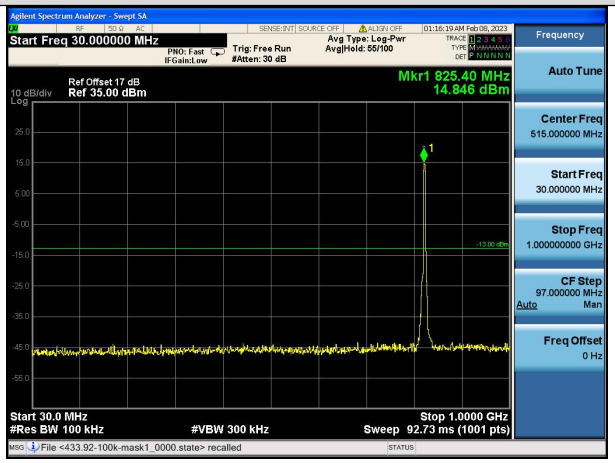
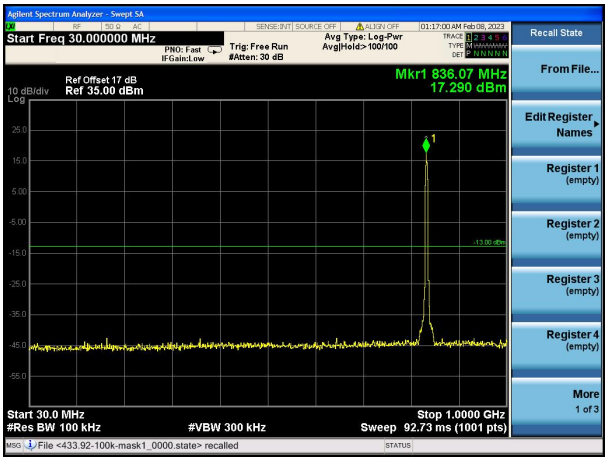
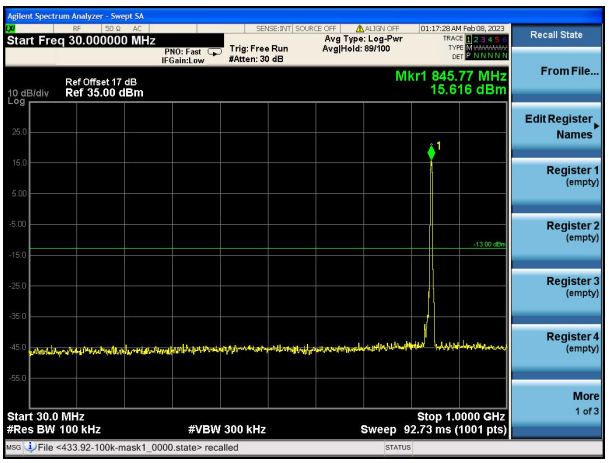
Test Mode: Traffic mode	WCDMA Band V (RMC 12.2Kbps link)



Lowest channel

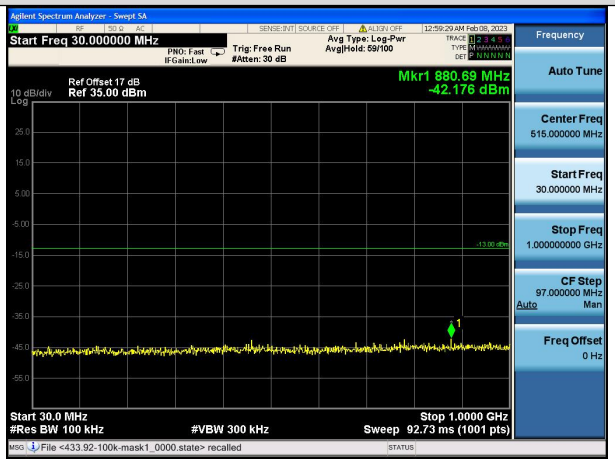


Middle channel

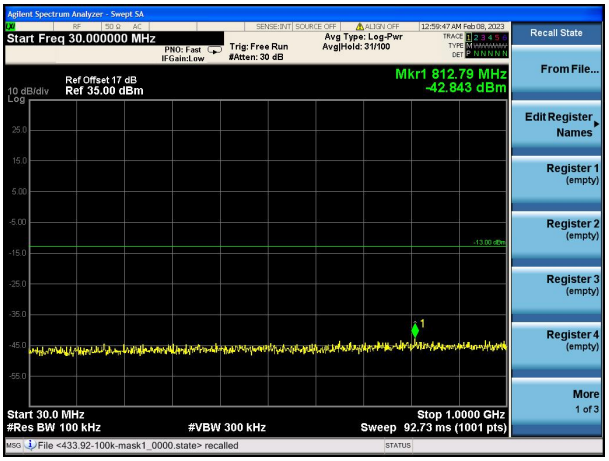


Highest channel

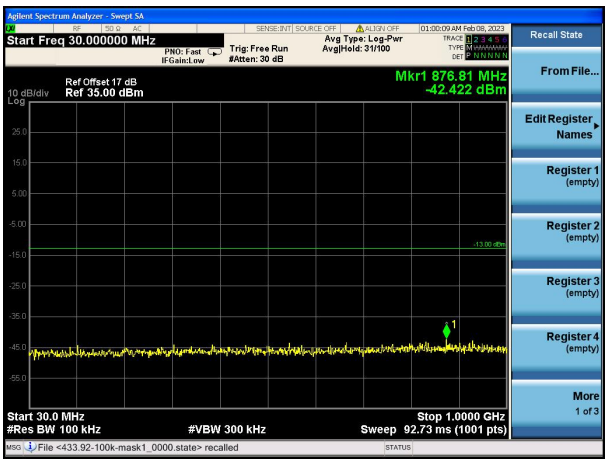
Test Mode: Traffic mode	WCDMA Band II (RMC 12.2Kbps link)



