



TEST REPORT

According to

FCC 47 CFR PART 22 SUBPART H AND PART 24 SUBPART E

Applicant	: AIR S.R.L.
Address	: San Nicolas 1450 (S2002QYN – Rosario) Santa Fe Argentina
Manufacturer	: GREEN CONNECT INTERNATIONAL CORP.
Address	: 4F., NO.87, LN.87, SEC.1, SIHCHUAN RD., BANCIAO DIST., NEW TAIPEI CITY 22063, TAIWAN
Equipment	: CX Phone
Model No.	: CX402E
Trademark	: CX
FCC ID	: 2AFEA-CX402E

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Manufacturer	:	GREEN CONNECT INTERNATIONAL CORP.
Address	:	4F., NO.87, LN.87, SEC.1, SIHCHUAN RD., BANCIAO DIST., NEW TAIPEI CITY 22063, TAIWAN
Equipment	:	CX Phone
Model No.	:	CX402E
Trade Name	:	CX

I HEREBY CERTIFY THAT :

The measurements shown in this test report were made in accordance with the procedures given in **ANSI C63.4 – 2009 and TIA/EIA 603** and the energy emitted by this equipment was **passed** **FCC Rule FCC PART 22 Subpart H and PART 24 Subpart E** in both radiated and conducted emission limits.

Testing was carried out on Jun 8, 2015 at **Cerpass Technology Corp.**

Signature

Miro Chueh/ Technical director




1. Report of Measurements and Examinations

FCC 47 CFR PART 22 SUBPART H AND PART 24 SUBPART E ANSI C63.4: 2009,TIA/EIA 603		
Test Parameter	Test Performed	Remark
Conducted Emission	YES	PASS
Field Strength of Spurious Radiation Measurement	YES	PASS
Occupied Bandwidth	YES	PASS
Maximum Peak Output Power	YES	PASS
ERP & EIRP Measurement	YES	PASS
Out of Band Emission at Antenna Terminals	YES	PASS
Frequency Stability V.S. Temperature Measurement	YES	PASS
Requency Stability V.S. Voltage Measurement	YES	PASS



2. Test Configuration of Equipment under Test

2.1. Feature of Equipment under Test

CX Phone	Model No:	CX402E
Operation Frequency Range	GSM /GPRS/EDGE 850:824.2MHz-848.8MHz GSM /GPRS/EDGE 1900:1850.2MHz-1909.8MHz	
EUT Power Rating:	DC 3.7V supplied by battery and DC5V supplied by adapter	
Adapter Spec.	Manufacturer:	SHENZHEN FUJIA APPLIANCE CO., LTD.
	Model No.:	FJ-SW1160501000UA
	Input Rating:	100-240Vac 50/60Hz 0.3A Max
	Output Rating:	5V  1000mA



2.2. Test Manner

Test Manner	
a	During testing, the interface cables and equipment positions were varied according to 47 CFR, Part 2, PART 22 Subpart H and PART 24 Subpart E.
b	Adjust the EUT at the test mode and the test channel. Then test.
The test modes:	
<p>The EUT had been tested under operating condition.</p> <p>After verification, all tests were carried out with the worst case test modes as shown below except radiated spurious emission below 1GHz and power line conducted emissions below 30MHz, which worst case was in normal link mode only.</p> <p>EUT staying in continuous transmitting mode was programmed.</p> <p>GSM 850: Channel Low (CH128), Channel Mid (CH190) and Channel High (CH251) were chosen for full testing.</p> <p>GSM 1900: Channel Low (CH512), Channel Mid (CH661) and Channel High (CH810) were chosen for full testing.</p> <p>EDGE 850: Channel Low (CH128), Channel Mid (CH190) and Channel High (CH251) were chosen for full testing.</p> <p>EDGE 1900: Channel Low (CH512), Channel Mid (CH661) and Channel High (CH810) were chosen for full testing.</p>	

2.3. Description of Test System

No.	Device	Manufacturer	Model No.	Description
1	N/A	N/A	N/A	N/A

**2.4. General Information of Test**

<input type="checkbox"/>	Test Site	Cerpass Technology Corporation Test Laboratory Address: No.10, Ln. 2, Lianfu St., Luzhu Dist., Taoyuan City 33848, Taiwan (R.O.C.) Tel:+886-3-3226-888 Fax:+886-3-3226-881 Address: No.68-1, Shihbachongsi, Shihding Township, New Taipei City 223, Taiwan, R.O.C. Tel: +886-2-2663-8582
	FCC	TW1079, TW1061,390316, 228391, 641184
	IC	4934B-1, 4934E-1, 4934E-2
	VCCI	T-2205 for Telecommunication Test C-4663 for Conducted emission test R-3428, R-4218 for Radiated emission test G-812, G-813 for radiated disturbance above 1GHz
<input checked="" type="checkbox"/>	Test Site	Cerpass Technology (Suzhou) Co.,Ltd Address: No.66,Tangzhuang Road, Suzhou Industrial Park, Jiangsu 215006, China Tel: +86-512-6917-5888 Fax: +86-512-6917-5666
	FCC	916572, 331395
	IC	7290A-1, 7290A-2
	VCCI	T-343 for Telecommunication Test C-2919 for Conducted emission test R-2670 for Radiated emission test G-227 for radiated disturbance above 1GHz

2.5. Measurement Uncertainty

Measurement Item	Measurement Frequency	Polarization	Uncertainty
Conducted Emission	9 kHz ~ 30 MHz	LINE/NEUTRAL	±2.71 dB
Radiated Emission	30 MHz ~ 25GHz	Vertical	±4.11 dB
		Horizontal	±4.10 dB
Occupied Bandwidth	---	---	±7500 Hz
Maximum Peak Output Power	---	---	±1.4 dB
Band Edges	---	---	±2.2 dB
Power Spectral Density	---	---	±2.2 dB



3. Test of Conducted Emission

3.1. Test Limit

Conducted Emissions were measured from 150 kHz to 30 MHz with a bandwidth of 9 KHz on the 120 VAC power and return leads of the EUT according to the methods defined in ANSI C63.4 Section 3.1. The EUT was placed on a nonmetallic stand in a shielded room 0.8 meters above the ground plane as shown in section 2.2. The interface cables and equipment positioning were varied within limits of reasonable applications to determine the position produced maximum conducted emissions.

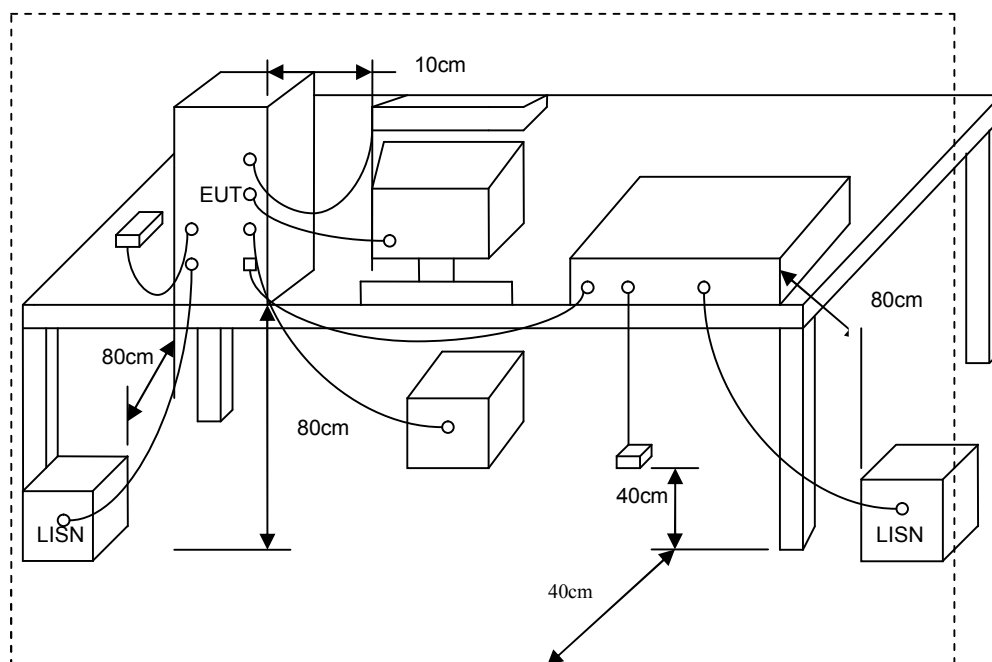
Frequency (MHz)	Quasi Peak (dB μ V)	Average (dB μ V)
0.15 – 0.5	66-56*	56-46*
0.5 – 5.0	56	46
5.0 – 30.0	60	50

*Decreases with the logarithm of the frequency.

3.2. Test Procedures

1. The EUT was placed on a table, which is 0.8m above ground plane.
2. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
3. Repeat above procedures until all frequency measured were complete.

3.3. Typical Test Setup



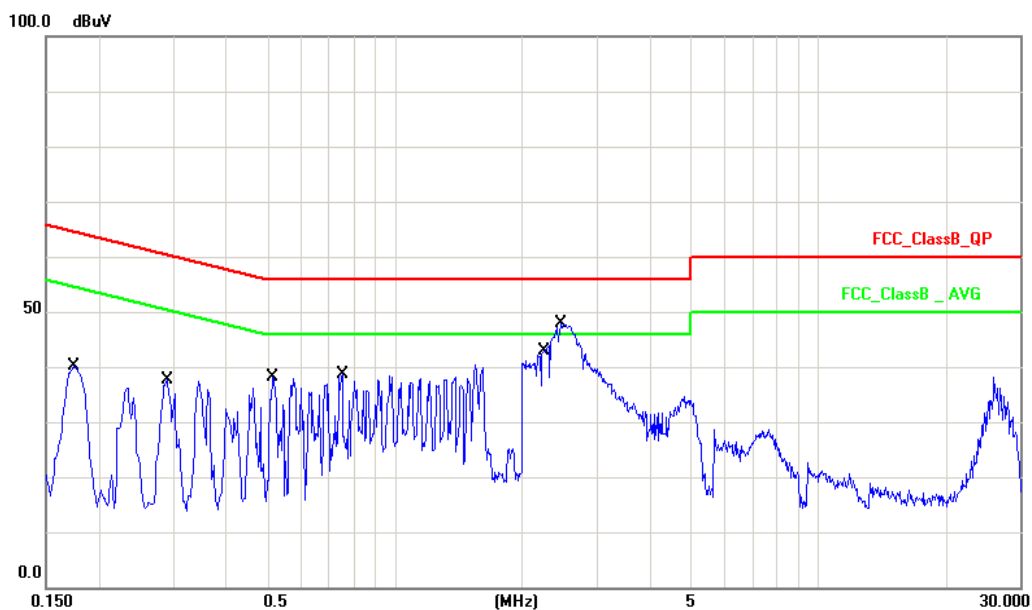
**3.4. Measurement Equipment**

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date.
Test Receiver	R&S	ESCI	100565	2015.03.24	2016.03.23
AMN	R&S	ESH2-Z5	100182	2014.09.04	2015.09.03
Two-Line V-Network	R&S	ENV216	100325	2014.12.04	2015.12.05
ISN	FCC	FCC-TLISN-T2-02	20379	2015.03.24	2016.03.23
ISN	FCC	FCC-TLISN-T4-02	20380	2015.03.24	2016.03.23
ISN	FCC	FCC-TLISN-T8-02	20381	2015.03.24	2016.03.23
ISN	TESEQ	ISN ST08	30175	2015.03.24	2016.03.23
Current Probe	R&S	EZ-17	100303	2015.04.04	2016.04.03
Passive Voltage Probe	R&S	ESH2-Z3	100026	2015.03.24	2016.03.23
Pulse Limiter	R&S	ESH3-Z2	100529	2015.03.24	2016.03.23
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-004	2015.03.31	2016.03.30



3.5. Test Result and Data

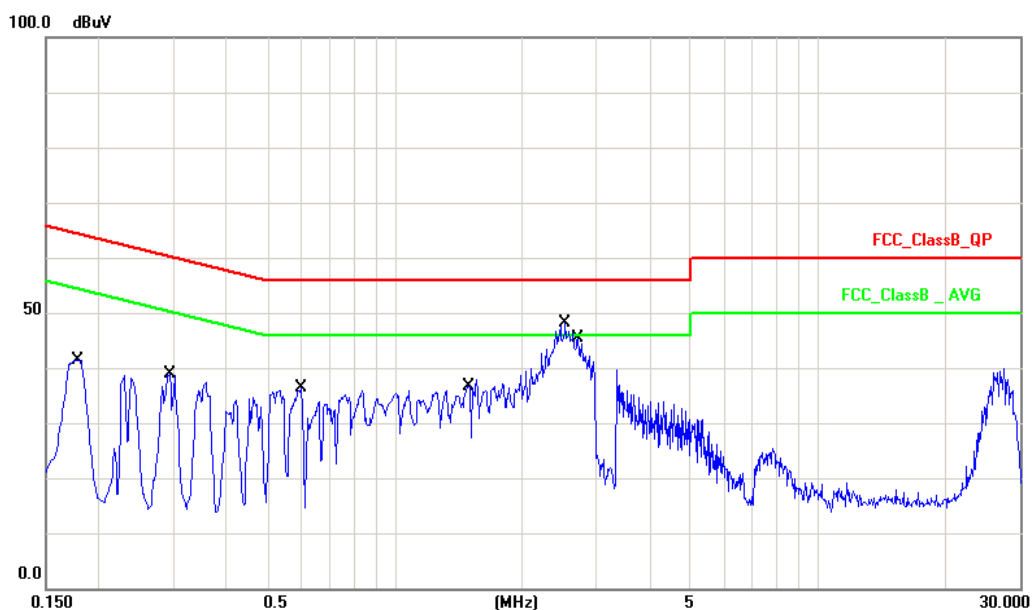
Test Item	Conduction Emission
Product	CX402E
Test Mode	Normal Link
Phase	Line
Test Date	2015/06/07



