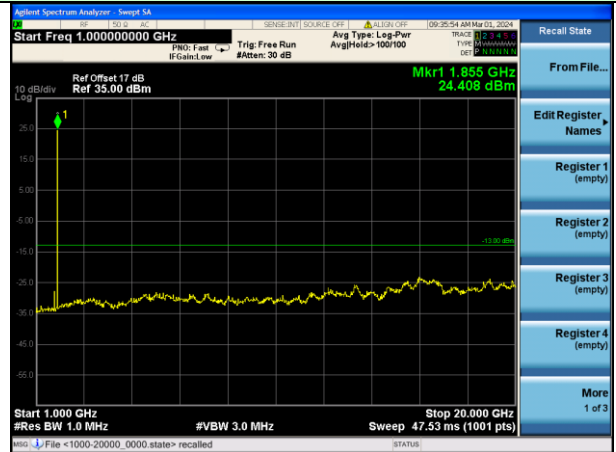
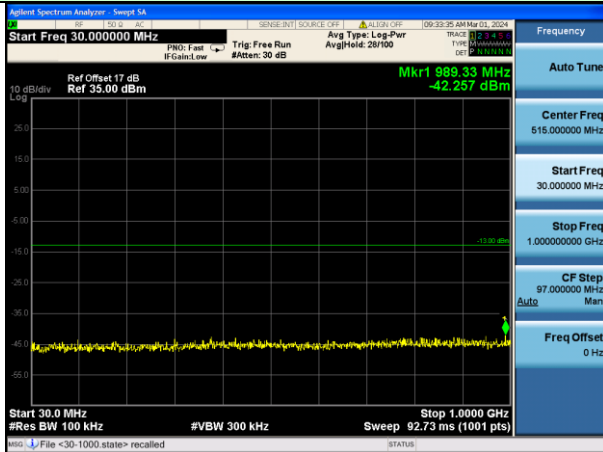
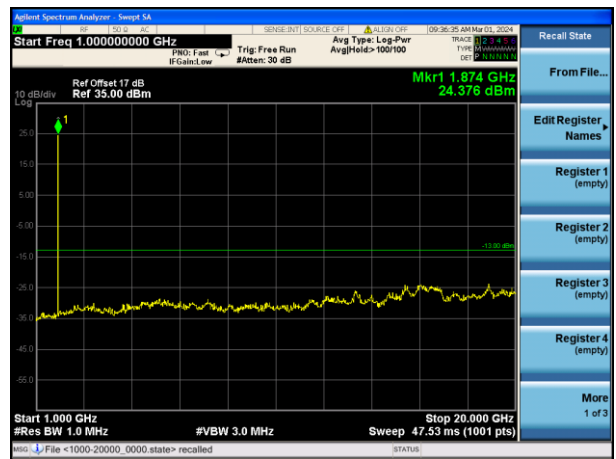
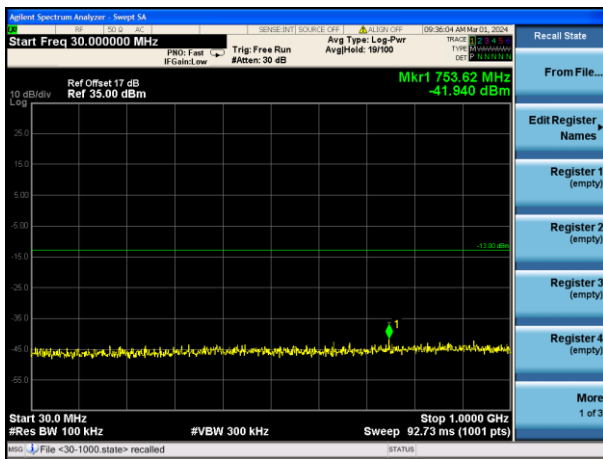


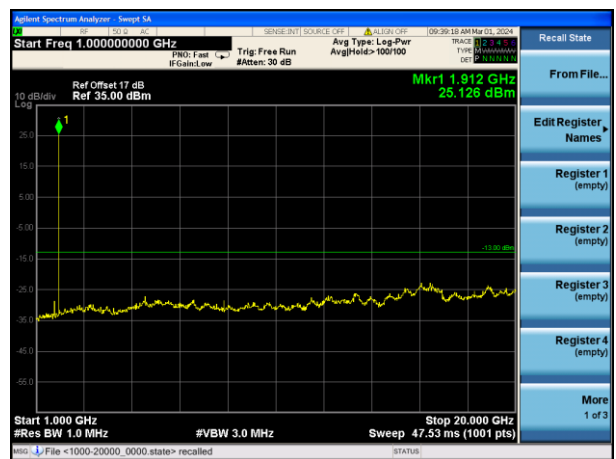
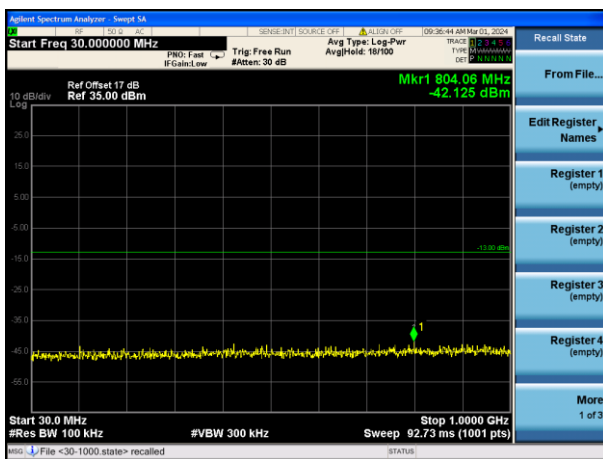
Test Mode: Traffic mode      PCS1900 (GPRS 1 link)



Lowest channel

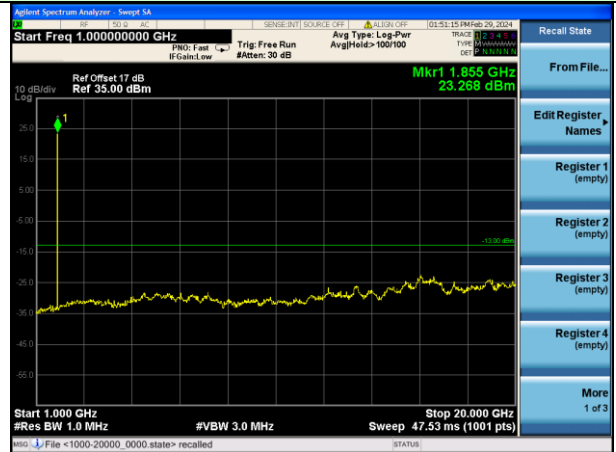
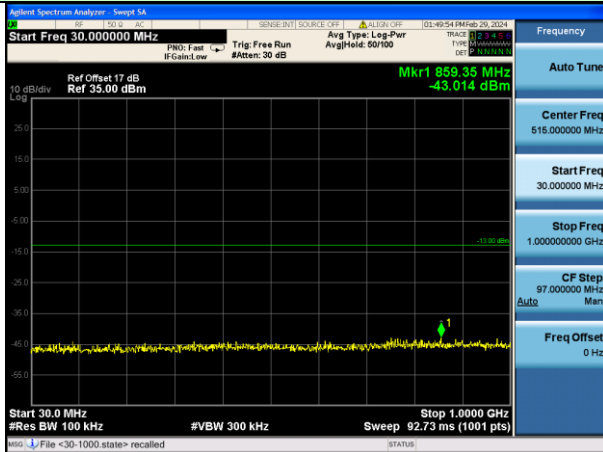


Middle channel

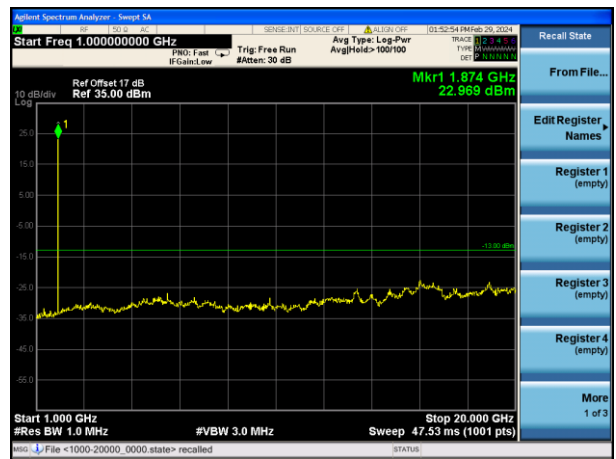
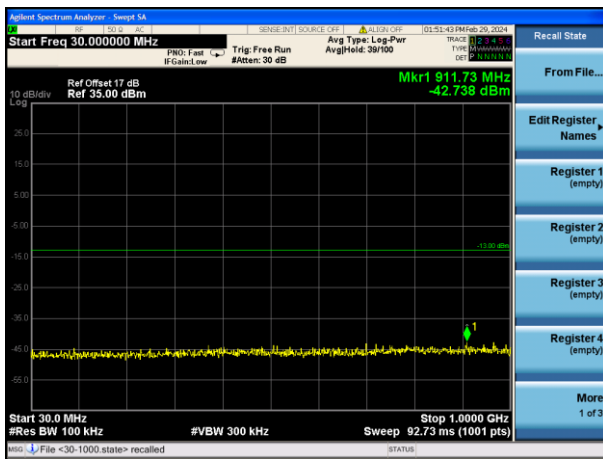


