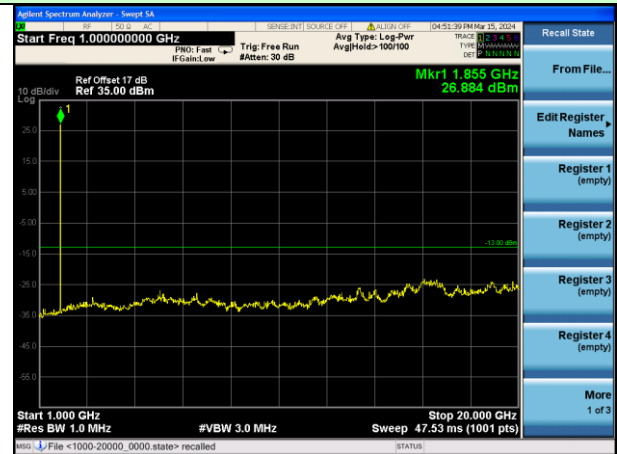
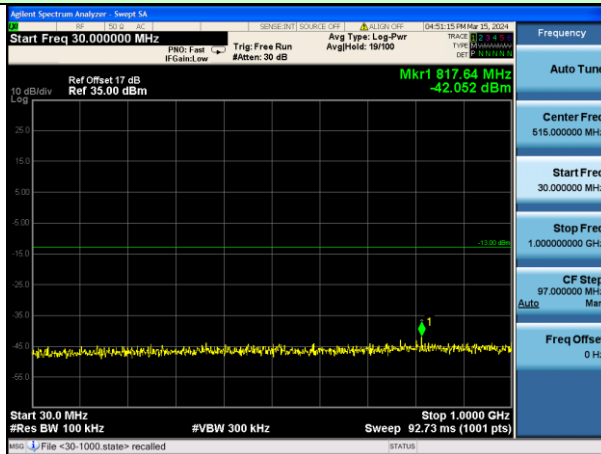
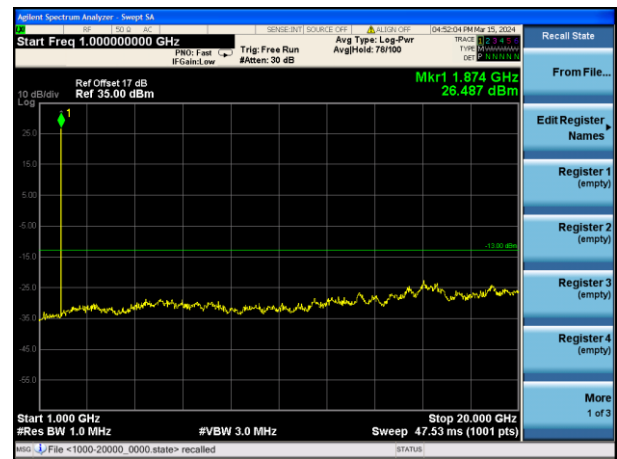
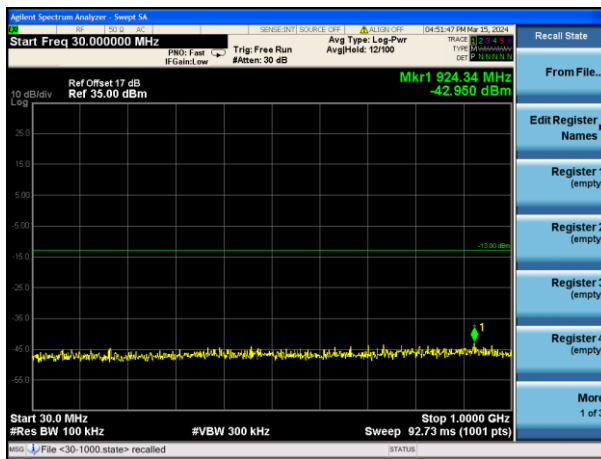


Test Mode: Traffic mode

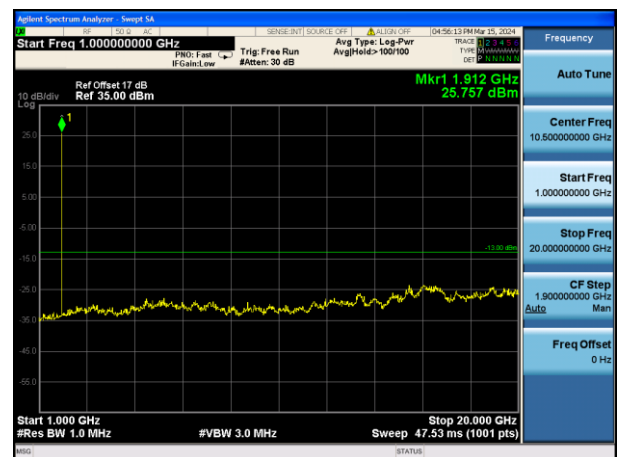
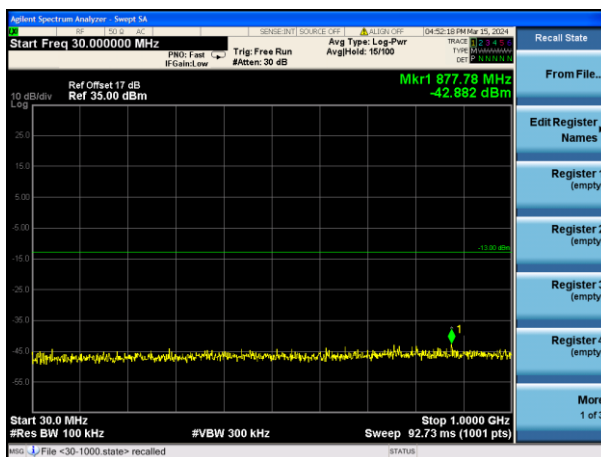
PCS1900 (GPRS 1 link)



Lowest channel



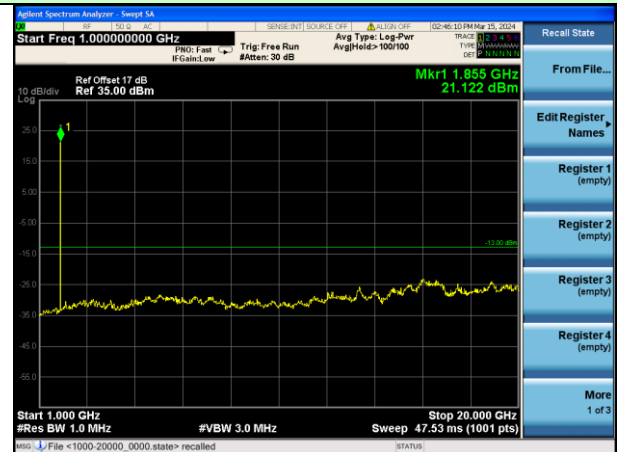
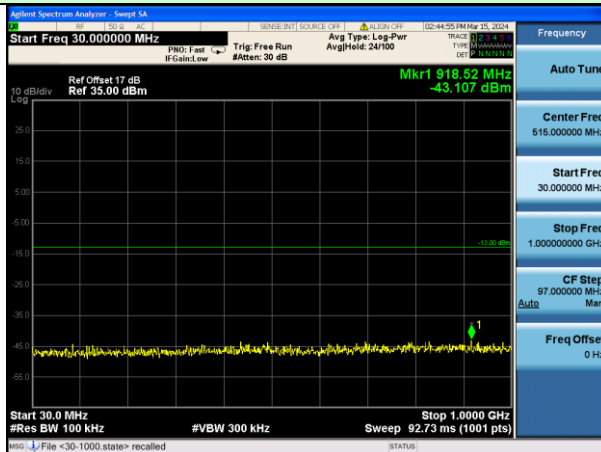
Middle channel



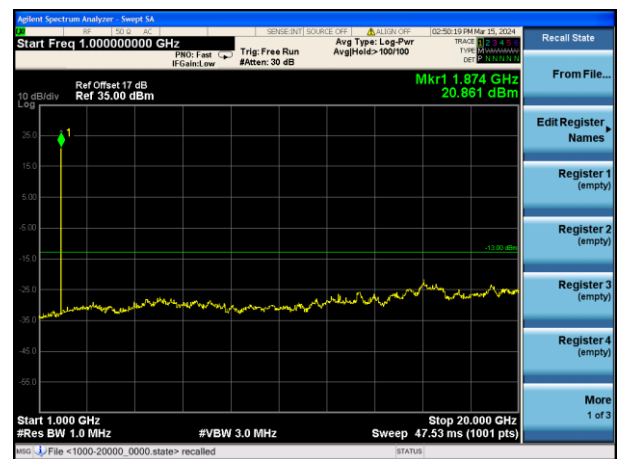
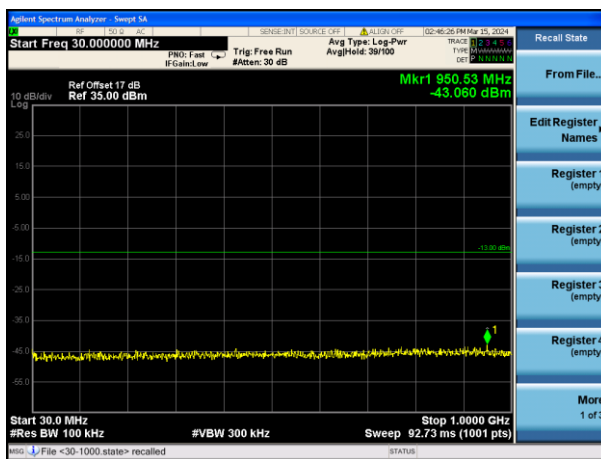
Highest channel