Lowest channel

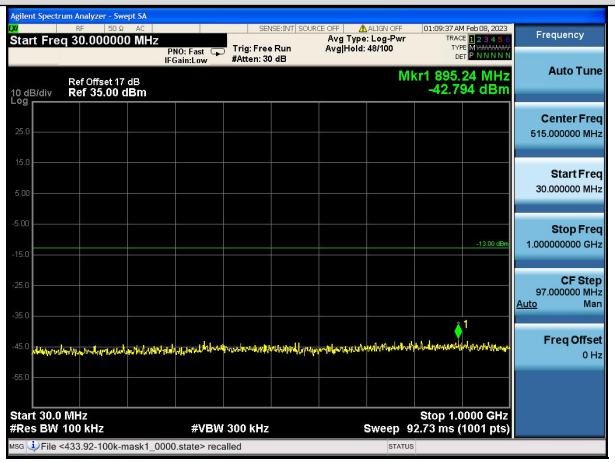


Middle channel

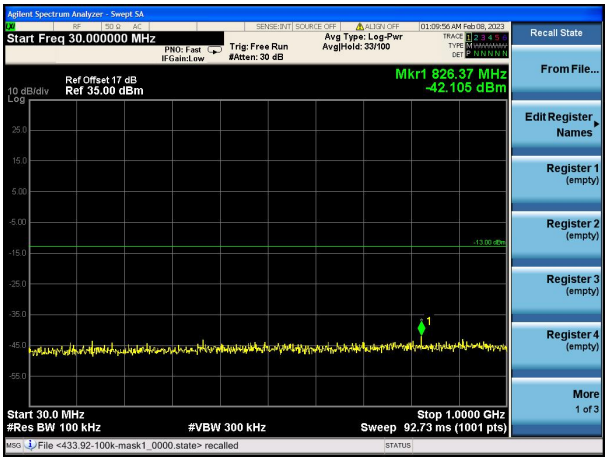


Highest channel

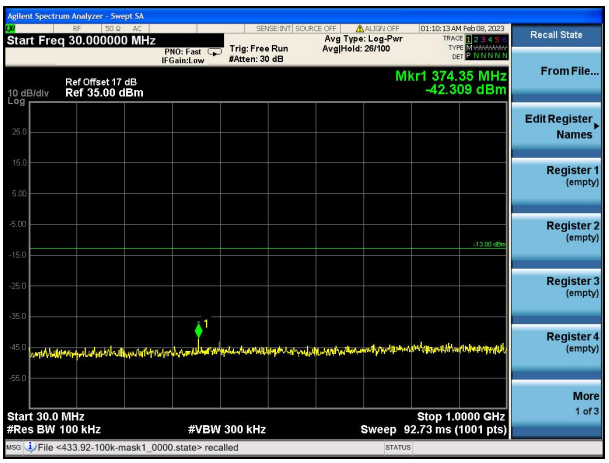
Test Mode: Traffic mode	WCDMA Band IV (RMC 12.2Kbps link)



Lowest channel



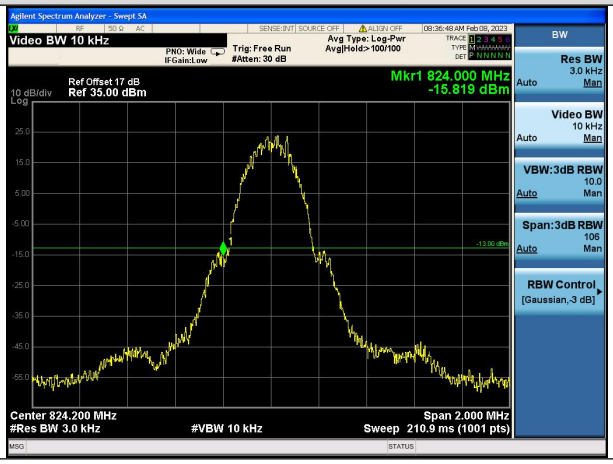
Middle channel

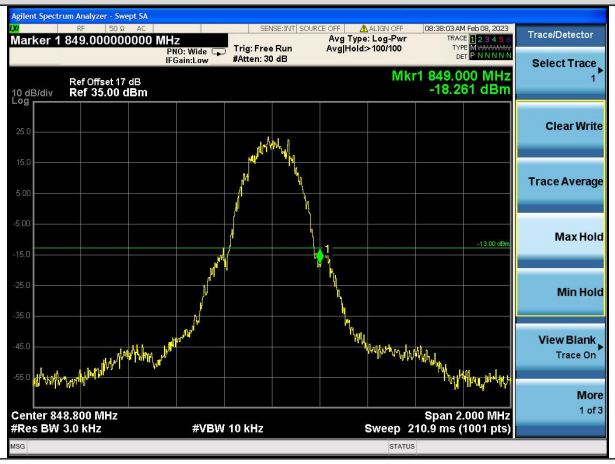


Highest channel

Band Edge:

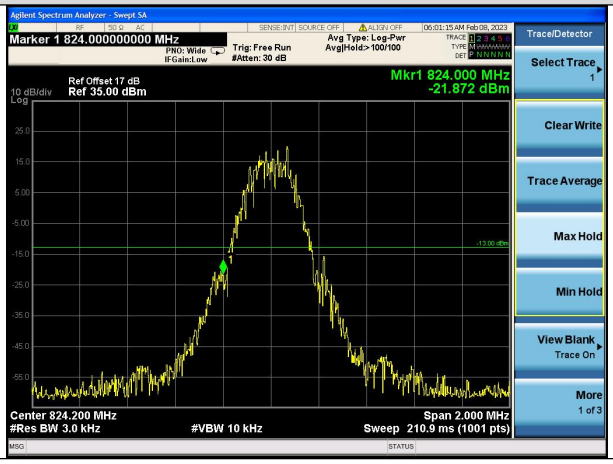
Test Mode: Traffic mode	GSM850 (GSM link)

