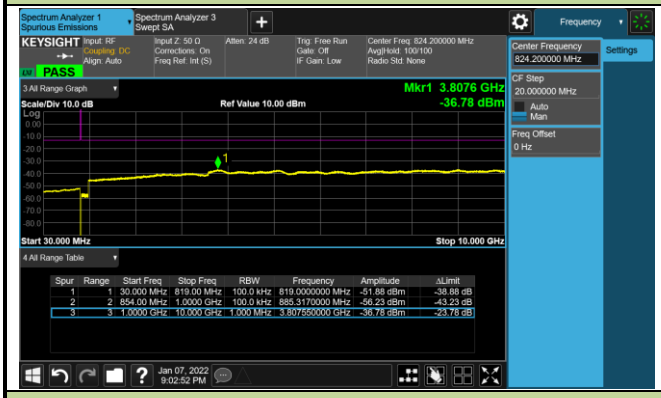
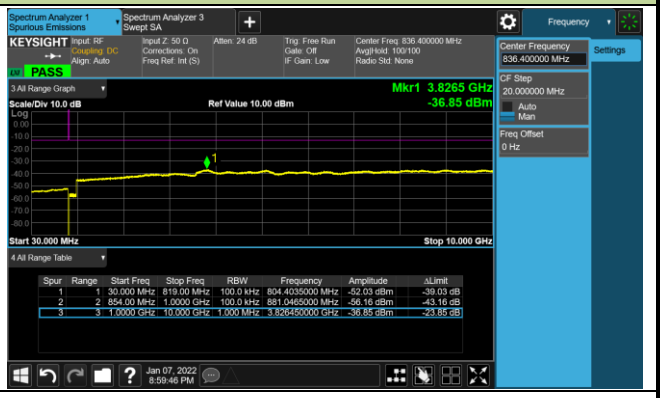
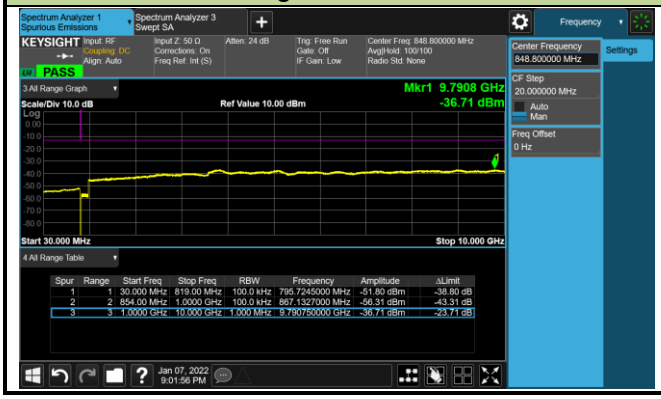
Note: Spurious emissions within 9kHz – 30MHz were found more than 20dB below limit line.

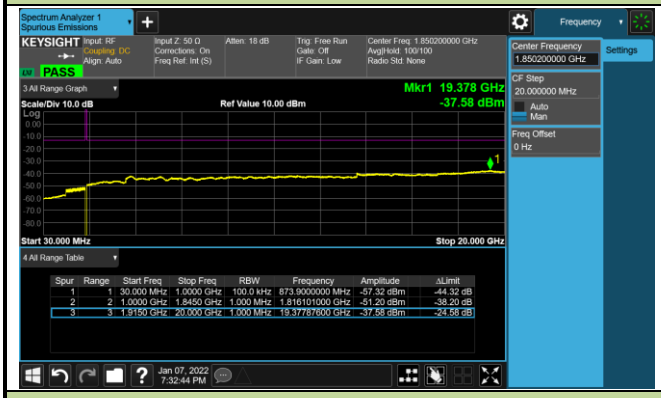
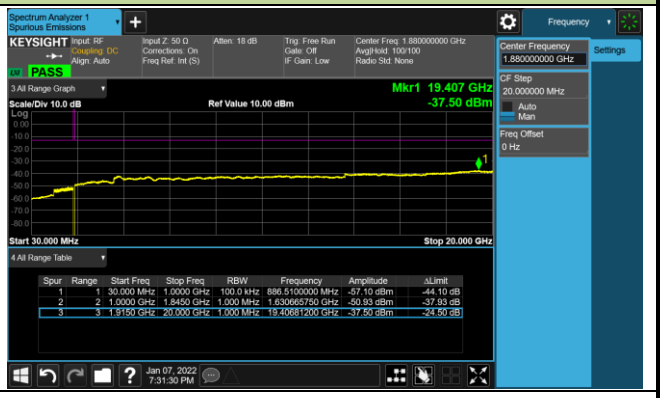
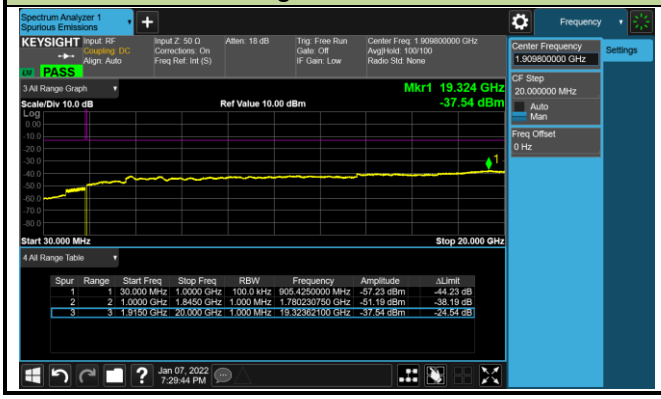
Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2022/01/07
Test Band	GSM 850, PCS 1900		