Test Mode: Traffic mode

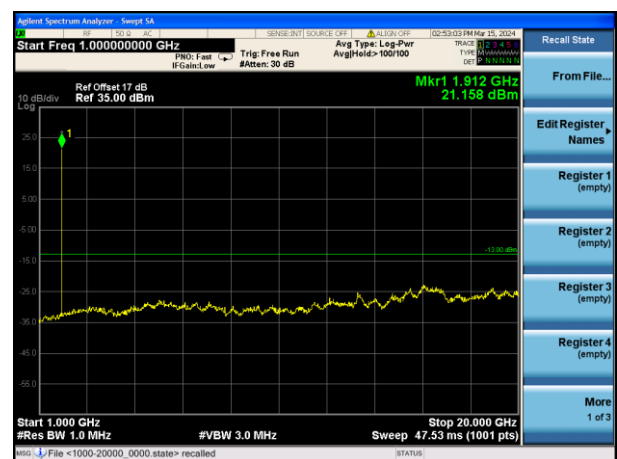
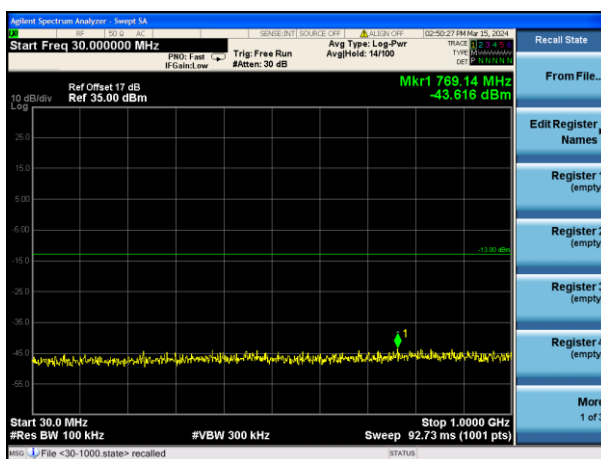
PCS1900 (EGPRS 1 link)



Lowest channel



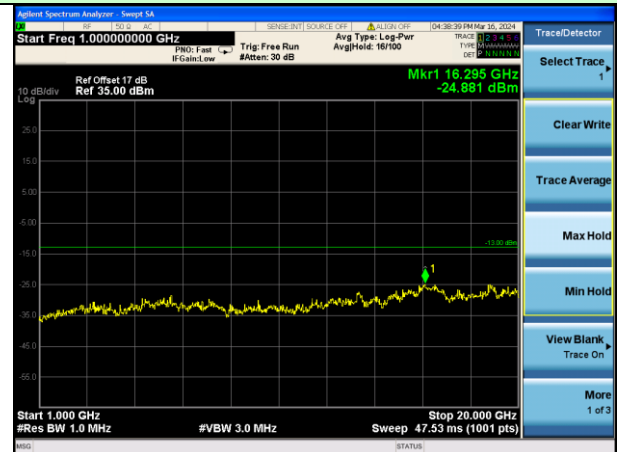
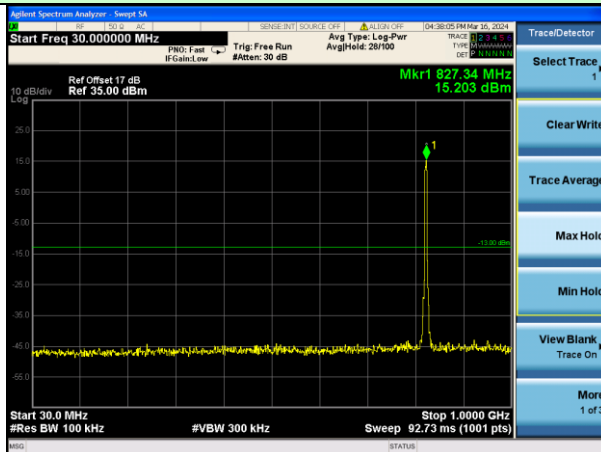
Middle channel



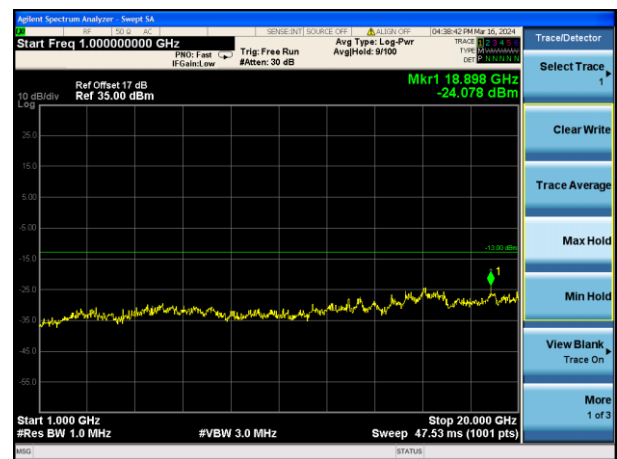
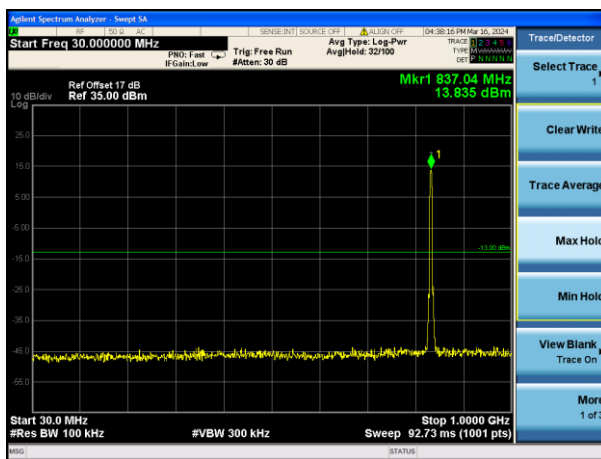
Highest channel

Test Mode: Traffic mode

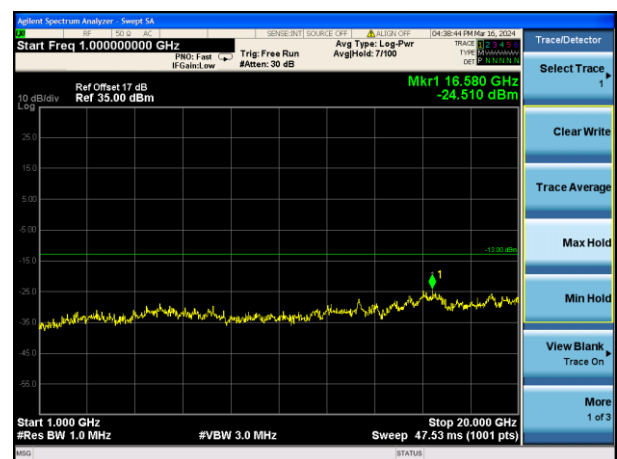
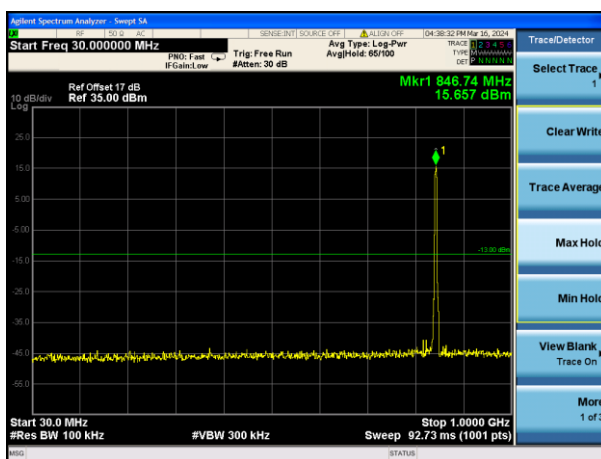
WCDMA Band V (RMC 12.2Kbps link)