Highest channel

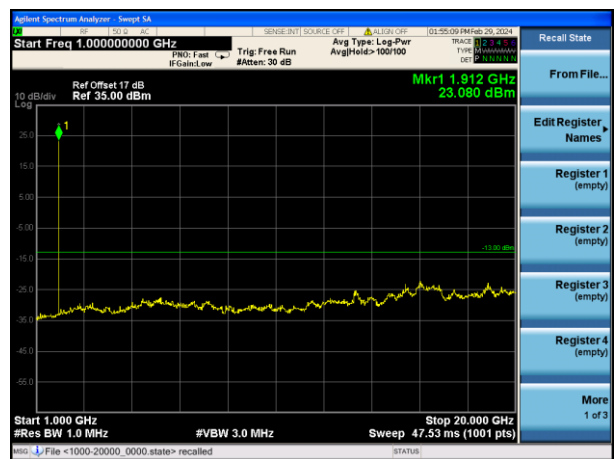
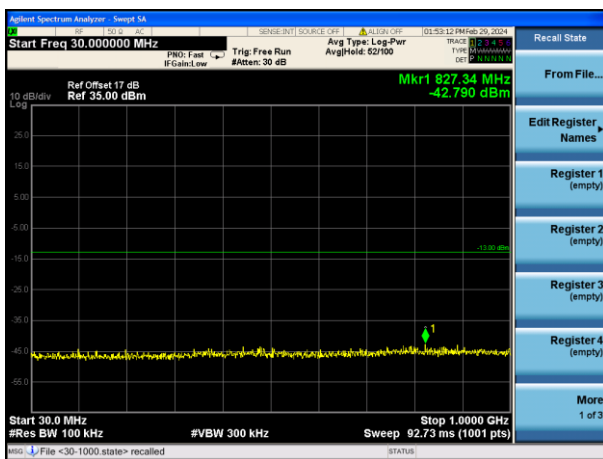
Test Mode: Traffic mode      PCS1900 (EGPRS 1 link)



Lowest channel

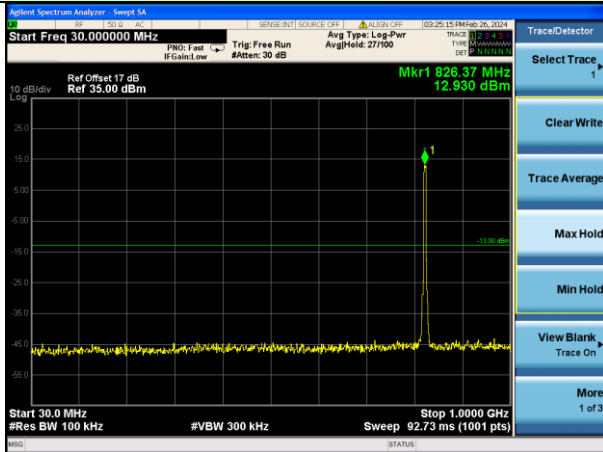


Middle channel

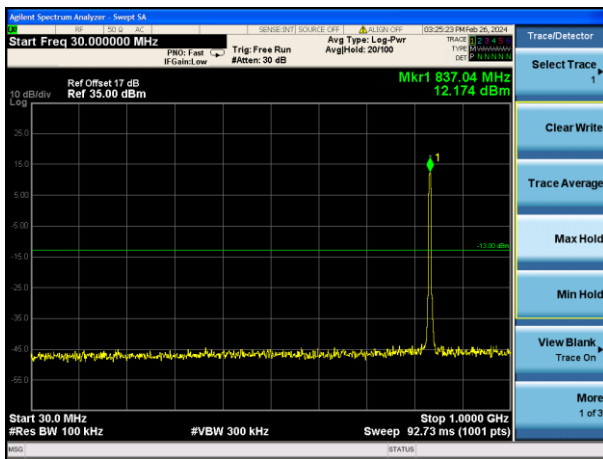


Highest channel

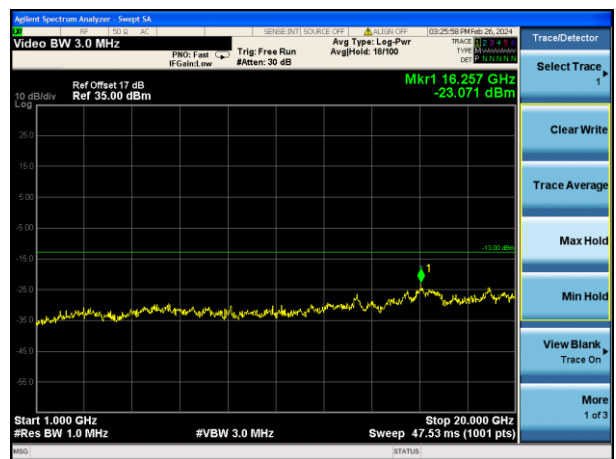
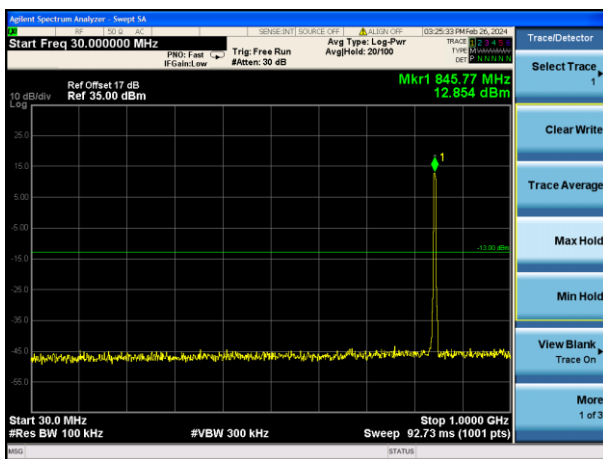
Test Mode: Traffic mode WCDMA Band V (RMC 12.2Kbps link)



Lowest channel

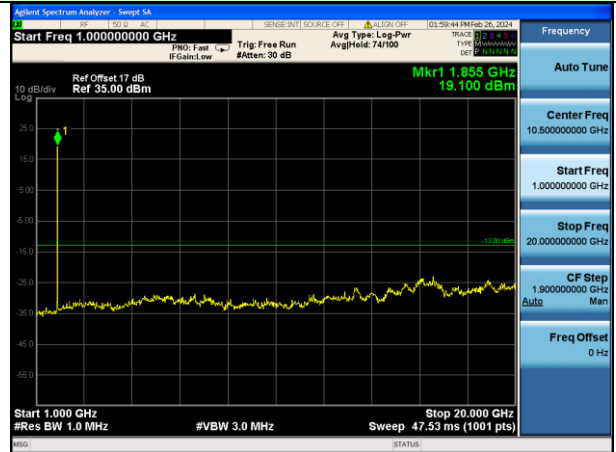
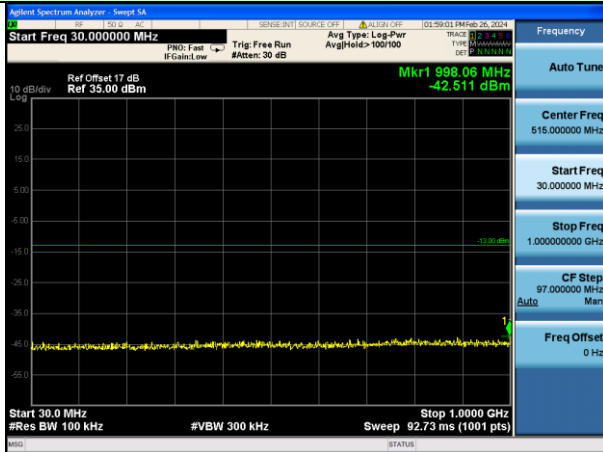