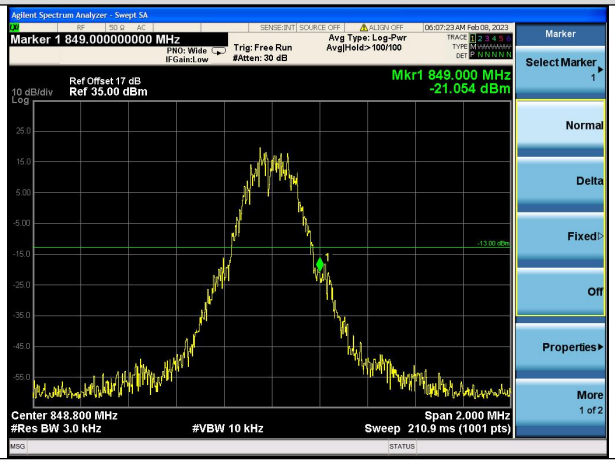




Lowest channel | Highest channel

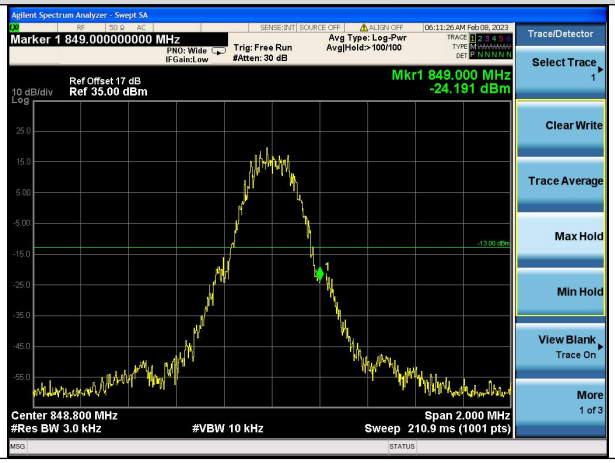
Test Mode: Traffic mode	GSM850 (GPRS 1 link)





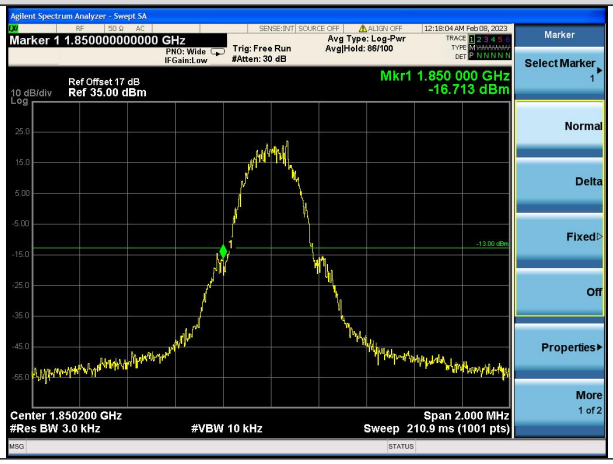
Lowest channel | Highest channel

Test Mode: Traffic mode	GSM850 (EGPRS 1 link)

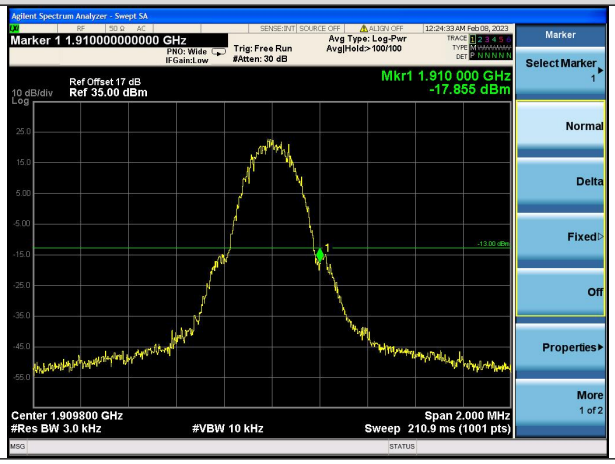


Lowest channel | Highest channel

Test Mode: Traffic mode	PCS1900 (GSM link)

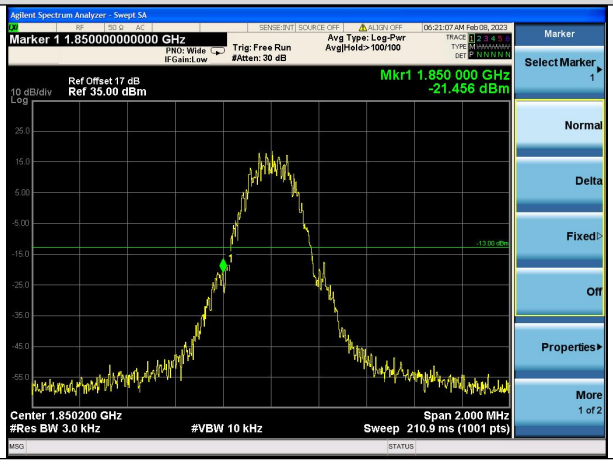


Lowest channel

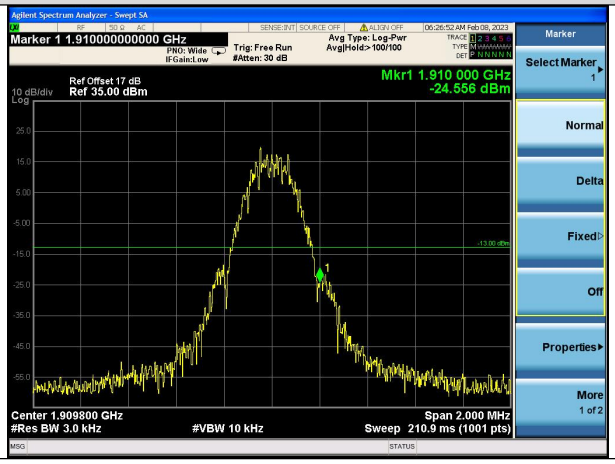


Highest channel

Test Mode: Traffic mode	PCS1900 (GPRS 1 link)