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1740	10.13	27.65	37.78	64.76	-26.98	QP
2	0.1740	10.13	14.63	24.76	54.76	-30.00	AVG
3	0.2900	10.14	25.36	35.50	60.52	-25.02	QP
4	0.2900	10.14	13.42	23.56	50.52	-26.96	AVG
5	0.5180	10.16	26.05	36.21	56.00	-19.79	QP
6	0.5180	10.16	12.86	23.02	46.00	-22.98	AVG
7	0.7539	10.14	25.21	35.35	56.00	-20.65	QP
8	0.7539	10.14	7.66	17.80	46.00	-28.20	AVG
9	2.2460	10.17	33.77	43.94	56.00	-12.06	QP
10	2.2460	10.17	12.83	23.00	46.00	-23.00	AVG
11	2.4860	10.18	38.90	49.08	56.00	-6.92	QP
12	2.4860	10.18	17.11	27.29	46.00	-18.71	AVG



Test Item	Conduction Emission
Product	CX402E
Test Mode	Normal Link
Phase	Neutral
Test Date	2015/06/07



No.	Frequency (MHz)	Factor (dB)	Reading (dBuV)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector
1	0.1780	10.13	28.57	38.70	64.57	-25.87	QP
2	0.1780	10.13	15.16	25.29	54.57	-29.28	AVG
3	0.2940	10.14	24.95	35.09	60.41	-25.32	QP
4	0.2940	10.14	7.73	17.87	50.41	-32.54	AVG
5	0.6020	10.16	23.90	34.06	56.00	-21.94	QP
6	0.6020	10.16	9.59	19.75	46.00	-26.25	AVG
7	1.5020	10.18	23.87	34.05	56.00	-21.95	QP
8	1.5020	10.18	6.59	16.77	46.00	-29.23	AVG
9	2.5300	10.19	33.85	44.04	56.00	-11.96	QP
10	2.5300	10.19	16.88	27.07	46.00	-18.93	AVG
11	2.7139	10.19	32.43	42.62	56.00	-13.38	QP
12	2.7139	10.19	15.46	25.65	46.00	-20.35	AVG

Note: Measurement Level = Reading Level + Correct Factor



4. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

4.1. Test Limit

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

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

4.2. Test Procedures

Final radiation measurements were made on a three-meter, Semi Anechoic Chamber. The EUT system was placed on a nonconductive turntable which is 0.8 meters height, top surface 1.0 x 1.5 meter. The spectrum was examined from 250 MHz to 2.5 GHz in order to cover the whole spectrum below 10th harmonic which could generate from the EUT. During the test, EUT was set to transmit continuously & Measurements spectrum range from 30 MHz to 26.5 GHz is investigated. For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak. For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, and then the video bandwidth is set to 1 MHz for peak measurements and 10 Hz for average measurements. A nonconductive material surrounded the EUT to supporting the EUT for standing on three orthogonal planes. At each condition, the EUT was rotated 360 degrees, and the antenna was raised and lowered from one to four meters to find the maximum emission levels. Measurements were taken using both horizontal and vertical antenna polarization.

For testing above 1GHz, the emission level of the EUT in peak mode was 20dB lower than average limit (that means the emission level in peak mode also complies with the limit in average mode), then testing will be stopped and peak values of EUT will be reported, otherwise, the emissions will be measured in average mode again and reported.

Appropriate preamplifiers were used for improving sensitivity and precautions were taken to avoid

overloading or desensitizing the spectrum analyzer. No post – detector video filters were used in the test. The spectrum analyzer's 6 dB bandwidth was set to 1 MHz, and the analyzer was operated in the peak detection mode, for frequencies both below and up 1 GHz. The average levels were obtained by subtracting the duty cycle correction factor from the peak readings.

The following procedures were used to convert the emission levels measured in decibels referenced to 1 microvolt (dBuV) into field intensity in micro volts per meter (uV/m).

The actual field intensity in decibels referenced to 1 microvolt in to field intensity in micro volts per meter (dBuV/m). The actual field intensity in referenced to 1 microvolt per meter (dBuV/m) is determined by algebraically adding the measured reading in dBuV, the antenna factor (dB), and cable loss (dB) and Subtracting the gain of preamplifier (dB) is auto calculate in spectrum analyzer.

$$(1) \text{ Amplitude (dBuV/m) = FI (dBuV) + AF (dBuV) + CL (dBuV) - Gain (dB)}$$

FI= Reading of the field intensity.

AF= Antenna factor.

CL= Cable loss.

P.S Amplitude is auto calculate in spectrum analyzer.



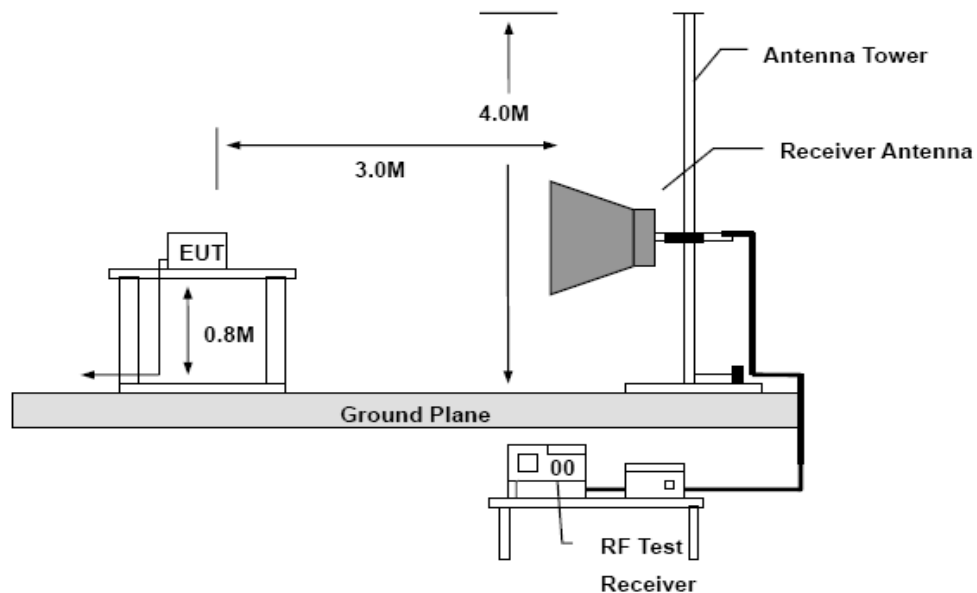
(2) Actual Amplitude (dBuV/m) = Amplitude (dBuV)-Dis(dB)

The FCC specified emission limits were calculated according the EUT operating frequency and by following linear interpolation equations:

(a) For fundamental frequency : Transmitter Output < +30dBm

(b) For spurious frequency : Spurious emission limits = fundamental emission limit /10

4.3. Typical Test Setup



**4.4. Measurement Equipment**

Instrument	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date.
EMI Test Receiver	R&S	ESCI	100563	2015.03.24	2016.03.23
H64 Preamplifier	HP	8447F	3113A05582	2015.03.24	2016.03.23
Preamplifier	Agilent	8449B	3008A02342	2015.03.24	2016.03.23
Ultra Broadband Antenna	R&S	HL562	100362	2015.05.24	2016.05.23
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	9120D-619	2015.05.24	2016.05.23
Broad-Band Horn Antenna	Schwarzbeck	BBHA9170	9170-348	2015.05.24	2016.05.23
Spectrum Analyzer	R&S	FSP40	100324	2015.03.23	2016.03.24
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2015.03.31	2016.03.30



4.5. Test Result and Data

Radiated Spurious Emission Measurement Result/Below 1G:

Engineer : Wind	Time : 2015-06-08
Site : EMC Lab AC 102	Margin : 6
Limit : FCC_Part22&24 and RSS 133 Clause 6.5&6.6	Probe : VERTICAL/ HORIZONTAL
EUT :CX402E	Note : GSM 850 link

Channel	Frequency (MHz)	Reading level (Peak) (dB)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Pol.
128	38.28	-15.32	-11.29	-26.61	-13.00	-13.61	H
	108.16	-11.35	-13.44	-24.79	-13.00	-11.79	H
	114.39	-12.54	-13.78	-26.32	-13.00	-13.32	V
	130.67	-16.95	-14.15	-31.10	-13.00	-18.10	V
190	75.96	-15.34	-16.63	-31.97	-13.00	-18.97	H
	85.52	-12.64	-15.27	-27.91	-13.00	-14.91	H
	141.09	-13.66	-14.47	-28.13	-13.00	-15.13	V
	829.33	-25.41	1.87	-23.54	-13.00	-10.54	V
251	109.17	-11.98	-14.25	-26.23	-13.00	-13.23	H
	125.46	-10.68	-14.15	-24.83	-13.00	-11.83	H
	312.85	-14.63	-9.74	-24.37	-13.00	-11.37	V
	896.38	-22.52	-2.44	-24.96	-13.00	-11.96	V



Engineer : Wind	Time : 2015-06-08
Site : EMC Lab AC 102	Margin : 6
Limit : FCC_Part22&24 and RSS 133 Clause 6.5&6.6	Probe : VERTICAL/ HORIZONTAL
EUT :CX402E	Note : GSM 1900 link

Channel	Frequency (MHz)	Reading level (Peak) (dB)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Pol.
512	37.28	-12.85	-11.29	-24.14	-13.00	-11.14	H
	110.95	-10.36	-13.44	-23.80	-13.00	-10.80	H
	115.36	-12.65	-13.78	-26.43	-13.00	-13.43	V
	131.77	-11.77	-14.15	-25.92	-13.00	-12.92	V
661	74.46	-11.03	-16.63	-27.66	-13.00	-14.66	H
	86.11	-12.96	-15.27	-28.23	-13.00	-15.23	H
	141.19	-12.61	-14.47	-27.08	-13.00	-14.08	V
	829.63	-26.38	1.87	-24.51	-13.00	-11.51	V
810	110.19	-12.14	-14.25	-26.39	-13.00	-13.39	H
	128.07	-13.12	-14.15	-27.27	-13.00	-14.27	H
	314.29	-14.86	-9.74	-24.60	-13.00	-11.60	V
	899.71	-23.44	-2.44	-25.88	-13.00	-12.88	V



Engineer : Wind	Time : 2015-06-08
Site : EMC Lab AC 102	Margin : 6
Limit : FCC_Part22&24 and RSS 133 Clause 6.5&6.6	Probe : VERTICAL/ HORIZONTAL
EUT :CX402E	Note : EDGE 850

Channel	Frequency (MHz)	Reading level (Peak) (dB)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Pol.
128	39.63	-11.85	-11.29	-23.14	-13.00	-10.14	H
	107.19	-12.84	-13.44	-26.28	-13.00	-13.28	H
	110.58	-13.02	-13.78	-26.80	-13.00	-13.80	V
	127.67	-11.65	-14.15	-25.80	-13.00	-12.80	V
190	74.28	-11.92	-16.63	-28.55	-13.00	-15.55	H
	86.32	-11.34	-15.27	-26.61	-13.00	-13.61	H
	136.30	-15.47	-14.47	-29.94	-13.00	-16.94	V
	828.12	-26.35	1.87	-24.48	-13.00	-11.48	V
251	108.90	-11.66	-14.25	-25.91	-13.00	-12.91	H
	127.16	-13.54	-14.15	-27.69	-13.00	-14.69	H
	311.29	-14.68	-9.74	-24.42	-13.00	-11.42	V
	895.08	-21.36	-2.18	-23.54	-13.00	-10.54	V



Engineer : Wind	Time : 2015-06-08
Site : EMC Lab AC 102	Margin : 6
Limit : FCC_Part22&24 and RSS 133 Clause 6.5&6.6	Probe : VERTICAL/ HORIZONTAL
EUT :CX402E	Note : EDGE 1900

Channel	Frequency (MHz)	Reading level (Peak) (dB)	Correction Factor (dB)	Emission level (dBm)	Limit (dBm)	Margin (dB)	Antenna Pol.
512	38.25	-11.62	-11.01	-22.63	-13.00	-9.63	H
	107.39	-10.35	-13.44	-23.79	-13.00	-10.79	H
	117.85	-14.65	-13.65	-28.30	-13.00	-15.30	V
	127.36	-13.54	-14.15	-27.69	-13.00	-14.69	V
661	75.09	-11.24	-16.63	-27.87	-13.00	-14.87	H
	84.50	-10.62	-15.27	-25.89	-13.00	-12.89	H
	136.85	-12.03	-14.47	-26.50	-13.00	-13.50	V
	830.18	-25.47	1.87	-23.60	-13.00	-10.60	V
810	107.31	-12.47	-14.25	-26.72	-13.00	-13.72	H
	128.67	-13.68	-14.15	-27.83	-13.00	-14.83	H
	312.15	-14.02	-9.74	-23.76	-13.00	-10.76	V
	897.89	-22.62	-2.44	-25.06	-13.00	-12.06	V