Middle channel

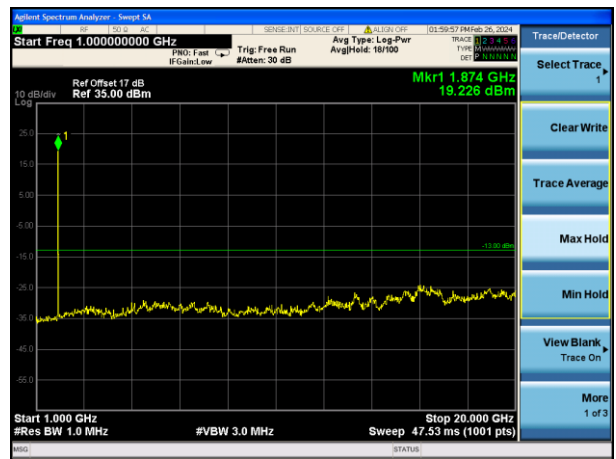
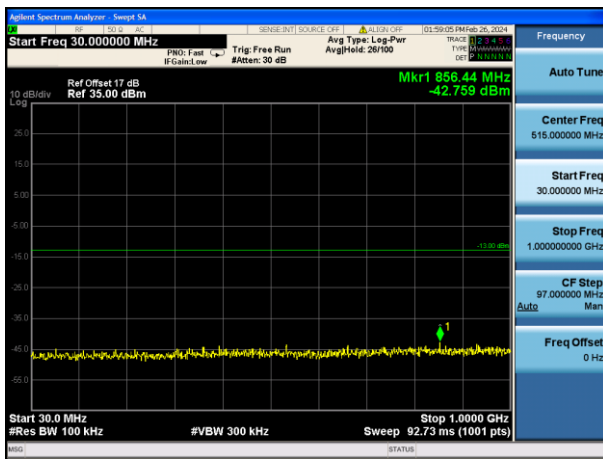


Highest channel

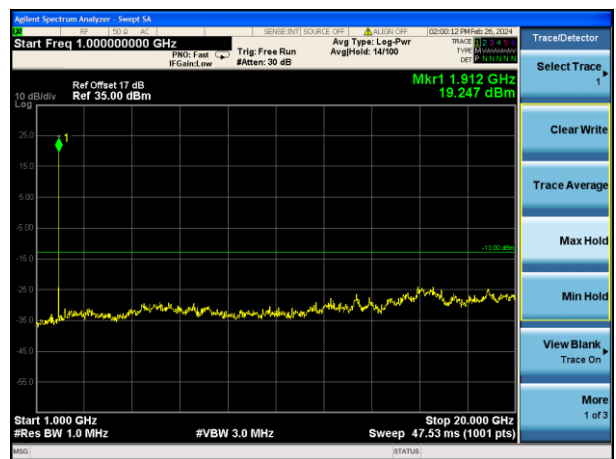
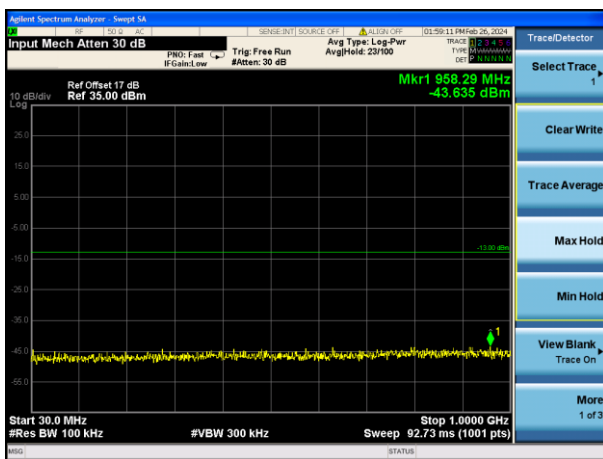
Test Mode: Traffic mode WCDMA Band II (RMC 12.2Kbps link)



Lowest channel

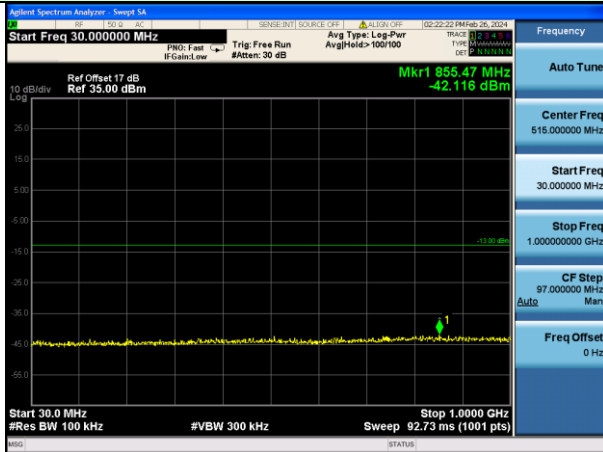


Middle channel

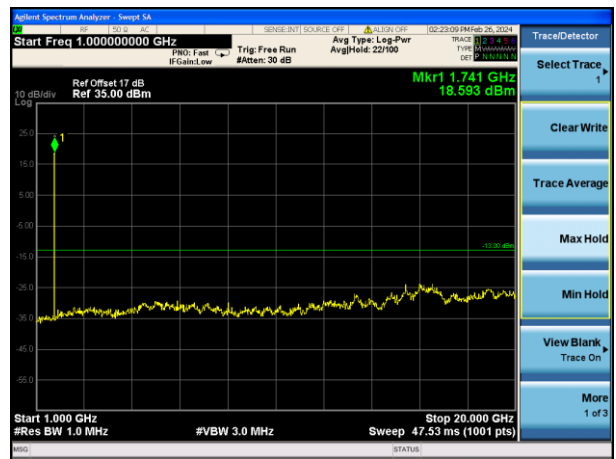
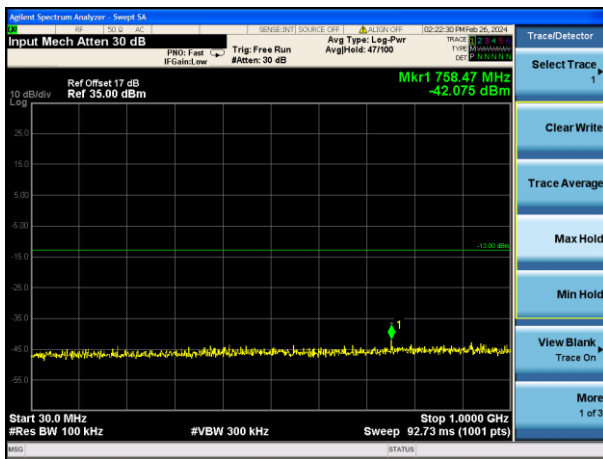


Highest channel

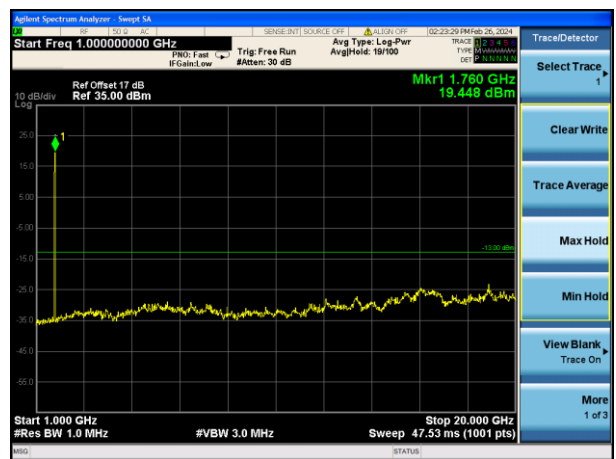
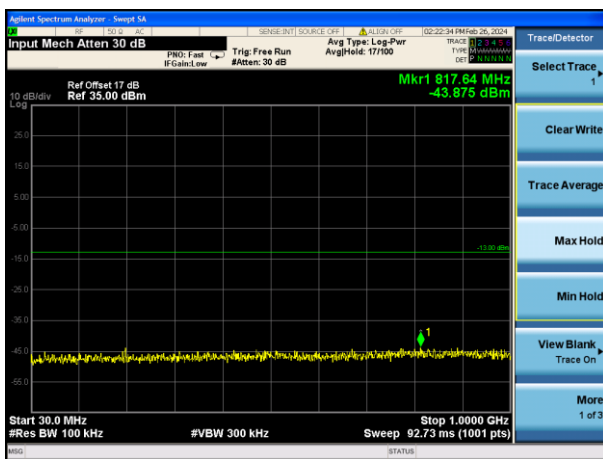
Test Mode: Traffic mode WCDMA Band IV (RMC 12.2Kbps link)