Lowest channel



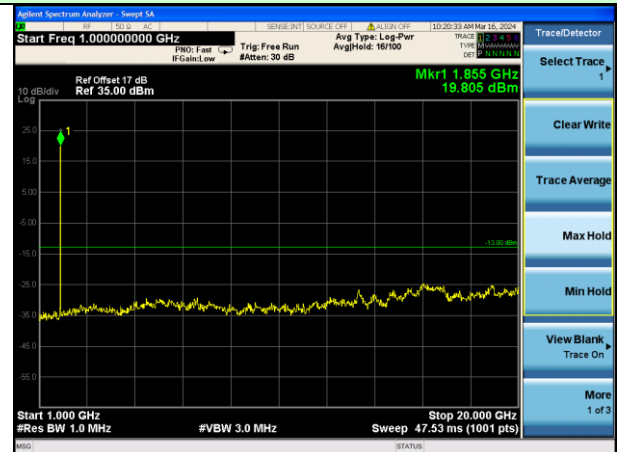
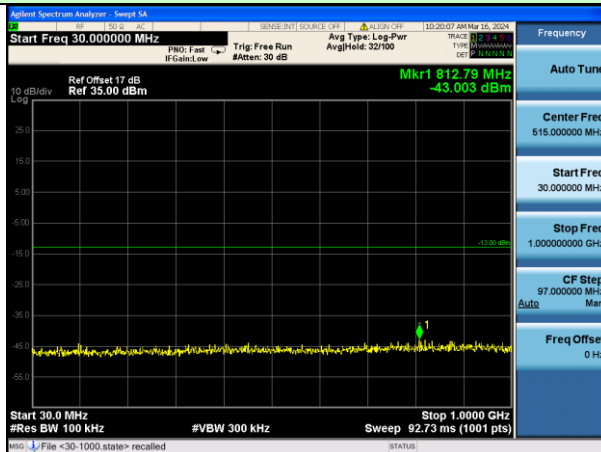
Middle channel



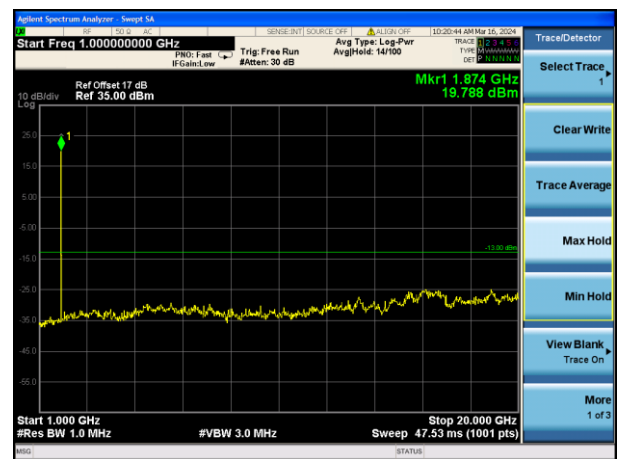
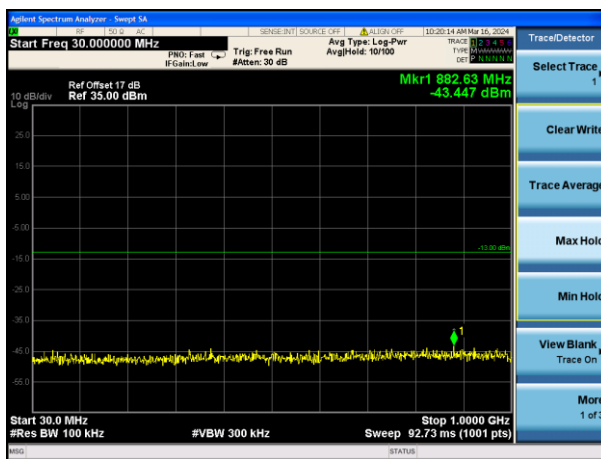
Highest channel

Test Mode: Traffic mode

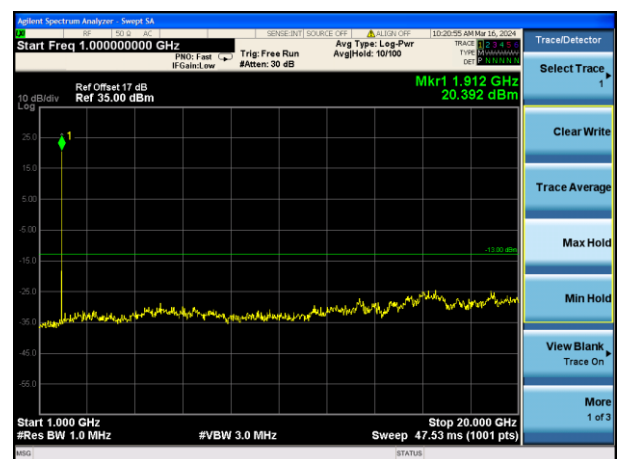
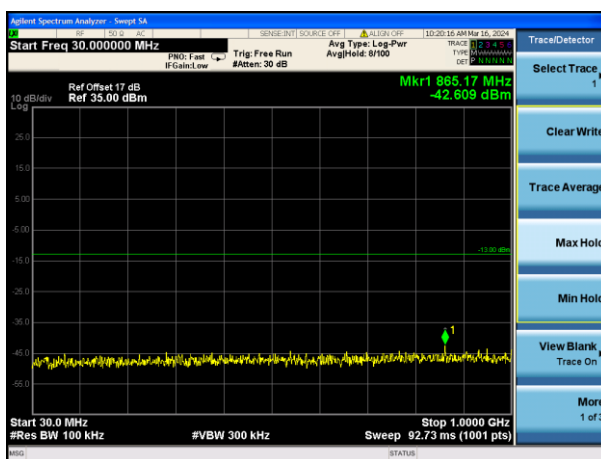
WCDMA Band II (RMC 12.2Kbps link)



Lowest channel



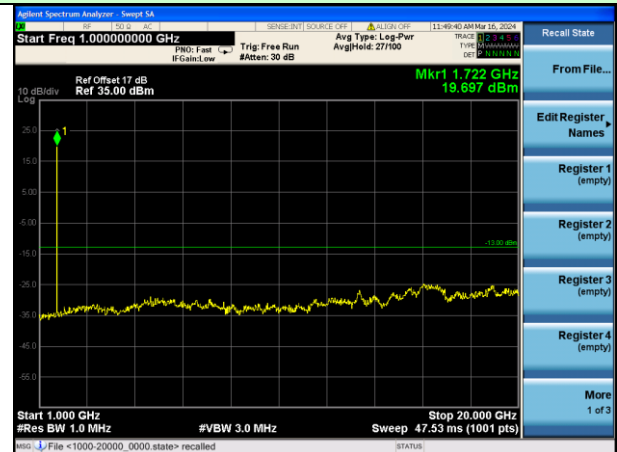
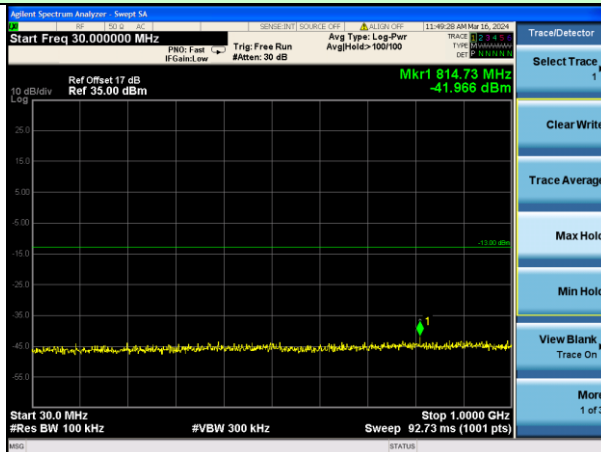
Middle channel



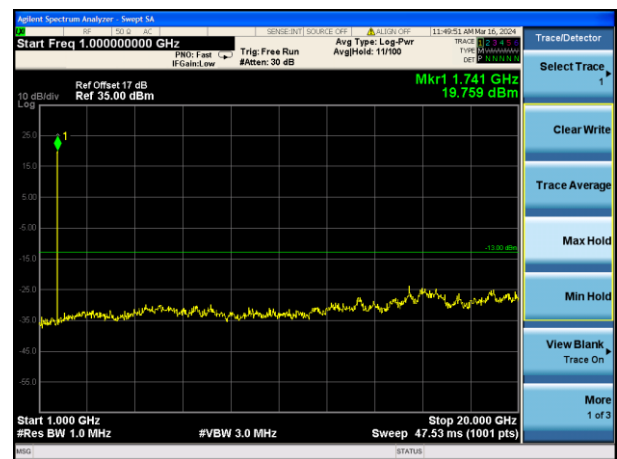
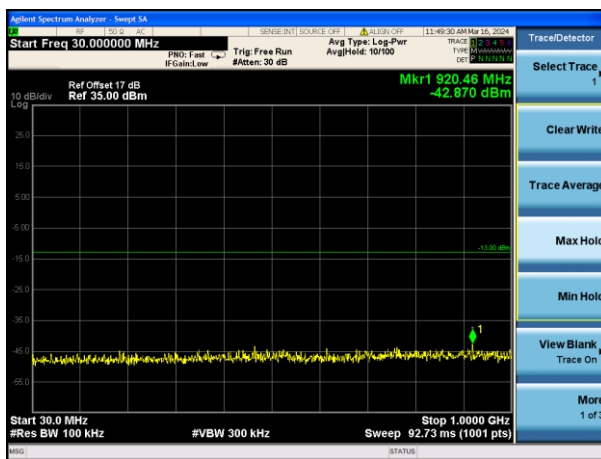
Highest channel

