



TEST REPORT

FCC ID: 2AI3K-CM16

Applicant : Cyrus Technology GmbH

Address : Hergelsbendenstr. 49
D-52080 Aachen, Germany

Equipment Under Test(EUT):

Name : MOBILE TELEPHONE

Model : Cyrus CM16

In Accordance with: FCC PART 2; FCC PART 22H; FCC PART 24E

Report No : T1861107 01

Date of Test : June 21- July 09, 2016

Date of Issue : July 11, 2016

Test Result : PASS

Test Result: **PASS**

In the configuration tested, the EUT complied with the standards specified above

Authorized Signature

(Mark Zhu)

General Manager

The manufacture should ensure that all the products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of Shenzhen Alpha Product Testing Co., Ltd. Or test done by Shenzhen Alpha Product Testing Co., Ltd. Approvals in connection with, distribution or use of the product described in this report must be approved by Shenzhen Alpha Product Testing Co., Ltd. Approvals in writing.


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1. General Information

1.1. Description of Device (EUT)

EUT	:	MOBILE TELEPHONE
Trade Name	:	
Model No.	:	Cyrus CM16
DIFF.	:	N/A
Power supply	:	DC 3.7V Supply by battery Manufacturer: NIL
Adapter	:	Model No.: CS 27 Input: 100-240V AC, 50/60Hz, 0.2A Output: 5.0V DC, 1A
Radio Technology	:	GSM 850: 824.2MHz—848.8MHz GSM 1900: 1850.2MHz—1909.8MHz
GSM Power class	:	GSM 850: Class 4 GSM 1900: Class 1
Operation frequency	:	GSM 850: 824.2MHz—848.8MHz GSM 1900: 1850.2MHz—1909.8MHz
Modulation	:	GSM/GPRS: GMSK, EDGE/EGPRS: 8PSK
Antenna Type	:	PCB Antenna, max gain 1.12 dBi for GSM850 PCB Antenna, max gain 1.12 dBi for GSM1900
Applicant	:	Cyrus Technology GmbH
Address	:	Hergelsbendenstr. 49 D-52080 Aachen
Manufacturer	:	Cyrus Technology GmbH
Address	:	Hergelsbendenstr. 49 D-52080 Aachen

1.2. Test Lab information

Shenzhen Alpha Product Testing Co., Ltd.

Building B, East Area of Nanchang Second, Industrial Zone, Gushu 2nd Road,
Bao'an, Shenzhen, China

March 25, 2015 File on Federal Communication Commission

Registration Number: 203110

July 18, 2014 Certificated by IC

Registration Number: 12135A

2. Summary of test

2.1. Summary of test result

Description of Test Item	Standard	Results
Conducted Output power	FCC PART 2: 2.1046 FCC PART 22H: 22.913 (a) FCC PART 24E: 24.232 (c)	PASS
Radiated Output power(erp/eirp)	FCC PART 22H:22.913 (a) FCC PART 24E:24.232(c)	PASS
Occupied bandwidth	FCC PART 2: 2.1049 FCC PART 22H: 22.917 (b) FCC PART 24E: 24.238 (b)	PASS
Frequency stability	FCC PART 2: 2.1055 FCC PART 22H: 22.355 FCC PART 24E: 24.235	PASS
Conducted spurious emission (Antenna terminal)	FCC PART 2: 2.1051 FCC PART 22H: 22.917 FCC PART 24E: 24.238	PASS
Radiated spurious emissions	FCC PART 2: 2.1053 FCC PART 22H: 22.917 FCC PART 24E: 24.238	PASS
Band edge compliance	FCC PART 22H: 22.917 (b) FCC PART 24E: 24.238 (b)	PASS
Power Line Conducted Emission Test	FCC Part 15: 15.207 ANSI C63.4: 2014	PASS

2.2. Assistant equipment used for test

Description	:	Adapter
Manufacturer	:	NIL
Model No.	:	CS 27
Input	:	100-240V AC, 50/60Hz,0.2A
Output	:	5.0V DC, 1A

2.3. Test mode

During all testing, EUT is in link mode with base station emulator at maximum power level in each test mode and channel as below:

Mode	Channel	Frequency(MHz)
GSM 850	128	824.2
	190	836.6
	251	848.8
PCS 1900	512	1850.2
	661	1880.0
	810	1909.8

2.4. Test Environment Conditions

Temperature range	21-25°C
Humidity range	40-75%
Pressure range	86-106kPa

2.5. Measurement Uncertainty (95% confidence levels, k=2)

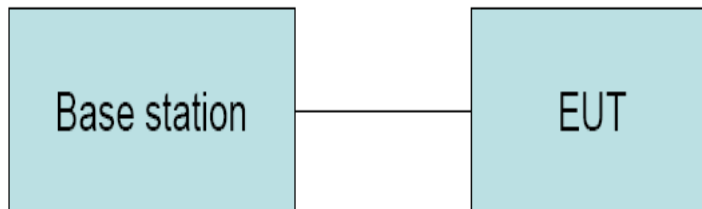
Item	MU	Remark
Uncertainty for Power point Conducted Emissions Test	2.42dB	
Uncertainty for Radiation Emission test in 3m chamber (30MHz to 1GHz)	3.54dB	Polarize: V
	4.1dB	Polarize: H
Uncertainty for Radiation Emission test in 3m chamber (1GHz to 25GHz)	2.08dB	Polarize: H
	2.56dB	Polarize: V
Uncertainty for radio frequency	1×10^{-9}	
Uncertainty for conducted RF Power	0.65dB	
Uncertainty for temperature	0.2°C	
Uncertainty for humidity	1%	
Uncertainty for DC and low frequency voltages	0.06%	

2.6. Test Equipment

Equipment	Manufacture	Model No.	Serial No.	Last cal. Due to	Cal Interval
3m Semi-Anechoic	CHENYU	N/A	N/A	2018.01.18	2Year
Spectrum analyzer	Agilent	E4407B	MY46185649	2017.01.16	1Year
Receiver	R&S	ESPI	101873	2017.01.16	1Year
Receiver	R&S	ESCI	101165	2017.01.16	1Year
Bilog Antenna	SCHWARZBECK	VULB 9168	VULB9168-440	2018.01.18	2Year
Horn Antenna	SCHWARZBECK	BBHA 9120 D	BBHA 9120 D(1201)	2017.01.20	2Year
Cable	Resenberger	N/A	No.1	2017.01.16	1Year
Cable	SCHWARZBECK	N/A	No.2	2017.01.16	1Year
Cable	SCHWARZBECK	N/A	No.3	2017.01.16	1Year
Pre-amplifier	HP	HP8347A	2834A00455	2017.01.18	1Year
Pre-amplifier	Agilent	8449B	3008A02664	2017.01.18	1Year
vector Signal Generator	Agilent	N5182A	MY49060042	2016.11.16	1 Year
vector Signal Generator	Agilent	E4440C	US44271917	2016.11.16	1 Year
X-series USB Peak and Average Power Sensor	Agilent	U2021XA	MY54080020	2016.11.16	1 Year
X-series USB Peak and Average Power Sensor	Agilent	U2021XA	MY54110001	2016.11.16	1 Year
Signal Analyzer	Agilent	N9020A	MY48030494	2016.11.16	1 Year
L.I.S.N.#1	Schwarzbeck	NSLK8126	8126466	2016.01.19	1Year
L.I.S.N.#2	ROHDE&SCHWA RZ	ENV216	101043	2016.01.19	1 Year

3. Conducted Output power

3.1. Block Diagram of Test Setup



3.2. Limit

Cellular Telephone 850MHz	PCS 1900MHz
38.5dBm(ERP)	33dBm(EIRP)

3.3. Test Procedure

- (1) The EUT's RF output port was connected to base station.
- (2) A call is set up by the SS according to the generic call set up procedure
- (3) Set EUT at maximum power level through base station by power level command
- (4) Measure the maximum output power of EUT at each frequency band and mode by base station.

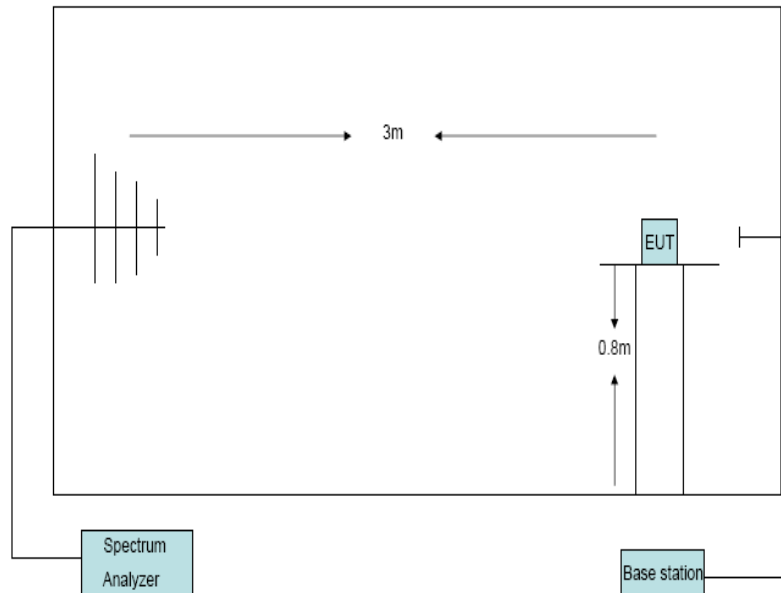
3.4. Test Result

EUT: MOBILE TELEPHONE		M/N:Cyrus CM16		Power: DC 3.7V			
Ambient Temperature:24℃		Relative Humidity: 62%					
Test date: 2016-06-25		Test site: RF site		Tested by: Simple Guan			
Conclusion: PASS							
Mode	Chann el	PK Output Power(dBm)					Limit (dBm)
		GSM850	GPRS -1 Slot	GPRS -2 Slot	GPRS -3 Slot	GPRS -4 Slot	
GSM/GPRS 850	128	32.73	32.11	30.36	29.38	27.68	38.5
	190	32.77	32.13	30.46	29.40	27.67	38.5
	251	32.64	32.07	30.38	28.96	27.57	38.5
PCS/GPRS 1900	512	30.56	28.98	27.02	25.91	24.26	33
	661	30.36	29.47	27.16	26.44	24.58	33
	810	30.18	29.76	27.61	26.11	24.35	33

EUT: MOBILE TELEPHONE		M/N:Cyrus CM16		Power: DC 3.7V		
Ambient Temperature:24℃		Relative Humidity: 62%				
Test date: 2016-06-25		Test site: RF site		Tested by: Simple Guan		
Conclusion: PASS						
Mode	Channel	PK Output Power(dBm)				Limit (dBm)
		EGPRS -1 Slot	EGPRS -2 Slot	EGPRS -3 Slot	EGPRS -4 Slot	
EGPRS 850	128	26.54	23.21	22.10	20.17	38.5
	190	26.53	23.29	22.16	20.27	38.5
	251	26.07	23.33	22.54	20.41	38.5
EGPRS 1900	512	25.37	23.71	21.45	19.40	33
	661	25.06	23.13	21.65	19.33	33
	810	25.49	23.19	21.38	19.71	33

4. Radiated Output power

4.1. Block Diagram of Test Setup



4.2. Limit

Cellular Telephone 850MHz	PCS 1900MHz
38.5dBm(ERP)	33dBm(EIRP)

4.3. Test Procedure

1. The EUT was placed on a non-conductive rotating platform with 0.8 meter height in an anechoic chamber. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer with RBW= 3MHz, VBW= 3MHz and peak detector settings.
2. During the measurement, the EUT was enforced in maximum power and linked with a base station. The highest emission was recorded from analyzer power level (LVL) from the 360 degrees rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations
3. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by dipole antenna (for frequency below 1GHz) or Horn antenna (for frequency above 1GHz) at same location with same

polarize of receiver antenna and then a known power of each measure frequency from S.G. was applied into the dipole antenna or Horn antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain - Substitution antenna Loss(only for Dipole antenna) - Analyzer reading. Then the EUT's EIRP was calculated with the correction factor, $EIRP = LVL + \text{Correction factor}$ and $ERP = EIRP - 2.15$

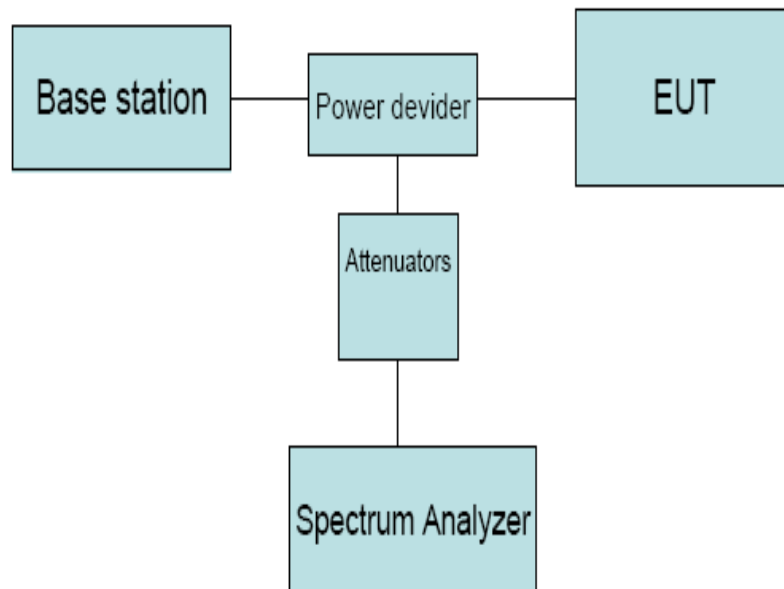
4.4. Test Result

EUT: MOBILE TELEPHONE M/N:Cyrus CM16					
Power: DC 3.7V					
Ambient Temperature:23℃			Relative Humidity: 60%		
Test date: 2016-06-25			Test site: RF site	Tested by: Simple Guan	
Conclusion: PASS					
Mode	Channel	LVL (dBm)	Correction factor(dB)	ERP (dBm)	EIRP (dBm)
GSM 850	128	4.4	26.61	28.95	/
	190	4.5	26.86	29.30	/
	251	4.4	26.49	28.92	/
PCS 1900	512	4.5	22.27	/	26.77
	661	4.5	22.66	/	27.16
	810	4.5	22.37	/	26.78
ERP=LVL + Correction factor -2.15					
EIRP=LVL+ Correction factor					

EUT: MOBILE TELEPHONE M/N:Cyrus CM16					
Power: DC 3.7V					
Ambient Temperature:23℃			Relative Humidity: 60%		
Test date: 2016-06-25			Test site: RF site	Tested by: Simple Guan	
Conclusion: PASS					
Mode	Channel	LVL (dBm)	Correction factor(dB)	ERP (dBm)	EIRP (dBm)
EGPRS 850	128	1.6	26.61	26.06	/
	190	1.5	26.86	26.21	/
	251	1.8	26.49	26.14	/
EGPRS 1900	512	1.2	22.27	/	23.47
	661	1.3	22.66	/	23.96
	810	1.2	22.37	/	23.57
ERP=LVL + Correction factor -2.15					
EIRP=LVL+ Correction factor					