**Radiated Spurious Emission Measurement Result/Above 1G:**

Engineer : Wind	Time : 2015-06-08
Site : EMC Lab AC 102	Margin : 6
Limit : FCC Part22&24 and RSS 133 Clause 6.5&6.6	Probe : VERTICAL/ HORIZONTAL
EUT :CX402E	Note : GSM 850 link

Channel	Frequency (MHz)	SA Reading	SG Reading	Cable Loss	Gain	EIRP	Limit	Margin	Antenna Pol.
128	1646.00	-61.51	-63.44	2.50	9.75	-56.19	-13.00	-43.19	H
	2470.50	-59.39	-57.80	3.12	10.48	-50.44	-13.00	-37.44	H
	1646.00	-59.27	-61.84	2.50	9.75	-54.59	-13.00	-41.59	V
	2470.50	-59.09	-58.12	3.12	10.48	-50.76	-13.00	-37.76	V
190	-60.52	2.52	-60.52	2.52	9.95	-53.09	-13.00	-40.09	H
	-56.91	3.18	-56.91	3.18	10.62	-49.47	-13.00	-36.47	H
	-60.28	2.52	-60.28	2.52	9.95	-52.85	-13.00	-39.85	V
	-55.50	3.18	-55.50	3.18	10.62	-48.06	-13.00	-35.06	V
251	1697.00	-57.33	-60.07	2.54	10.06	-52.55	-13.00	-39.55	H
	2547.00	-53.63	-52.06	3.14	10.68	-44.52	-13.00	-31.52	H
	1697.00	-57.10	-59.10	2.54	10.06	-51.58	-13.00	-38.58	V
	2547.00	-52.58	-50.76	3.14	10.68	-43.22	-13.00	-30.22	V

Engineer : Wind	Time : 2015-06-08
Site : EMC Lab AC 102	Margin : 6
Limit : FCC Part22&24 and RSS 133 Clause 6.5&6.6	Probe : VERTICAL/ HORIZONTAL
EUT :CX402E	Note : GSM 1900 link

Channel	Frequency (MHz)	SA Reading	SG Reading	Cable Loss	Gain	EIRP	Limit	Margin	Antenna Pol.
512	3700.00	-64.66	-61.29	3.84	12.69	-52.44	-13.00	-39.44	H
	5550.00	-63.13	-55.24	4.82	13.15	-46.91	-13.00	-33.91	H
	3700.00	-63.91	-60.55	3.84	12.69	-51.70	-13.00	-38.70	V
	5550.00	-66.18	-58.29	4.82	13.15	-49.96	-13.00	-36.96	V
661	3760.00	-64.02	-61.13	3.73	12.72	-52.14	-13.00	-39.14	H
	5640.00	-64.83	-55.79	4.93	13.14	-47.58	-13.00	-34.58	H
	3760.00	-63.30	-60.00	3.73	12.72	-51.01	-13.00	-38.01	V
	5640.00	-64.83	-56.48	4.93	13.14	-48.27	-13.00	-35.27	V
810	3818.00	-63.33	-59.81	4.02	12.73	-51.10	-13.00	-38.10	H
	5727.00	-65.33	-56.35	4.87	13.11	-48.11	-13.00	-35.11	H
	3818.00	-63.90	-59.97	4.02	12.73	-51.26	-13.00	-38.26	V
	5727.00	-65.66	-56.89	4.87	13.11	-48.65	-13.00	-35.65	V



Engineer : Wind	Time : 2015-06-08
Site : EMC Lab AC 102	Margin : 6
Limit : FCC_Part22&24 and RSS 133 Clause 6.5&6.6	Probe : VERTICAL/ HORIZONTAL
EUT :CX402E	Note : EDGE 850

Channel	Frequency (MHz)	SA Reading	SG Reading	Cable Loss	Gain	EIRP	Limit	Margin	Antenna Pol.
128	1646.00	-57.92	-60.03	2.50	9.75	-52.78	-13.00	-39.78	H
	2470.50	-59.11	-57.83	3.12	10.48	-50.47	-13.00	-37.47	H
	1646.00	-60.66	-62.56	2.50	9.75	-55.31	-13.00	-42.31	V
	2470.50	-62.34	-58.79	3.12	10.48	-51.43	-13.00	-38.43	V
190	1671.50	-58.38	-60.67	2.52	9.95	-53.24	-13.00	-40.24	H
	2513.00	-58.76	-57.55	3.18	10.62	-50.11	-13.00	-37.11	H
	1671.50	-60.98	-62.19	2.52	9.95	-54.76	-13.00	-41.76	V
	2513.00	-61.96	-59.49	3.18	10.62	-52.05	-13.00	-39.05	V
251	1697.00	-57.37	-59.76	2.54	10.06	-52.24	-13.00	-39.24	H
	2547.00	-59.56	-58.45	3.14	10.68	-50.91	-13.00	-37.91	H
	1697.00	-59.95	-62.12	2.54	10.06	-54.60	-13.00	-41.60	V
	2547.00	-60.29	-58.47	3.14	10.68	-50.93	-13.00	-37.93	V

Engineer : Wind	Time : 2015-06-08
Site : EMC Lab AC 102	Margin : 6
Limit : FCC_Part22&24 and RSS 133 Clause 6.5&6.6	Probe : VERTICAL/ HORIZONTAL
EUT :CX402E	Note : EDGE 1900

Channel	Frequency (MHz)	SA Reading	SG Reading	Cable Loss	Gain	EIRP	Limit	Margin	Antenna Pol.
512	3700.00	-63.37	-59.81	3.84	12.69	-50.96	-13.00	-37.96	H
	5550.00	-62.23	-53.73	4.82	13.15	-45.40	-13.00	-32.40	H
	3700.00	-63.28	-60.12	3.84	12.69	-51.27	-13.00	-38.27	V
	5550.00	-65.30	-56.78	4.82	13.15	-48.45	-13.00	-35.45	V
661	3760.00	-63.39	-59.91	3.73	12.72	-50.92	-13.00	-37.92	H
	5640.00	-65.33	-56.36	4.93	13.14	-48.15	-13.00	-35.15	H
	3760.00	-64.21	-60.62	3.73	12.72	-51.63	-13.00	-38.63	V
	5640.00	-65.21	-56.48	4.93	13.14	-48.27	-13.00	-35.27	V
810	3818.00	-64.16	-60.64	4.02	12.73	-51.93	-13.00	-38.93	H
	5727.00	-65.17	-56.14	4.87	13.11	-47.90	-13.00	-34.90	H
	3818.00	-64.16	-60.68	4.02	12.73	-51.97	-13.00	-38.97	V
	5727.00	-65.17	-56.54	4.87	13.11	-48.30	-13.00	-35.30	V



5. Occupied Bandwidth

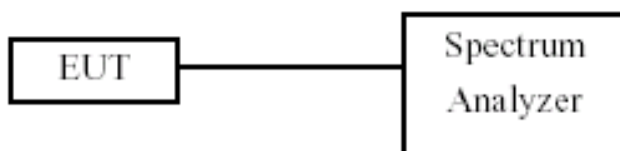
5.1. Test Limit

According to §FCC 2.1049.

5.2. Test Procedures

The EUT's output RF connector was connected with a short cable to the spectrum analyzer, RBW was set to about 1% of emission BW, VBW is set to 3 times the RBW, -26dBc display line was placed on the screen (or 99% bandwidth), the occupied bandwidth is the delta frequency between the two points where the display line intersects the signal trace.

5.3. Test Setup Layout



5.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	Agilent	E4407B	MY44211883	2014.09.12	2015.09.11
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2015.03.31	2016.03.30



5.5. Test Result and Data

Test Item	Occupied Channel Bandwidth
Test Mode	GSM 850
Test Date	2015-06-05

Channel No.	Frequency (MHz)	-26dB Occupied Bandwidth (kHz)	99% Occupied Bandwidth (kHz)
128	824.20	313.985	244.140
189	836.40	320.156	243.550
251	848.80	313.529	244.744

Figure Channel 128 (824.20MHz)

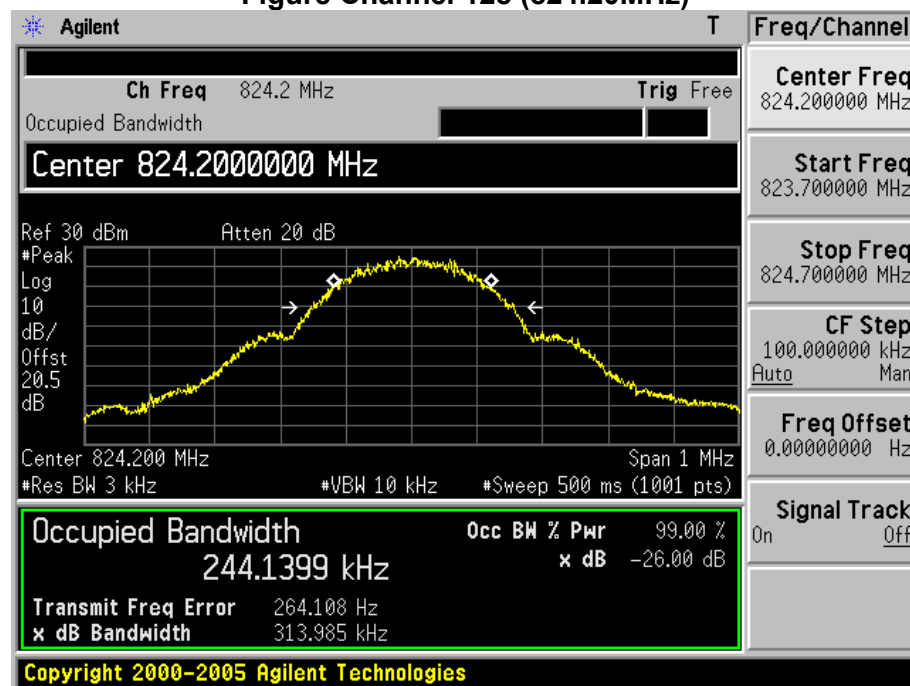




Figure Channel 189 (836.40MHz)

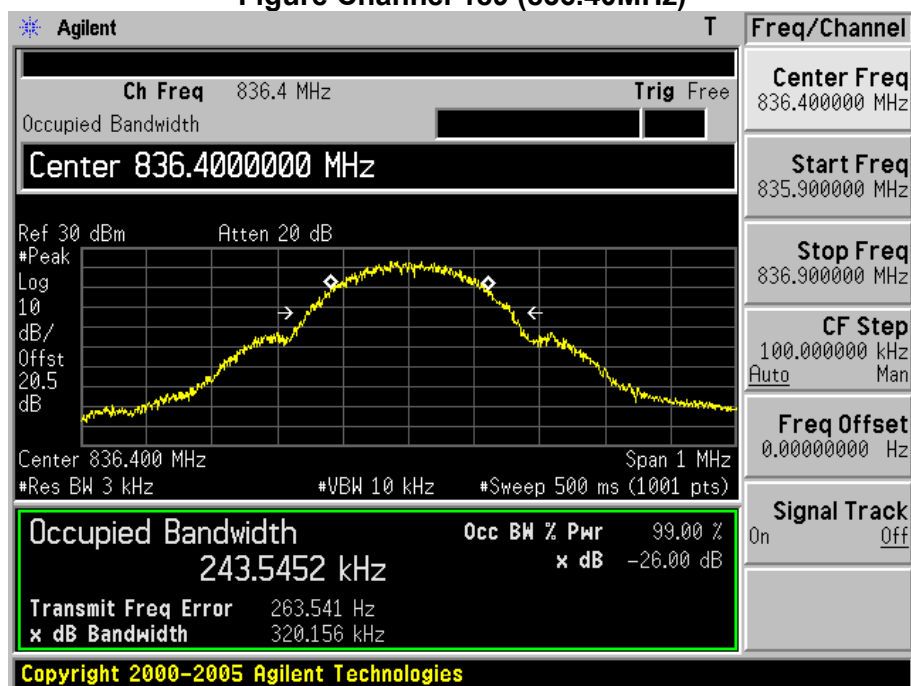
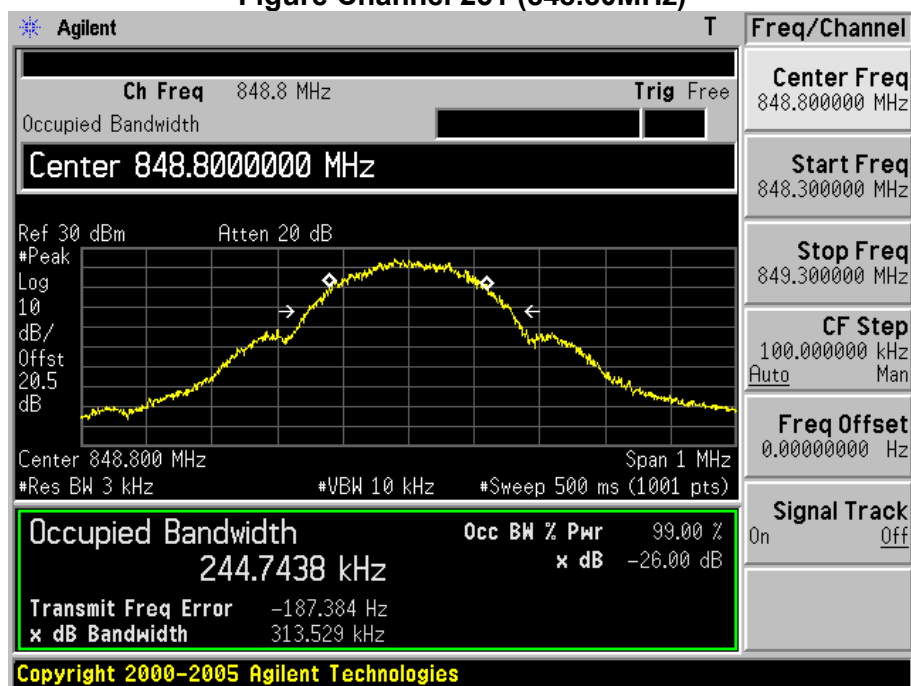