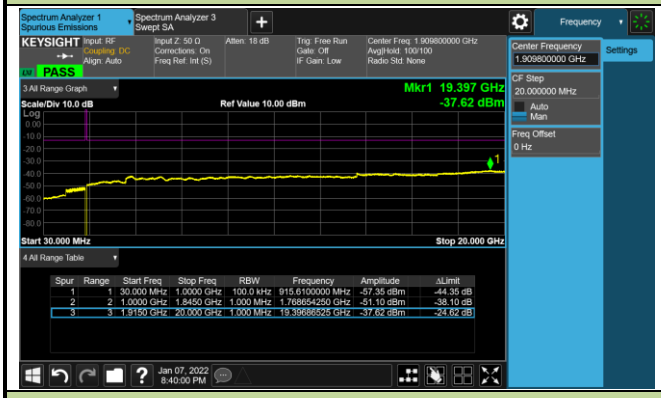
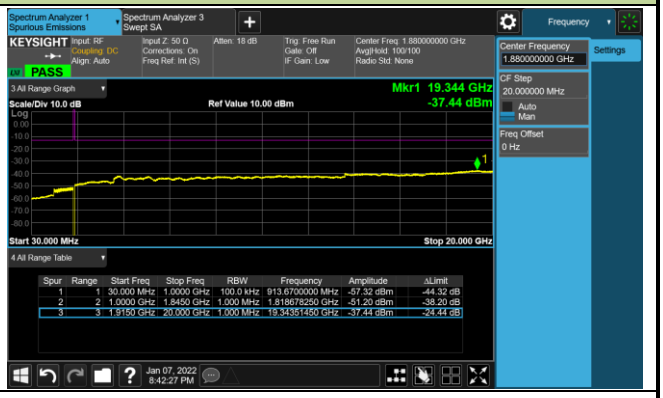
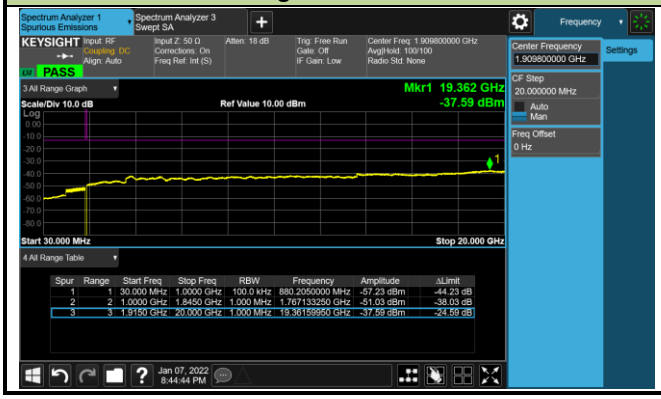
Mode (EGPRS)	Frequency (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
GSM 850	824.2	30 ~ 10000	-36.78	≤ -13.00	Pass
	836.4	30 ~ 10000	-36.85	≤ -13.00	Pass
	848.8	30 ~ 10000	-36.71	≤ -13.00	Pass
PCS 1900	1850.2	30 ~ 20000	-37.62	≤ -13.00	Pass
	1880.0	30 ~ 20000	-37.44	≤ -13.00	Pass
	1909.8	30 ~ 20000	-37.59	≤ -13.00	Pass

Note: Spurious emissions within 9kHz – 30MHz were found more than 20dB below limit line.