5. Occupied Bandwidth

5.1. Block Diagram of Test Setup



5.2. Limit

N/A

5.3. Test Procedure

1. The EUT' RF output port was connected to Spectrum Analyzer and Base Station via power divider.
2. Spectrum analyzer's occupied bandwidth measure function was used to measure 99% bandwidth and -26dBc bandwidth

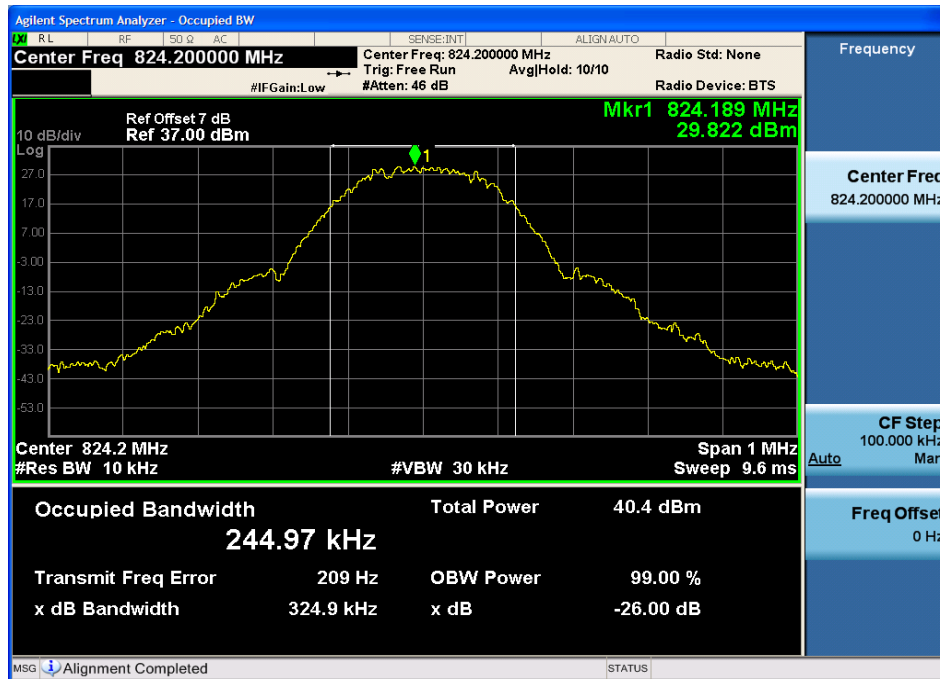
5.4. Test Result

EUT: MOBILE TELEPHONE M/N:Cyrus CM16			
Power: DC 3.7V			
Ambient Temperature:23℃		Relative Humidity: 60%	
Test date: 2016-06-25		Test site: RF site	Tested by: Simple Guan
Mode	Channel	99% bandwidth (KHz)	-26dBc bandwidth (KHz)
GSM 850	128	244.97	324.9
	190	245.23	319.9
	251	244.86	319.9
PCS 1900	512	246.09	320.8
	661	245.97	315.3
	810	244.32	320.2

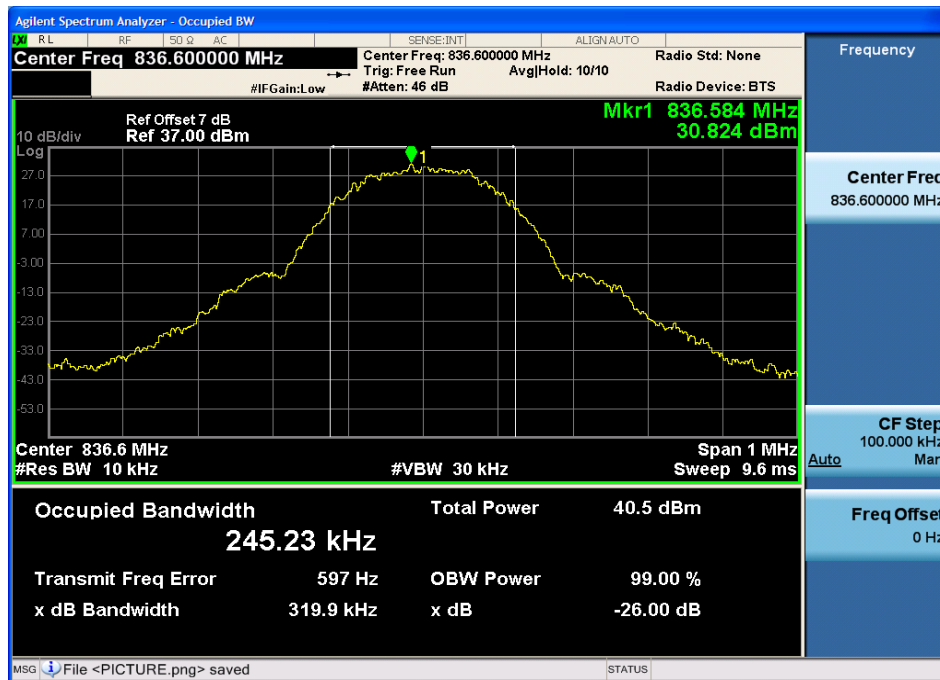
EUT: MOBILE TELEPHONE M/N:Cyrus CM16			
Power: DC 3.7V			
Ambient Temperature:23℃		Relative Humidity: 60%	
Test date: 2016-06-25		Test site: RF site	Tested by: Simple Guan
Mode	Channel	99% bandwidth (KHz)	-26dBc bandwidth (KHz)
EGPRS 850	128	251.99	323.2
	190	248.25	323.8
	251	248.84	318.9
EGPRS 1900	512	249.51	315.2
	661	249.82	317.2
	810	243.35	315.9