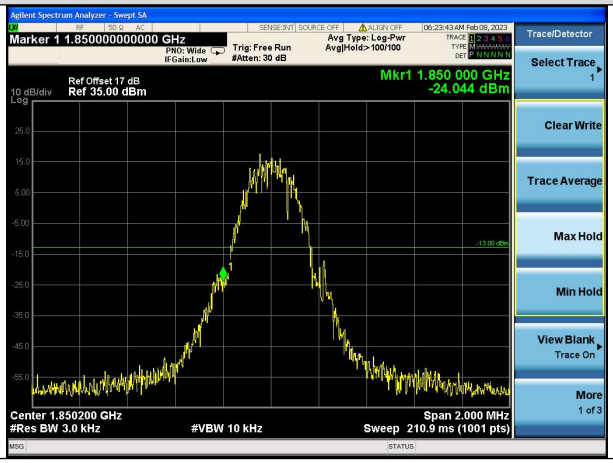


Lowest channel

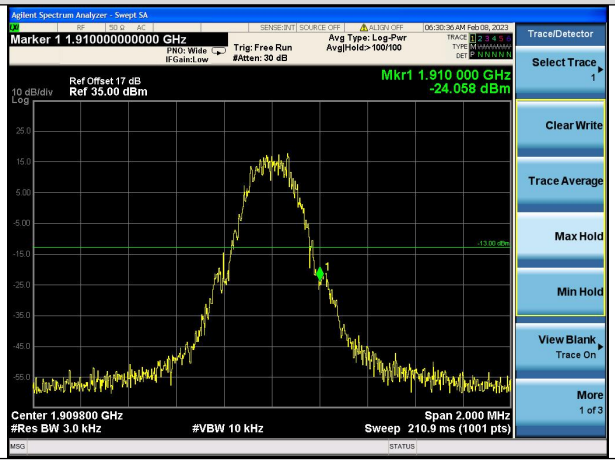


Highest channel

Test Mode: Traffic mode	PCS1900 (EGPRS 1 link)



Lowest channel



Highest channel

Test Mode: Traffic mode	WCDMA Band V (RMC 12.2Kbps link)

Lowest channel

Highest channel

Test Mode: Traffic mode	WCDMA Band II (RMC 12.2Kbps link)

Lowest channel

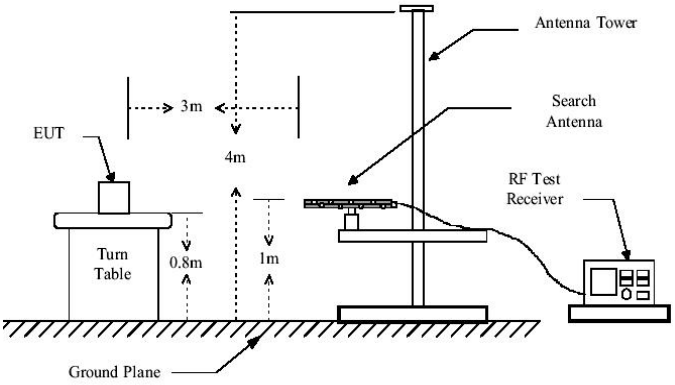
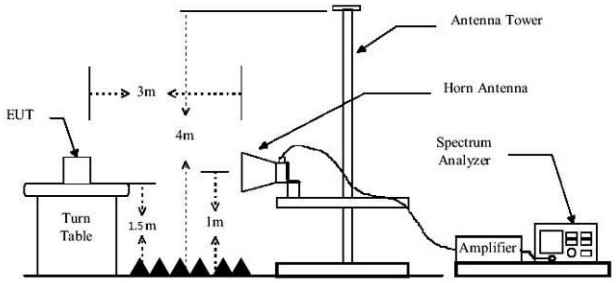
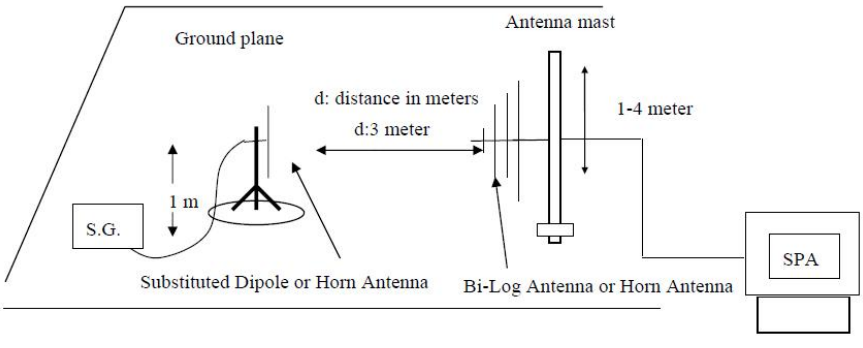
Highest channel

Test Mode: Traffic mode	WCDMA Band IV (RMC 12.2Kbps link)

Lowest channel

Highest channel

4.8 ERP, EIRP Measurement

Test Requirement:	FCC part22.913(a) and FCC part24.232(b)
Test Method:	FCC part2.1046
Limit:	GSM850, WCDMA Band V: 7W PCS1900, WCDMA Band II: 2W WCDMA Band IV: 1W
Test setup:	Below 1GHz  Above 1GHz  Substituted method: 

Test Procedure:	1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the measurement, the EUT was communication with the station. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna from 4m to 1m. The reading was recorded and the field strength (E in dBuV/m) was calculated. 3. ERP in frequency band 824.2 –848.80.8MHz were measured using a substitution method. The EUT was replaced by dipole antenna connected, the S.G. output was recorded and ERP was calculated asfollows: ERP = S.G. output (dBm) + Antenna Gain (dBd) – Cable Loss (dB) 4. EIRP in frequency band 1850.2 –1909.8MHz were measured using a substitution method. The EUT was replaced by or horn antenna connected, the S.G. output was recorded and EIRP was calculated as follows: EIRP = S.G. output (dBm) + Antenna Gain (dBi) – Cable Loss (dB)
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

Measurement Data

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
GSM850 (GSM link)	Lowest	H	V	32.83	38.45	Pass
			H	30.42		
		E1	V	31.94		
			H	30.31		
		E2	V	32.48		
			H	29.66		
	Middle	H	V	33.16	38.45	Pass
			H	30.42		
		E1	V	32.98		
			H	30.03		
		E2	V	32.83		
			H	30.11		
	Highest	H	V	32.22	38.45	Pass
			H	29.91		
		E1	V	32.49		
			H	29.59		
		E2	V	31.81		
			H	31.11		