Test Mode: Traffic mode

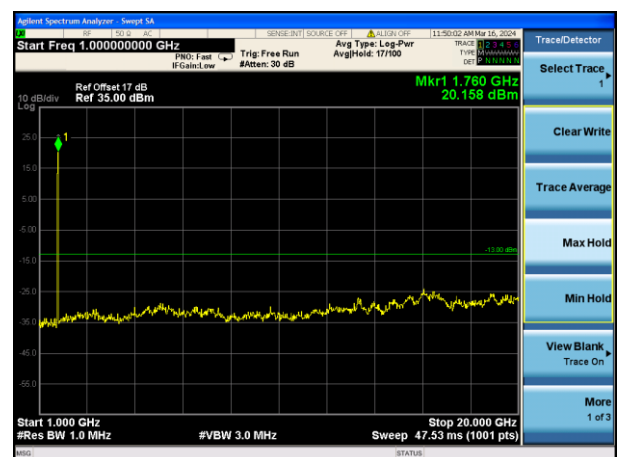
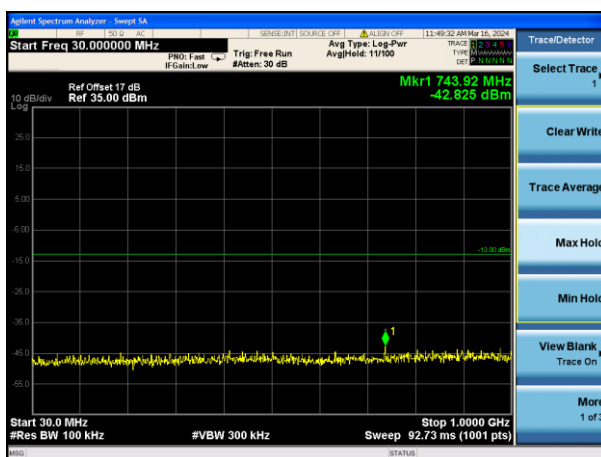
WCDMA Band IV (RMC 12.2Kbps link)



Lowest channel



Middle channel

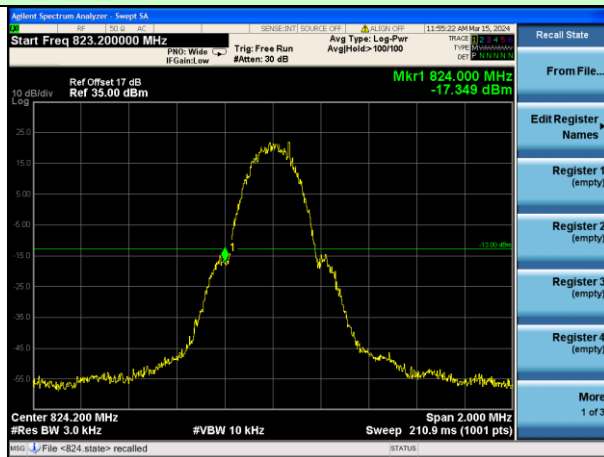


Highest channel

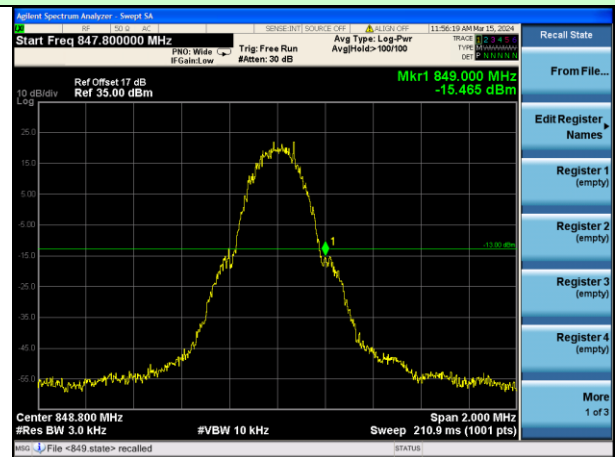
Band Edge:

Test Mode: Traffic mode

GSM850 (GSM link)



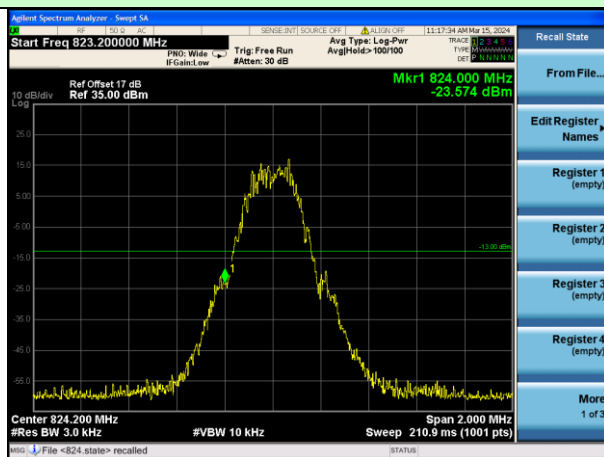
Lowest channel



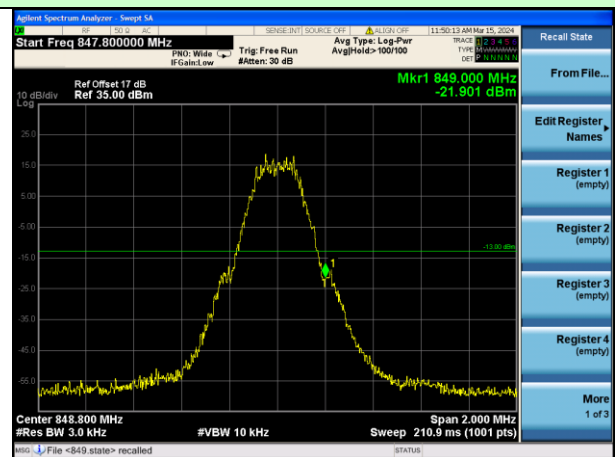
Highest channel

Test Mode: Traffic mode

GSM850 (GPRS 1 link)



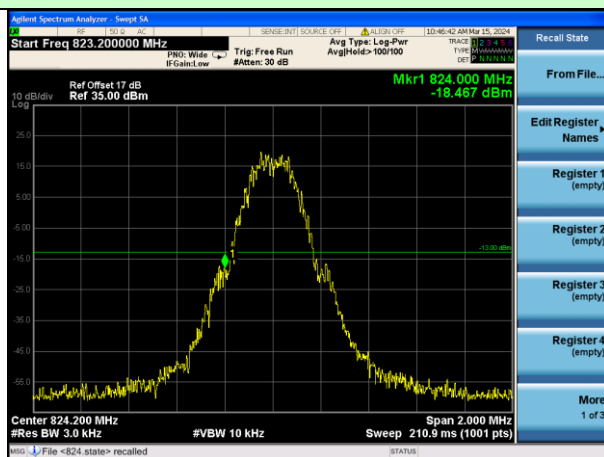
Lowest channel



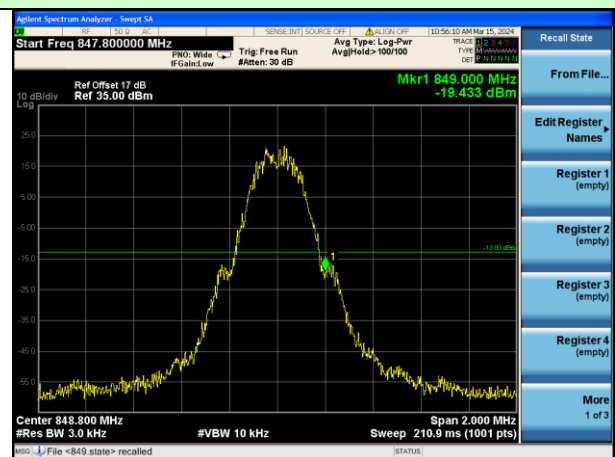
Highest channel

Test Mode: Traffic mode

GSM850 (EGPRS 1 link)