5.5. Original test data

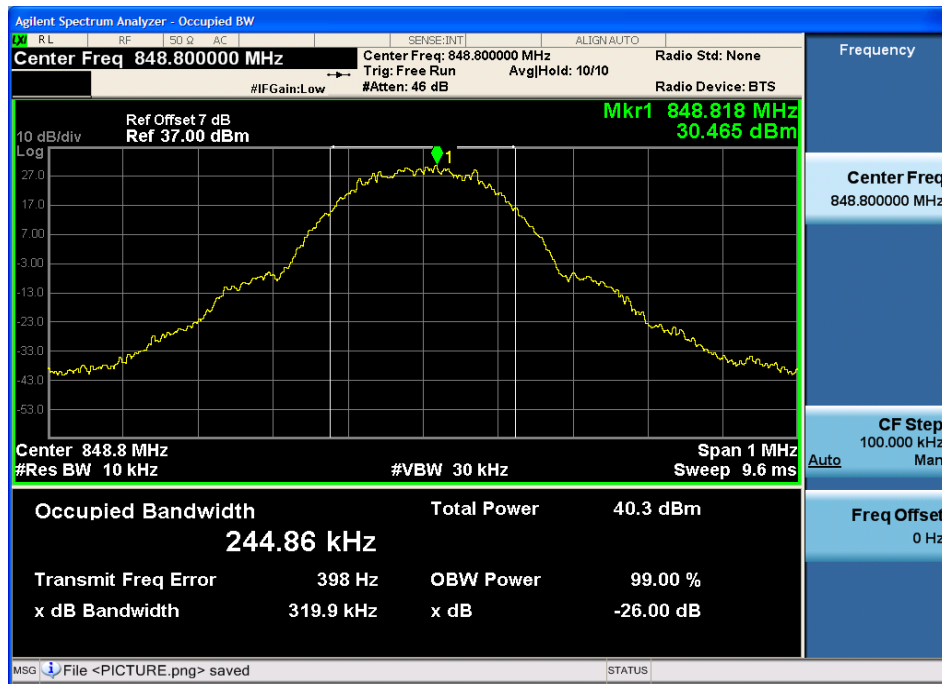
GSM 850 CH128



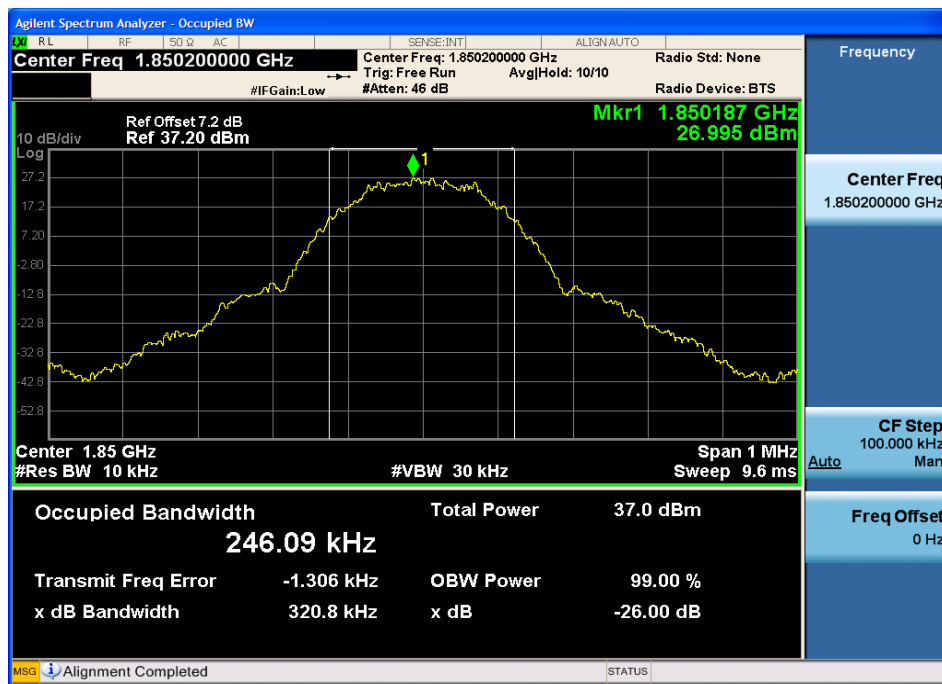
GSM 850 CH190



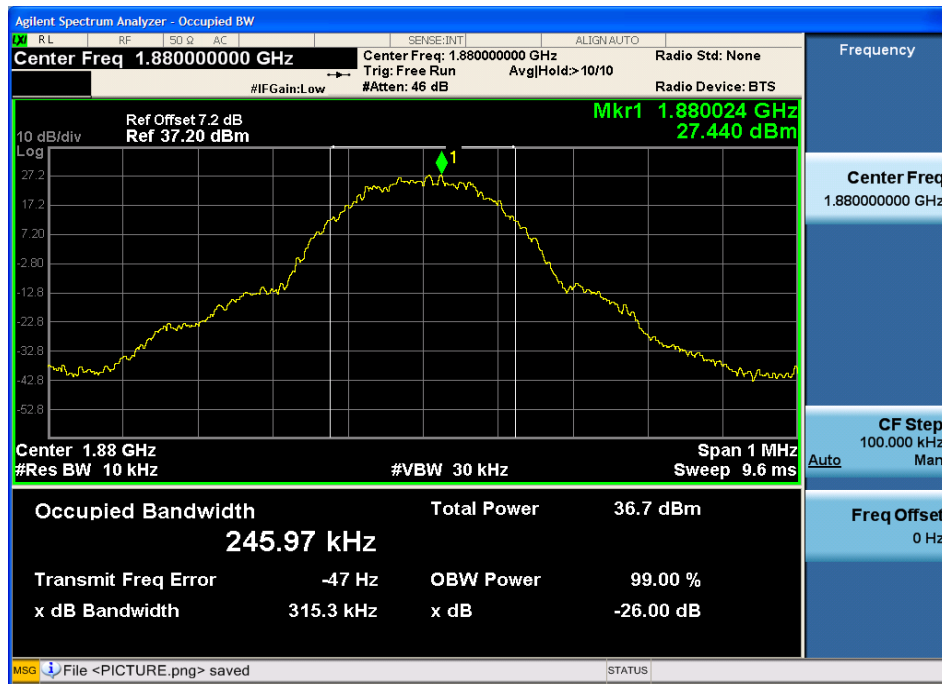
GSM 850 CH251



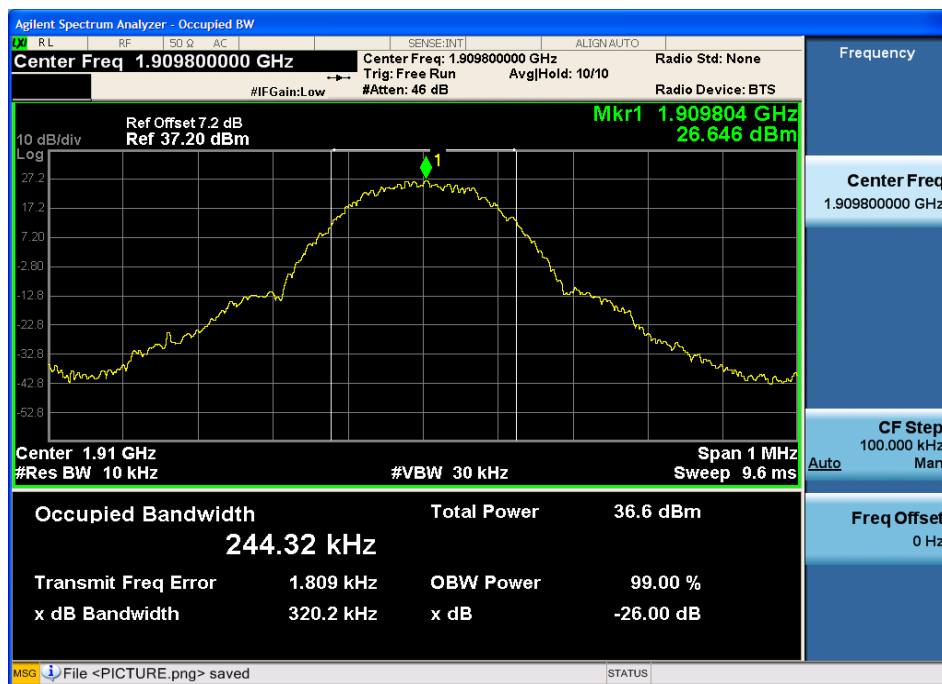
PCS 1900 CH512



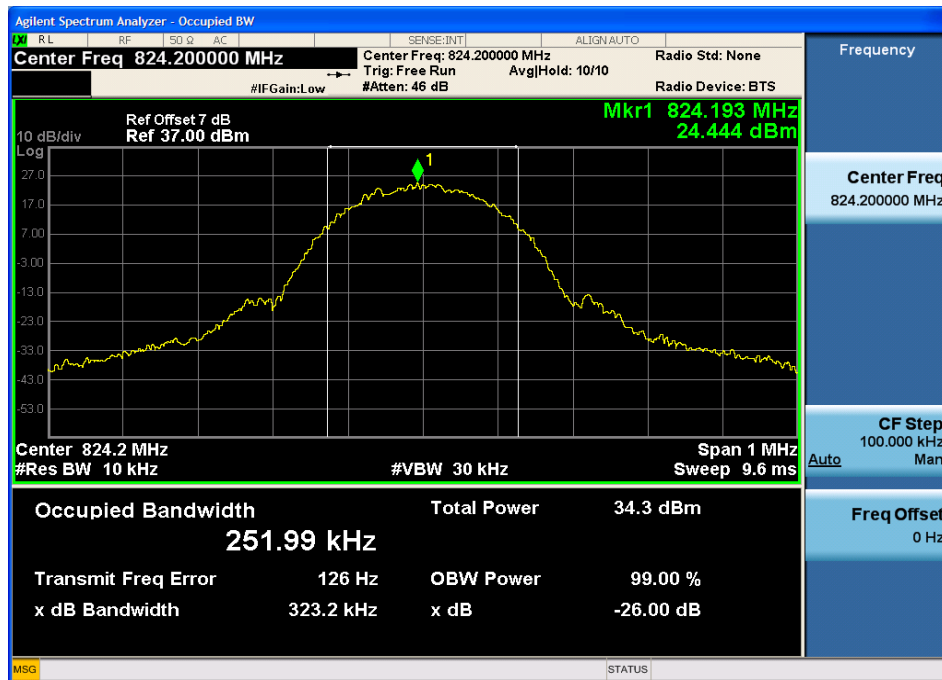
PCS 1900 CH661



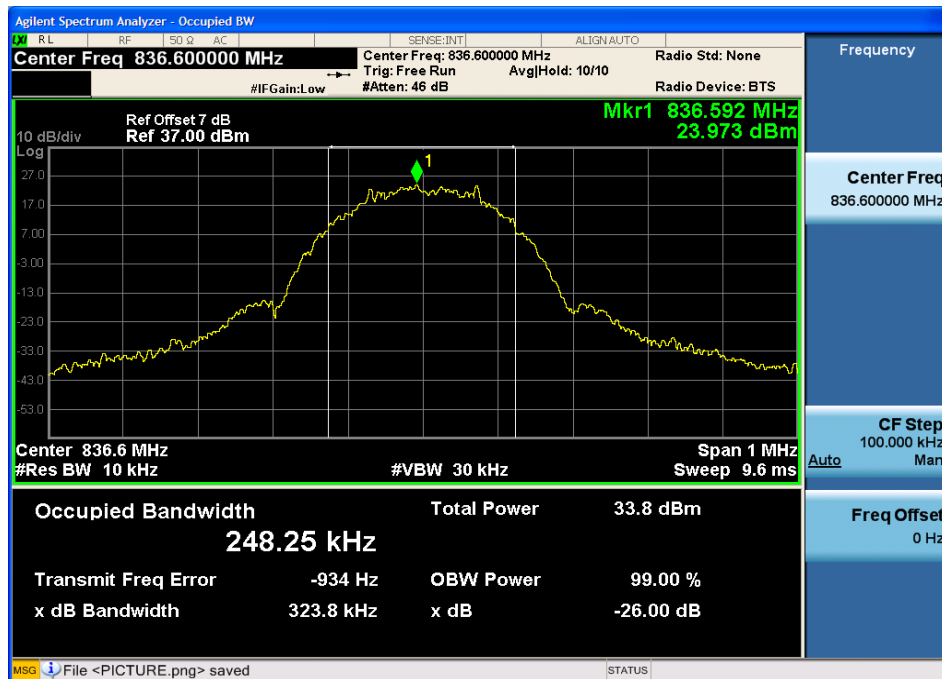
PCS 1900 CH810



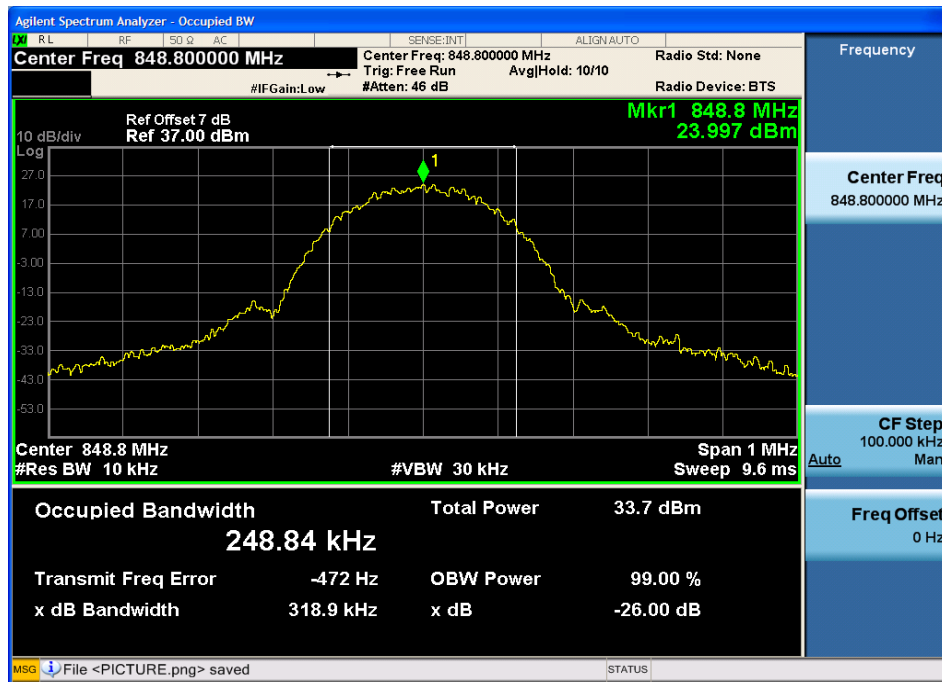
EGPRS 850 CH128



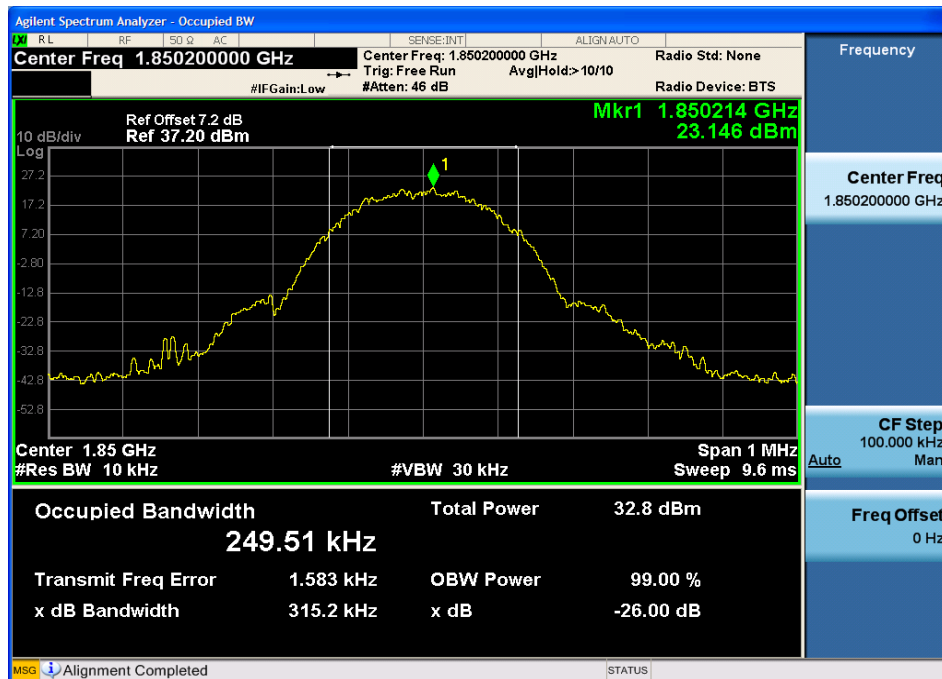
EGPRS 850 CH190



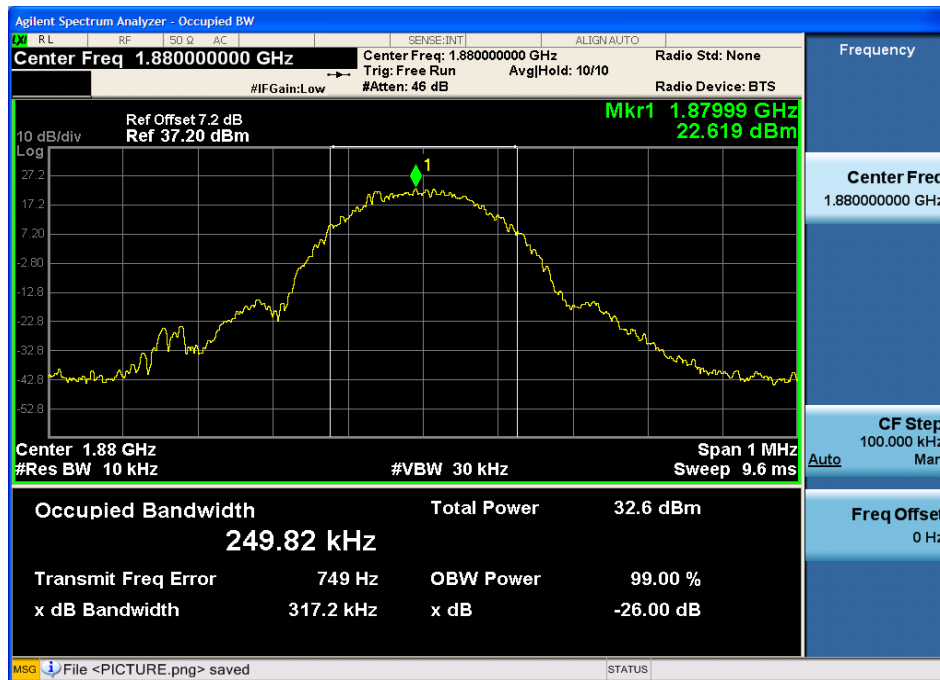
EGPRS 850 CH251



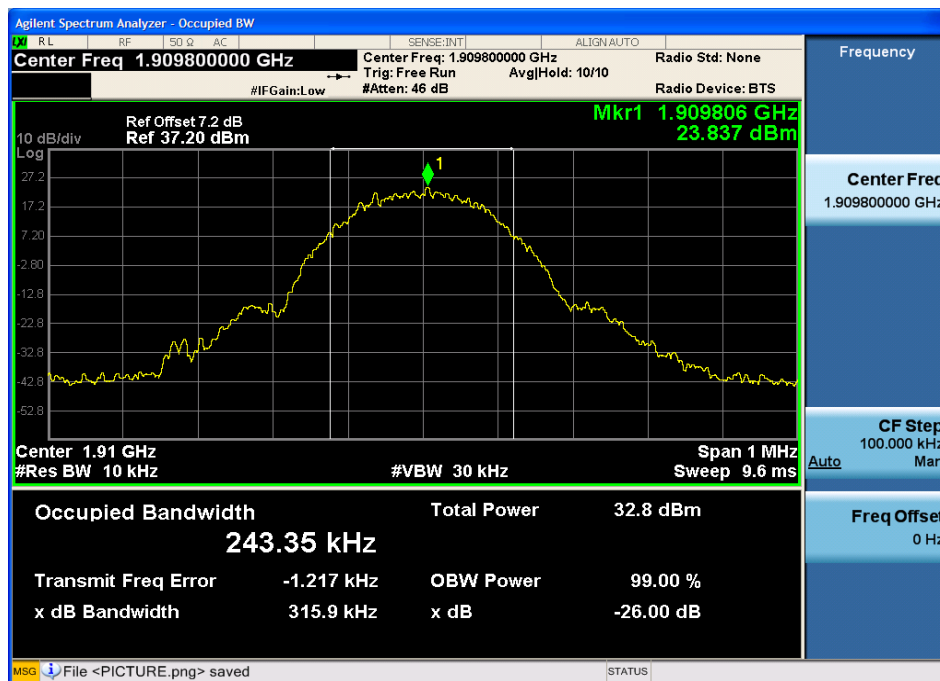
EGPRS 1900 CH512



EGPRS 1900 CH661

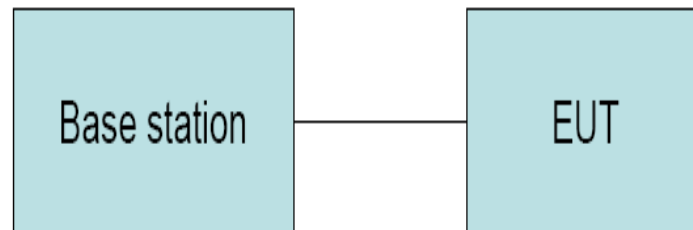


EGPRS 1900 CH810



6. Frequency stability

6.1. Block Diagram of Test Setup



6.2. Limit

Cellular Telephone 850MHz	PCS 1900MHz
± 2.5 ppm	Must stay within the authorized frequency block

6.3. Test Procedure

Test Procedures for Temperature Variation:

1. The EUT was set up in the thermal chamber and connected with the base station.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized for three hours. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in -30°C step up to 50°C . The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

Test Procedures for Voltage Variation

1. The EUT was placed in a temperature chamber at $25\pm 5^{\circ}\text{C}$ and connected with the base station.
2. The power supply voltage to the EUT was varied from DC 5V to 3.5V
3. The variation in frequency was measured for the worst case.