GSM 850_GPRS	
Low Channel	Middle Channel
	
High Channel	
	

GSM 850_EGPRS	
Low Channel	Middle Channel
	
High Channel	
	

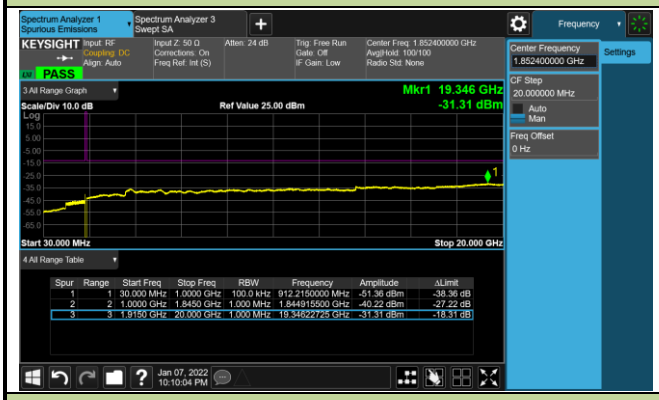
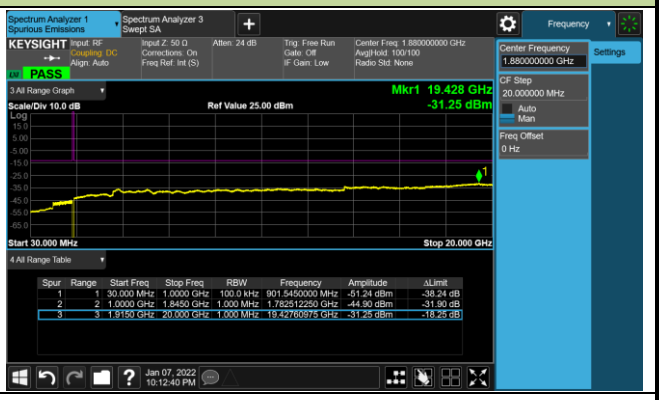
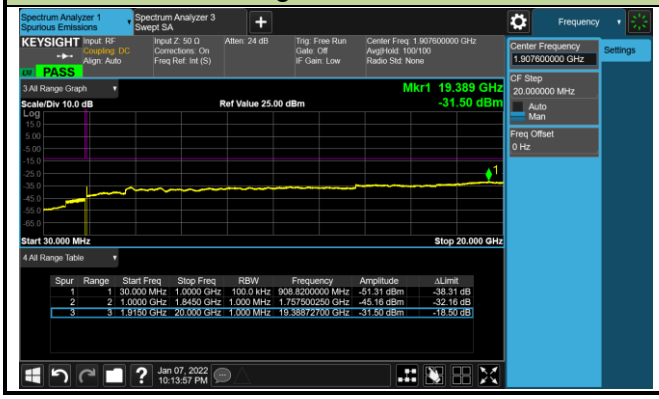
PCS 1900_GPRS	
Low Channel	Middle Channel
	
High Channel	
	

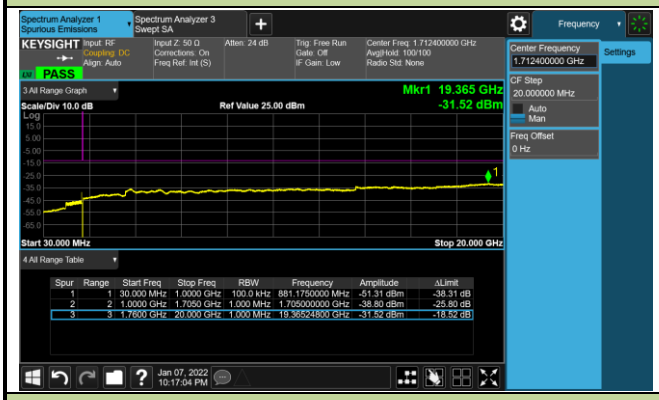
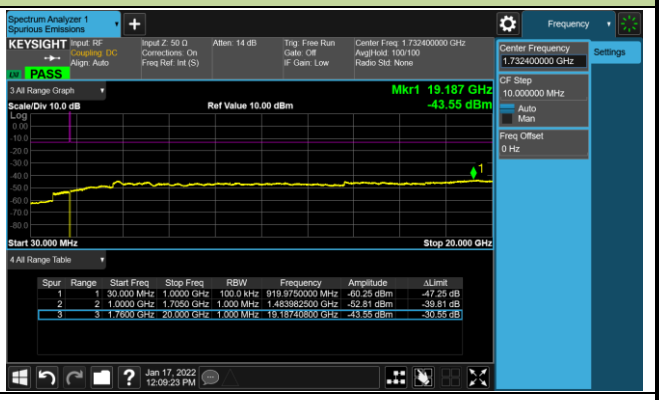
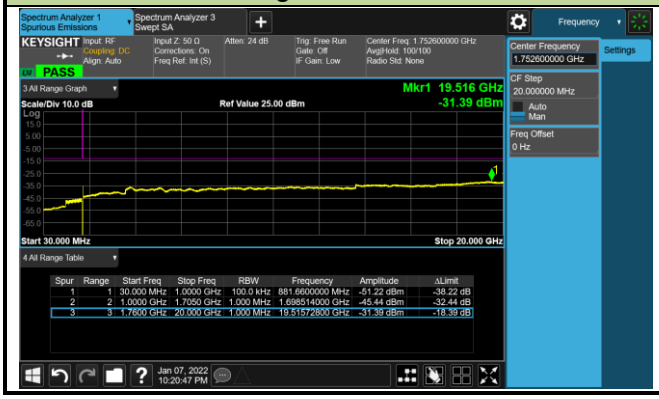
PCS 1900_EGPRS	
Low Channel	Middle Channel
	