Figure Channel 251 (848.80MHz)





Test Item	Occupied Channel Bandwidth
Test Mode	GSM 1900
Test Date	2015-06-05

Channel No.	Frequency (MHz)	-26dB Occupied Bandwidth (kHz)	99% Occupied Bandwidth (kHz)
512	1850.20	314.034	242.895
661	1880.00	313.907	240.752
810	1909.80	315.476	246.991

Figure Channel 512 (1850.20MHz)

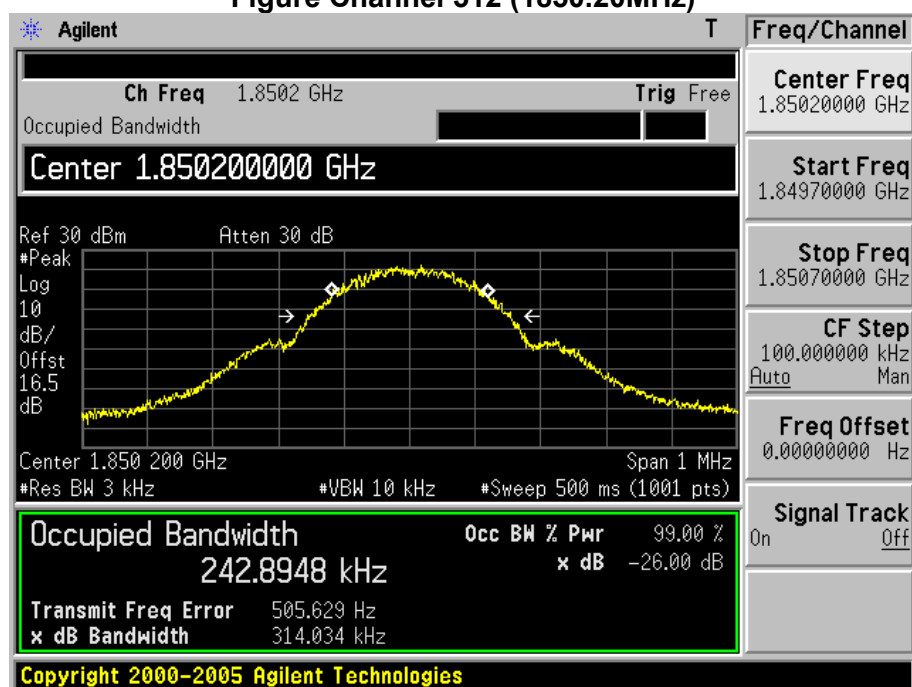




Figure Channel 661 (1880.00MHz)

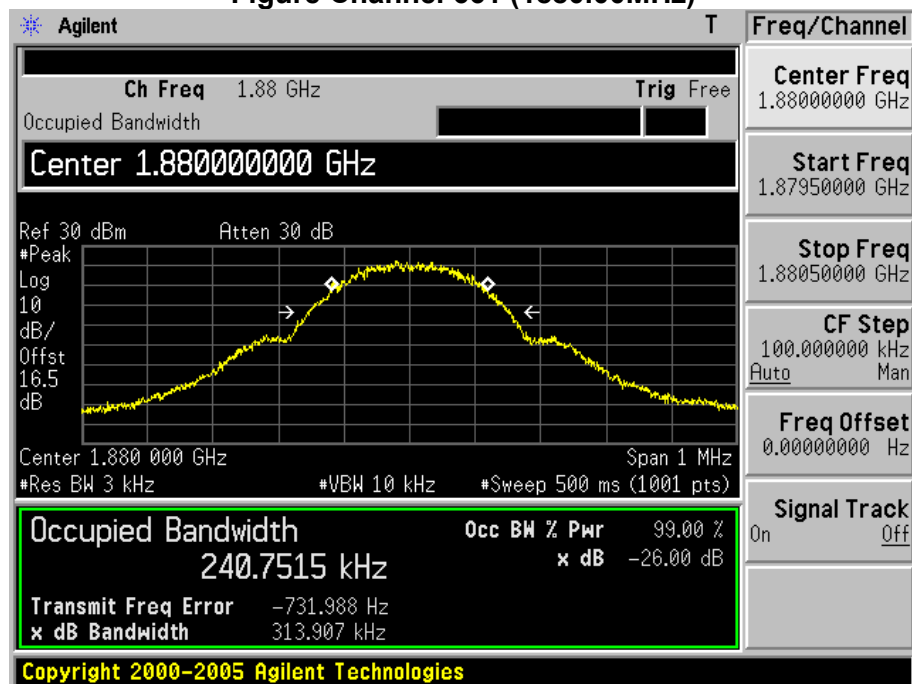


Figure Channel 810 (1909.80MHz)





Test Item	Occupied Channel Bandwidth
Test Mode	EDGE 850
Test Date	2015-06-05

Channel No.	Frequency (MHz)	-26dB Occupied Bandwidth (kHz)	99% Occupied Bandwidth (kHz)
128	824.20	310.529	245.022
189	836.40	312.128	244.699
251	848.80	313.640	236.606

Figure Channel 128 (824.20MHz)

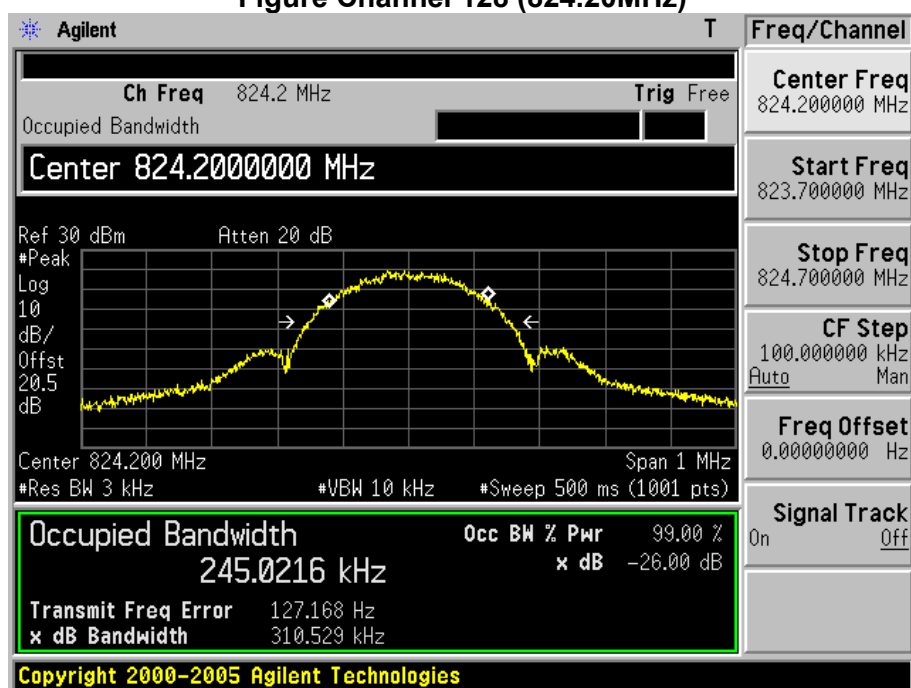




Figure Channel 189 (836.40MHz)

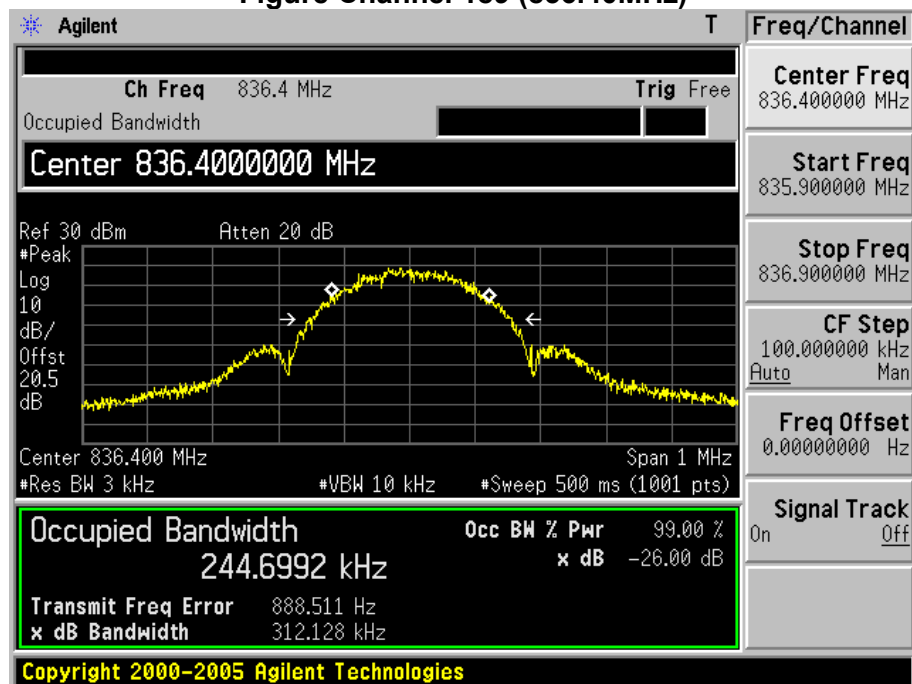
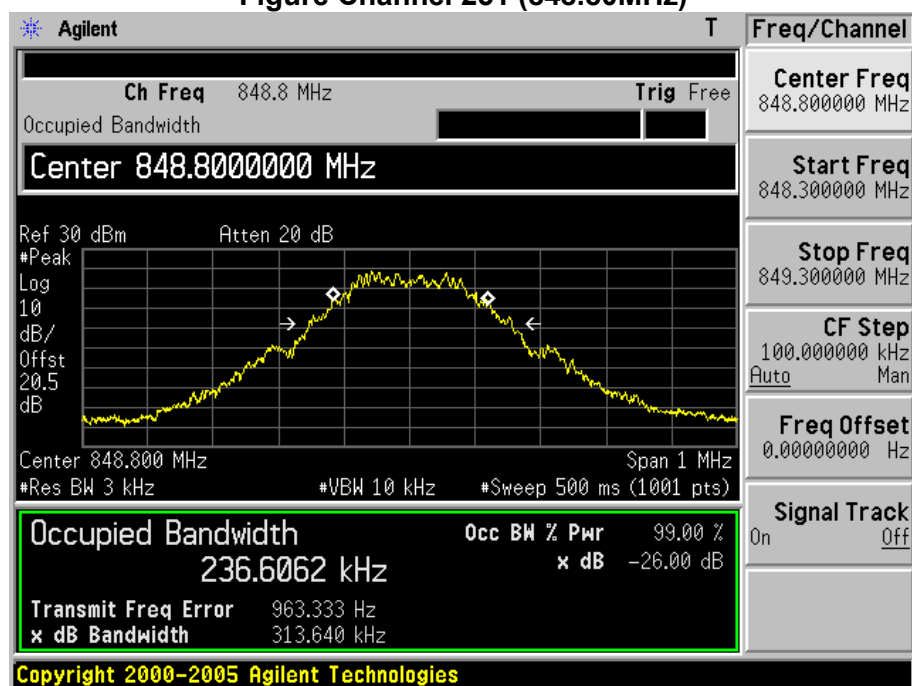


Figure Channel 251 (848.80MHz)





Test Item	Occupied Channel Bandwidth
Test Mode	EDGE 1900
Test Date	2015-06-05

Channel No.	Frequency (MHz)	-26dB Occupied Bandwidth (kHz)	99% Occupied Bandwidth (kHz)
512	1850.20	315.763	237.846
661	1880.00	315.651	238.706
810	1909.80	313.396	238.854

Figure Channel 512 (1850.20MHz)