6.4. Test Result

EUT: MOBILE TELEPHONE M/N:Cyrus CM16			
Ambient Temperature:23°C		Relative Humidity: 60%	
Test date: 2016-06-25		Test site: RF site	Tested by: Simple Guan
Conclusion: PASS			
Mode	Voltage (V)	Frequency error (Hz)	frequency error (ppm)
GSM 850 CH 190	4.1V	17.35	0.0207
	4.0V	-18.57	-0.0222
	3.9V	15.42	0.0184
	3.8V	-16.06	-0.0192
	3.7V	-16.33	-0.0195
PCS 1900 CH661	4.1V	-26.14	-0.0139
	4.0V	36.39	0.0194
	3.9V	-29.39	-0.0156
	3.8V	31.14	0.0166
	3.7V	-27.22	-0.0145

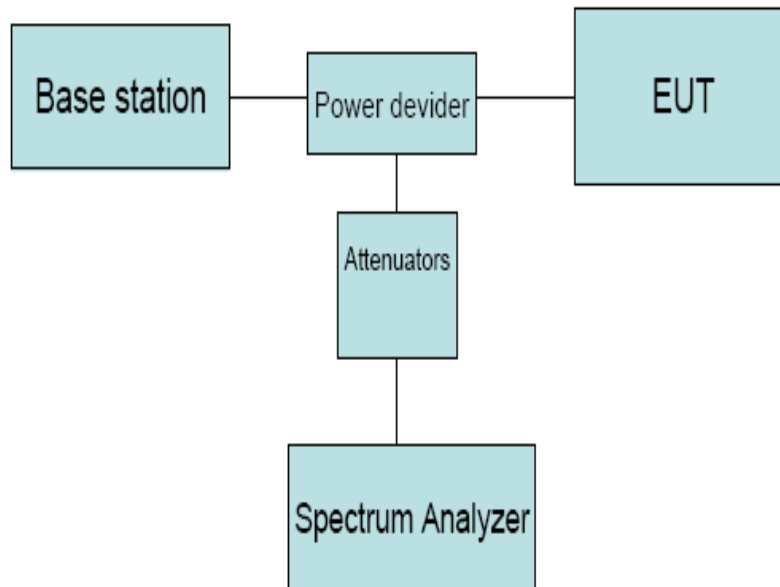
Mode	Temperature (°C)	Frequency error (Hz)	frequency error (ppm)
GSM 850 CH190	-30	20.15	0.0241
	-20	16.02	0.0191
	-10	15.93	0.0190
	0	21.27	0.0254
	10	-15.16	-0.0181
	20	18.63	0.0223
	30	-12.91	-0.0154
	40	-13.31	-0.0159
	50	-21.02	-0.0251
PCS 1900 CH661	-30	35.36	0.0188
	-20	22.28	0.0119
	-10	32.17	0.0171
	0	37.03	0.0197
	10	-24.39	-0.0130
	20	31.71	0.0169
	30	-24.52	-0.0130
	40	21.77	0.0116
	50	-16.42	-0.0087

EUT: MOBILE TELEPHONE M/N:Cyrus CM16			
Power: DC 3.7V			
Ambient Temperature:23°C		Relative Humidity: 60%	
Test date: 2016-06-25		Test site: RF site	Tested by: Simple Guan
Conclusion: PASS			
Mode	Voltage (V)	Frequency error (Hz)	frequency error (ppm)
EGPRS 850 CH 190	4.1V	17.35	0.0243
	4.0V	-18.57	0.0186
	3.9V	15.42	0.0220
	3.8V	-16.06	0.0156
	3.7V	-16.33	0.0159
EGPRS 1900 CH 661	4.1V	-26.14	0.0123
	4.0V	36.39	0.0210
	3.9V	-29.39	0.0140
	3.8V	31.14	0.0182
	3.7V	-27.22	0.0129

Mode	Temperature (°C)	Frequency error (Hz)	frequency error (ppm)
EGPRS 850 CH190	-30	20.15	0.0193
	-20	16.02	0.0191
	-10	15.93	0.0190
	0	21.27	0.0254
	10	-15.16	0.0181
	20	18.63	0.0223
	30	-12.91	0.0154
	40	-13.31	0.0159
	50	-21.02	0.0251
EGPRS 1900 CH661	-30	35.36	0.0188
	-20	22.28	0.0119
	-10	32.17	0.0171
	0	37.03	0.0197
	10	-24.39	0.0130
	20	31.71	0.0169
	30	-24.52	0.0130
	40	21.77	0.0116
	50	-16.42	0.0087

7. Conducted spurious emissions

7.1. Block Diagram of Test Setup



7.2. Limit

The mean power of emissions must be attenuated below the mean power of the unmodulated carrier (P) on any frequency outside the frequency band by at least $(43 + 10 \log P)$ dB, in this case, -13dBm.

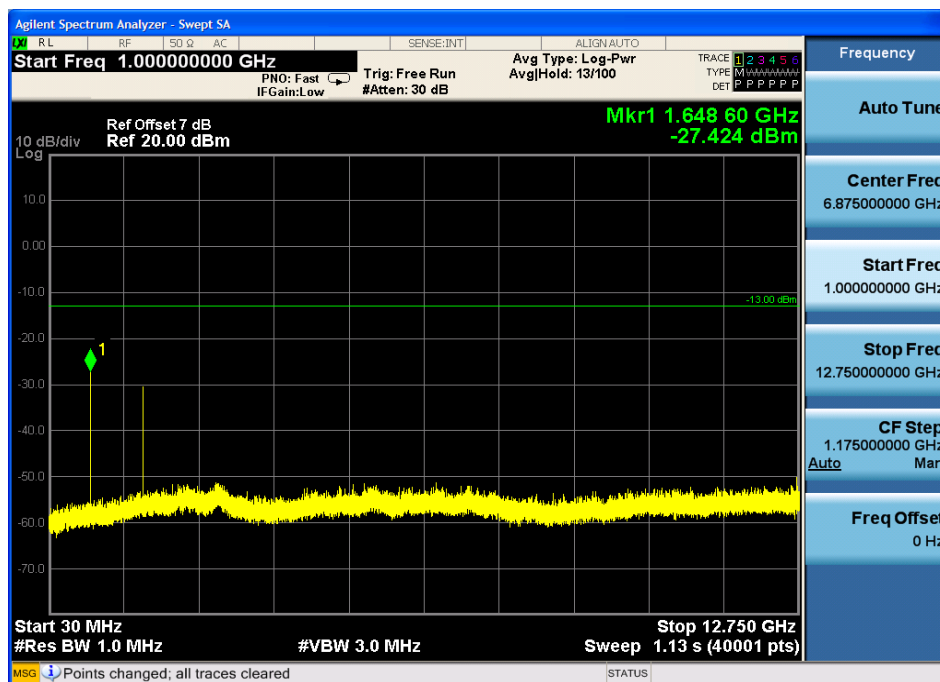
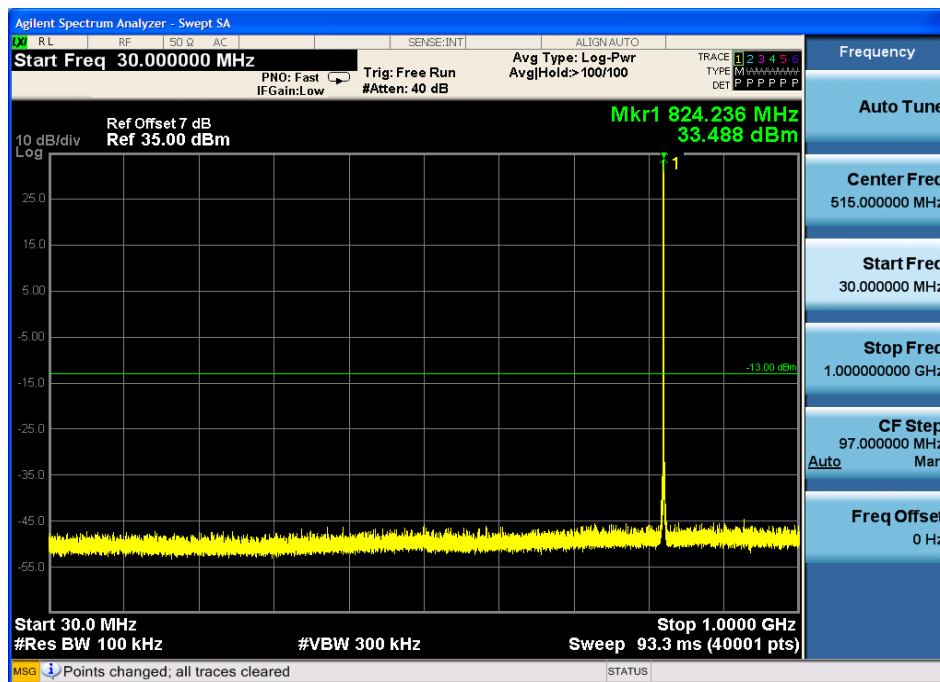
7.3. Test Procedure

1. The EUT was connected to spectrum analyzer and base station via power divider.
2. The low, middle and high channels of each band and mode's spurious emissions for 30MHz to 10th Harmonic were measured by Spectrum analyzer.

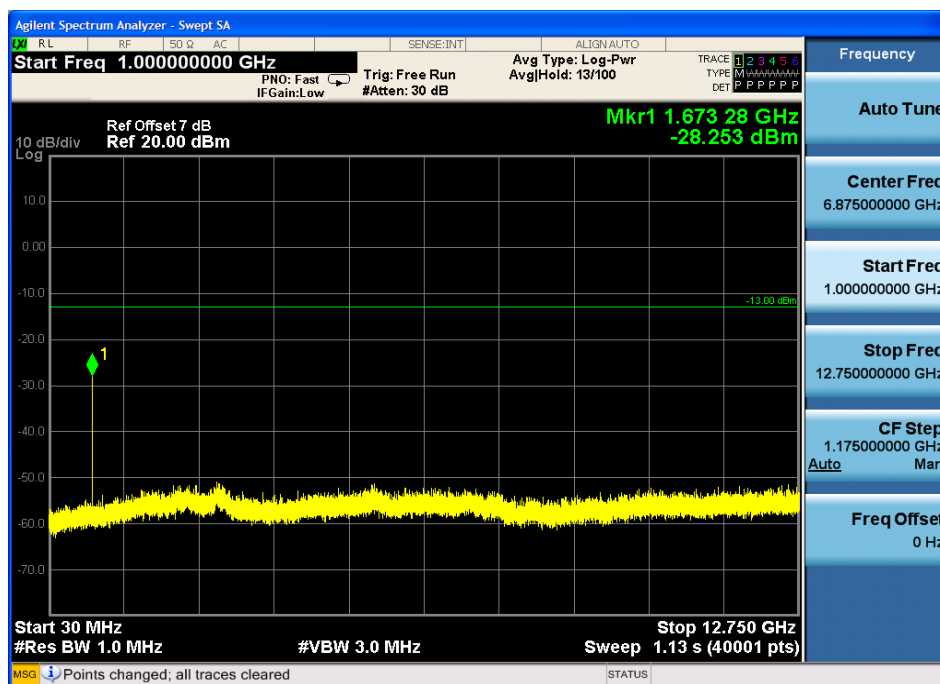
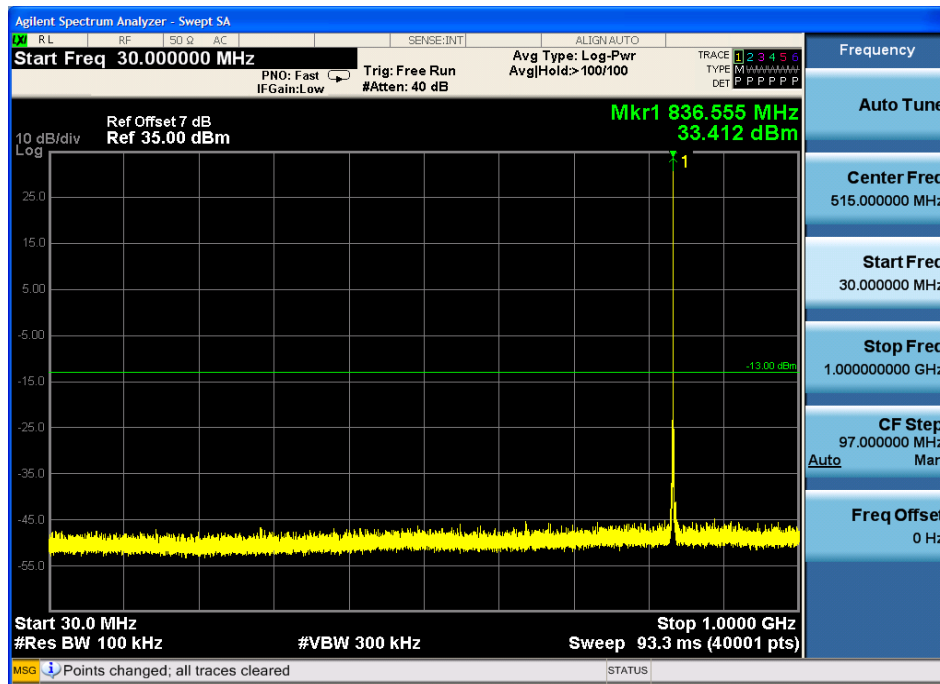
7.4. Test Result

PASS

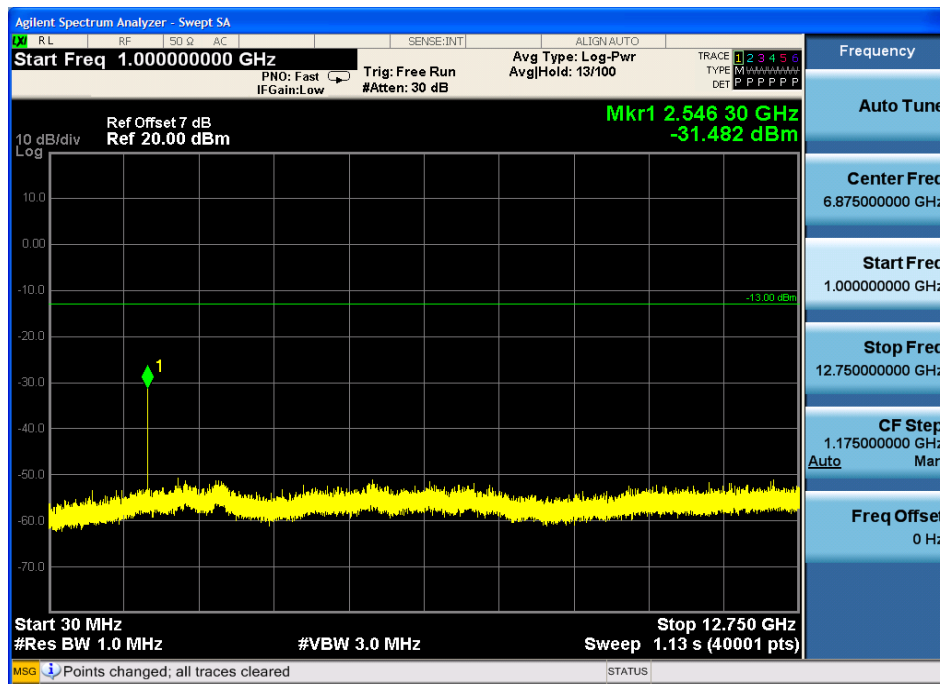
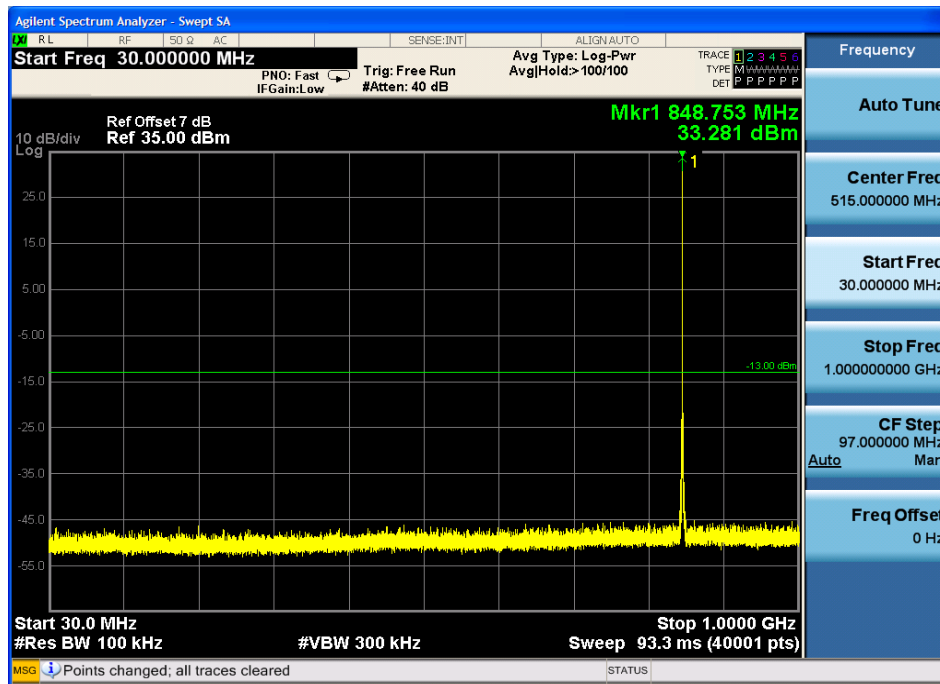
Test Mode: GSM 850 CH 128