High Channel	
	

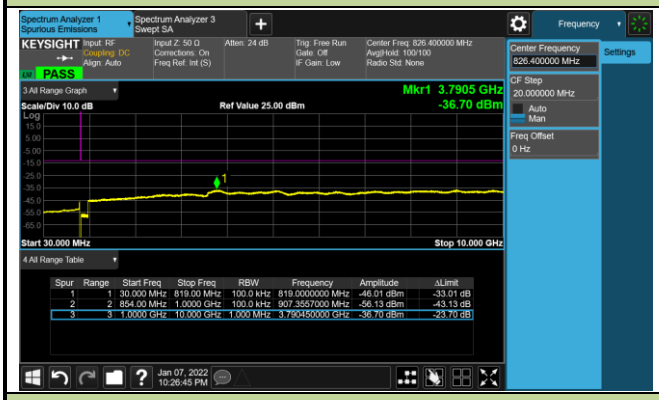
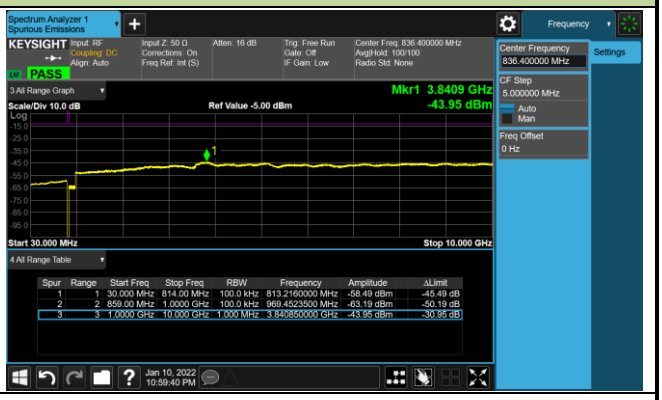
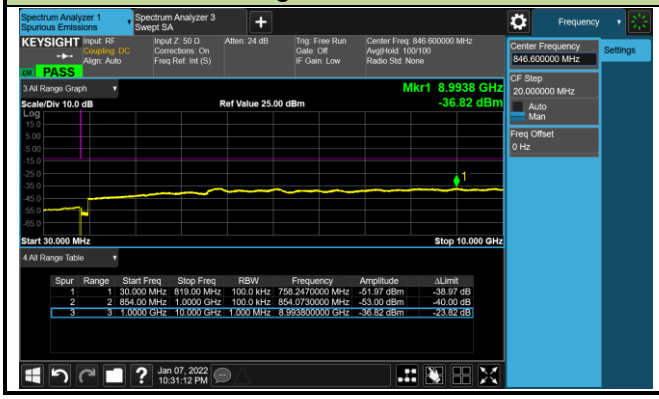
Product	Mobile Computer	Test Site	SIP-SR1
Test Engineer	Candy Luo	Test Date	2022/01/07 ~ 2022/01/17
Test Band	WCDMA Band II, IV, V		

Mode	Frequency (MHz)	Frequency Range (MHz)	Max Spurious Emissions (dBm)	Limit (dBm)	Result
WCDMA Band II	1852.4	30 ~ 20000	-31.31	≤ -13.00	Pass
	1880.0	30 ~ 20000	-31.25	≤ -13.00	Pass
	1907.6	30 ~ 20000	-31.50	≤ -13.00	Pass
WCDMA Band IV	1712.4	30 ~ 20000	-31.52	≤ -13.00	Pass
	1732.4	30 ~ 20000	-43.55	≤ -13.00	Pass
	1752.6	30 ~ 20000	-31.39	≤ -13.00	Pass
WCDMA Band V	826.4	30 ~ 10000	-36.70	≤ -13.00	Pass
	836.4	30 ~ 10000	-43.95	≤ -13.00	Pass
	846.6	30 ~ 10000	-36.82	≤ -13.00	Pass

Note: Spurious emissions within 9kHz – 30MHz were found more than 20dB below limit line.