Lowest channel



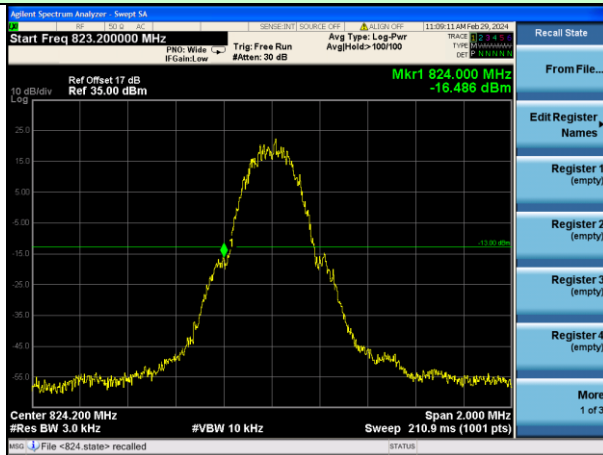
Middle channel



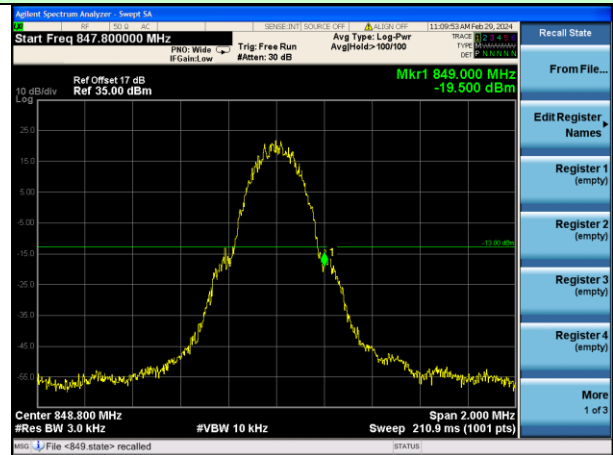
Highest channel

Band Edge:

Test Mode: Traffic mode GSM850 (GSM link)

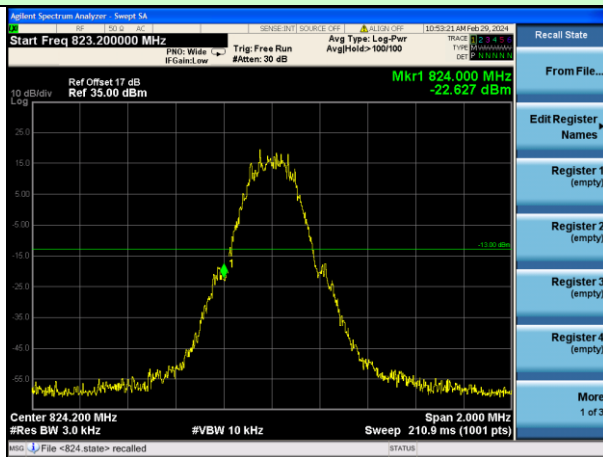


Lowest channel

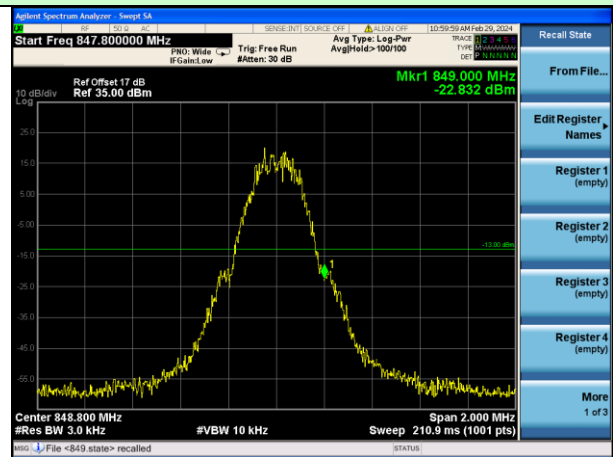


Highest channel

Test Mode: Traffic mode GSM850 (GPRS 1 link)

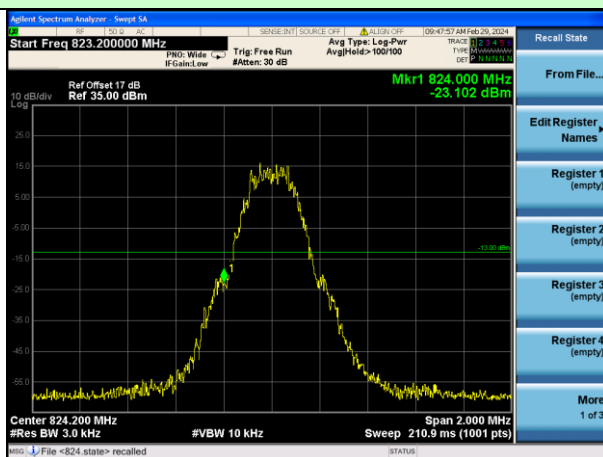


Lowest channel

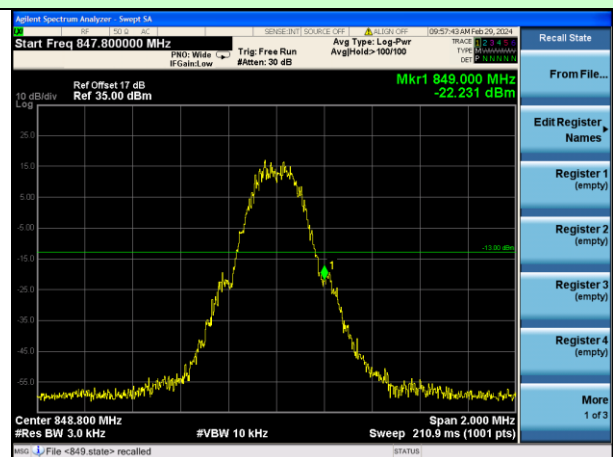


Highest channel

Test Mode: Traffic mode GSM850 (EGPRS 1 link)

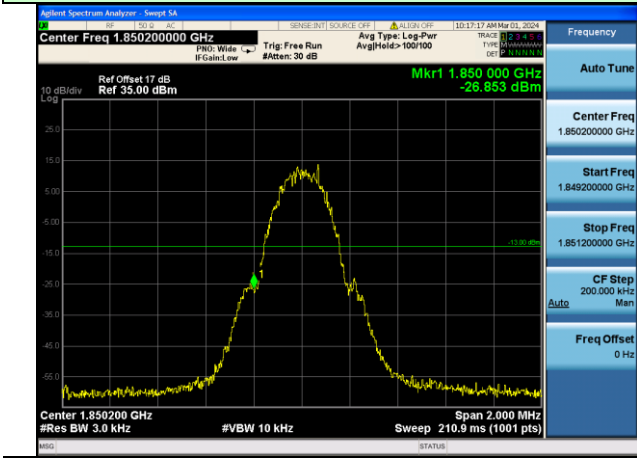


Lowest channel

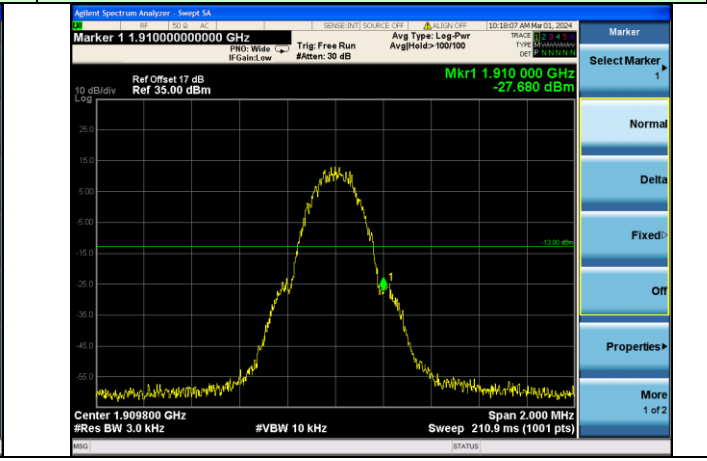


Highest channel

Test Mode: Traffic mode PCS1900 (GSM link)