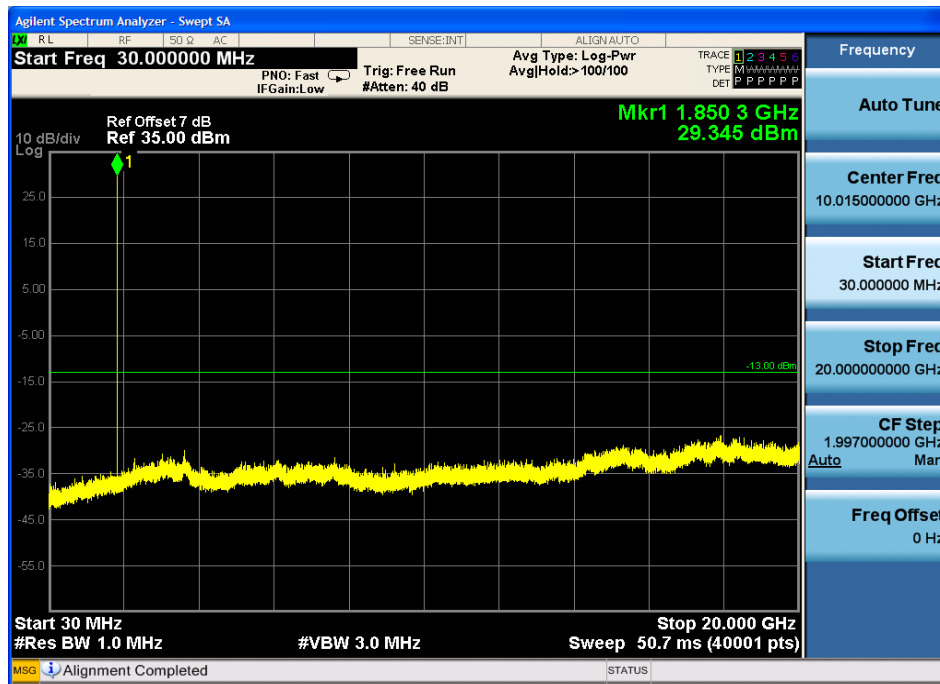
Test Mode: GSM 850 CH 190



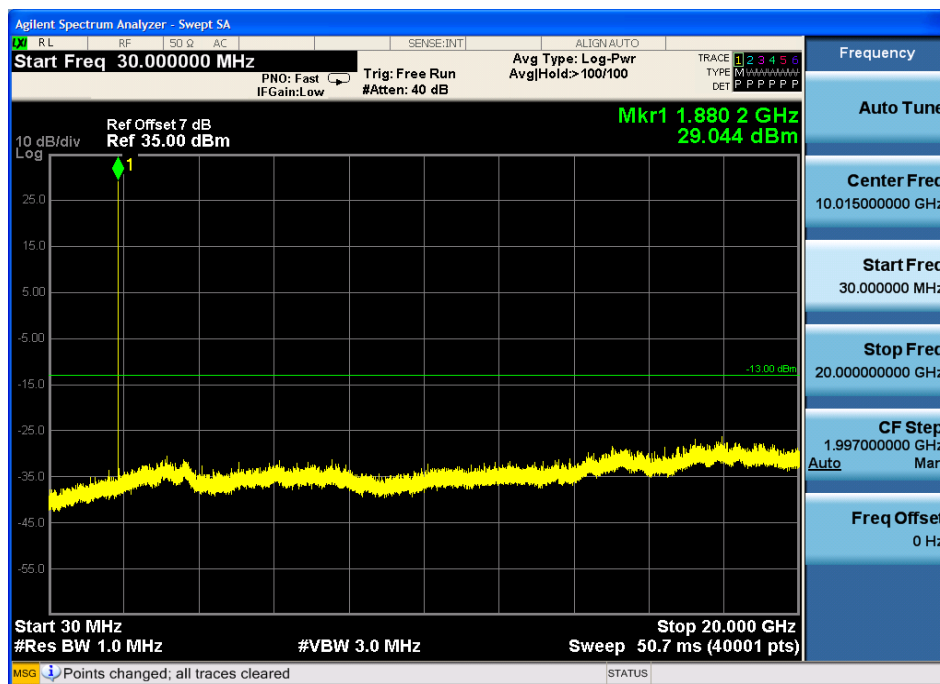
Test Mode: GSM 850 CH 251



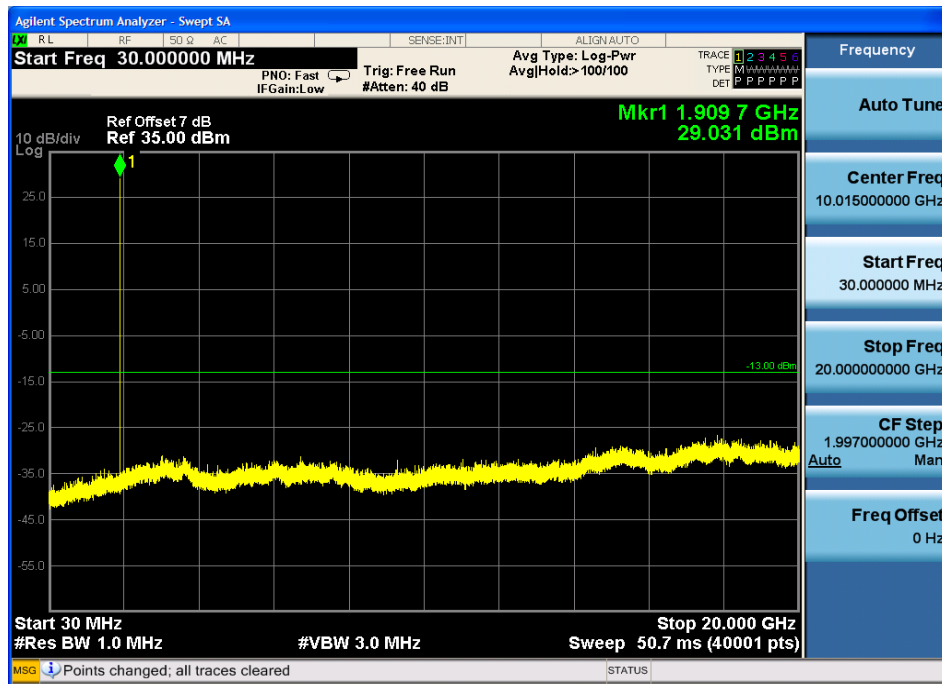
Test Mode: GSM 1900 CH 512



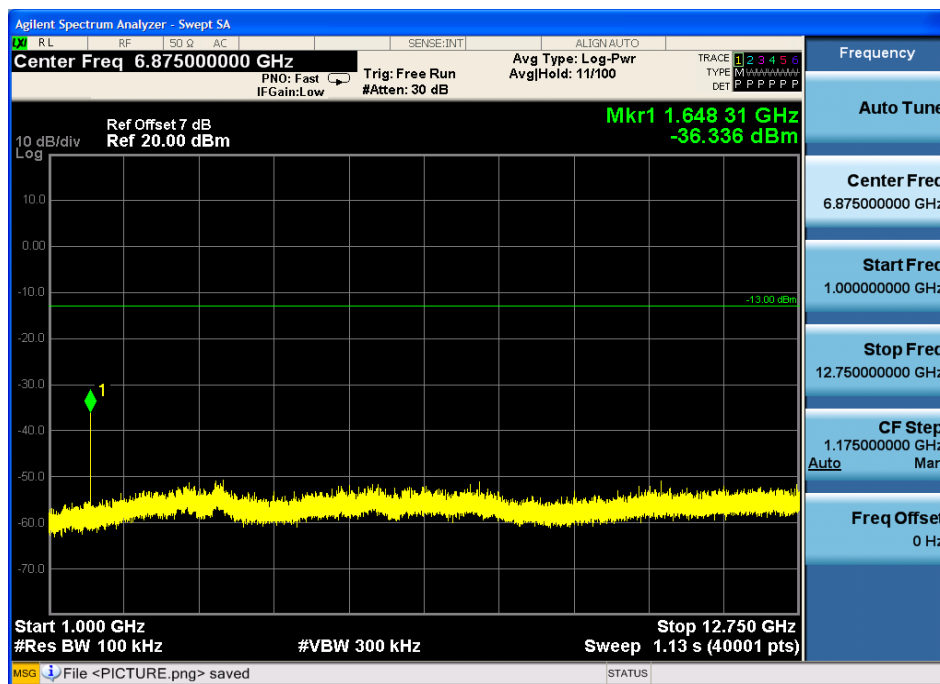
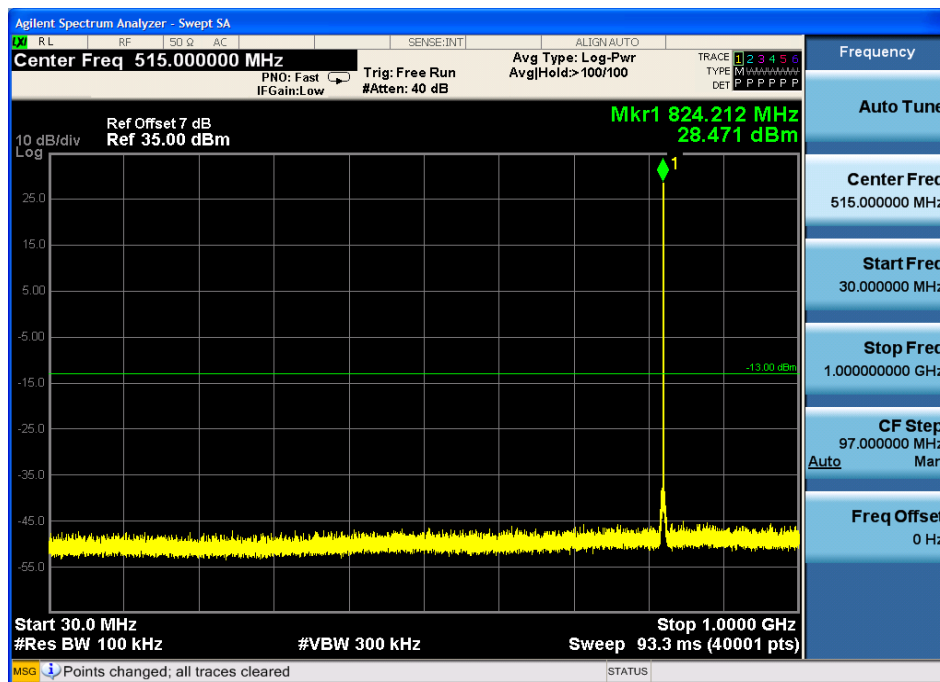
Test Mode: GSM 1900 CH 661



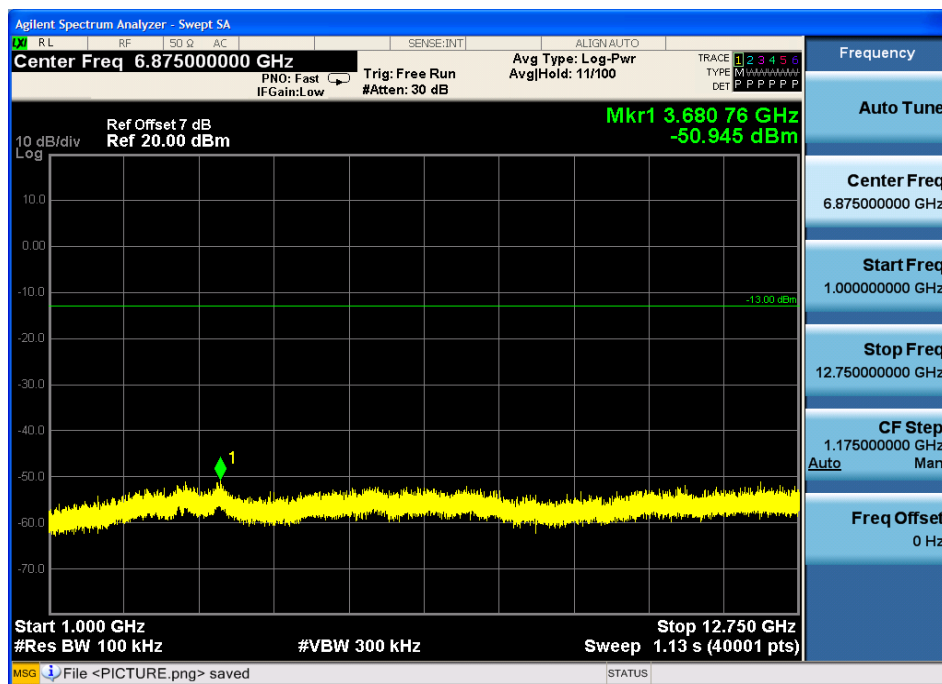
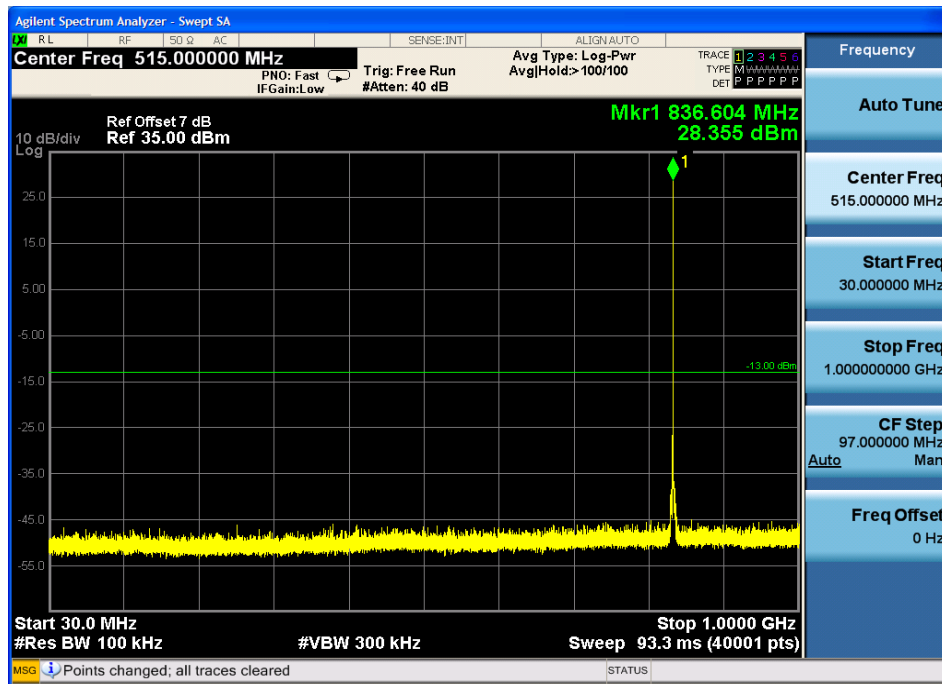
Test Mode: GSM 1900 CH 810