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
GSM850 (GPRS 1 link)	Lowest	H	V	32.67	38.45	Pass
			H	30.86		
		E1	V	32.33		
			H	30.04		
		E2	V	32.26		
			H	30.08		
	Middle	H	V	32.73	38.45	Pass
			H	30.76		
		E1	V	32.5		
			H	30.34		
		E2	V	32.43		
			H	30.39		
	Highest	H	V	32.48	38.45	Pass
			H	30.36		
		E1	V	32.54		
			H	29.92		
		E2	V	32.11		
			H	30.82		

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
GSM850 (EGPRS 1 link)	Lowest	H	V	33.10	38.45	Pass
			H	30.69		
		E1	V	32.37		
			H	29.55		
		E2	V	32.02		
			H	30.23		
	Middle	H	V	32.80	38.45	Pass
			H	31.17		
		E1	V	32.11		
			H	30.62		
		E2	V	32.44		
			H	30.41		
	Highest	H	V	32.11	38.45	Pass
			H	30.81		
		E1	V	32.37		
			H	29.69		
		E2	V	32.00		
			H	31.30		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP (dBm)	Limit (dBm)	Result
PCS1900 (GSM link)	Lowest	H	V	32.24	33.01	Pass
			H	30.66		
		E1	V	32.39		
			H	30.45		
		E2	V	32.39		
			H	30.35		
	Middle	H	V	32.74	33.01	Pass
			H	30.80		
		E1	V	32.55		
			H	30.07		
		E2	V	32.67		
			H	29.98		
	Highest	H	V	32.07	33.01	Pass
			H	30.04		
		E1	V	32.90		
			H	30.10		
		E2	V	32.09		
			H	30.40		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP (dBm)	Limit (dBm)	Result
PCS1900 (GPRS 1 link)	Lowest	H	V	30.31	33.01	Pass
			H	28.32		
		E1	V	29.63		
			H	29.08		
		E2	V	30.05		
			H	28.50		
	Middle	H	V	30.44	33.01	Pass
			H	28.38		
		E1	V	30.33		
			H	28.34		
		E2	V	30.45		
			H	28.18		
	Highest	H	V	29.73	33.01	Pass
			H	28.39		
		E1	V	30.30		
			H	29.01		
		E2	V	29.69		
			H	28.25		

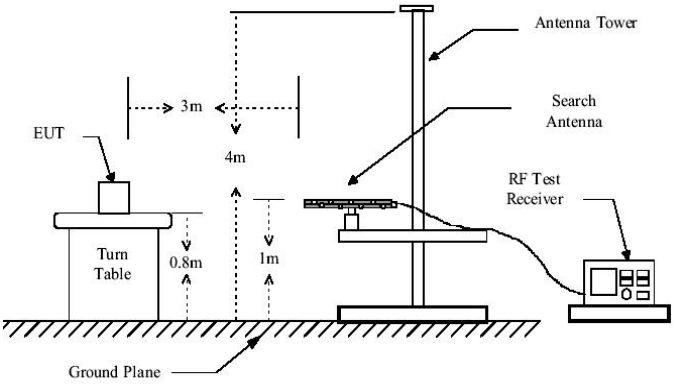
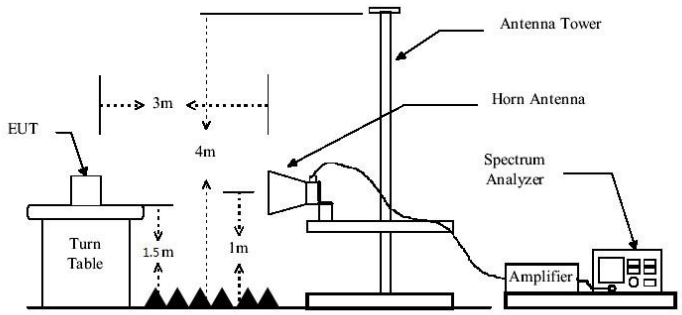
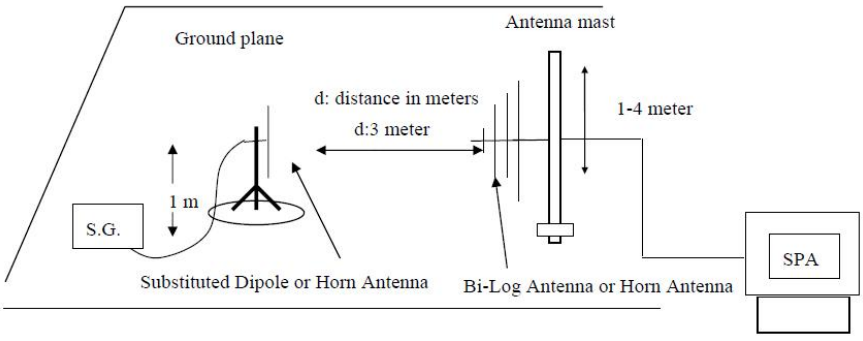
EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP (dBm)	Limit (dBm)	Result
PCS1900 (EGPRS 1 link)	Lowest	H	V	30.09	33.01	Pass
			H	28.71		
		E1	V	30.36		
			H	29.01		
		E2	V	30.36		
			H	27.87		
	Middle	H	V	30.47	33.01	Pass
			H	28.09		
		E1	V	30.04		
			H	28.89		
		E2	V	30.50		
			H	27.53		
	Highest	H	V	30.06	33.01	Pass
			H	28.07		
		E1	V	29.69		
			H	28.30		
		E2	V	29.15		
			H	27.98		