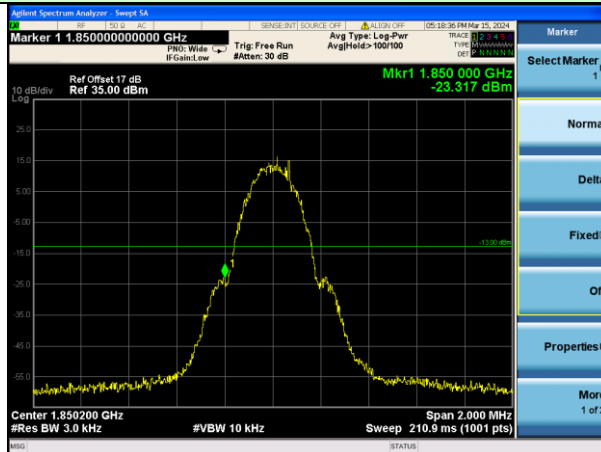
Lowest channel



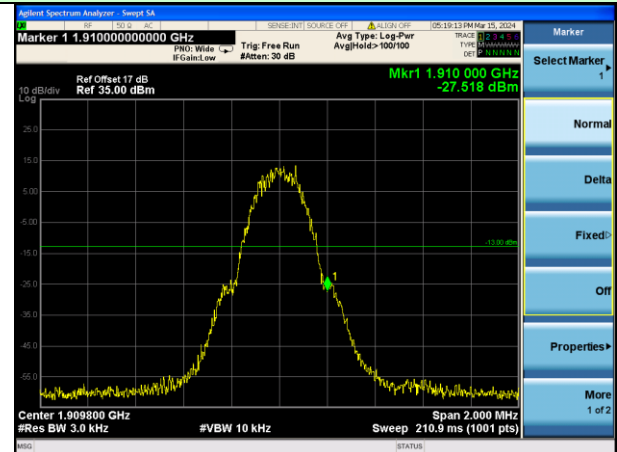
Highest channel

Test Mode: Traffic mode

PCS1900 (GSM link)



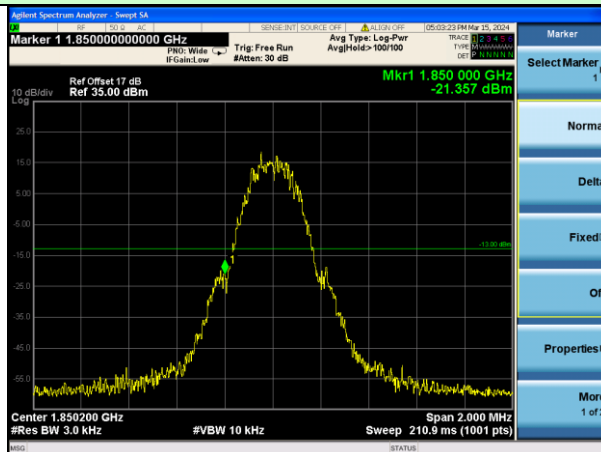
Lowest channel



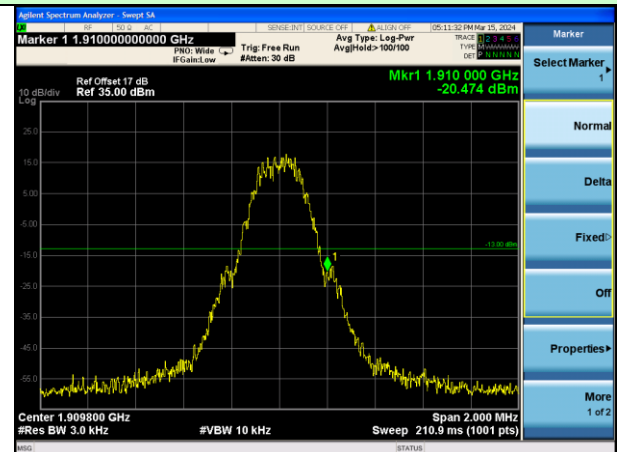
Highest channel

Test Mode: Traffic mode

PCS1900 (GPRS 1 link)



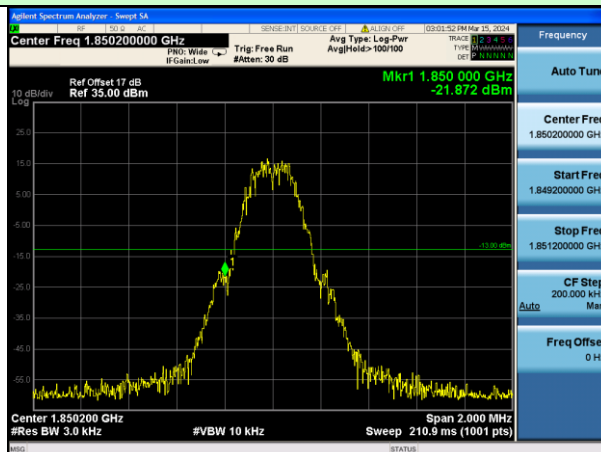
Lowest channel



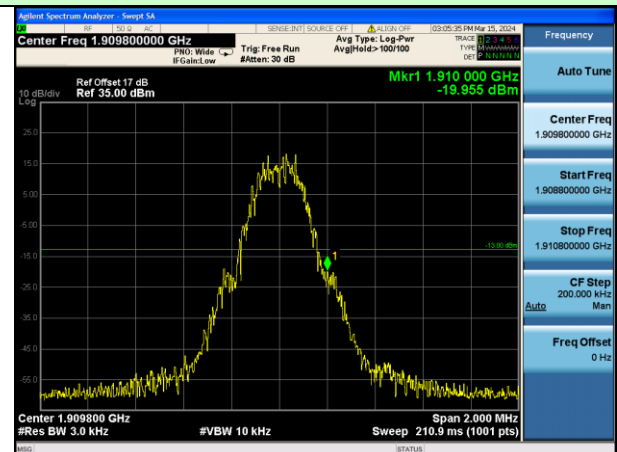
Highest channel

Test Mode: Traffic mode

PCS1900 (EGPRS 1 link)



Lowest channel



Highest channel

Test Mode: Traffic mode

WCDMA Band V (RMC 12.2Kbps link)



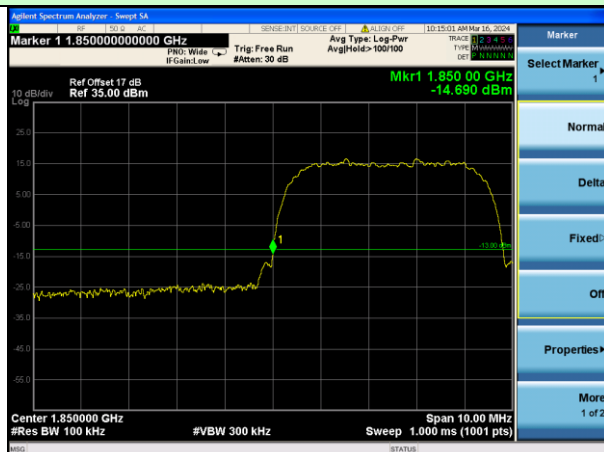
Lowest channel



Highest channel

Test Mode: Traffic mode

WCDMA Band II (RMC 12.2Kbps link)



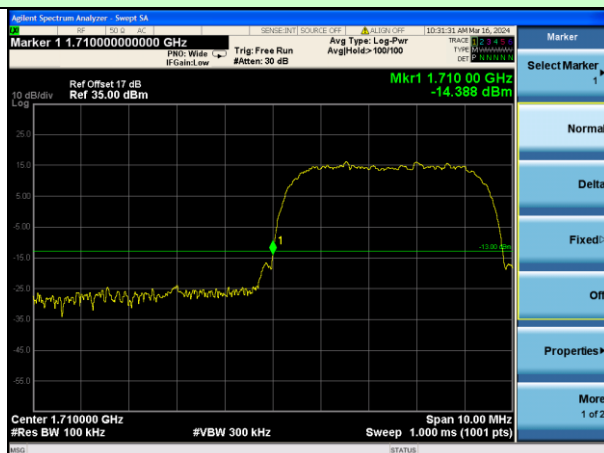
Lowest channel



Highest channel

Test Mode: Traffic mode

WCDMA Band IV (RMC 12.2Kbps link)