WCDMA Band II	
Low Channel	Middle Channel
	
High Channel	
	

WCDMA Band IV	
Low Channel	Middle Channel
	
High Channel	
	

WCDMA Band V	
Low Channel	Middle Channel
	
High Channel	
	

5.8. Radiated Spurious Emission Measurement

5.8.1.Test Limit

Out of band emissions: The powerof any emission outside of theauthorized operating frequency ranges must be attenuated below the transmitting power (P) by a factorof at least 43 + 10 log(P) dB. The emission limit equal to -13dBm.

E (dBμV/m) = EIRP (dBm) - 20 log D + 104.8; where D is the measurement distance in meters. The emission limit equal to 82.3dBμV/m.

5.8.2.Test Procedure

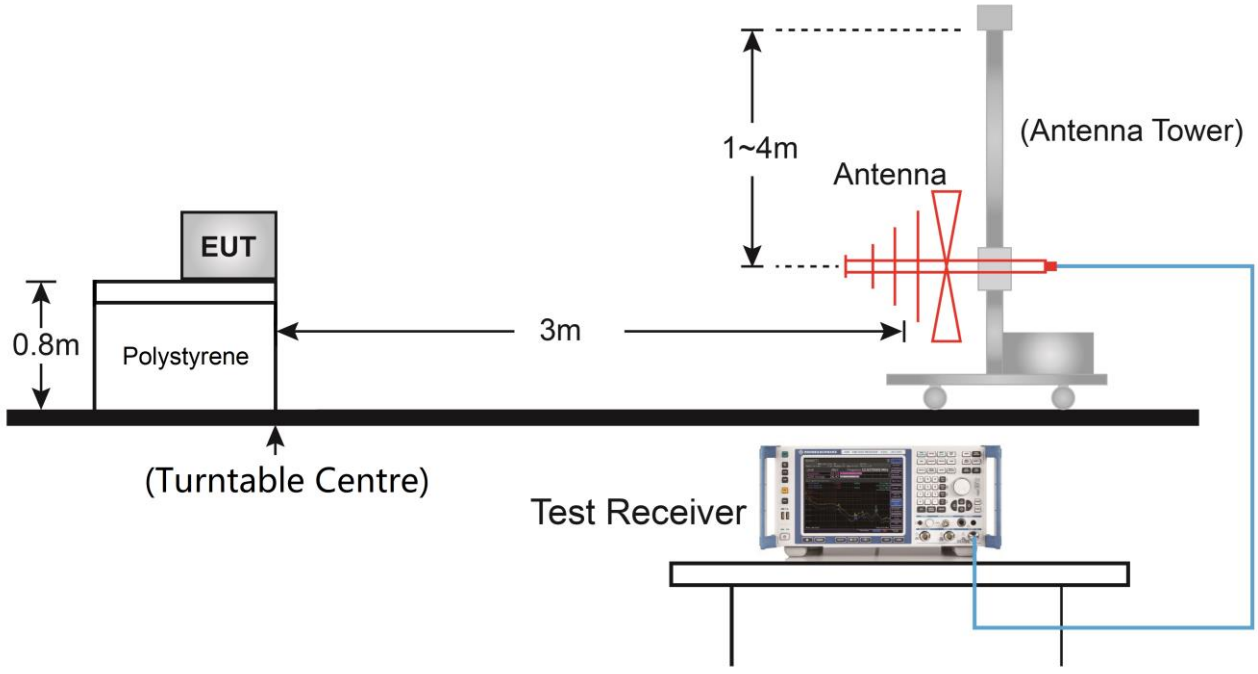
ANSI C63.26-2015 - Section 5.2.7 & 5.5

5.8.3.Test Setting

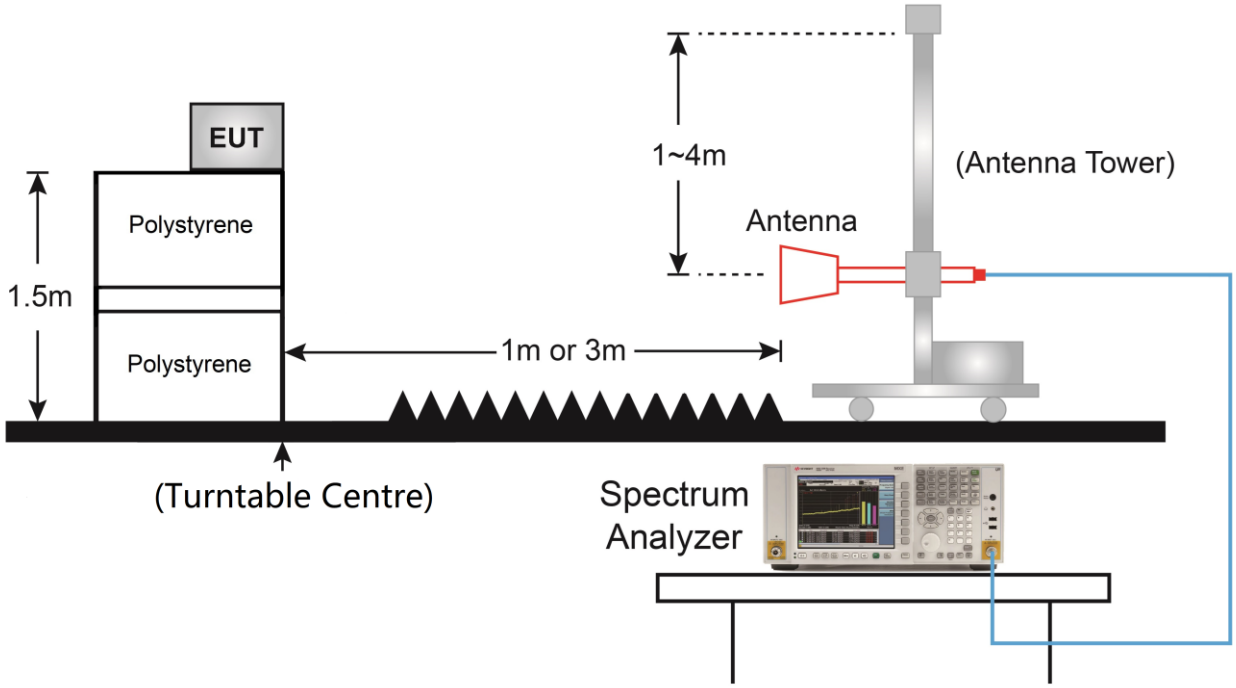
1. RBW = 1MHz
2. VBW ≥ 3*RBW
3. Sweep time ≥ 10 × (number of points in sweep) × (transmission symbol period)
4. Detector = Peak
5. Trace mode = max hold
6. The trace was allowed to stabilize

5.8.4.Test Setup

Below 1GHz Test Setup:



Above 1GHz Test Setup:



5.8.5.Test Result

Product	Mobile Computer	Test Site	SIP-AC3
Test Engineer	Kyrie Xie	Test Date	2022/01/24
Test Band	GSM 850		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
756.0	21.8	27.9	49.7	82.3	-32.6	Peak	Horizontal
973.8	21.2	30.0	51.2	82.3	-31.1	Peak	Horizontal
742.5	21.3	27.7	49.0	82.3	-33.3	Peak	Vertical
979.1	21.8	30.0	51.8	82.3	-30.5	Peak	Vertical
14753.0	45.4	2.9	48.3	82.3	-34.0	Peak	Horizontal
17558.0	44.2	7.2	51.4	82.3	-30.9	Peak	Horizontal
3295.0	54.5	-13.0	41.5	82.3	-40.8	Peak	Vertical
4119.5	52.8	-10.9	41.9	82.3	-40.4	Peak	Vertical
Middle Channel							
734.7	21.4	27.3	48.7	82.3	-33.6	Peak	Horizontal
980.6	22.4	30.0	52.4	82.3	-29.9	Peak	Horizontal
735.2	22.4	27.4	49.8	82.3	-32.5	Peak	Vertical
925.8	22.2	29.7	51.9	82.3	-30.4	Peak	Vertical
3346.0	59.1	-13.3	45.8	82.3	-36.5	Peak	Horizontal
4179.0	55.7	-11.4	44.3	82.3	-38.0	Peak	Horizontal