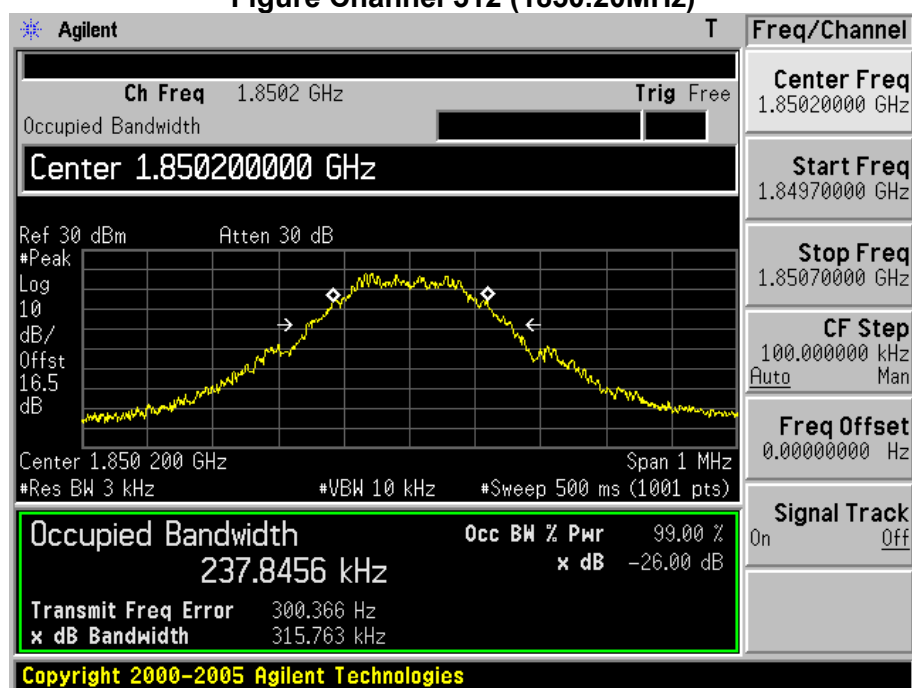




Figure Channel 661 (1880.00MHz)

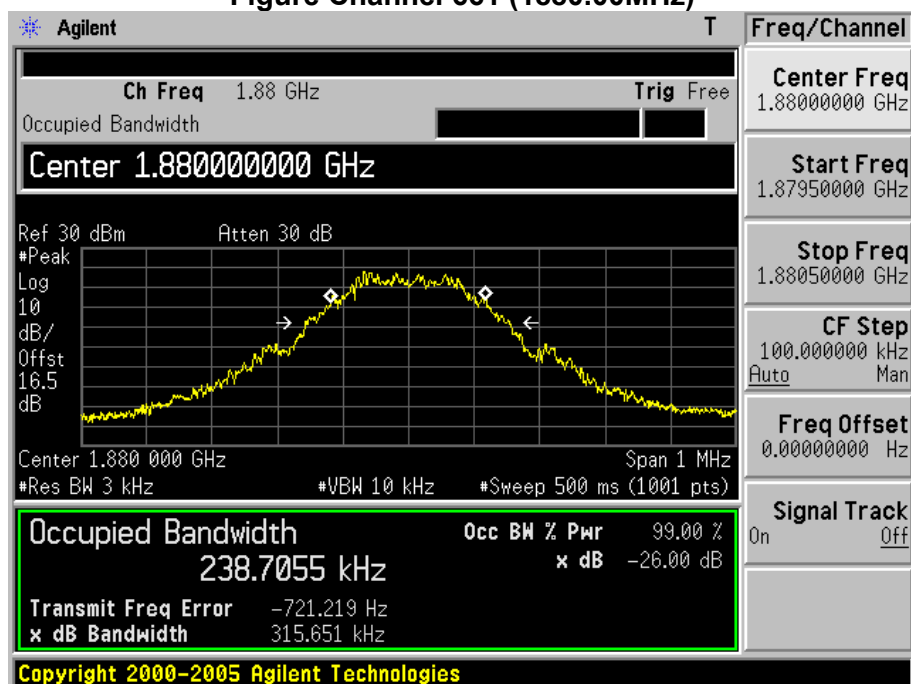
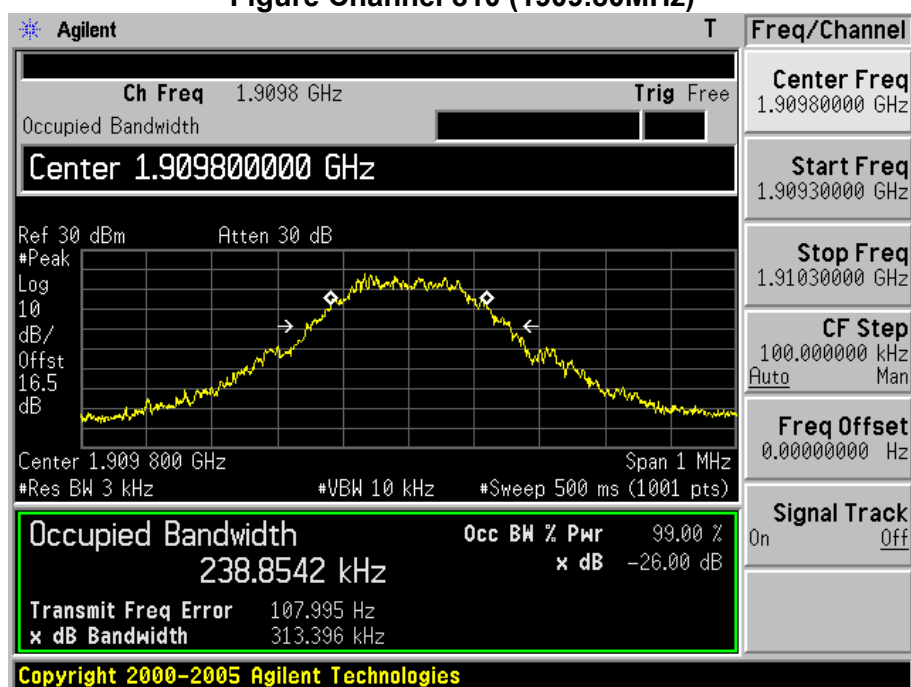


Figure Channel 810 (1909.80MHz)





6. Maximum Peak Output Power

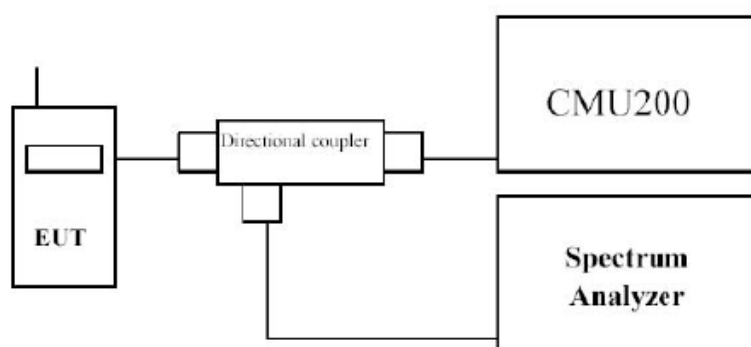
6.1. Test Limit

According to FCC §2.1046.

6.2. Test Procedure

- Place the EUT on a bench and set it in transmitting mode.
- Connect a low loss RF cable from the antenna port to a spectrum analyzer and CMU200 by a Directional Coupler.
- EUT Communicate with CMU200, then selects a channel for testing.
- Add a correction factor to the display of spectrum, and then test.

6.3. Test Setup Layout



6.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	E4407B	Agilent	MY44211883	2014.09.12	2015.09.11
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2015.03.31	2016.03.30
Universal Radio Communication Tester	R&S	CMU200	108823	2015.03.24	2016.03.23

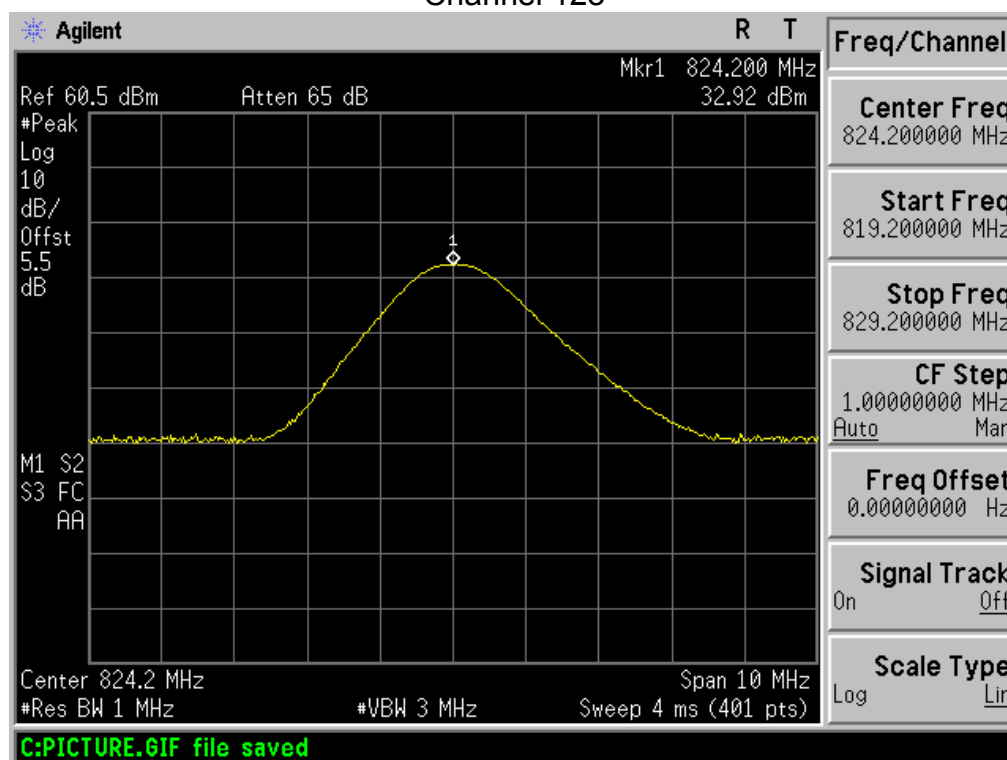


6.5. Test Result and Data

Test Item	Maximum Peak Output Power
Test Mode	GSM 850
Test Date	2015-06-05

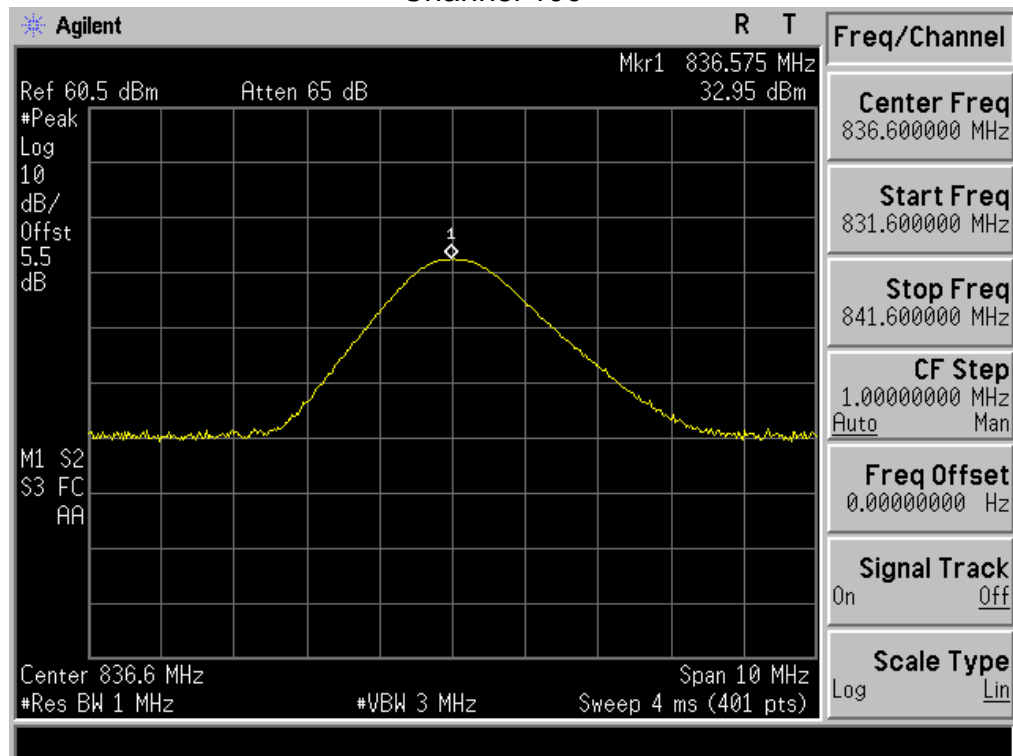
Channel No.	Frequency (MHz)	Average Power (dBm)	Peak Power (dBm)
128	824.2	32.54	32.92
190	836.6	32.78	32.95
251	848.8	32.42	33.29