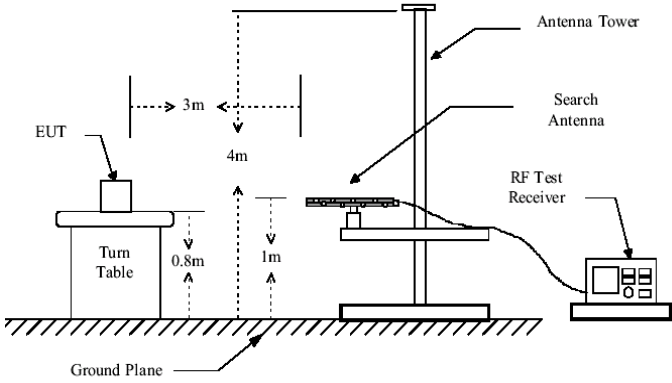
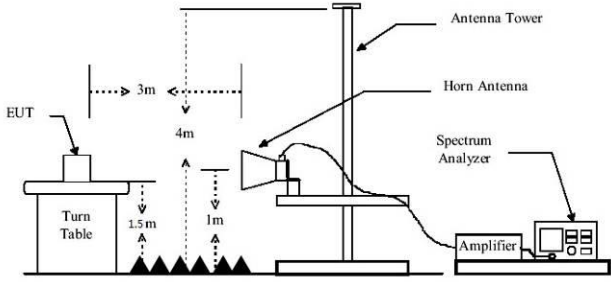
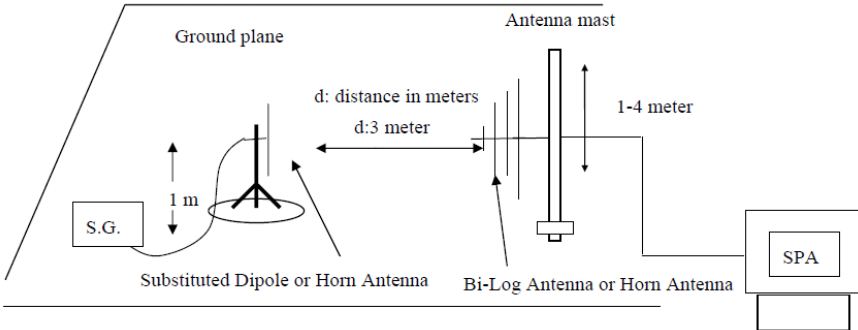


Lowest channel



Highest channel

4.8 ERP, EIRP Measurement

Test Requirement:	FCC part22.913(a) and FCC part24.232(b) , Part 27.54(h)
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 as follows: $\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable Loss (dB)}$ 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: $\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable Loss (dB)}$
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 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	29.68	38.45	Pass
			H	28.97		
		E1	V	29.52		
			H	29.54		
		E2	V	28.42		
			H	30.19		
	Middle	H	V	28.58	38.45	Pass
			H	28.78		
		E1	V	26.94		
			H	30.80		
		E2	V	28.00		
			H	29.82		
	Highest	H	V	28.11	38.45	Pass
			H	29.12		
		E1	V	27.55		
			H	30.30		
		E2	V	27.84		
			H	30.14		

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
GSM850 (GPRS 1 link)	Lowest	H	V	26.74	38.45	Pass
			H	25.83		
		E1	V	26.56		
			H	25.19		
		E2	V	27.32		
			H	25.62		
	Middle	H	V	28.06	38.45	Pass
			H	25.42		
		E1	V	26.85		
			H	24.76		
		E2	V	26.87		
			H	25.83		
	Highest	H	V	26.53	38.45	Pass
			H	25.30		
		E1	V	27.15		
			H	25.49		
		E2	V	27.53		
			H	24.86		

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
GSM850 (EGPRS 1 link)	Lowest	H	V	25.16	38.45	Pass
			H	22.86		
		E1	V	26.39		
			H	23.68		
		E2	V	25.22		
			H	23.73		
	Middle	H	V	25.32	38.45	Pass
			H	23.84		
		E1	V	25.28		
			H	23.65		
		E2	V	25.74		
			H	22.97		
	Highest	H	V	25.76	38.45	Pass
			H	23.88		
		E1	V	25.19		
			H	23.63		
		E2	V	25.75		
			H	23.37		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP (dBm)	Limit (dBm)	Result
PCS1900 (GSM link)	Lowest	H	V	30.24	33.01	Pass
			H	25.36		
		E1	V	30.26		
			H	27.00		
		E2	V	29.81		
			H	26.43		
	Middle	H	V	29.57	33.01	Pass
			H	26.76		
		E1	V	29.37		
			H	26.71		
		E2	V	30.34		
			H	27.00		
	Highest	H	V	29.77	33.01	Pass
			H	25.99		
		E1	V	29.29		
			H	26.36		
		E2	V	29.41		
			H	26.86		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP (dBm)	Limit (dBm)	Result
PCS1900 (GPRS 1 link)	Lowest	H	V	29.41	33.01	Pass
			H	25.68		
		E1	V	29.55		
			H	27.01		
		E2	V	29.20		
			H	26.03		
	Middle	H	V	29.46	33.01	Pass
			H	27.57		
		E1	V	29.61		
			H	27.21		
		E2	V	29.54		
			H	27.35		
	Highest	H	V	29.77	33.01	Pass
			H	26.52		
		E1	V	29.53		
			H	26.37		
		E2	V	29.13		
			H	26.57		

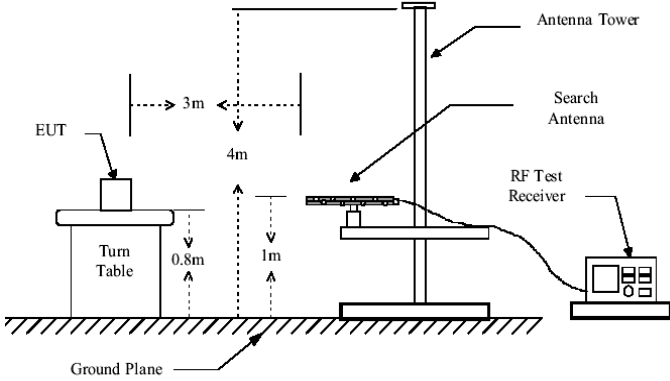
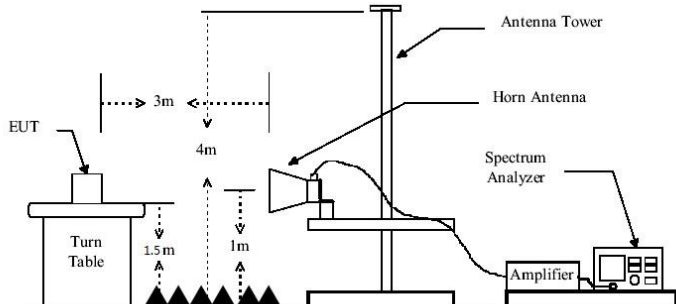
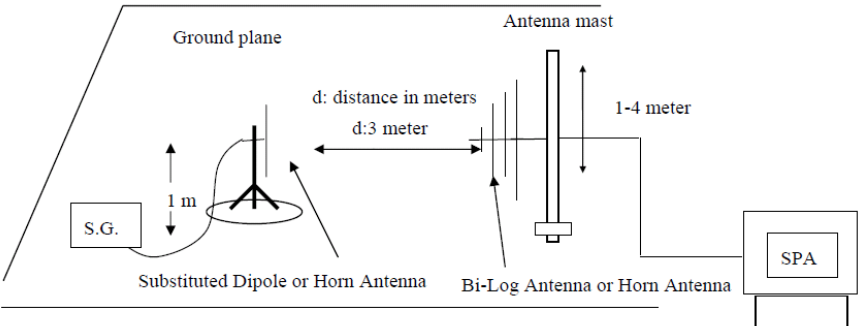
EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP (dBm)	Limit (dBm)	Result
PCS1900 (EGPRS 1 link)	Lowest	H	V	27.48	33.01	Pass
			H	24.18		
		E1	V	28.05		
			H	24.58		
		E2	V	27.40		
			H	23.99		
	Middle	H	V	27.43	33.01	Pass
			H	24.39		
		E1	V	27.99		
			H	24.47		
		E2	V	26.82		
			H	25.43		
	Highest	H	V	27.67	33.01	Pass
			H	23.92		
		E1	V	27.22		
			H	24.32		
		E2	V	27.00		
			H	25.59		

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
WCDMA Band V	Lowest	H	V	20.59	38.45	Pass
			H	20.99		
		E1	V	20.79		
			H	20.36		
		E2	V	21.22		
			H	20.89		
	Middle	H	V	20.69	38.45	Pass
			H	19.95		
		E1	V	20.68		
			H	19.92		
		E2	V	21.21		
			H	20.69		
	Highest	H	V	20.37	38.45	Pass
			H	19.70		
		E1	V	21.08		
			H	20.04		
		E2	V	21.32		
			H	20.55		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
WCDMA Band II	Lowest	H	V	22.19	33.01	Pass
			H	20.86		
		E1	V	21.27		
			H	19.74		
		E2	V	21.66		
			H	20.69		
	Middle	H	V	20.02	33.01	Pass
			H	19.73		
		E1	V	21.19		
			H	20.53		
		E2	V	21.17		
			H	19.85		
	Highest	H	V	20.81	33.01	Pass
			H	20.46		
		E1	V	20.70		
			H	19.71		
		E2	V	21.16		
			H	18.93		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
WCDMA Band IV	Lowest	H	V	24.30	30	Pass
			H	22.10		
		E1	V	21.52		
			H	22.17		
		E2	V	21.16		
			H	22.39		
	Middle	H	V	21.93	30	Pass
			H	21.72		
		E1	V	21.80		
			H	21.18		
		E2	V	21.00		
			H	20.90		
	Highest	H	V	22.52	30	Pass
			H	21.75		
		E1	V	21.58		
			H	21.70		
		E2	V	21.90		
			H	22.45		