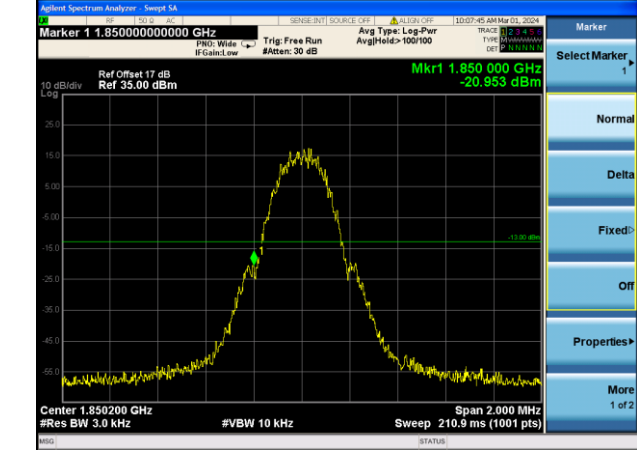


Lowest channel

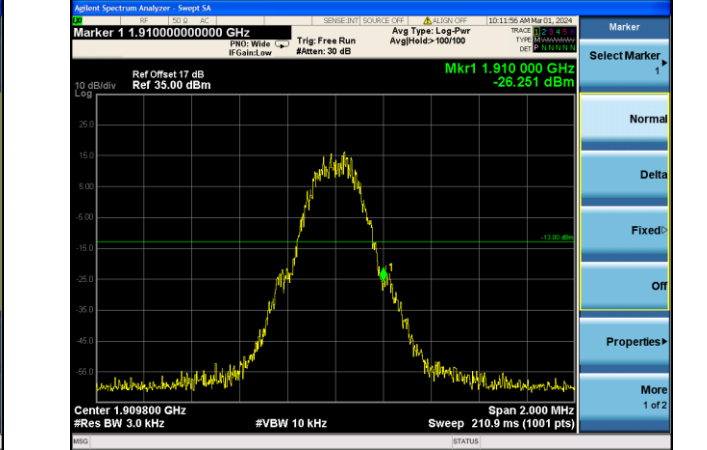


Highest channel

Test Mode: Traffic mode PCS1900 (GPRS 1 link)

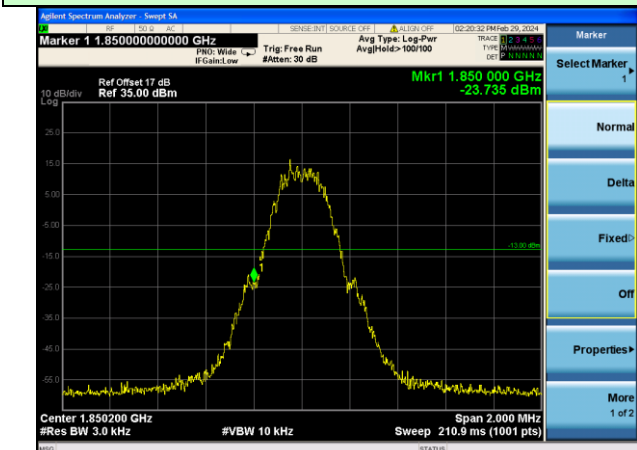


Lowest channel

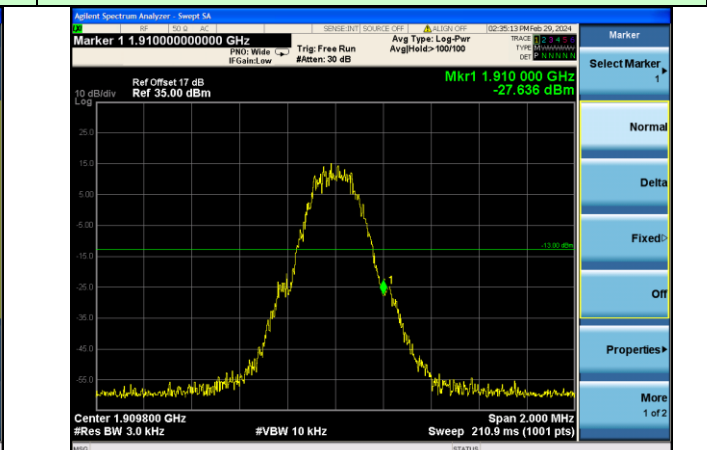


Highest channel

Test Mode: Traffic mode PCS1900 (EGPRS 1 link)



Lowest channel



Highest channel

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

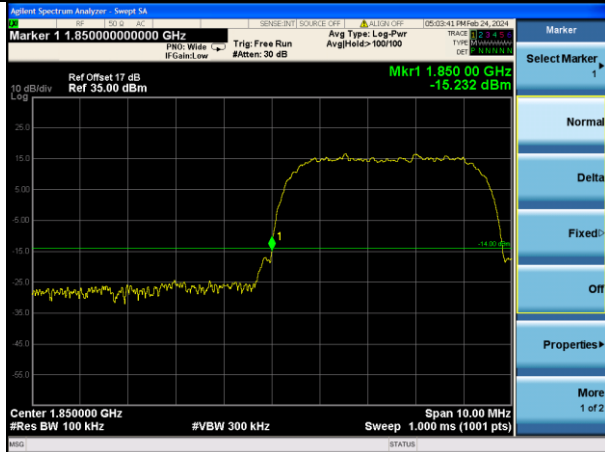


Lowest channel



Highest channel

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

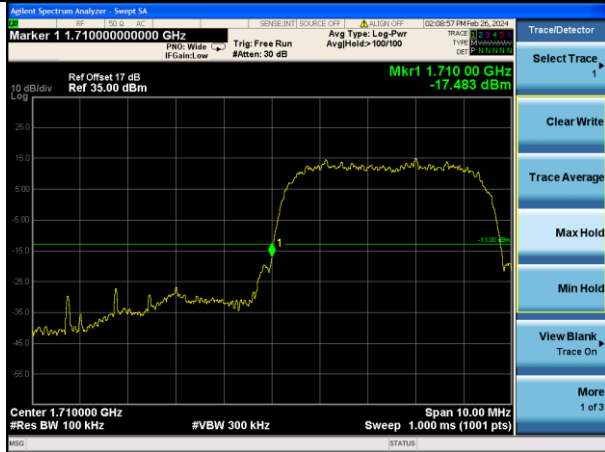


Lowest channel



Highest channel

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



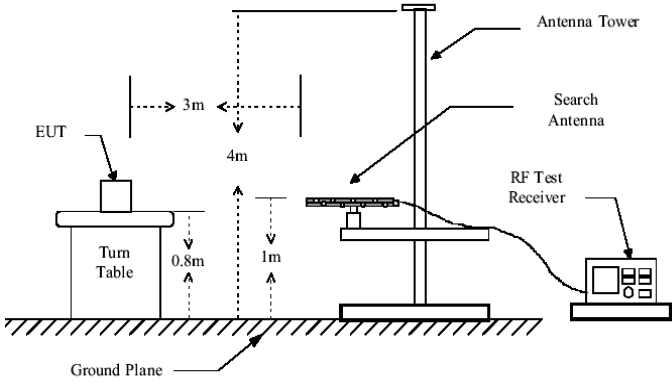
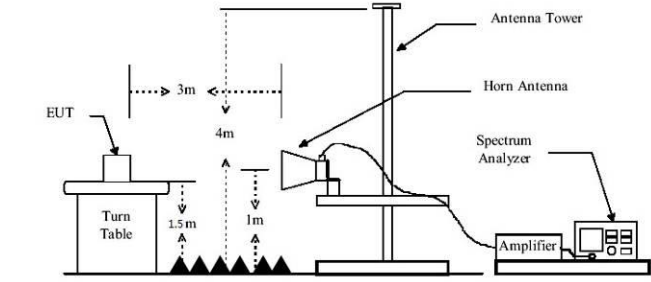
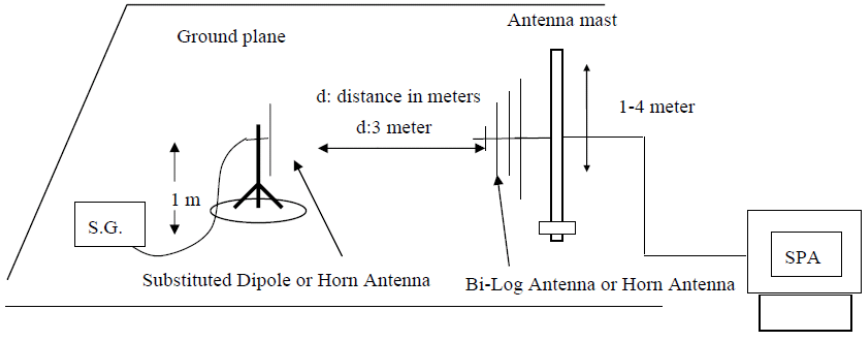
Lowest channel



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:	<p>Below 1GHz</p>  <p>Above 1GHz</p>  <p>Substituted method:</p> 

Test Procedure:	<ol style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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:  <math display="block">\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable Loss (dB)}</math> </li> <li>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:  <math display="block">\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable Loss (dB)}</math> </li> </ol>
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	29.71	38.45	Pass
			H	28.73		
		E1	V	29.83		
			H	27.25		
		E2	V	29.19		
			H	26.70		
	Middle	H	V	30.38	38.45	Pass
			H	27.74		
		E1	V	29.53		
			H	27.61		
		E2	V	29.61		
			H	28.03		
	Highest	H	V	30.37	38.45	Pass
			H	27.91		
		E1	V	29.96		
			H	27.59		
		E2	V	29.66		
			H	27.79		