Channel 128

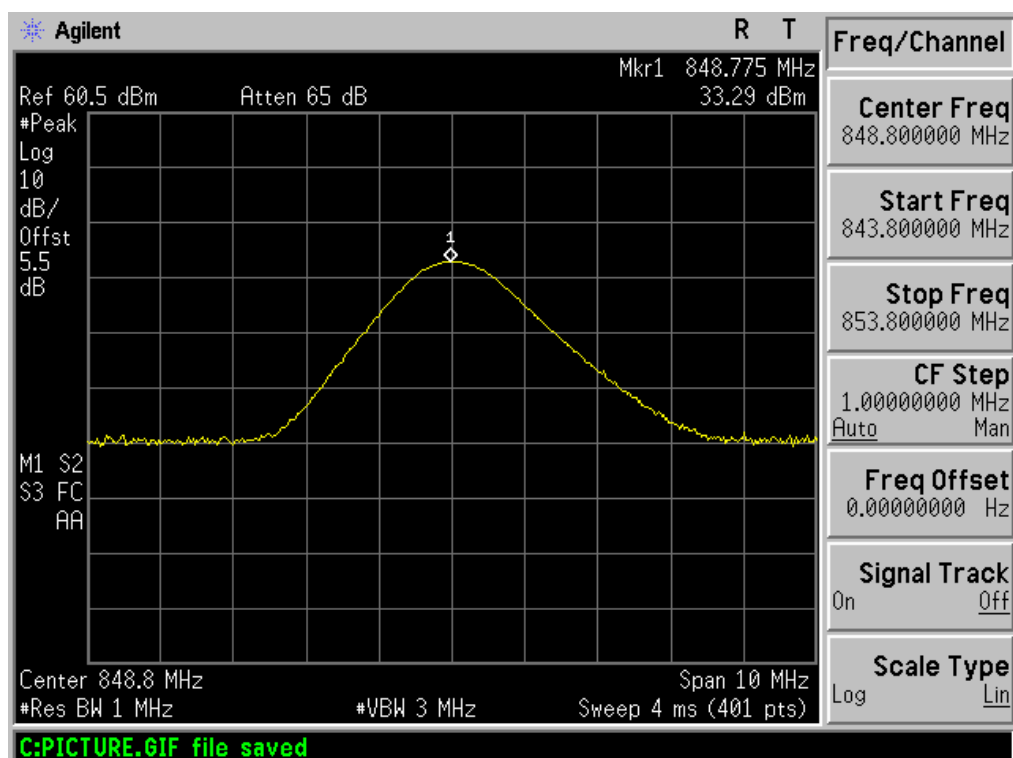




Channel 190

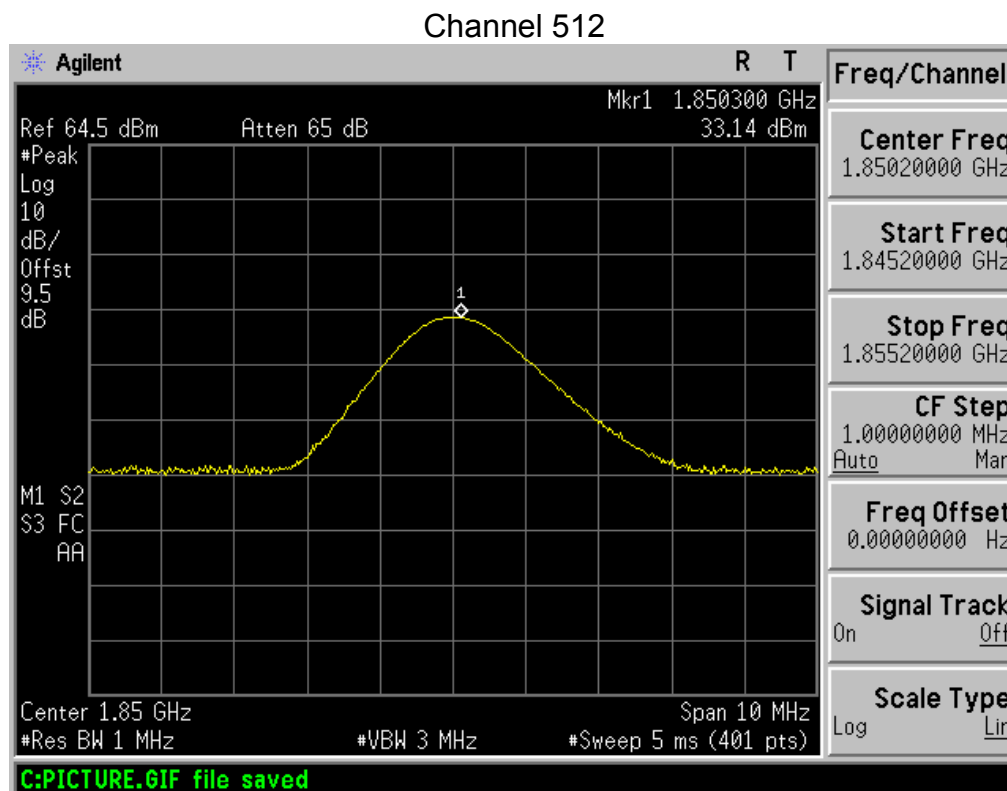


Channel 251



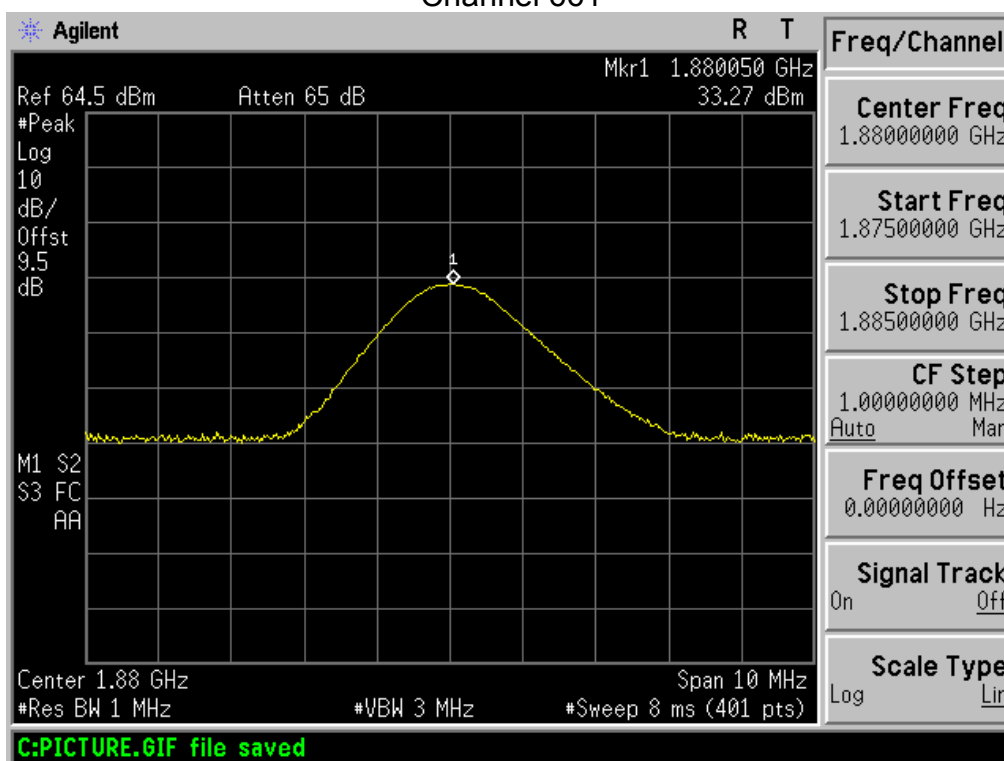
Test Item	Maximum Peak Output Power
Test Mode	GSM 1900
Test Date	2015-06-05

Channel No.	Frequency (MHz)	Average Power (dBm)	Peak Power (dBm)
512	1850.2	32.84	33.14
661	1880.0	32.94	33.27
810	1909.8	32.94	33.16