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
WCDMA Band V	Lowest	H	V	23.39	38.45	Pass
			H	23.29		
		E1	V	23.22		
			H	23.07		
		E2	V	23.37		
			H	23.05		
	Middle	H	V	23.59	38.45	Pass
			H	22.79		
		E1	V	23.82		
			H	23.27		
		E2	V	23.71		
			H	22.81		
	Highest	H	V	23.06	38.45	Pass
			H	22.42		
		E1	V	23.56		
			H	22.85		
		E2	V	23.65		
			H	22.50		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
WCDMA Band II	Lowest	H	V	24.38	33.01	Pass
			H	24.10		
		E1	V	23.77		
			H	23.80		
		E2	V	24.20		
			H	23.70		
	Middle	H	V	24.30	33.01	Pass
			H	24.40		
		E1	V	24.38		
			H	23.84		
		E2	V	23.63		
			H	23.61		
	Highest	H	V	24.49	33.01	Pass
			H	24.36		
		E1	V	24.45		
			H	24.27		
		E2	V	24.14		
			H	23.20		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
WCDMA Band IV	Lowest	H	V	24.19	33.01	Pass
			H	23.53		
		E1	V	24.13		
			H	22.97		
		E2	V	24.14		
			H	23.69		
	Middle	H	V	24.35	33.01	Pass
			H	23.66		
		E1	V	24.25		
			H	23.71		
		E2	V	24.11		
			H	23.89		
	Highest	H	V	24.14	33.01	Pass
			H	23.98		
		E1	V	24.45		
			H	23.42		
		E2	V	23.78		
			H	23.82		

4.9 Field strength of spurious radiation measurement

Test Requirement:	FCC part22.917(a) and FCC part24.238(a)
Test Method:	FCC part2.1053
Limit:	-13dBm
Test setup:	Below 1GHz  Above 1GHz  Substituted method: 

Test Procedure:	1. The EUT was placed on an non-conductive turntable using a non-conductive support. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and EMI spectrum analyzer. 2. During the tests, the antenna height and the EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. This maximization process was repeated with the EUT positioned in each of its three orthogonal orientations. 3. The frequency range up to tenth harmonic was investigated for each of three fundamental frequency (low, middle and high channels). Once spurious emission was identified, the power of the emission was determined using the substitution method. 4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency. ERP / EIRP = S.G. output (dBm) + Antenna Gain(dB/dBi) – Cable Loss (dB)
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

Measurement Data

Test mode:	GSM850		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1648.40	Vertical	-36.97	-13.00	Pass
2472.60	V	-39.91		
3296.80	V	-38.13		
4121.00	V	-43.61		
4945.20	V	---		
1648.40	Horizontal	-39.01	-13.00	Pass
2472.60	H	-42.46		
3296.80	H	-44.65		
4121.00	H	-45.66		
4945.20	H	---		
Test mode:	**GSM850**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1673.20	Vertical	-37.14	-13.00	Pass
2509.80	V	-39.71		
3346.40	V	-37.83		
4183.00	V	-43.78		
5019.60	V	---		
1673.20	Horizontal	-39.09	-13.00	Pass
2509.80	H	-42.29		
3346.40	H	-45.28		
4183.00	H	-46.14		
5019.60	H	---		
Test mode:	**GSM850**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1697.60	Vertical	-37.04	-13.00	Pass
2546.40	V	-39.30		
3395.20	V	-38.47		
4244.00	V	-42.81		
5092.80	V	---		
1697.60	Horizontal	-39.11	-13.00	Pass
2546.40	H	-42.98		
3395.20	H	-45.26		
4244.00	H	-45.86		
5092.80	H	---		

Remark：

1. The emission behaviour belongs to narrowband spurious emission.
2. Remark"---" means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

Test mode:	PCS1900		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3700.40	Vertical	-37.09	-13.00	Pass
5550.60	V	-39.24		
7400.80	V	-37.90		
9251.00	V	-43.07		
11101.20	V	---		
3700.40	Horizontal	-38.85	-13.00	Pass
5550.60	H	-42.97		
7400.80	H	-45.01		
9251.00	H	-45.92		
11101.20	H	---		
Test mode:	**PCS1900**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-37.30	-13.00	Pass
5640.00	V	-39.07		
7520.00	V	-38.35		
9400.00	V	-43.48		
11280.00	V	---		
3760.00	Horizontal	-39.35	-13.00	Pass
5640.00	H	-42.72		
7520.00	H	-45.26		
9400.00	H	-46.26		
11280.00	H	---		
Test mode:	**PCS1900**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3819.60	Vertical	-36.92	-13.00	Pass
5729.40	V	-39.83		
7639.20	V	-38.03		
9549.00	V	-43.78		
11458.80	V	---		
3819.60	Horizontal	-38.78	-13.00	Pass
5729.40	H	-42.60		
7639.20	H	-45.10		
9549.00	H	-45.69		
11458.80	H	---		

Remark：

1. The emission behaviour belongs to narrowband spurious emission.
2. Remark”---“ means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

Test mode:	WCDMA Band V		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1652.80	Vertical	-36.49	-13.00	Pass
2479.20	V	-39.28		
3305.60	V	-37.95		
4132.00	V	-43.03		
4958.40	V	---		
1652.80	Horizontal	-38.90	-13.00	Pass
2479.20	H	-42.32		
3305.60	H	-44.49		
4132.00	H	-46.31		
4958.40	H	---		
Test mode:	**WCDMA Band V**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1672.80	Vertical	-36.91	-13.00	Pass
2509.20	V	-39.79		
3345.60	V	-38.17		
4182.00	V	-43.45		
5018.40	V	---		
1672.80	Horizontal	-39.18	-13.00	Pass
2509.20	H	-42.45		
3345.60	H	-44.85		
4182.00	H	-46.30		
5018.40	H	---		
Test mode:	**WCDMA Band V**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1693.20	Vertical	-36.70	-13.00	Pass
2539.80	V	-39.73		
3386.40	V	-37.80		
4233.00	V	-43.09		
5079.60	V	---		
1693.20	Horizontal	-39.00	-13.00	Pass
2539.80	H	-42.81		
3386.40	H	-44.54		
4233.00	H	-46.04		
5079.60	H	---		

Remark：

1. The emission behaviour belongs to narrowband spurious emission.
2. Remark"---" means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