4.9 Field strength of spurious radiation measurement

Test Requirement:	FCC part22.917(a) and FCC part24.238(a), Part 27.54(h)
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. $\text{ERP / EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}$
Test Instruments:	Refer to section 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass

Measurement Data

Test mode:	GSM850		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1648.90	Vertical	-37.90	-13.00	Pass
2471.57	V	-37.12		
3296.80	V	-35.15		
4120.89	V	-33.96		
4944.89	V	-29.51		
1649.65	Horizontal	-37.44	-13.00	Pass
2472.21	H	-36.65		
3294.63	H	-35.52		
4120.03	H	-34.40		
4943.57	H	-31.32		
Test mode:	GPRS850		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1673.22	Vertical	-37.58	-13.00	Pass
2508.29	V	-36.40		
3343.94	V	-36.01		
4180.59	V	-34.32		
5016.59	V	-29.81		
1670.64	Horizontal	-40.45	-13.00	Pass
2508.26	H	-36.60		
3343.15	H	-37.09		
4180.77	H	-33.88		
5016.29	H	-30.58		
Test mode:	EGPRS850		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1695.06	Vertical	-39.74	-13.00	Pass
2543.30	V	-37.39		
3392.09	V	-35.86		
4239.33	V	-31.45		
5087.33	V	-31.07		
1696.54	Horizontal	-38.55	-13.00	Pass
2543.61	H	-37.25		
3391.62	H	-37.10		
4239.41	H	-33.41		
5087.30	H	-31.94		

Remark :

1. The emission behaviour belongs to narrowband spurious emission.
2. The above table only shows the worst case channel of each mode.
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:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3701.91	Vertical	-36.89	-13.00	Pass
5550.39	V	-36.30		
7398.93	V	-37.02		
9249.28	V	-31.10		
11099.28	V	-31.12		
3701.72	Horizontal	-37.37	-13.00	Pass
5548.78	H	-38.08		
7400.74	H	-35.65		
9249.28	H	-32.29		
11100.39	H	-32.07		
Test mode:	GPRS1900		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3758.64	Vertical	-40.16	-13.00	Pass
5641.96	V	-34.73		
7520.98	V	-34.97		
9398.27	V	-32.49		
11278.27	V	-32.13		
3760.87	Horizontal	-38.22	-13.00	Pass
5639.53	H	-37.33		
7521.28	H	-36.00		
9399.64	H	-31.75		
11281.96	H	-31.71		
Test mode:	EGPRS1900		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3821.58	Vertical	-37.22	-13.00	Pass
5728.98	V	-37.71		
7639.60	V	-36.35		
9548.38	V	-33.47		
11458.38	V	-32.02		
3818.92	Horizontal	-40.17	-13.00	Pass
5729.93	H	-36.93		
7638.32	H	-35.25		
9551.87	H	-34.71		
11458.98	H	-29.48		

Remark:

1. The emission behaviour belongs to narrowband spurious emission.
2. The above table only shows the worst case channel of each mode.
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)		
1650.11	Vertical	-46.29	-13.00	Pass
2478.56	V	-42.36		
3302.76	V	-42.12		
4129.68	V	-34.60		
4955.68	V	-38.29		
1651.99	Horizontal	-42.33	-13.00	Pass
2479.52	H	-42.94		
3304.73	H	-39.17		
4128.50	H	-39.85		
4956.56	H	-39.48		
Test mode:	WCDMA Band V		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1670.15	Vertical	-46.25	-13.00	Pass
2506.72	V	-44.20		
3344.44	V	-40.44		
4180.95	V	-35.82		
5016.95	V	-37.02		
1672.64	Horizontal	-41.68	-13.00	Pass
2507.74	H	-44.72		
3344.21	H	-36.84		
4179.29	H	-40.37		
5014.72	H	-38.69		
Test mode:	WCDMA Band V		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1693.36	Vertical	-43.04	-13.00	Pass
2537.96	V	-42.96		
3382.89	V	-41.99		
4231.73	V	-35.92		
5077.73	V	-36.24		
1690.29	Horizontal	-44.03	-13.00	Pass
2537.48	H	-44.98		
3385.15	H	-40.25		
4229.01	H	-39.43		
5075.96	H	-38.97		

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)		
3703.01	Vertical	-45.39	-13.00	Pass
5556.80	V	-42.12		
7407.98	V	-40.90		
9259.66	V	-36.78		
11111.66	V	-38.31		
3705.63	Horizontal	-40.69	-13.00	Pass
5554.28	H	-46.18		
7409.64	H	-38.53		
9261.09	H	-38.94		
11112.80	H	-36.89		
Test mode:	WCDMA Band II		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3759.20	Vertical	-45.20	-13.00	Pass
5641.62	V	-41.30		
7521.82	V	-39.06		
9400.17	V	-34.43		
11280.17	V	-37.80		
3760.88	Horizontal	-41.44	-13.00	Pass
5639.95	H	-44.51		
7520.09	H	-38.84		
9399.65	H	-40.49		
11281.62	H	-38.33		
Test mode:	WCDMA Band II		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3817.27	Vertical	-43.13	-13.00	Pass
5722.68	V	-44.24		
7631.82	V	-41.06		
9539.60	V	-37.92		
11447.60	V	-38.37		
3815.02	Horizontal	-43.30	-13.00	Pass
5725.01	H	-43.45		
7630.74	H	-39.15		
9538.51	H	-41.84		
11446.68	H	-39.47		

Remark:

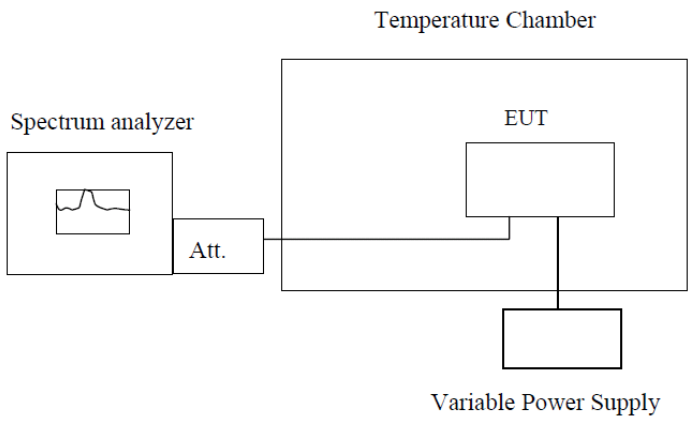
1. The emission behaviour belongs to narrowband spurious emission.
2. Remark"---" means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

Test mode:	WCDMA Band IV		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3419.40	Vertical	-45.00	-13.00	Pass
5131.67	V	-41.25		
6838.42	V	-42.46		
8548.78	V	-37.47		
10258.78	V	-39.19		
3419.60	Horizontal	-42.72	-13.00	Pass
5129.50	H	-44.96		
6839.23	H	-36.84		
8548.55	H	-41.35		
10261.67	H	-39.43		
Test mode:	WCDMA Band IV		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3461.25	Vertical	-43.15	-13.00	Pass
5188.92	V	-44.00		
6919.23	V	-41.65		
8651.91	V	-36.58		
10381.91	V	-36.06		
3460.76	Horizontal	-41.56	-13.00	Pass
5188.96	H	-45.50		
6919.83	H	-38.19		
8650.89	H	-40.75		
10378.92	H	-37.09		
Test mode:	WCDMA Band IV		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
3498.64	Vertical	-45.76	-13.00	Pass
5248.12	V	-44.80		
7001.21	V	-39.67		
8750.57	V	-36.54		
10500.57	V	-37.40		
3498.91	Horizontal	-43.41	-13.00	Pass
5250.78	H	-43.68		
7000.95	H	-37.41		
8750.75	H	-39.63		
10498.12	H	-37.23		