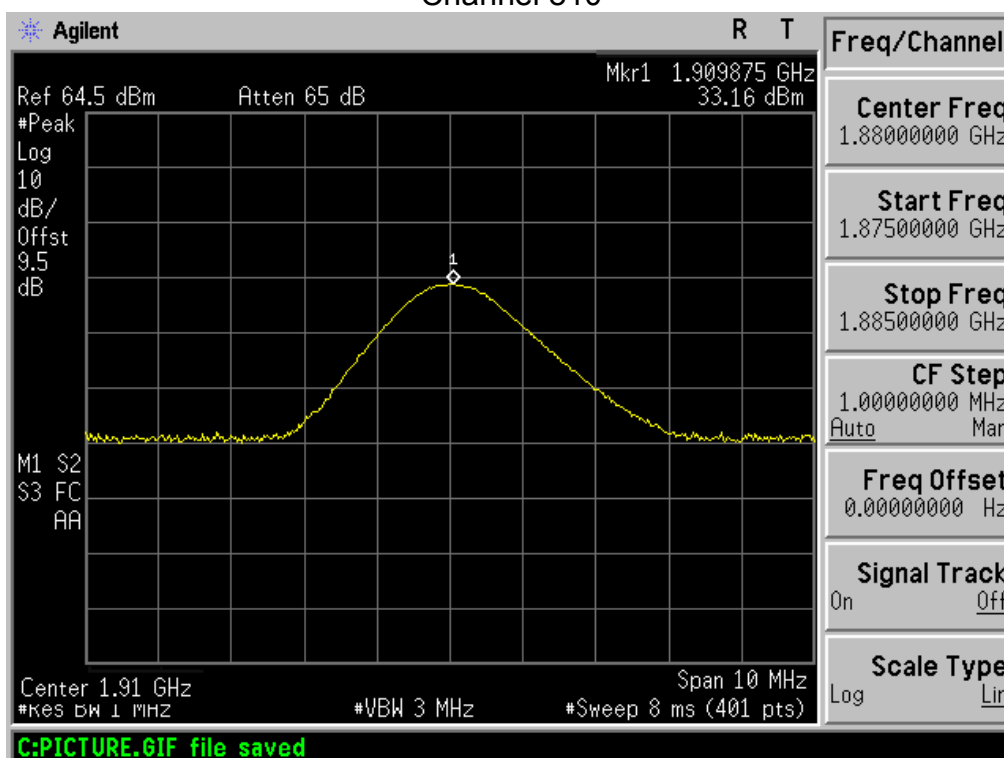




Channel 661



Channel 810

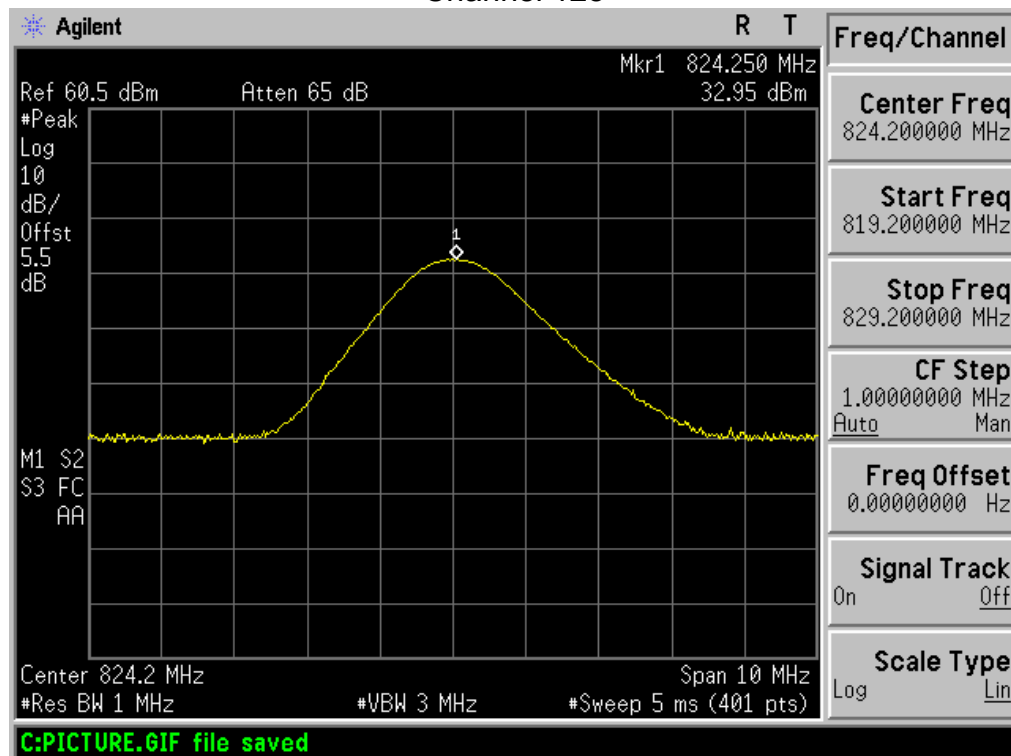




Test Item	Maximum Peak Output Power
Test Mode	EDGE 850
Test Date	2015-06-05

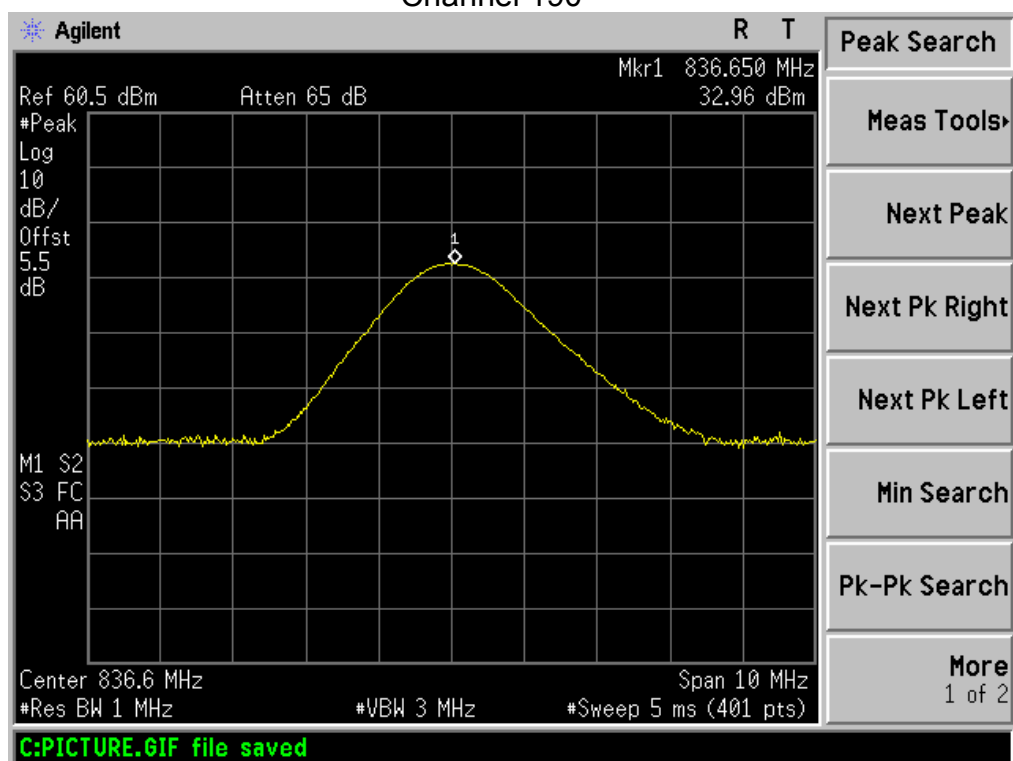
Channel No.	Frequency (MHz)	Average Power (dBm)	Peak Power (dBm)
128	824.2	32.29	32.95
190	836.6	32.62	32.96
251	848.8	32.31	33.37

Channel 128

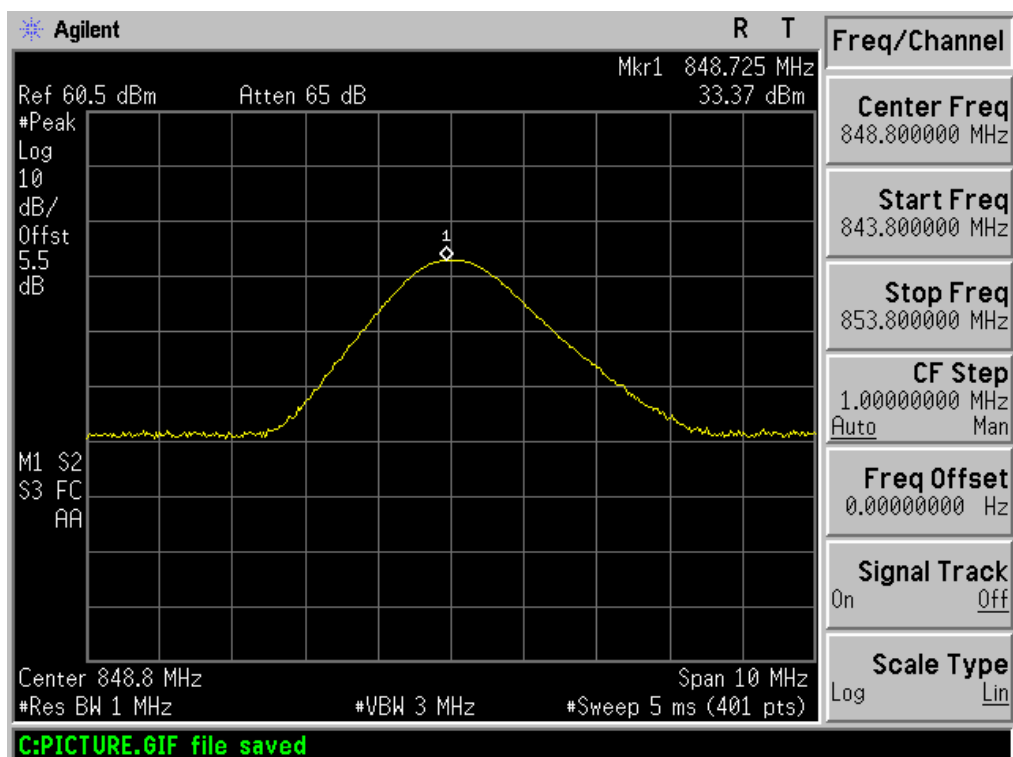




Channel 190



Channel 251

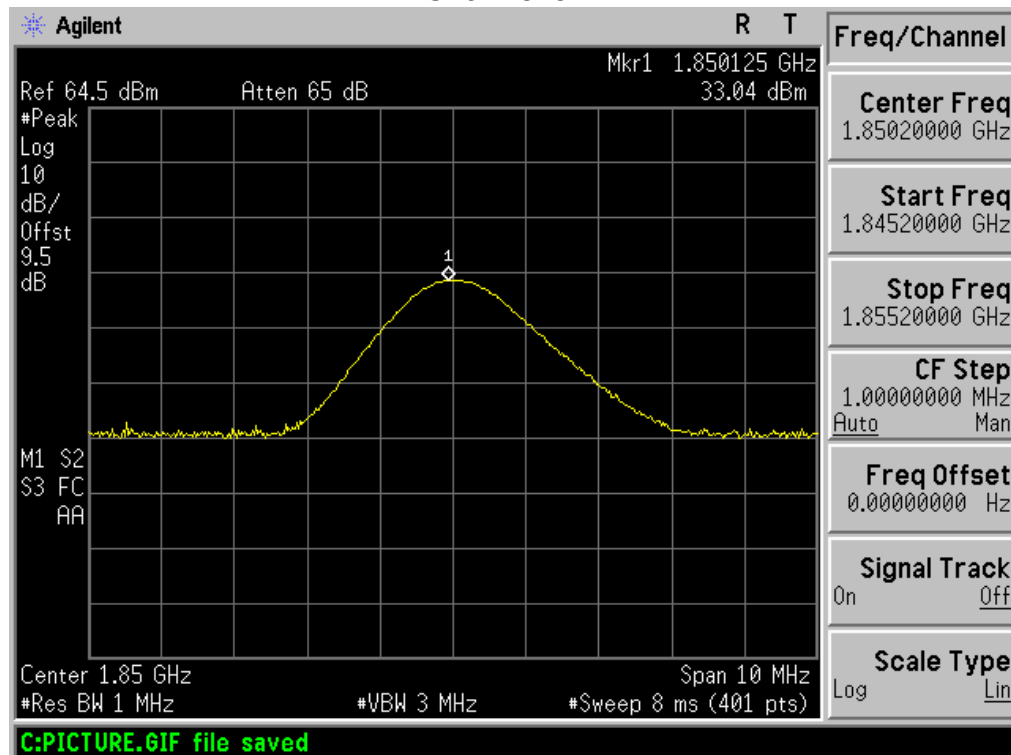




Test Item	Maximum Peak Output Power
Test Mode	EDGE 1900
Test Date	2015-06-05

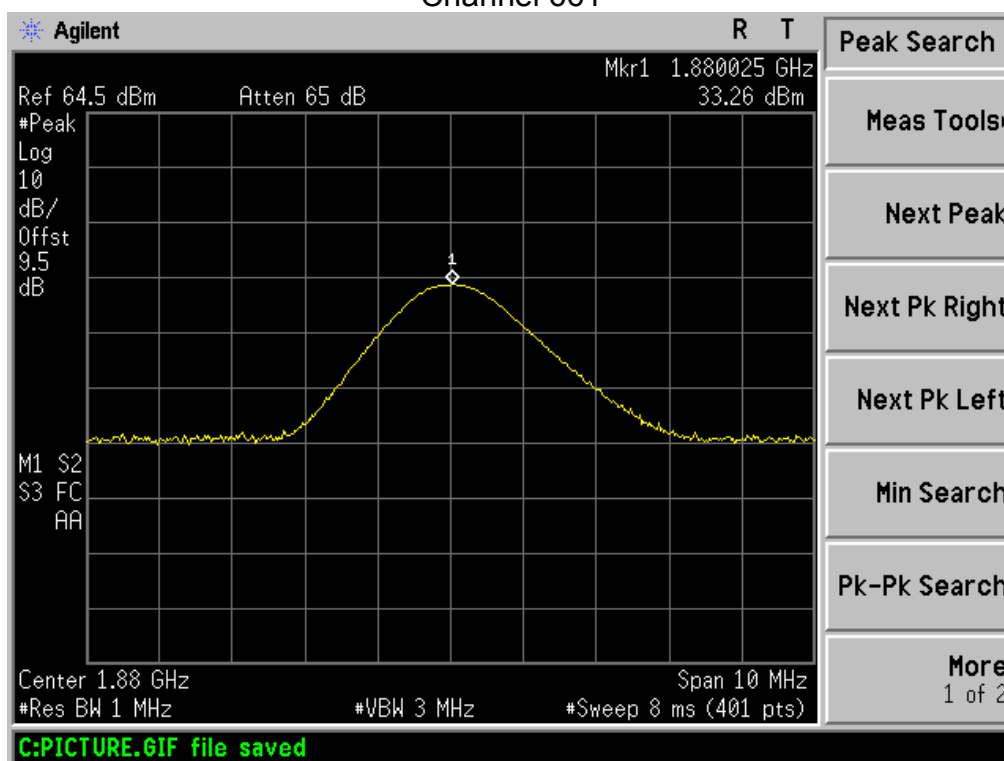
Channel No.	Frequency (MHz)	Average Power (dBm)	Peak Power (dBm)
512	1850.2	32.76	33.04
661	1880.0	32.83	33.26
810	1909.8	32.81	33.24

Channel 512

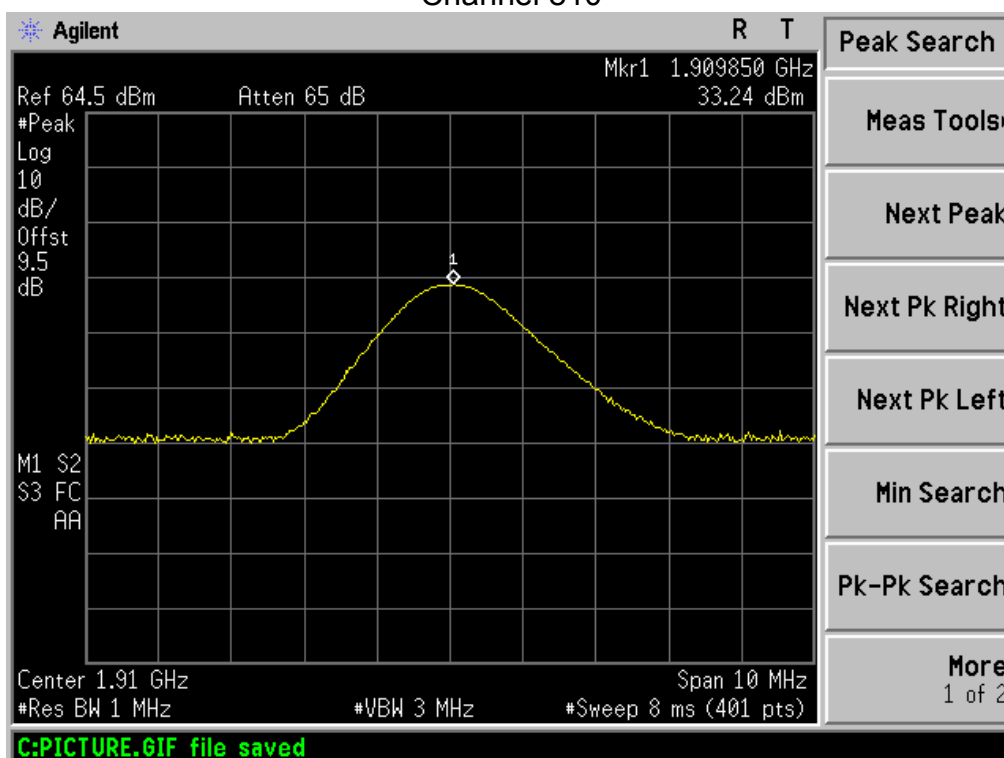




Channel 661



Channel 810





Mode	Frequency <MHz>	Average Burst Power<dBm>	Mode	Frequency <MHz>	Average Burst Power<dBm>
GSM850	824.2	32.41	PCS1900	1850.2	32.84
	836.6	32.78		1880	32.94
	848.8	32.42		1909.8	32.94
GPRS850(1slot)	824.2	32.29	GPRS1900(1slot)	1850.2	32.76
	836.6	32.62		1880	32.83
	848.8	32.31		1909.8	32.81
GPRS850(2slot)	824.2	31.11	GPRS1900(2slot)	1850.2	30.96
	836.6	31.32		1880	31.05
	848.8	31.09		1909.8	30.99
GPRS850(3slot)	824.2	28.56	GPRS1900(3slot)	1850.2	28.55
	836.6	28.61		1880	28.65
	848.8	28.51		1909.8	28.51
GPRS850(4slot)	824.2	26.65	GPRS1900(4slot)	1850.2	26.69
	836.6	26.72		1880	26.77
	848.8	26.59		1909.8	26.71
EDGE850(1slot) 8PSK	824.2	28.25	EDGE1900(1slot) 8PSK	1850.2	26.49
	836.6	28.23		1880	26.38
	848.8	28.19		1909.8	26.31
EDGE850(2slot) 8PSK	824.2	27.92	EDGE1900(2slot) 8PSK	1850.2	25.29
	836.6	27.88		1880	25.26
	848.8	27.83		1909.8	25.18
EDGE850(3slot) 8PSK	824.2	26.26	EDGE1900(3slot) 8PSK	1850.2	24.27
	836.6	26.21		1880	24.24
	848.8	26.15		1909.8	24.21
EDGE850(4slot) 8PSK	824.2	25.92	EDGE1900(4slot) 8PSK	1850.2	23.29
	836.6	25.94		1880	23.18
	848.8	25.88		1909.8	23.14



7. ERP & EIRP MEASUREMENT

7.1. Test Limit

According to FCC §2.1046

FCC 22.913(a): The Effective Radiated Power (ERP) of mobile transmitters must not exceed 7 Watts.