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
GSM850 (GPRS 1 link)	Lowest	H	V	27.21	38.45	Pass
			H	25.52		
		E1	V	26.72		
			H	25.09		
		E2	V	27.10		
			H	26.07		
	Middle	H	V	27.59	38.45	Pass
			H	25.26		
		E1	V	27.08		
			H	24.80		
		E2	V	26.48		
			H	25.44		
	Highest	H	V	26.86	38.45	Pass
			H	25.44		
		E1	V	26.80		
			H	25.31		
		E2	V	27.87		
			H	25.28		

EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
GSM850 (EGPRS 1 link)	Lowest	H	V	25.48	38.45	Pass
			H	23.33		
		E1	V	26.06		
			H	24.02		
		E2	V	25.12		
			H	23.72		
	Middle	H	V	25.56	38.45	Pass
			H	23.47		
		E1	V	25.59		
			H	23.33		
		E2	V	25.67		
			H	23.42		
	Highest	H	V	25.40	38.45	Pass
			H	24.00		
		E1	V	25.31		
			H	23.70		
		E2	V	25.92		
			H	23.16		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP (dBm)	Limit (dBm)	Result
PCS1900 (GSM link)	Lowest	H	V	29.75	33.01	Pass
			H	25.79		
		E1	V	30.30		
			H	27.34		
		E2	V	29.72		
			H	26.36		
	Middle	H	V	29.96	33.01	Pass
			H	26.84		
		E1	V	29.81		
			H	26.86		
		E2	V	30.12		
			H	27.25		
	Highest	H	V	29.88	33.01	Pass
			H	26.34		
		E1	V	28.94		
			H	26.55		
		E2	V	29.14		
			H	26.37		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP (dBm)	Limit (dBm)	Result
PCS1900 (GPRS 1 link)	Lowest	H	V	29.85	33.01	Pass
			H	25.72		
		E1	V	29.40		
			H	26.70		
		E2	V	29.67		
			H	26.35		
	Middle	H	V	29.78	33.01	Pass
			H	27.48		
		E1	V	29.68		
			H	26.95		
		E2	V	29.72		
			H	27.58		
	Highest	H	V	30.05	33.01	Pass
			H	26.51		
		E1	V	29.77		
			H	26.43		
		E2	V	29.43		
			H	26.58		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP (dBm)	Limit (dBm)	Result
PCS1900 (EGPRS 1 link)	Lowest	H	V	27.22	33.01	Pass
			H	24.16		
		E1	V	27.57		
			H	24.14		
		E2	V	27.01		
			H	24.48		
	Middle	H	V	27.68	33.01	Pass
			H	24.65		
		E1	V	28.31		
			H	24.72		
		E2	V	27.17		
			H	25.20		
	Highest	H	V	27.91	33.01	Pass
			H	23.83		
		E1	V	27.36		
			H	23.98		
		E2	V	27.19		
			H	25.15		

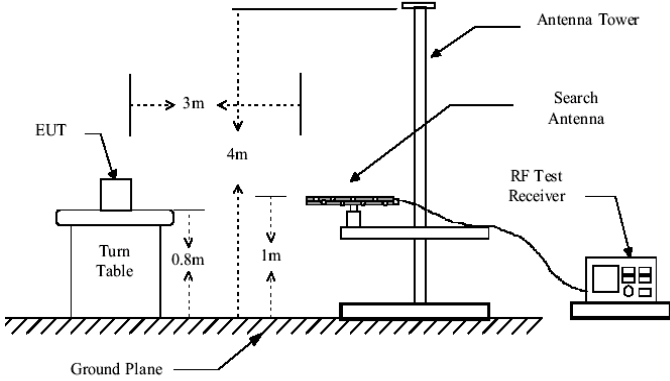
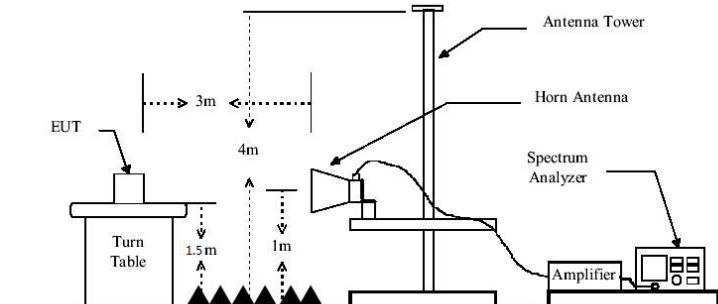
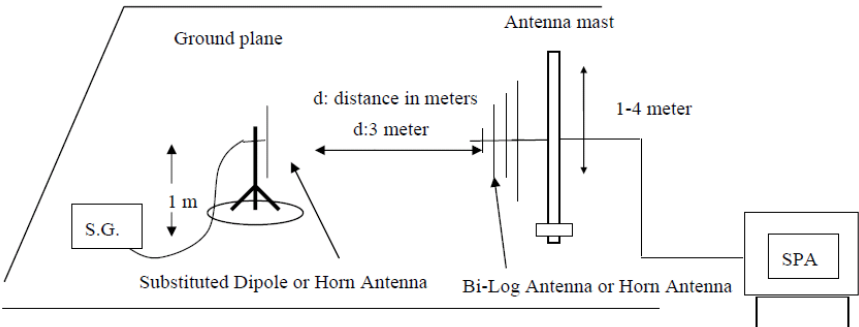


EUT mode	Channel	EUT Pol.	Antenna Pol.	ERP(dBm)	Limit (dBm)	Result
WCDMA Band V	Lowest	H	V	20.68	38.45	Pass
			H	20.75		
		E1	V	20.50		
			H	20.20		
		E2	V	20.77		
			H	20.93		
	Middle	H	V	21.11	38.45	Pass
			H	20.39		
		E1	V	21.16		
			H	19.88		
		E2	V	21.26		
			H	20.20		
	Highest	H	V	20.72	38.45	Pass
			H	19.45		
		E1	V	20.74		
			H	20.02		
		E2	V	21.57		
			H	20.78		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
WCDMA Band II	Lowest	H	V	21.76	33.01	Pass
			H	20.90		
		E1	V	21.11		
			H	19.90		
		E2	V	21.48		
			H	20.77		
	Middle	H	V	20.28	33.01	Pass
			H	19.80		
		E1	V	21.12		
			H	20.72		
		E2	V	21.11		
			H	19.68		
	Highest	H	V	21.22	33.01	Pass
			H	20.44		
		E1	V	20.62		
			H	19.93		
		E2	V	21.21		
			H	19.21		

EUT mode	Channel	EUT Pol.	Antenna Pol.	EIRP(dBm)	Limit (dBm)	Result
WCDMA Band IV	Lowest	H	V	23.93	33.01	Pass
			H	21.98		
		E1	V	21.98		
			H	22.05		
		E2	V	21.58		
			H	22.13		
	Middle	H	V	22.13	33.01	Pass
			H	22.12		
		E1	V	21.87		
			H	21.39		
		E2	V	21.32		
			H	21.23		
	Highest	H	V	22.02	33.01	Pass
			H	21.56		
		E1	V	21.91		
			H	21.44		
		E2	V	21.63		
			H	22.73		

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:	<p>Below 1GHz</p>  <p>Above 1GHz</p>  <p>Substituted method:</p> 

Test Procedure:	<ol style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> <li>4. The spurious emissions attenuation was calculated as the difference between radiated power at the fundamental frequency and the spurious emissions frequency.  <math display="block">\text{ERP / EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain(dB/dBi)} - \text{Cable Loss (dB)}</math> </li> </ol>
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:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1647.38	Vertical	-44.74	-13.00	Pass
2470.11	V	-43.81		
3297.68	V	-38.28		
4118.09	V	-38.28		
4942.09	V	-40.07		
1649.72	Horizontal	-42.07	-13.00	Pass
2473.06	H	-42.40		
3297.25	H	-38.87		
4118.38	H	-37.73		
4942.11	H	-38.40		
Test mode:	GPRS850		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1670.00	Vertical	-40.80	-13.00	Pass
2506.86	V	-37.83		
3345.16	V	-34.79		
4178.73	V	-32.99		
5014.73	V	-31.67		
1671.68	Horizontal	-39.41	-13.00	Pass
2508.71	H	-36.15		
3345.81	H	-34.56		
4180.04	H	-31.22		
5014.86	H	-31.31		
Test mode:	EGPRS850		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result
	Polarization	Level (dBm)		
1695.79	Vertical	-44.33	-13.00	Pass
2543.70	V	-42.22		
3390.58	V	-41.38		
4241.69	V	-35.88		
5089.69	V	-36.47		
1694.96	Horizontal	-44.83	-13.00	Pass
2542.57	H	-44.89		
3390.71	H	-38.26		
4238.09	H	-40.27		
5087.70	H	-38.69		