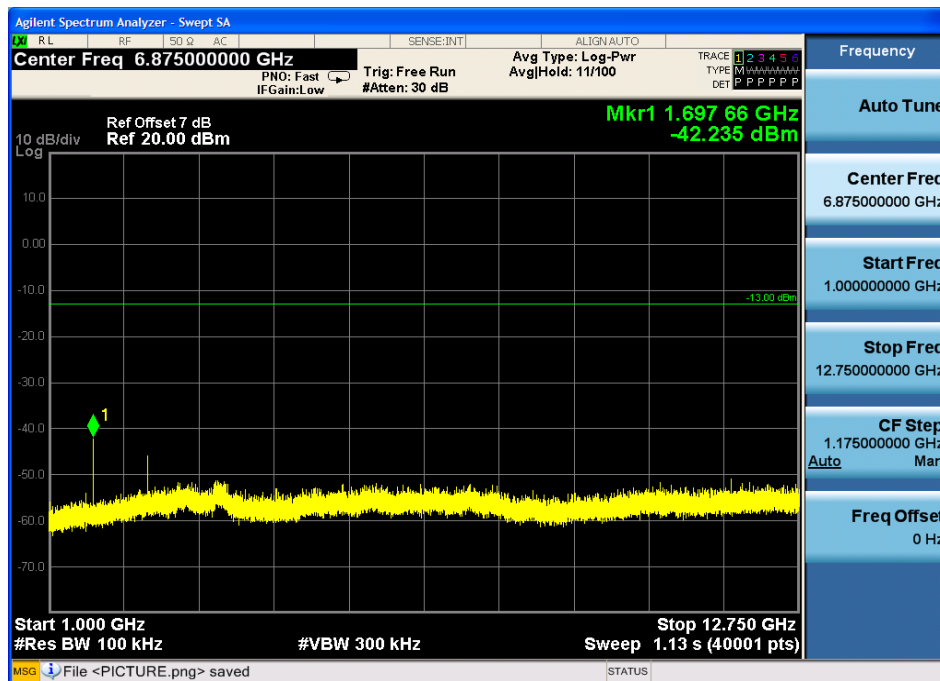
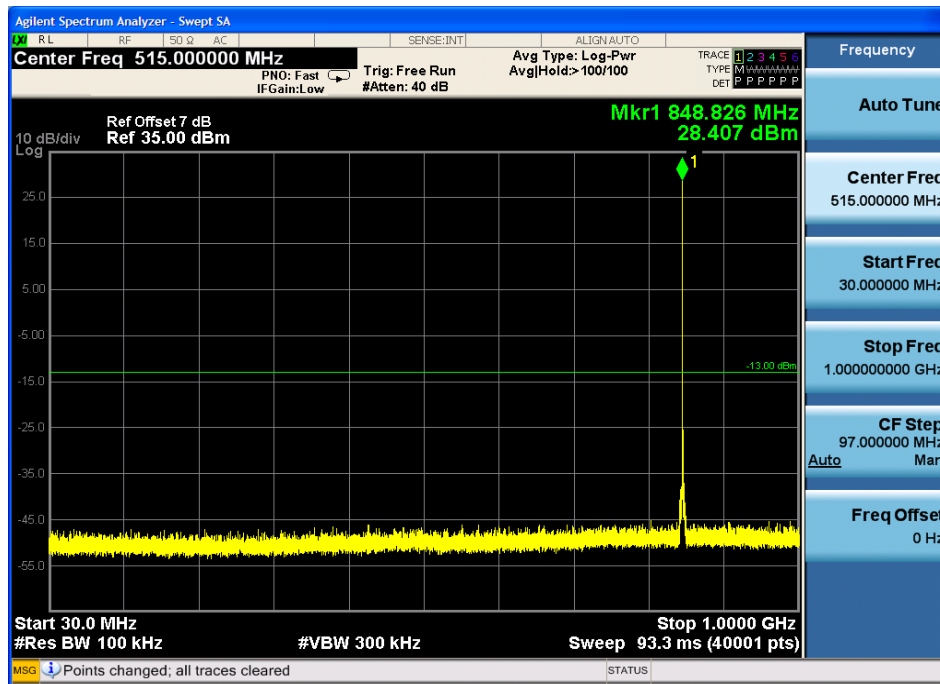
Test Mode: EGPRS 850 CH 128



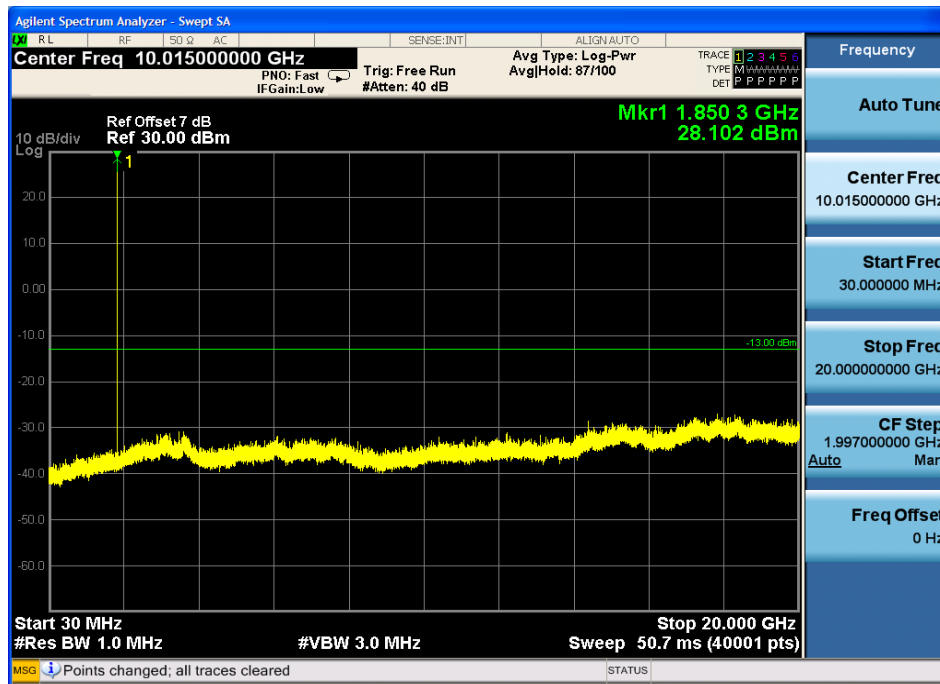
Test Mode: EGPRS 850 CH 190



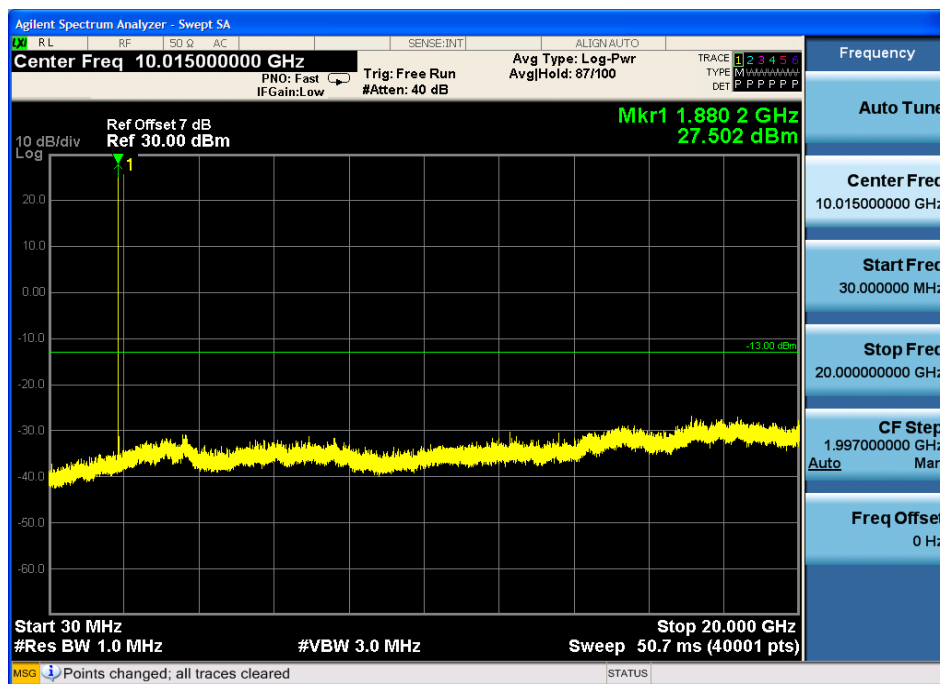
Test Mode: EGPRS 850 CH 251



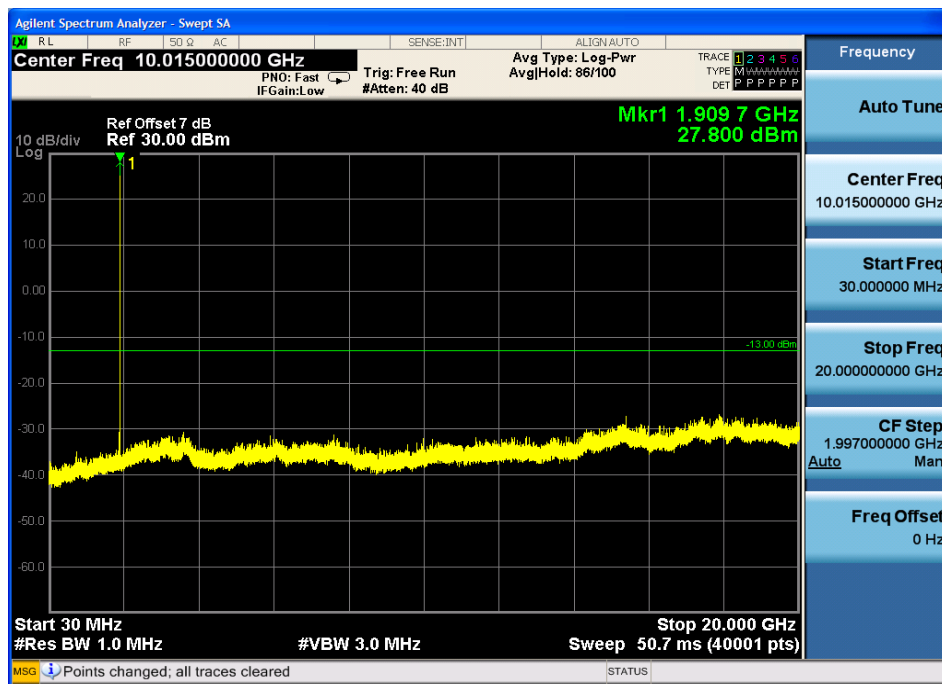
Test Mode: EGPRS 1900 CH 512



Test Mode: EGPRS 1900 CH 661

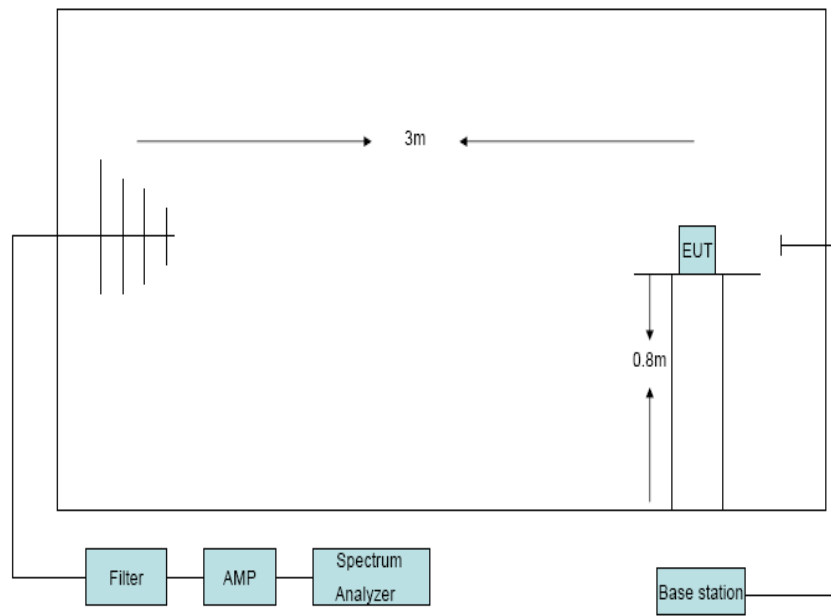


Test Mode: EGPRS 1900 CH 810



8. Radiated Spurious emissions

8.1. Block Diagram of Test Setup



8.2. Limit

The mean power of emissions must be attenuated below the mean power of the unmodulated carrier (P) on any frequency outside the frequency band by at least $(43 + 10 \log P)$ dB, in this case, -13dBm.