Test mode:	WCDMA Band II		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3704.80	Vertical	-39.41	-13.00	Pass
5557.20	V	-38.44		
7409.60	V	-43.44		
9262.00	V	---		
11114.40	V	-39.15		
3704.80	Horizontal	-42.33	-13.00	Pass
5557.20	H	-44.59		
7409.60	H	-46.23		
9262.00	H	-39.41		
11114.40	H	---		
Test mode:	**WCDMA Band II**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3760.00	Vertical	-36.46	-13.00	Pass
5640.00	V	-39.13		
7520.00	V	-38.35		
9400.00	V	-43.06		
11280.00	V	---		
3760.00	Horizontal	-38.95	-13.00	Pass
5640.00	H	-42.08		
7520.00	H	-44.80		
9400.00	H	-46.19		
11280.00	H	---		
Test mode:	**WCDMA Band II**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3815.20	Vertical	-36.80	-13.00	Pass
5722.80	V	-39.31		
7630.40	V	-38.32		
9538.00	V	-43.75		
11445.60	V	---		
3815.20	Horizontal	-39.12	-13.00	Pass
5722.80	H	-42.25		
7630.40	H	-44.90		
9538.00	H	-46.47		
11445.60	H	---		

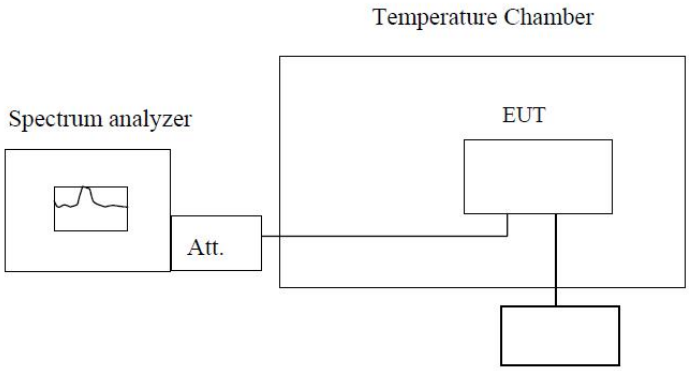
Remark：

1. The emission behaviour belongs to narrowband spurious emission.
2. Remark"---" means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

Test mode:	WCDMA Band IV		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3424.8	Vertical	-36.73	-13.00	Pass
5137.2	V	-39.92		
10274.4	V	-38.05		
15411.6	V	-42.92		
30823.2	V	---		
3424.8	Horizontal	-38.94	-13.00	Pass
5137.2	H	-42.96		
10274.4	H	-44.63		
15411.6	H	-45.63		
30823.2	H	---		
Test mode:	**WCDMA Band IV**		**Test channel:**	**Middle**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3480	Vertical	-36.73	-13.00	Pass
5220	V	-39.92		
10440	V	-38.05		
15660	V	-42.92		
31320	V	---		
3480	Horizontal	-38.94	-13.00	Pass
5220	H	-42.96		
10440	H	-44.63		
15660	H	-45.63		
31320	H	---		
Test mode:	**WCDMA Band IV**		**Test channel:**	**Highest**
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3505.2	Vertical	-36.55	-13.00	Pass
5257.8	V	-39.60		
10515.6	V	-38.15		
15773.4	V	-43.72		
31546.8	V	---		
3505.2	Horizontal	-38.92	-13.00	Pass
5257.8	H	-42.58		
10515.6	H	-44.64		
15773.4	H	-46.04		
31546.8	H	---		

Remark：
1. The emission behaviour belongs to narrowband spurious emission.
2. Remark”---“ means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

4.10 Frequency stability V.S. Temperature measurement

Test Requirement:	FCC Part2.1055(a)(1)(b)
Test Method:	FCC Part2.1055(a)(1)(b)
Limit:	2.5ppm
Test setup:	 **Note :** Measurement setup for testing on Antenna connector
Test procedure:	1. The equipment under test was connected to an external DC power supply and input rated voltage. 2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. 3. The EUT was placed inside the temperature chamber. 4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency. 5. Turn EUT off and set the chamber temperature to –20°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. 6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

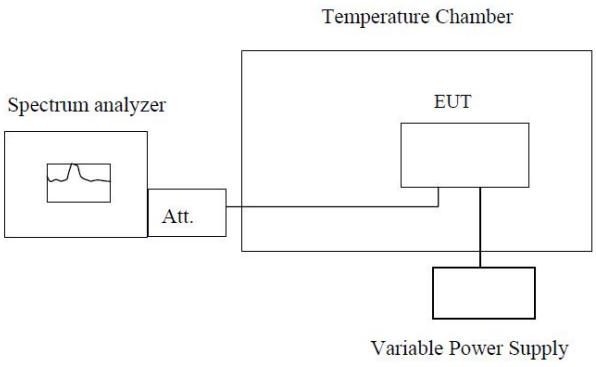
Measurement Data

Reference Frequency: GSM850 (GSM link) Middle channel=190 channel=836.6MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.7	-20	12	0.0149	2.5	Pass
	-10	12	0.0145		
	0	13	0.0157		
	10	12	0.0144		
	20	10	0.0121		
	30	15	0.0173		
	40	13	0.0150		
	50	14	0.0173		
	55	11	0.0126		
Reference Frequency: GSM850 (GPRS 1 link) Middle channel=190 channel=836.6MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.7	-20	9	0.0112	2.5	Pass
	-10	12	0.0147		
	0	12	0.0148		
	10	13	0.0155		
	20	10	0.0125		
	30	14	0.0166		
	40	13	0.0153		
	50	10	0.0119		
	55	8	0.0096		
Reference Frequency: GSM850 (EGPRS 1 link) Middle channel=190 channel=836.6MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.7	-20	10	0.0114	2.5	Pass
	-10	12	0.0146		
	0	13	0.0154		
	10	14	0.0166		
	20	11	0.0133		
	30	11	0.0133		
	40	10	0.0122		
	50	12	0.0139		
	55	11	0.0131		