3346.0	56.1	-13.3	42.8	82.3	-39.5	Peak	Vertical
4179.0	56.6	-11.4	45.2	82.3	-37.1	Peak	Vertical
High Channel							
810.9	22.2	28.8	51.0	82.3	-31.3	Peak	Horizontal
954.4	22.9	30.1	53.0	82.3	-29.3	Peak	Horizontal
808.4	22.9	28.8	51.7	82.3	-30.6	Peak	Vertical
938.9	22.7	30.0	52.7	82.3	-29.6	Peak	Vertical
3397.0	58.4	-12.7	45.7	82.3	-36.6	Peak	Horizontal
17362.5	44.7	6.9	51.6	82.3	-30.7	Peak	Horizontal
4247.0	56.1	-11.2	44.9	82.3	-37.4	Peak	Vertical
17243.5	43.8	7.4	51.2	82.3	-31.1	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Product	Mobile Computer	Test Site	SIP-AC3
Test Engineer	Kyrie Xie	Test Date	2022/01/24
Test Band	PCS 1900		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
786.6	2.8	28.0	30.8	82.3	-51.5	Peak	Horizontal
934.5	2.2	29.7	31.9	82.3	-50.4	Peak	Horizontal
54.7	12.6	17.9	30.5	82.3	-51.8	Peak	Vertical
969.9	1.6	30.1	31.7	82.3	-50.6	Peak	Vertical
3703.0	54.6	-12.1	42.5	82.3	-39.8	Peak	Horizontal
17345.5	44.1	7.4	51.5	82.3	-30.8	Peak	Horizontal
13886.0	46.6	0.3	46.9	82.3	-35.4	Peak	Vertical
17235.0	44.2	7.5	51.7	82.3	-30.6	Peak	Vertical
Middle Channel							
907.9	3.2	29.2	32.4	82.3	-49.9	Peak	Horizontal
977.2	2.5	30.1	32.6	82.3	-49.7	Peak	Horizontal
47.9	13.1	17.8	30.9	82.3	-51.4	Peak	Vertical
965.1	2.3	30.0	32.3	82.3	-50.0	Peak	Vertical
12228.5	47.1	-2.4	44.7	82.3	-37.6	Peak	Horizontal
16742.0	43.9	6.6	50.5	82.3	-31.8	Peak	Horizontal
12109.5	48.4	-2.6	45.8	82.3	-36.5	Peak	Vertical
17022.5	44.7	5.9	50.6	82.3	-31.7	Peak	Vertical
High Channel							
755.1	3.8	27.9	31.7	82.3	-50.6	Peak	Horizontal
979.1	3.2	30.0	33.2	82.3	-49.1	Peak	Horizontal
49.4	13.3	17.9	31.2	82.3	-51.1	Peak	Vertical
956.8	2.8	29.9	32.7	82.3	-49.6	Peak	Vertical
13962.5	46.6	0.6	47.2	82.3	-35.1	Peak	Horizontal
17235.0	43.3	7.5	50.8	82.3	-31.5	Peak	Horizontal
16138.5	44.3	4.9	49.2	82.3	-33.1	Peak	Vertical
18000.0	43.2	8.5	51.7	82.3	-30.6	Peak	Vertical
Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).							