## 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.

<b>Test mode:</b>		<b>PCS1900</b>		<b>Test channel:</b>	<b>Highest</b>
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result	
	Polarization	Level (dBm)			
3698.88	Vertical	-45.24	-13.00	Pass	
5550.29	V	-41.63			
7398.59	V	-41.37			
9248.70	V	-36.47			
11098.70	V	-39.46			
3699.19	Horizontal	-44.60	-13.00	Pass	
5549.28	H	-44.18			
7401.28	H	-39.76			
9248.05	H	-37.70			
11100.29	H	-38.73			
<b>Test mode:</b>		<b>GPRS1900</b>		<b>Test channel:</b>	<b>Highest</b>
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result	
	Polarization	Level (dBm)			
3759.34	Vertical	-44.78	-13.00	Pass	
5640.39	V	-41.53			
7520.37	V	-39.59			
9401.13	V	-36.75			
11281.13	V	-37.03			
3758.19	Horizontal	-45.60	-13.00	Pass	
5640.16	H	-43.30			
7520.60	H	-38.58			
9398.15	H	-38.38			
11280.39	H	-38.63			
<b>Test mode:</b>		<b>EGPRS1900</b>		<b>Test channel:</b>	<b>Highest</b>
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result	
	Polarization	Level (dBm)			
3818.58	Vertical	-45.54	-13.00	Pass	
5730.36	V	-41.56			
7639.35	V	-40.61			
9550.12	V	-38.87			
11460.12	V	-38.04			
3821.90	Horizontal	-41.89	-13.00	Pass	
5730.80	H	-42.66			
7638.45	H	-38.37			
9551.35	H	-40.53			
11460.36	H	-35.43			

## 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)			
1651.72	Vertical	-44.40	-13.00	Pass	
2477.00	V	-42.92			
3303.08	V	-40.88			
4130.19	V	-36.12			
4956.19	V	-37.97			
1653.47	Horizontal	-42.32	-13.00	Pass	
2477.00	H	-44.46			
3302.40	H	-38.63			
4128.80	H	-40.58			
4955.00	H	-37.98			
Test mode:		WCDMA Band V		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result	
	Polarization	Level (dBm)			
1672.36	Vertical	-43.76	-13.00	Pass	
2507.43	V	-42.49			
3342.83	V	-41.13			
4180.68	V	-38.17			
5016.68	V	-37.48			
1673.04	Horizontal	-42.75	-13.00	Pass	
2507.76	H	-43.70			
3345.30	H	-40.60			
4181.23	H	-37.68			
5015.43	H	-35.55			
Test mode:		WCDMA Band V		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result	
	Polarization	Level (dBm)			
1693.67	Vertical	-42.45	-13.00	Pass	
2536.55	V	-43.37			
3385.73	V	-38.23			
4228.06	V	-36.09			
5074.06	V	-40.10			
1693.55	Horizontal	-42.24	-13.00	Pass	
2536.54	H	-44.92			
3385.41	H	-37.96			
4230.64	H	-37.57			
5074.55	H	-36.14			

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)			
3701.23	Vertical	-42.89	-13.00	Pass	
5551.28	V	-40.64			
7400.23	V	-39.73			
9248.09	V	-39.62			
11098.09	V	-40.07			
3700.49	Horizontal	-43.30	-13.00	Pass	
5550.20	H	-43.26			
7399.24	H	-37.57			
9249.72	H	-39.74			
11101.28	H	-37.06			
Test mode:		WCDMA Band II		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result	
	Polarization	Level (dBm)			
3761.14	Vertical	-42.98	-13.00	Pass	
5638.01	V	-43.91			
7521.99	V	-37.97			
9401.27	V	-38.78			
11281.27	V	-36.89			
3759.46	Horizontal	-44.33	-13.00	Pass	
5641.41	H	-42.05			
7521.59	H	-38.65			
9399.56	H	-37.39			
11278.01	H	-37.22			
Test mode:		WCDMA Band II		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result	
	Polarization	Level (dBm)			
3821.36	Vertical	-42.76	-13.00	Pass	
5728.18	V	-43.74			
7640.27	V	-39.69			
9549.68	V	-36.81			
11459.68	V	-38.48			
3821.64	Horizontal	-42.15	-13.00	Pass	
5731.77	H	-41.69			
7640.63	H	-38.26			
9549.14	H	-38.35			
11458.18	H	-37.64			

## Remark:

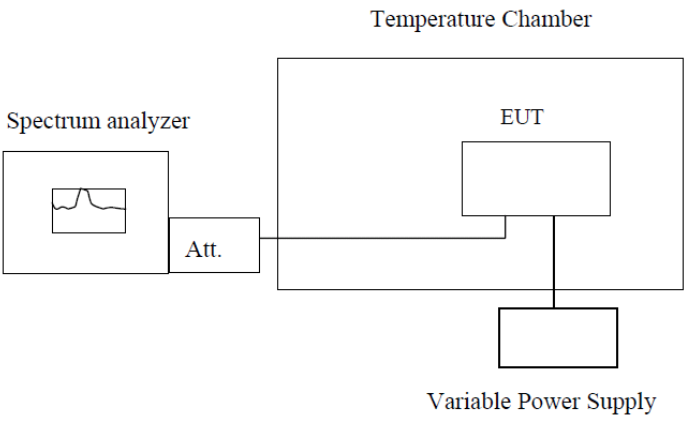
1. The emission behaviour belongs to narrowband spurious emission.
2. Remark"---" means that the emission level is too low to be measured
3. The emission levels of below 1 GHz are very lower than the limit and not show in test report.

Test mode:		WCDMA Band IV		Test channel:	Lowest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result	
	Polarization	Level (dBm)			
3421.20	Vertical	-42.92	-13.00	Pass	
5129.12	V	-42.80			
6840.57	V	-39.39			
8548.09	V	-38.79			
10258.09	V	-40.07			
3420.75	Horizontal	-43.04	-13.00	Pass	
5129.05	H	-44.41			
6839.54	H	-40.85			
8551.61	H	-39.44			
10259.12	H	-35.17			
Test mode:		WCDMA Band IV		Test channel:	Middle
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result	
	Polarization	Level (dBm)			
3460.68	Vertical	-43.44	-13.00	Pass	
5190.60	V	-41.32			
6921.48	V	-38.48			
8648.17	V	-36.31			
10378.17	V	-39.99			
3458.59	Horizontal	-45.20	-13.00	Pass	
5190.70	H	-42.76			
6920.71	H	-39.26			
8650.67	H	-38.27			
10380.60	H	-36.11			
Test mode:		WCDMA Band IV		Test channel:	Highest
Frequency (MHz)	Spurious Emission		Limit (dBm)	Result	
	Polarization	Level (dBm)			
3501.41	Vertical	-42.71	-13.00	Pass	
5252.00	V	-39.92			
7000.79	V	-39.17			
8748.07	V	-38.96			
10498.07	V	-40.09			
3501.41	Horizontal	-42.38	-13.00	Pass	
5248.65	H	-44.81			
6999.27	H	-39.91			
8751.84	H	-39.71			
10502.00	H	-34.94			

## 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:	 <p style="text-align: center;"><b>Note :</b> Measurement setup for testing on Antenna connector</p>
Test procedure:	<ol style="list-style-type: none"> <li>1. The equipment under test was connected to an external DC power supply and input rated voltage.</li> <li>2. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators.</li> <li>3. The EUT was placed inside the temperature chamber.</li> <li>4. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 25°C operating frequency as reference frequency.</li> <li>5. Turn EUT off and set the chamber temperature to –20°C. After the temperature stabilized for approximately 30 minutes recorded the frequency.</li> <li>6. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.</li> </ol>
Test Instruments:	Refer to section 5.0 for details
Test mode:	Refer to section 6.1 for details
Test results:	Pass