8.3. Test Procedure

1. The EUT was placed on a non-conductive rotating platform with 0.8 meter height in an anechoic chamber. The radiated spurious emissions from 30MHz to 10th harmonious of fundamental frequency were measured at 3m with a test antenna and a spectrum analyzer with RBW= 1MHz, VBW= 1MHz ,peak detector settings.
2. During the measurement, the EUT was enforced in maximum power and linked with a base station. All the spurious emissions (record as LVL) at 3m were measured by rotation of the turntable and the test antenna raised and lowered over a range from 1 to 4 meters in both horizontally and vertically polarized orientations.
3. Final spurious emissions levels were measured by substitution method according to TIA/EIA-603-C. The EUT was replaced by dipole antenna (for frequency below 1GHz) or Horn antenna (for frequency above 1GHz) at same location with same polarize of receiver antenna and then a known power of each measure frequency from S.G. was

applied into the dipole antenna or Horn antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna. The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain –Substitution antenna Loss (only for Dipole antenna) - Analyzer reading. Then final spurious emissions were calculated with the correction factor, EIRP= LVL + Correction factor and ERP = EIRP – 2.15

8.4. Test Result

EUT:MOBILE TELEPHONE M/N:Cyrus CM16						
Power: DC 3.7V						
Test Date: 2016-06-25		Test site: RF Chamber		Tested by: Simple Guan		
Ambient Temperature: 24℃		Relative Humidity: 60%				
Conclusion: PASS						
Test result						
Test Mode: GSM 850 CH128						
Frequency (MHz)	Antenna polarization	LVL (dBm)	Correction factor(dB)	Result (ERP)(dBm)	Limit (dBm)	Margin (dB)
537.31	H	-55.45	-6.53	-61.98	-13	48.98
537.31	V	-58.71	-6.53	-65.24	-13	52.24
1648.4	H	-53.76	11.5	-42.26	-13	29.26
1648.4	V	-43.92	10.56	-33.36	-13	20.36
Test Mode: GSM 850 CH190						
1673.2	H	-52.93	10.94	-41.99	-13	28.99
1673.2	V	-49.35	10.9	-38.45	-13	25.45
Test mode: GSM 850 CH251						
1697.6	H	-46.11	11.67	-34.44	-13	21.44
1697.6	V	-41.8	11.13	-30.67	-13	17.67

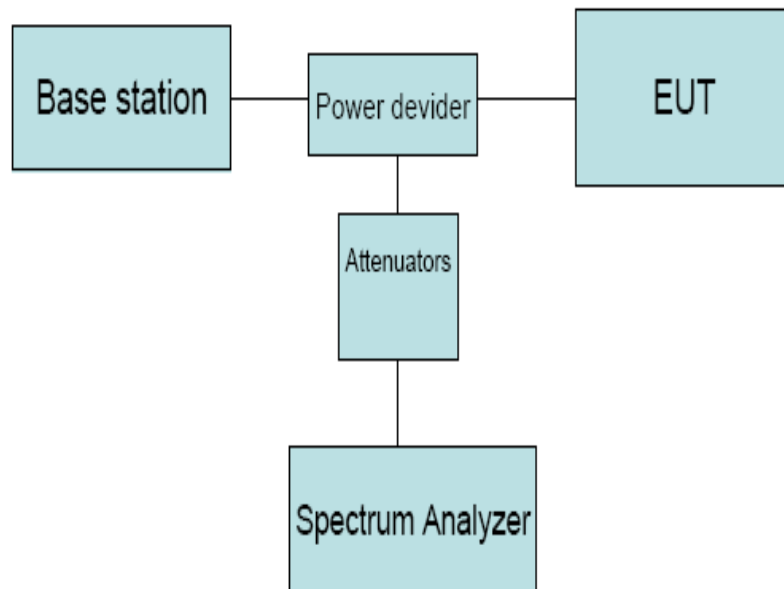
Test Mode: GSM 1900 CH512						
Frequency (MHz)	Antenna polarization	LVL (dBm)	Correction factor(dB)	Result (EIRP)(dBm)	Limit (dBm)	Margin (dB)
537.31	H	-55.8	-6.53	-62.33	-13	49.33
537.31	V	-54.8	-6.53	-61.33	-13	48.33
3700.4	H	-51.81	8.57	-43.24	-13	30.24
3700.4	V	-51.13	8.37	-42.76	-13	29.76
Test Mode: GSM 1900 CH661						
3760	H	-53.71	8.75	-44.96	-13	31.96
3760	V	-51.3	8.55	-42.75	-13	29.75
Test mode: GSM 1900 CH810						
3819.6	H	-53.71	8.94	-44.77	-13	31.77
3819.6	V	-51.3	8.72	-42.58	-13	29.58
Note: All the other emissions not recorded were too low to read, and deemed to comply with limit.						

EUT:MOBILE TELEPHONE M/N:Cyrus CM16						
Power: DC 3.7V						
Test Date: 2016-06-25		Test site: RF Chamber		Tested by: Simple Guan		
Ambient Temperature: 24℃		Relative Humidity: 60%				
Conclusion: PASS						
Test result						
Test Mode: EGPRS CH128						
Frequency (MHz)	Antenna polarization	LVL (dBm)	Correction factor(dB)	Result (ERP)(dBm)	Limit (dBm)	Margin (dB)
537.31	H	-55.55	-6.53	-62.08	-13	49.08
537.31	V	-58.81	-6.53	-65.34	-13	52.34
1648.4	H	-53.86	11.5	-42.36	-13	29.36
1648.4	V	-44.02	10.56	-33.46	-13	20.46
Test Mode: EGPRS CH190						
1673.2	H	-53.3	10.94	-42.36	-13	29.36
1673.2	V	-49.72	10.9	-38.82	-13	25.82
Test mode: EGPRS CH251						
1697.6	H	-46.48	11.67	-34.81	-13	21.81
1697.6	V	-42.17	11.13	-31.04	-13	18.04

Test Mode: EGPRS 1900 CH512						
Frequency (MHz)	Antenna polarization	LVL (dBm)	Correction factor(dB)	Result (EIRP)(dBm)	Limit (dBm)	Margin (dB)
537.31	H	-56.31	-6.53	-62.84	-13	49.84
537.31	V	-55.31	-6.53	-61.84	-13	48.84
3700.4	H	-52.32	8.57	-43.75	-13	30.75
3700.4	V	-51.64	8.37	-43.27	-13	30.27
Test Mode: EGPRS 1900 CH661						
3760	H	-54.49	8.75	-45.74	-13	32.74
3760	V	-52.08	8.55	-43.53	-13	30.53
Test mode: EGPRS 1900 CH810						
3819.6	H	-54.49	8.94	-45.55	-13	32.55
3819.6	V	-52.08	8.72	-43.36	-13	30.36
Note: All the other emissions not recorded were too low to read, and deemed to comply with limit.						

9. Band Edge Compliance

9.1. Block Diagram of Test Setup



9.2. Limit

The mean power of emissions must be attenuated below the mean power of the unmodulated carrier (P) on any frequency outside the frequency band by at least $(43 + 10 \log P)$ dB, in this case, -13dBm.

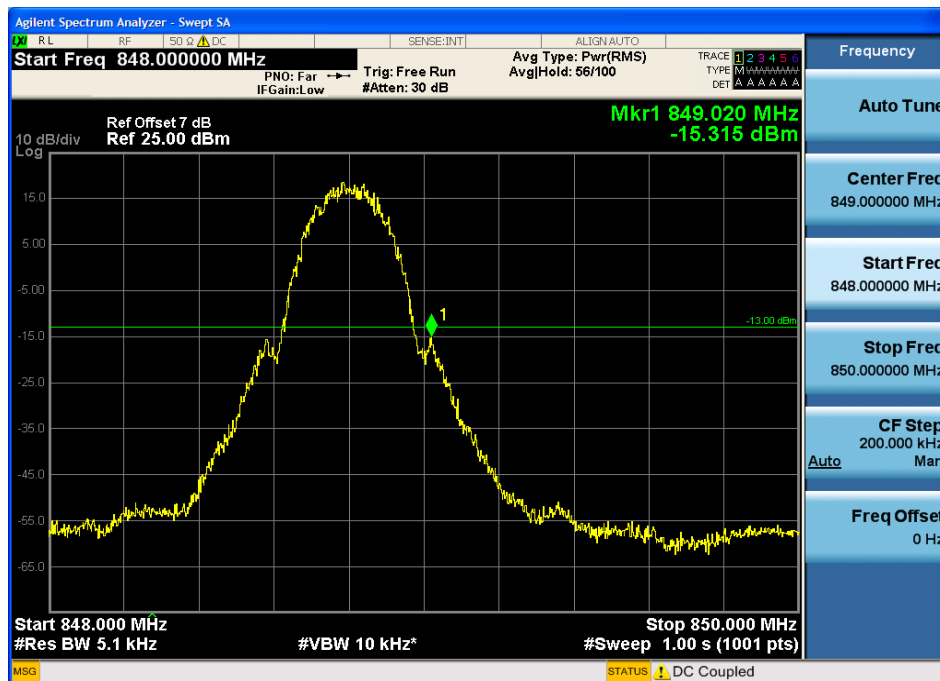
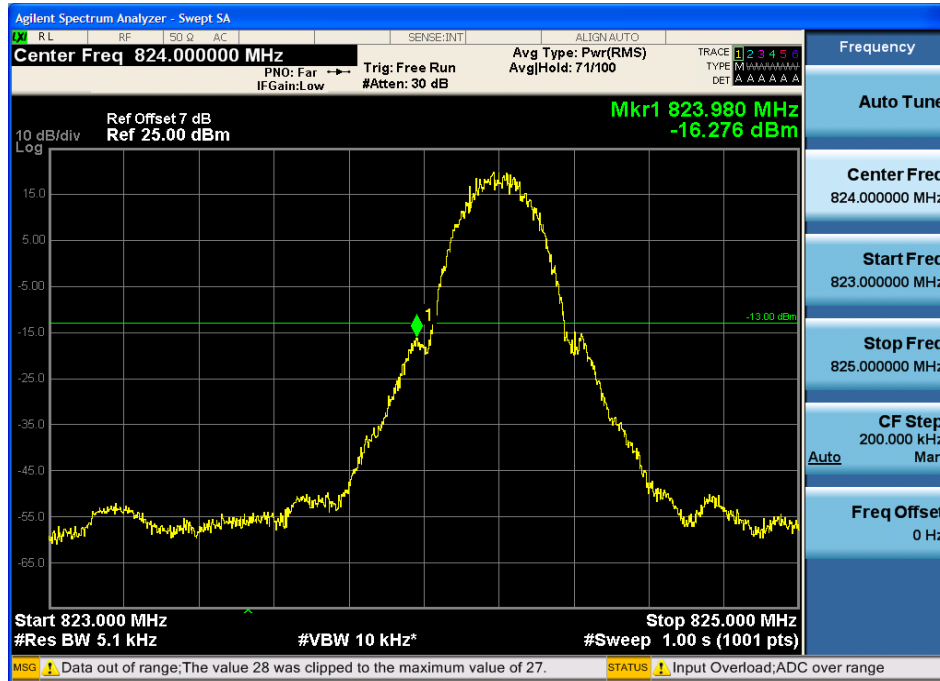
9.3. Test Procedure

1. The EUT was connected to Spectrum Analyzer and Base Station via power divider.
2. The band edges of low and high channels for the highest RF powers were measured.

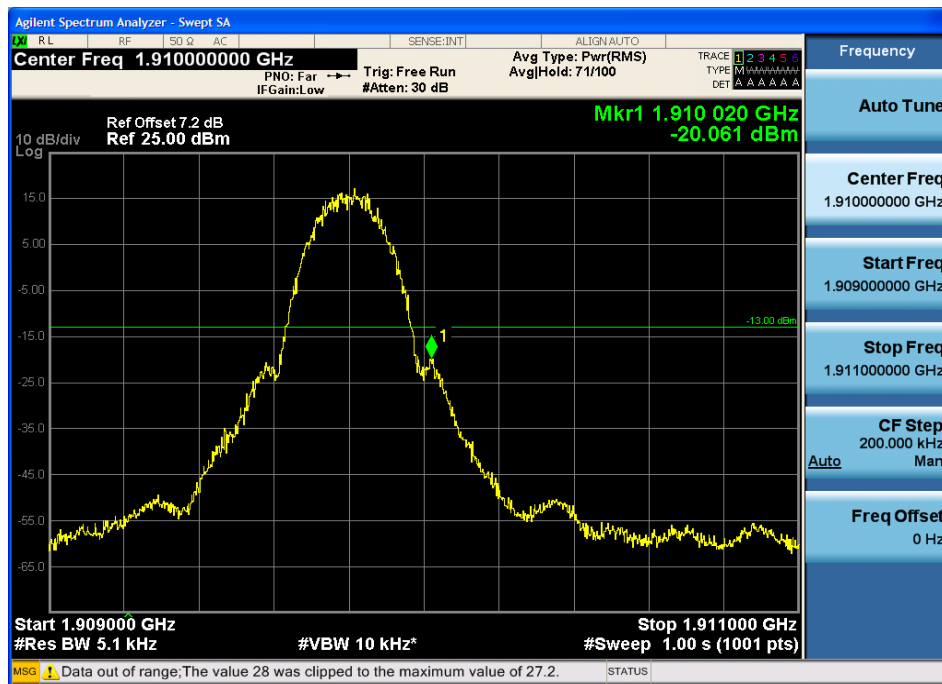
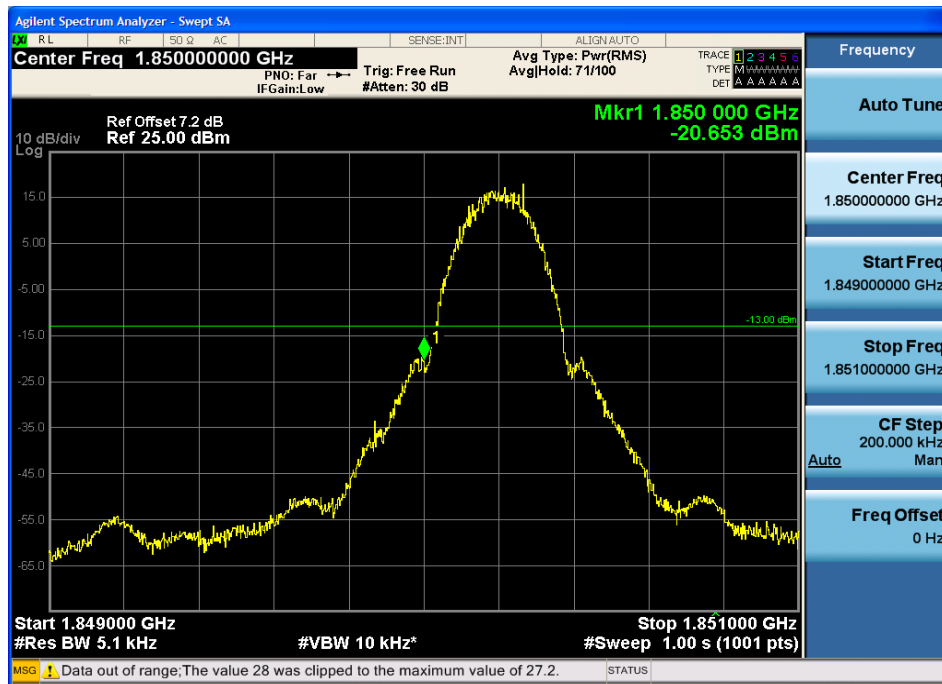
9.4. Test Result