Product	Mobile Computer	Test Site	SIP-AC3
Test Engineer	Kyrie Xie	Test Date	2022/01/24
Test Band	WCDMA Band II		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
54.7	4.1	17.9	22.0	82.3	-60.3	Peak	Horizontal
819.1	3.2	28.9	32.1	82.3	-50.2	Peak	Horizontal
48.4	14.3	17.9	32.2	82.3	-50.1	Peak	Vertical
922.4	2.4	29.7	32.1	82.3	-50.2	Peak	Vertical
3711.5	58.7	-12.2	46.5	82.3	-35.8	Peak	Horizontal
17753.5	44.2	6.9	51.1	82.3	-31.2	Peak	Horizontal
3703.0	57.1	-12.1	45.0	82.3	-37.3	Peak	Vertical
7409.0	52.2	-6.2	46.0	82.3	-36.3	Peak	Vertical
Middle Channel							
820.6	1.8	28.9	30.7	82.3	-51.6	Peak	Horizontal
937.9	2.2	29.9	32.1	82.3	-50.2	Peak	Horizontal
47.9	13.5	17.8	31.3	82.3	-51.0	Peak	Vertical
54.7	13.7	17.9	31.6	82.3	-50.7	Peak	Vertical
3762.5	60.9	-11.8	49.1	82.3	-33.2	Peak	Horizontal
17107.5	45.3	6.6	51.9	82.3	-30.4	Peak	Horizontal
3754.0	57.1	-11.7	45.4	82.3	-36.9	Peak	Vertical
17235.0	44.1	7.5	51.6	82.3	-30.7	Peak	Vertical
High Channel							
137.2	8.3	17.3	25.6	82.3	-56.7	Peak	Horizontal
944.2	2.2	29.9	32.1	82.3	-50.2	Peak	Horizontal
48.4	14.5	17.9	32.4	82.3	-49.9	Peak	Vertical
54.7	13.8	17.9	31.7	82.3	-50.6	Peak	Vertical
3813.5	58.5	-11.5	47.0	82.3	-35.3	Peak	Horizontal
16946.0	44.2	7.2	51.4	82.3	-30.9	Peak	Horizontal
3813.5	57.4	-11.5	45.9	82.3	-36.4	Peak	Vertical
7630.0	51.9	-5.9	46.0	82.3	-36.3	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)