Reference Frequency: PCS1900 (GSM link) Middle channel=661 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error			Result
		Hz	ppm		
3.7	-20	8	0.0041	2.5	Pass
	-10	12	0.0066		
	0	10	0.0054		
	10	11	0.0061		
	20	10	0.0054		
	30	12	0.0065		
	40	11	0.0058		
	50	8	0.0044		
	55	12	0.0063		
Reference Frequency: PCS1900 (GPRS 1 link) Middle channel=661 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error			Result
		Hz	ppm		
3.7	-20	13	0.0069	2.5	Pass
	-10	10	0.0053		
	0	11	0.0057		
	10	12	0.0063		
	20	10	0.0056		
	30	9	0.0050		
	40	12	0.0063		
	50	9	0.0048		
	55	11	0.0061		
Reference Frequency: PCS1900 (EGPRS 1 link) Middle channel=661 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error			Result
		Hz	ppm		
3.7	-20	13	0.0068	2.5	Pass
	-10	11	0.0057		
	0	11	0.0057		
	10	7	0.0040		
	20	10	0.0053		
	30	8	0.0044		
	40	9	0.0050		
	50	10	0.0053		
	55	13	0.0068		

Reference Frequency: WCDMA Band V Middle channel=4183 channel=836.6MHz					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.7	-20	20	0.0234	2.5	Pass
	-10	23	0.0275		
	0	21	0.0252		
	10	-26	-0.0315		
	20	20	0.0235		
	30	14	0.0163		
	40	0	0.0000		
	50	9	0.0102		
	55	15	0.0182		
Reference Frequency: WCDMA Band II Middle channel=9400 channel=1880.0MHz					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.7	-20	21	0.0111	2.5	Pass
	-10	23	0.0122		
	0	25	0.0131		
	10	-28	-0.0148		
	20	21	0.0111		
	30	14	0.0077		
	40	-3	-0.0017		
	50	7	0.0039		
	55	12	0.0062		
Reference Frequency: WCDMA Band IV Middle channel=1450 channel=1740.0MHz					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.7	-20	19	0.0109	2.5	Pass
	-10	23	0.0132		
	0	22	0.0126		
	10	-24	-0.0140		
	20	20	0.0115		
	30	16	0.0093		
	40	-4	-0.0021		
	50	12	0.0067		
	55	15	0.0087		

4.11 Frequency stability V.S. Voltage measurement

Test Requirement:	FCC Part2.1055(d)(1)(2)
Test Method:	FCC Part2.1055(d)(1)(2)
Limit:	2.5ppm
Test setup:	 **Note :** Measurement setup for testing on Antenna connector
Test procedure:	1. Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage. 2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency. 3. Reduce the input voltage to specified extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

Measurement Data

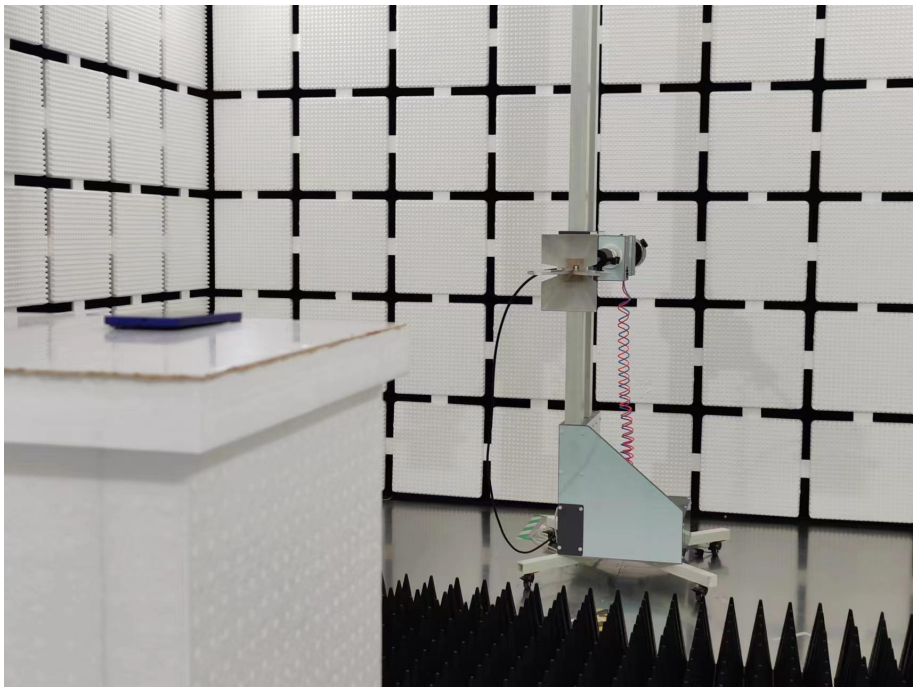
Reference Frequency: GSM850 (GSM link) Middle channel=190 channel=836.6MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	9	0.0106	2.5	Pass
	3.80	9	0.0113		
	3.61	14	0.0170		
Reference Frequency: GSM850 (GPRS 1 link) Middle channel=190 channel=836.6MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	9	0.0108	2.5	Pass
	3.80	11	0.0129		
	3.61	13	0.0156		
Reference Frequency: GSM850 (EGPRS 1 link) Middle channel=190 channel=836.6MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	8	0.0094	2.5	Pass
	3.80	14	0.0171		
	3.61	11	0.0133		

Reference Frequency: PCS1900 (GSM link) Middle channel=661 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	10	0.0056	2.5	Pass
	3.80	10	0.0053		
	3.61	12	0.0061		
Reference Frequency: PCS1900 (GPRS 1 link) Middle channel=661 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	12	0.0063	2.5	Pass
	3.80	9	0.0046		
	3.61	13	0.0067		
Reference Frequency: PCS1900 (EGPRS 1 link) Middle channel=661 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	8	0.0043	2.5	Pass
	3.80	9	0.0051		
	3.61	12	0.0066		

Reference Frequency: WCDMA Band V Middle channel=4183 channel=836.6MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	15	0.0179	2.5	Pass
	3.80	23	0.0269		
	3.61	22	0.0258		
Reference Frequency: WCDMA Band II Middle channel=940 channel=1880.0MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	19	0.0100	2.5	Pass
	3.80	23	0.0122		
	3.61	20	0.0106		
Reference Frequency: WCDMA Band IV Middle channel=1450 channel=1740.0MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	18	0.0105	2.5	Pass
	3.80	23	0.0132		
	3.61	22	0.0127		

5 Test Setup Photo

Radiated Emission



-------END OF REPORT-------