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 3 for details
Test mode:	Refer to section 4.1 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		
3.8	-20	10	0.0118	2.5	Pass
	-10	27	0.0328		
	0	19	0.0223		
	10	0	-0.0004		
	20	29	0.0350		
	30	-15	-0.0175		
	40	17	0.0198		
	50	7	0.0079		
	60	9	0.0103		
Reference Frequency: GSM850 (GPRS 1 link) Middle channel=190 channel=836.6MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.8	-20	13	0.0161	2.5	Pass
	-10	28	0.0336		
	0	14	0.0169		
	10	8	0.0099		
	20	29	0.0348		
	30	-13	-0.0159		
	40	18	0.0218		
	50	4	0.0047		
	60	14	0.0169		
Reference Frequency: GSM850 (EGPRS 1 link) Middle channel=190 channel=836.6MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.8	-20	14	0.0172	2.5	Pass
	-10	22	0.0258		
	0	17	0.0206		
	10	6	0.0075		
	20	31	0.0365		
	30	-18	-0.0213		
	40	16	0.0192		
	50	7	0.0081		
	60	11	0.0135		

Reference Frequency: PCS1900 (GSM link) Middle channel=661 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error			Result
		Hz	ppm		
3.8	-20	11	0.0058	2.5	Pass
	-10	18	0.0094		
	0	13	0.0069		
	10	11	0.0058		
	20	21	0.0111		
	30	-14	-0.0073		
	40	11	0.0059		
	50	2	0.0009		
	60	15	0.0082		
Reference Frequency: PCS1900 (GPRS 1 link) Middle channel=661 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error			Result
		Hz	ppm		
3.8	-20	11	0.0059	2.5	Pass
	-10	22	0.0116		
	0	19	0.0100		
	10	12	0.0065		
	20	19	0.0100		
	30	-22	-0.0115		
	40	13	0.0067		
	50	1	0.0006		
	60	14	0.0072		
Reference Frequency: PCS1900 (EGPRS 1 link) Middle channel=661 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error			Result
		Hz	ppm		
3.8	-20	15	0.0080	2.5	Pass
	-10	20	0.0108		
	0	17	0.0092		
	10	11	0.0059		
	20	20	0.0105		
	30	-21	-0.0112		
	40	11	0.0058		
	50	6	0.0033		
	60	12	0.0064		

Reference Frequency: WCDMA Band V Middle channel=4183 channel=836.6MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.8	-20	9	0.0105	2.5	Pass
	-10	27	0.0328		
	0	18	0.0218		
	10	6	0.0072		
	20	25	0.0294		
	30	-14	-0.0164		
	40	19	0.0224		
	50	4	0.0046		
	60	9	0.0108		
Reference Frequency: WCDMA Band II Middle channel=9400 channel=1880.0MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.8	-20	16	0.0087	2.5	Pass
	-10	17	0.0090		
	0	14	0.0077		
	10	6	0.0031		
	20	19	0.0099		
	30	-18	-0.0097		
	40	12	0.0065		
	50	6	0.0034		
	60	15	0.0082		
Reference Frequency: WCDMA Band IV Middle channel=1450 channel=1740.0MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.8	-20	10	0.0055	2.5	Pass
	-10	21	0.0122		
	0	16	0.0090		
	10	11	0.0061		
	20	21	0.0124		
	30	-15	-0.0088		
	40	10	0.0059		
	50	11	0.0063		
	60	13	0.0077		

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 3 for details
Test mode:	Refer to section 4.1 for details
Test results:	Pass

Measurement Data

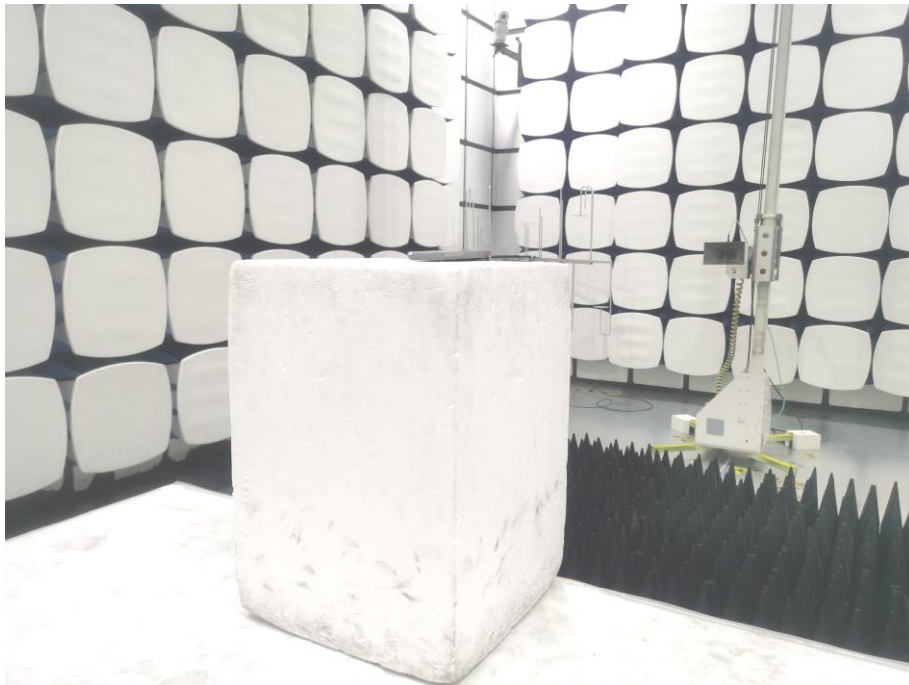
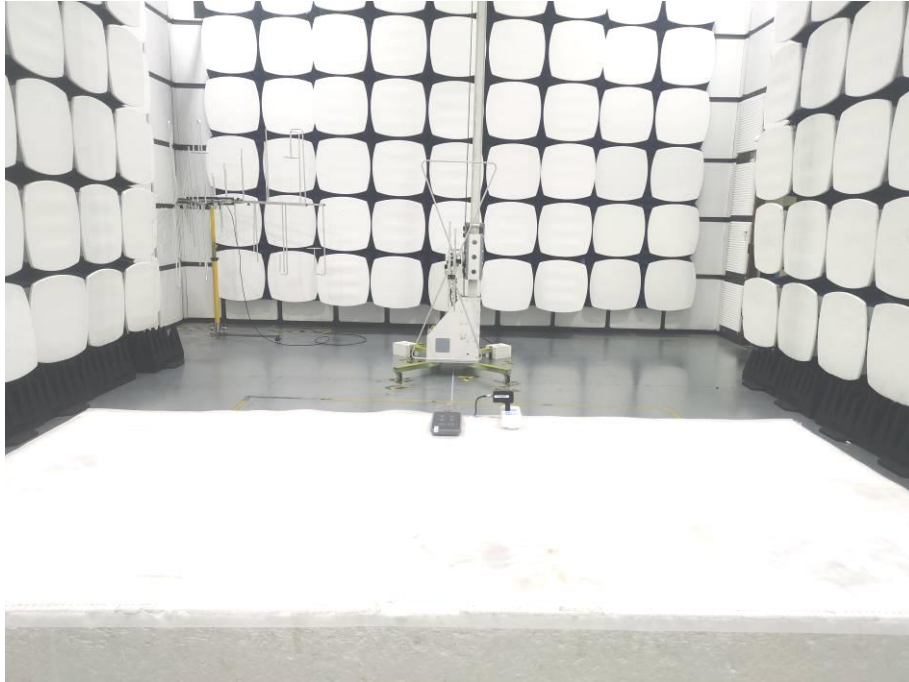
Reference Frequency: GSM850 (GSM link) Middle channel=190 channel=836.6MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	15	0.0183	2.5	Pass
	3.8	5	0.0061		
	3.23	32	0.0382		
Reference Frequency: GSM850 (GPRS 1 link) Middle channel=190 channel=836.6MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	12	0.0146	2.5	Pass
	3.8	21	0.0255		
	3.23	18	0.0220		
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	4.37	13	0.0158	2.5	Pass
	3.8	22	0.0264		
	3.23	17	0.0204		

Reference Frequency: PCS1900 (GSM link) Middle channel=661 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	14	0.0073	2.5	Pass
	3.8	22	0.0115		
	3.23	15	0.0082		
Reference Frequency: PCS1900 (GPRS 1 link) Middle channel=661 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	13	0.0068	2.5	Pass
	3.8	18	0.0094		
	3.23	13	0.0072		
Reference Frequency: PCS1900 (EGPRS 1 link) Middle channel=661 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	9	0.0048	2.5	Pass
	3.8	21	0.0112		
	3.23	14	0.0077		

Reference Frequency: WCDMA Band V Middle channel=4183 channel=836.6MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	10	0.0124	2.5	Pass
	3.8	21	0.0247		
	3.23	19	0.0223		
Reference Frequency: WCDMA Band II Middle channel=940 channel=1880.0MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	16	0.0084	2.5	Pass
	3.8	16	0.0087		
	3.23	21	0.0111		
Reference Frequency: WCDMA Band IV Middle channel=1450 channel=1740.0MHz					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.37	15	0.0087	2.5	Pass
	3.8	21	0.0119		
	3.23	16	0.0090		

5 Test Setup Photo

Radiated Emission



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