Product	Mobile Computer	Test Site	SIP-AC3
Test Engineer	Kyrie Xie	Test Date	2022/01/24
Test Band	WCDMA Band IV		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
137.2	7.0	17.3	24.3	82.3	-58.0	Peak	Horizontal
993.2	2.9	30.1	33.0	82.3	-49.3	Peak	Horizontal
54.7	14.5	17.9	32.4	82.3	-49.9	Peak	Vertical
996.6	2.8	30.0	32.8	82.3	-49.5	Peak	Vertical
14855.0	45.8	2.5	48.3	82.3	-34.0	Peak	Horizontal
17566.5	43.7	7.2	50.9	82.3	-31.4	Peak	Horizontal
6848.0	53.2	-6.8	46.4	82.3	-35.9	Peak	Vertical
16937.5	44.0	7.2	51.2	82.3	-31.1	Peak	Vertical
Middle Channel							
137.2	6.6	17.3	23.9	82.3	-58.4	Peak	Horizontal
952.0	2.4	30.0	32.4	82.3	-49.9	Peak	Horizontal
54.7	13.7	17.9	31.6	82.3	-50.7	Peak	Vertical
938.9	3.0	30.0	33.0	82.3	-49.3	Peak	Vertical
6958.5	51.8	-7.1	44.7	82.3	-37.6	Peak	Horizontal
16971.5	44.3	6.5	50.8	82.3	-31.5	Peak	Horizontal
6967.0	54.2	-7.0	47.2	82.3	-35.1	Peak	Vertical
8701.0	52.0	-4.6	47.4	82.3	-34.9	Peak	Vertical
High Channel							
803.6	2.6	28.6	31.2	82.3	-51.1	Peak	Horizontal
969.9	2.2	30.1	32.3	82.3	-50.0	Peak	Horizontal
54.7	13.8	17.9	31.7	82.3	-50.6	Peak	Vertical
980.1	2.5	30.0	32.5	82.3	-49.8	Peak	Vertical
7009.5	51.2	-6.6	44.6	82.3	-37.7	Peak	Horizontal
16750.5	43.8	6.5	50.3	82.3	-32.0	Peak	Horizontal
7018.0	54.1	-6.6	47.5	82.3	-34.8	Peak	Vertical
17158.5	44.3	6.1	50.4	82.3	-31.9	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)

Product	Mobile Computer	Test Site	SIP-AC3
Test Engineer	Kyrie Xie	Test Date	2022/01/24
Test Band	WCDMA Band V		

Frequency (MHz)	Reading Level (dBμV)	Factor (dB)	Measure Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Detector	Polarization
Low Channel							
757.0	22.0	27.9	49.9	82.3	-32.4	Peak	Horizontal
942.8	22.8	29.7	52.5	82.3	-29.8	Peak	Horizontal
702.7	23.5	27.0	50.5	82.3	-31.8	Peak	Vertical
980.1	21.8	30.0	51.8	82.3	-30.5	Peak	Vertical
13767.0	47.2	0.8	48.0	82.3	-34.3	Peak	Horizontal
17379.5	44.9	6.7	51.6	82.3	-30.7	Peak	Horizontal
14498.0	46.3	2.1	48.4	82.3	-33.9	Peak	Vertical
16946.0	43.6	7.2	50.8	82.3	-31.5	Peak	Vertical
Middle Channel							
772.5	21.7	27.9	49.6	82.3	-32.7	Peak	Horizontal
972.4	22.0	30.1	52.1	82.3	-30.2	Peak	Horizontal
769.1	21.5	27.9	49.4	82.3	-32.9	Peak	Vertical
955.4	22.0	30.1	52.1	82.3	-30.2	Peak	Vertical
13741.5	46.3	0.4	46.7	82.3	-35.6	Peak	Horizontal
17218.0	44.4	6.4	50.8	82.3	-31.5	Peak	Horizontal
14498.0	45.4	2.1	47.5	82.3	-34.8	Peak	Vertical
17838.5	44.3	7.1	51.4	82.3	-30.9	Peak	Vertical
High Channel							
781.3	21.6	28.0	49.6	82.3	-32.7	Peak	Horizontal
959.3	23.0	29.9	52.9	82.3	-29.4	Peak	Horizontal
726.5	22.3	26.9	49.2	82.3	-33.1	Peak	Vertical
933.6	22.5	29.8	52.3	82.3	-30.0	Peak	Vertical
13869.0	46.0	1.1	47.1	82.3	-35.2	Peak	Horizontal
16929.0	43.8	7.2	51.0	82.3	-31.3	Peak	Horizontal
10188.5	49.3	-4.0	45.3	82.3	-37.0	Peak	Vertical
16937.5	43.3	7.2	50.5	82.3	-31.8	Peak	Vertical

Note: Measure Level (dBμV/m) = Reading Level (dBμV) + Factor (dB).

Factor (dB/m) = Cable Loss (dB) + Antenna Factor (dB/m)

Appendix A - Test Setup Photograph

Refer to “2112RSU039-UT” file.

Appendix B - EUT Photograph

Refer to “2112RSU039-UE” file.

The End