PASS

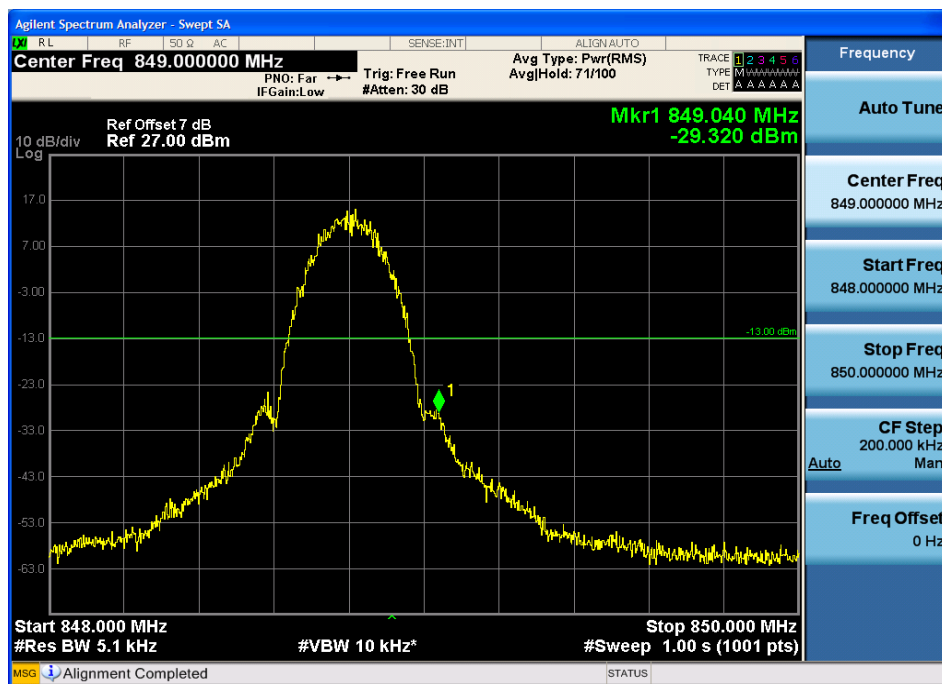
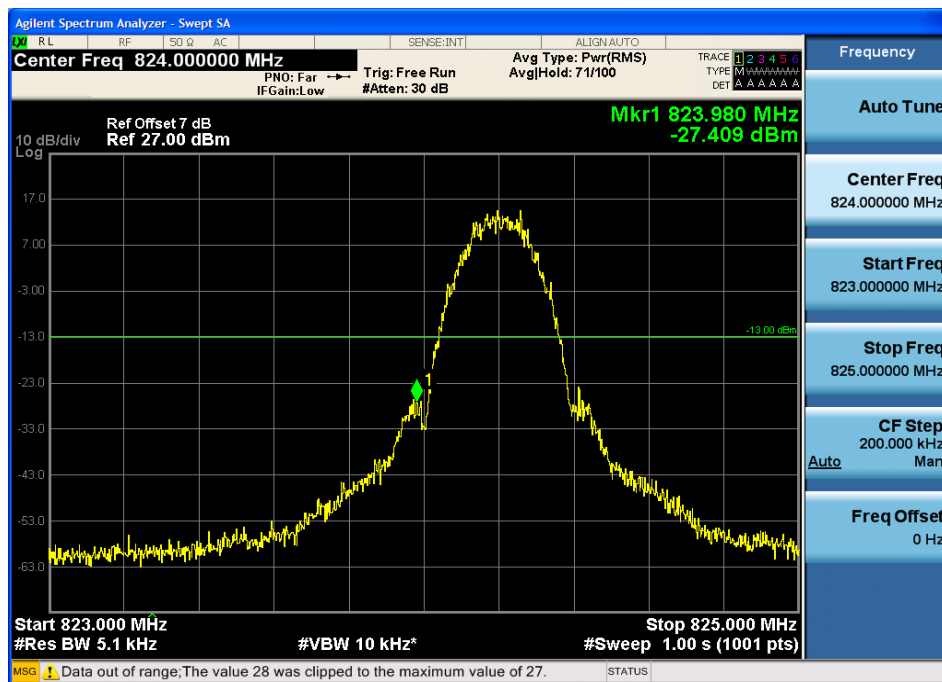
Test Mode: GSM 850



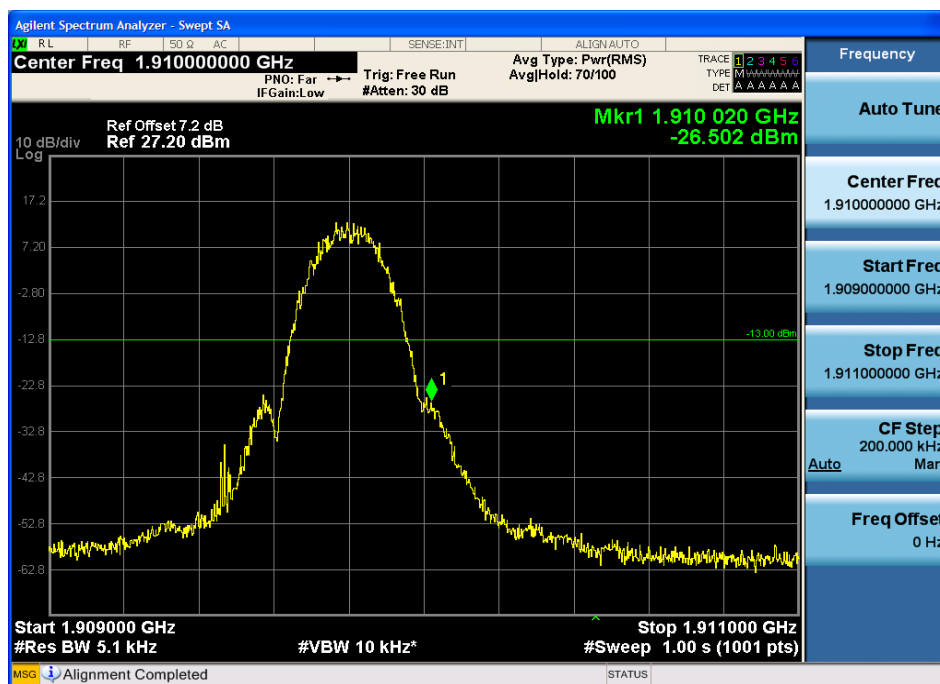
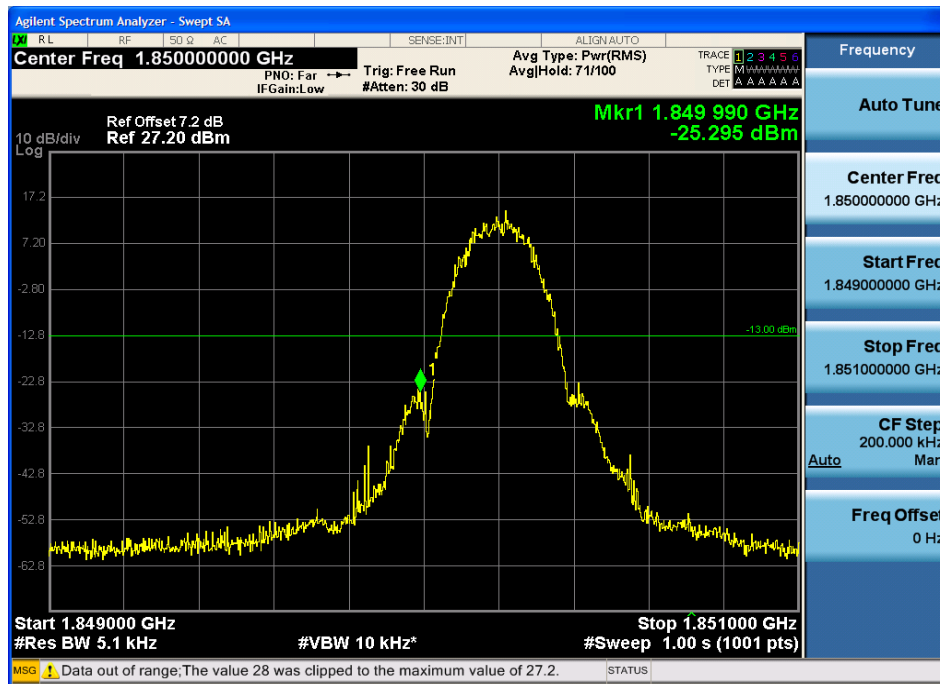
Test Mode: GSM 1900



Test Mode: EGPRS 850



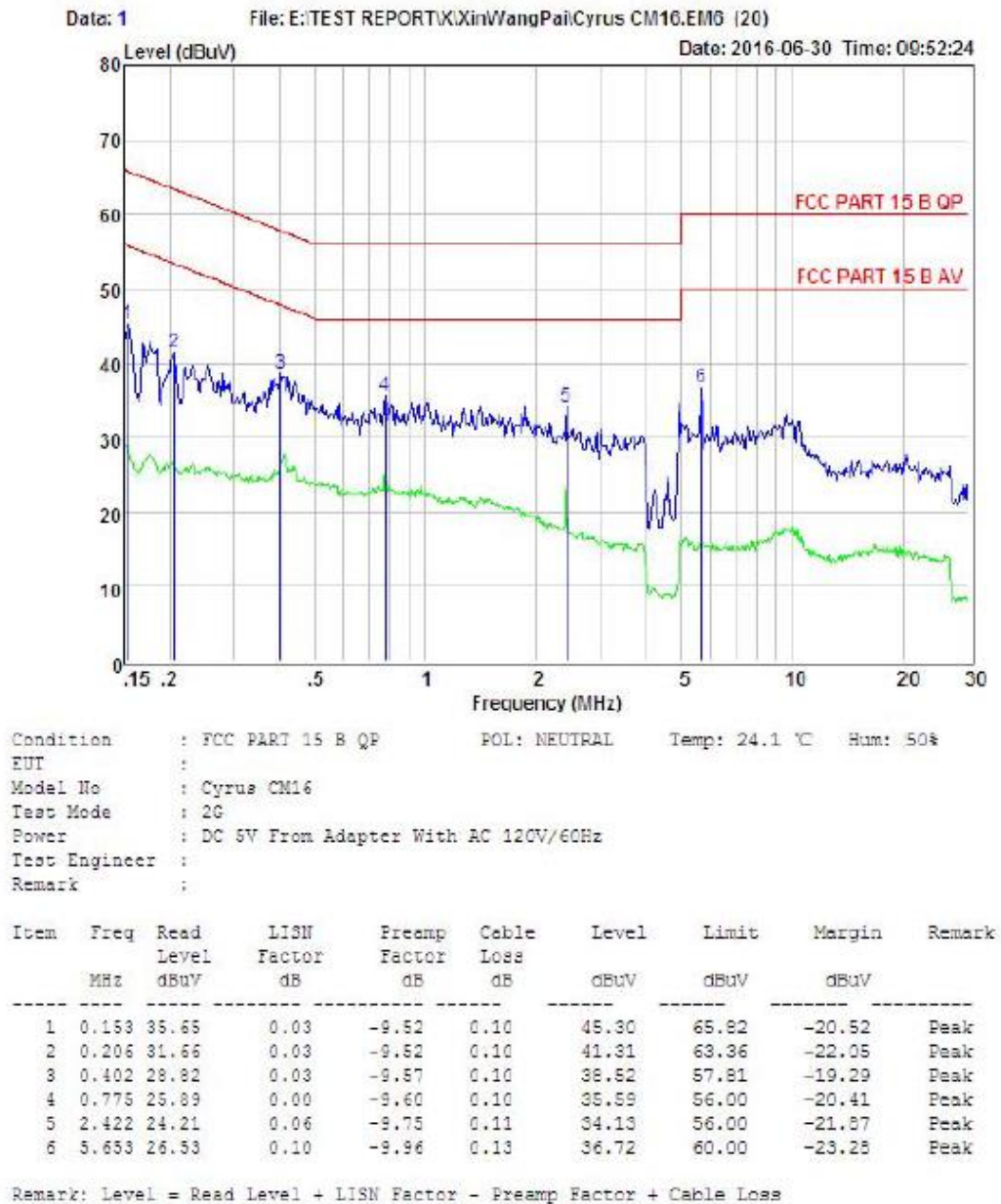
Test Mode: EGPRS 1900



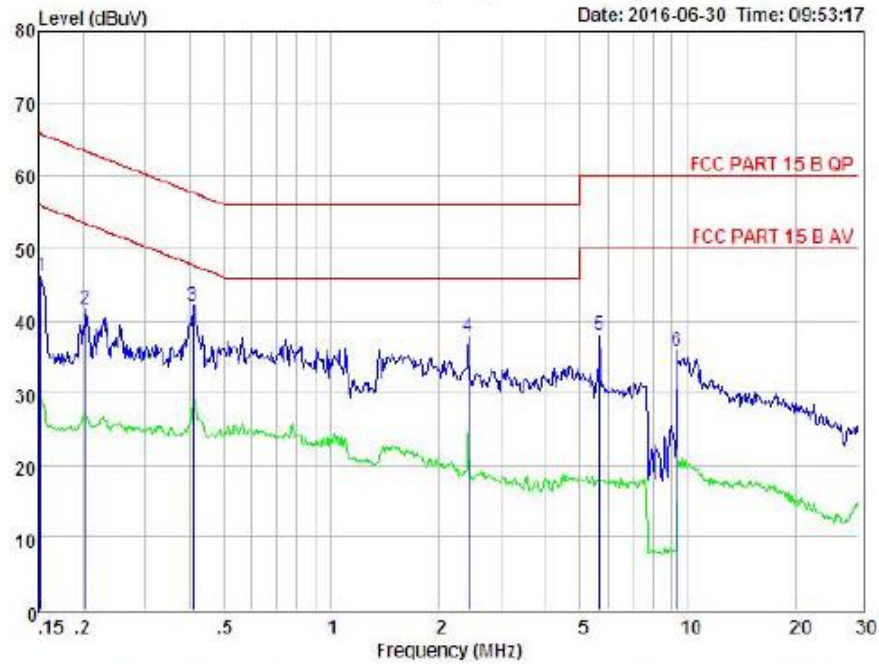
- ### 10.1. Block Diagram of Test Setup

10.4. Test Result

PASS. (See below detailed test data)



Data: 3 File: E:\TEST REPORT\XinWangPai\Cyrus CM16.EM3 (20) Date: 2016-06-30 Time: 09:53:17



Condition : FCC PART 15 B QP POL: LINE Temp: 24.1 °C Hum: 50%
 EUT :
 Model No : Cyrus CM16
 Test Mode : 2G
 Power : DC 5V From Adapter With AC 120V/60Hz
 Test Engineer :
 Remark :

Item	Freq MHz	Read Level dBuV	LISN Factor dB	Preamp Factor dB	Cable Loss dB	Level dBuV	Limit dBuV	Margin dBuV	Remark
1	0.152	36.52	0.03	-9.52	0.10	46.17	65.91	-19.74	Peak
2	0.204	31.93	0.03	-9.52	0.10	41.60	63.45	-21.85	Peak
3	0.408	32.43	0.03	-9.57	0.10	42.13	57.68	-15.55	Peak
4	2.422	27.90	0.06	-9.75	0.11	37.82	56.00	-18.18	Peak
5	5.653	27.78	0.10	-9.96	0.13	37.97	60.00	-22.03	Peak
6	9.352	25.47	0.17	-9.94	0.19	35.77	60.00	-24.23	Peak

Remark: Level = Read Level + LISN Factor - Preamp Factor + Cable Loss

11. Test setup photo

Please refer to test setup photo documents.

12.Photos of EUT

Please refer to EUT photo document.

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