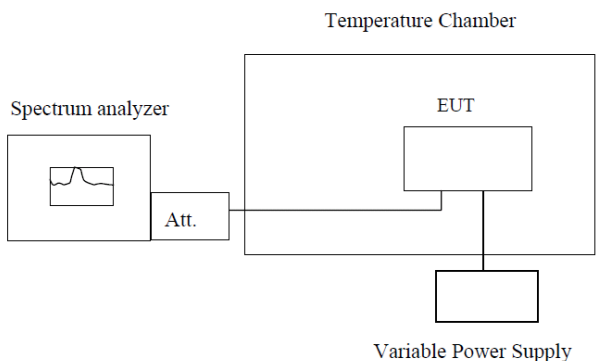
## Measurement Data

Reference Frequency: GSM850 (GSM link) Middle channel=190 channel=836.6MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
3.8	-20	19	0.0222	2.5	Pass
	-10	20	0.0240		
	0	27	0.0319		
	10	-25	-0.0304		
	20	23	0.0271		
	30	16	0.0186		
	40	0	-0.0006		
	50	3	0.0037		
60	11	0.0131			
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	24	0.0288	2.5	Pass
	-10	21	0.0251		
	0	27	0.0326		
	10	-30	-0.0360		
	20	23	0.0278		
	30	15	0.0175		
	40	-1	-0.0011		
	50	10	0.0114		
60	15	0.0181			
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	19	0.0230	2.5	Pass
	-10	26	0.0306		
	0	22	0.0264		
	10	-32	-0.0379		
	20	24	0.0291		
	30	14	0.0165		
	40	0	-0.0005		
	50	8	0.0097		
60	8	0.0101			

Reference Frequency: PCS1900 (GSM link) Middle channel=661 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error			Result
		Hz	ppm		
3.8	-20	22	0.0115	2.5	Pass
	-10	23	0.0123		
	0	18	0.0098		
	10	-23	-0.0120		
	20	17	0.0089		
	30	13	0.0068		
	40	-5	-0.0026		
	50	15	0.0081		
	60	12	0.0062		
Reference Frequency: PCS1900 (GPRS 1 link) Middle channel=661 channel=1880MHz					
Power supplied (Vdc)	Temperature (°C)	Frequency error			Result
		Hz	ppm		
3.8	-20	20	0.0107	2.5	Pass
	-10	21	0.0110		
	0	20	0.0109		
	10	-25	-0.0133		
	20	21	0.0114		
	30	17	0.0091		
	40	-5	-0.0028		
	50	10	0.0052		
	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	20	0.0107	2.5	Pass
	-10	24	0.0128		
	0	18	0.0098		
	10	-27	-0.0144		
	20	18	0.0097		
	30	13	0.0071		
	40	-3	-0.0014		
	50	13	0.0069		
	60	12	0.0065		

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	23	0.0271	2.5	Pass
	-10	20	0.0244		
	0	28	0.0335		
	10	-26	-0.0316		
	20	19	0.0232		
	30	14	0.0162		
	40	-5	-0.0058		
	50	11	0.0128		
60	13	0.0161			
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	15	0.0080	2.5	Pass
	-10	23	0.0120		
	0	21	0.0109		
	10	-22	-0.0117		
	20	18	0.0098		
	30	13	0.0070		
	40	-4	-0.0023		
	50	14	0.0074		
60	15	0.0079			
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	21	0.0121	2.5	Pass
	-10	24	0.0134		
	0	21	0.0118		
	10	-27	-0.0147		
	20	20	0.0113		
	30	20	0.0109		
	40	-1	-0.0004		
	50	15	0.0081		
60	13	0.0072			

## 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:	 <p style="text-align: center;">Temperature Chamber</p> <p style="text-align: center;">Spectrum analyzer      Att.      EUT</p> <p style="text-align: center;">Variable Power Supply</p> <p><b>Note :</b> Measurement setup for testing on Antenna connector</p>
Test procedure:	<ol style="list-style-type: none"> <li>1. Set chamber temperature to 25°C. Use a variable DC power source to power the EUT and set the voltage to rated voltage.</li> <li>2. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.</li> <li>3. Reduce the input voltage to specified extreme voltage variation (+/- 15%) and endpoint, record the maximum frequency change.</li> </ol>
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	4	0.0046	2.5	Pass
	3.8	2	0.0030		
	3.42	3	0.0035		
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	4	0.005	2.5	Pass
	3.8	2	0.002		
	3.42	3	0.004		
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	3	0.004	2.5	Pass
	3.8	2	0.002		
	3.42	2	0.003		

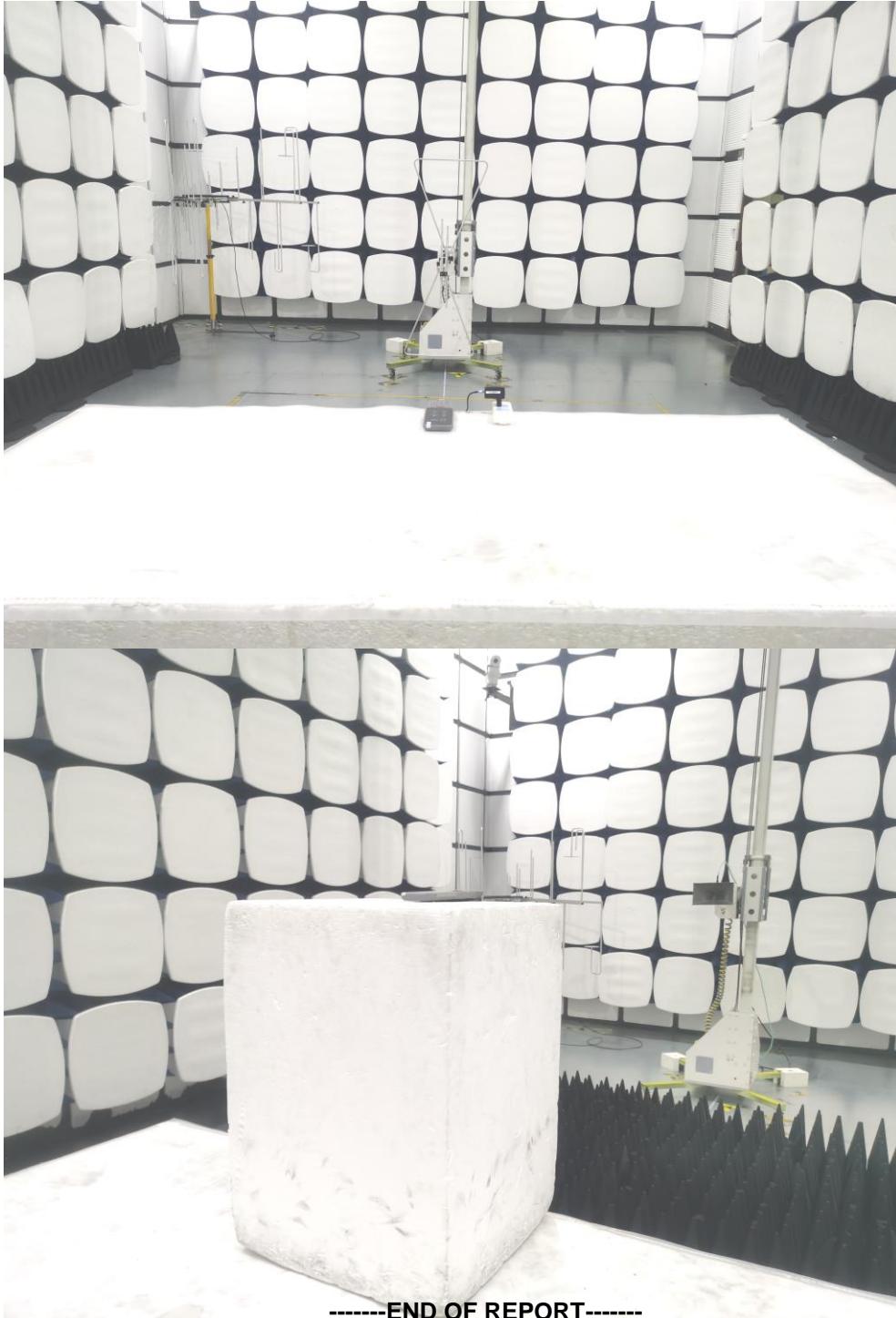


Reference Frequency: PCS1900 (GSM link) Middle channel=661 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	4	0.002	2.5	Pass
	3.8	2	0.001		
	3.42	3	0.001		
Reference Frequency: PCS1900 (GPRS 1 link) Middle channel=661 channel=1880MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	3	0.002	2.5	Pass
	3.8	2	0.001		
	3.42	3	0.001		
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	4	0.002	2.5	Pass
	3.8	1	0.001		
	3.42	3	0.002		

Reference Frequency: WCDMA Band V Middle channel=4183 channel=836.6MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	4	0.004	2.5	Pass
	3.8	2	0.002		
	3.42	2	0.002		
Reference Frequency: WCDMA Band II Middle channel=940 channel=1880.0MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	4	0.004	2.5	Pass
	3.8	1	0.001		
	3.42	2	0.003		
Reference Frequency: WCDMA Band IV Middle channel=1450 channel=1740.0MHz					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
25	4.18	4	0.005	2.5	Pass
	3.8	2	0.002		
	3.42	2	0.004		

## 5 Test Setup Photo

Radiated Emission



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