FCC 24.232(b): The equivalent Isotropic Radiated Power (EIRP) must not exceed 2 Watts.

7.2. Test Procedure

The EUT was placed on a 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.

During the measurement of the EUT, the resolution bandwidth was set to 3MHz and the average bandwidth was set to 3MHz. The highest emission was recorded with the rotation of the turntable and the lowering of the test antenna. The reading was recorded and the field strength (E in dBuV/m) was calculated.

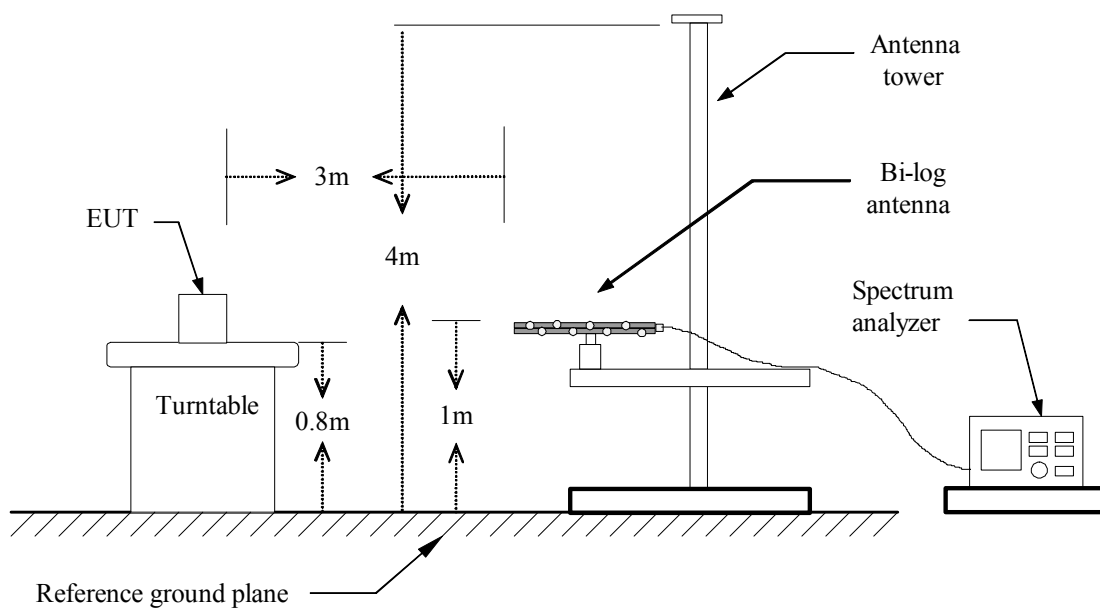
ERP in frequency band 824-849MHz, and EIRP in frequency band 1850 –1910MHz were measured using a substitution method. The EUT was replaced by half-wave dipole (824-849MHz) or horn antenna (1850-1910MHz) connected to a signal generator. The spectrum analyzer reading was recorded and ERP/EIRP was calculated as follows:

$$\text{ERP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBd)} - \text{Cable (dB)}$$
$$\text{EIRP} = \text{S.G. output (dBm)} + \text{Antenna Gain (dBi)} - \text{Cable (dB)}$$

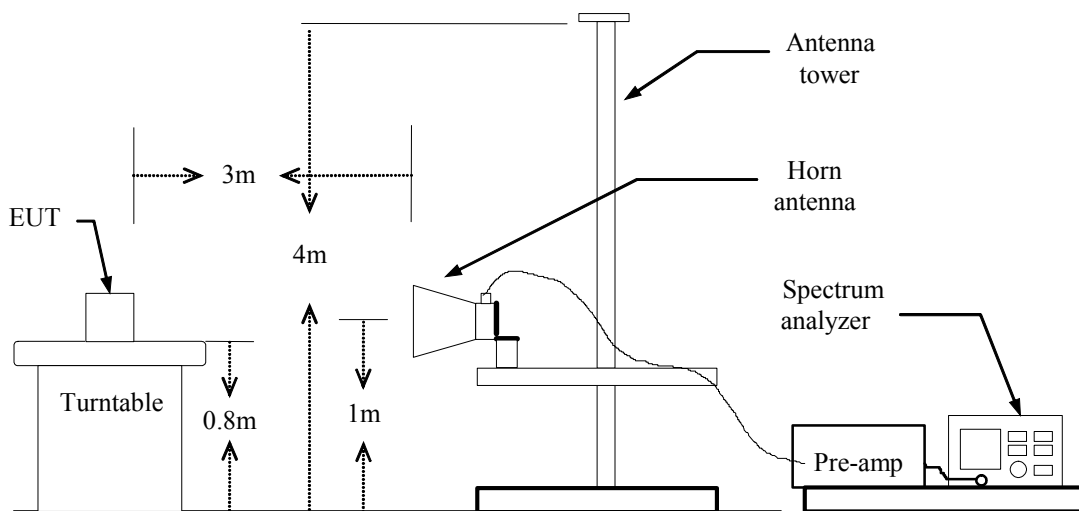


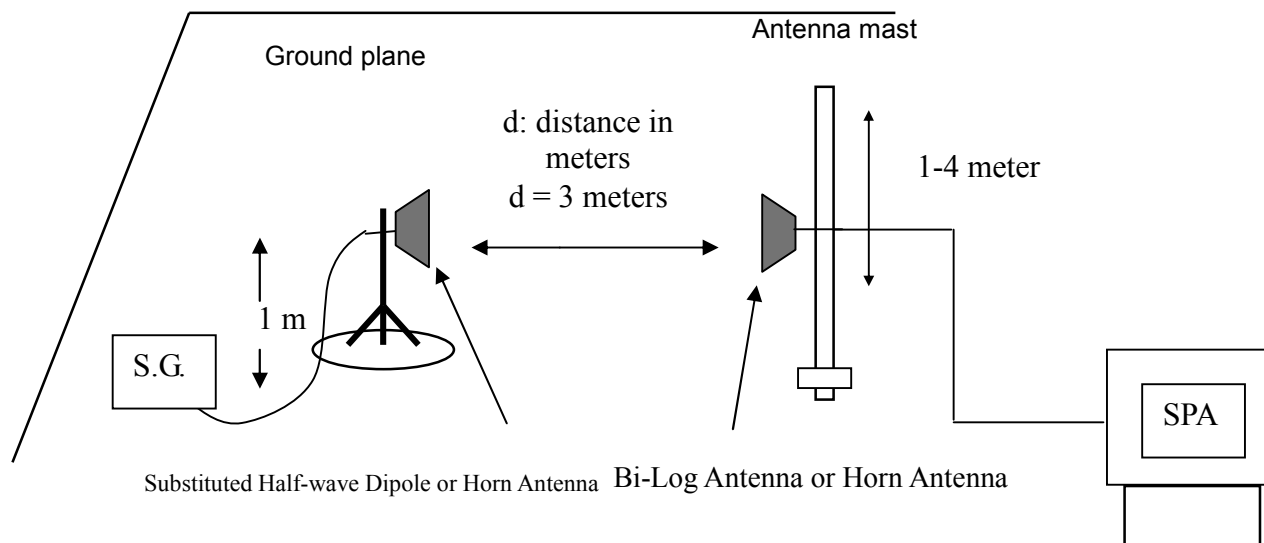
7.3. Test Setup Layout

Below 1 GHz



Above 1 GHz



**For Substituted Method Test Set-UP****7.4. Measurement Equipment**

Instrument/Ancillary	Manufacturer	Model No.	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	Agilent	E4407B	MY44211883	2014.09.25	2015.09.25
H64 Amplifier	HP	8447F	3113A05582	2015.03.24	2016.03.23
Preamplifier	Agilent	8449B	ED-HE-EMI-077	2015.03.24	2016.03.23
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	9120D-619	2015.05.24	2016.05.23
Broad-Band Horn Antenna	Schwarzbeck	BBHA9120D	9120D-618	2015.05.24	2016.05.23
Temperature/Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2015.03.31	2016.03.30

**7.5. Test Result and Data****GSM 850 TEST DATA**

Channel	Frequency (MHz)	Reading level (Peak) (dB)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Pol.
128	824.2	28.54	1.01	29.55	38.5	-8.95	V
	824.2	27.65	0.96	28.61	38.5	-9.89	H
190	836.6	29.34	1.77	31.11	38.5	-7.39	V
	836.6	27.76	1.46	29.22	38.5	-9.28	H
251	848.8	30.14	1.85	31.99	38.5	-6.51	V
	848.8	29.78	1.54	31.32	38.5	-7.18	H

GSM 1900 TEST DATA

Channel	Frequency (MHz)	Reading level (Peak) (dB)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Pol.
512	1852.4	25.66	2.34	28	33	-5.00	V
	1852.4	26.37	1.88	28.25	33	-4.75	H
661	1880	27.49	2.12	29.61	33	-3.39	V
	1880	26.14	2.41	28.55	33	-4.45	H
810	1907.6	25.97	2.34	28.31	33	-4.69	V
	1907.6	24.11	1.98	26.09	33	-6.91	H

**EDGE 850 TEST DATA**

Channel	Frequency (MHz)	Reading level (Peak) (dB)	Correction Factor (dB)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Pol.
128	824.2	28.64	1.01	29.65	38.5	-8.85	V
	824.2	27.82	0.96	28.78	38.5	-9.72	H
190	836.6	28.94	1.77	30.71	38.5	-7.79	V
	836.6	27.15	1.46	28.61	38.5	-9.89	H
251	848.8	27.36	1.85	29.21	38.5	-9.29	V
	848.8	27.11	1.54	28.65	38.5	-9.85	H

EDGE 1900 TEST DATA

Channel	Frequency (MHz)	Reading level (Peak) (dB)	Correction Factor (dB)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Pol.
512	1852.4	25.41	2.34	27.75	33	-5.25	V
	1852.4	23.92	1.88	25.8	33	-7.20	H
661	1880	24.01	2.12	26.13	33	-6.87	V
	1880	23.54	2.41	25.95	33	-7.05	H
810	1907.6	24.09	2.34	26.43	33	-6.57	V
	1907.6	23.87	1.98	25.85	33	-7.15	H



8. OUT OF BAND EMISSION AT ANTENNA TERMINALS

8.1. Test Limit

According to FCC §2.1051, FCC §22.917, FCC §24.238(a).

Out of Band Emissions: The mean power of emission must be attenuated below the mean power of the non-modulated carrier (P) on any frequency twice or more than twice the fundamental frequency by at least $43 + 10 \log P$ dB.

Mobile Emissions in Base Frequency Range: The mean power of any emissions appearing in the base station frequency range from cellular mobile transmitters operated must be attenuated to a level not exceed -80 dBm at the transmit antenna connector.

Band Edge Requirements: In the 1MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1% of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the Out of band Emission.

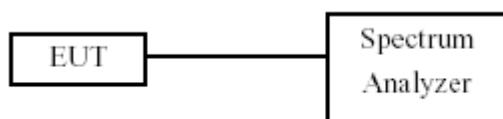
8.2. Test Procedure

The RF output of the transceiver was connected to a spectrum analyzer through appropriate attenuation. The resolution bandwidth of the spectrum analyzer was set at 1MHz, sufficient scans were taken to show the out of band Emissions if any up to 10th harmonic.

For the out of band: Set the RBW, VBW = 1MHz, Start=30MHz, Stop= 10 th harmonic. Limit = -13dBm

Band Edge Requirements (824 MHz and 849 MHz /1850MHz and 1910MHz): In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 1 percent of the emission bandwidth of the fundamental emission of the transmitter may be employed to measure the out of band Emissions. Limit, -13dBm.

8.3. Test Setup Layout



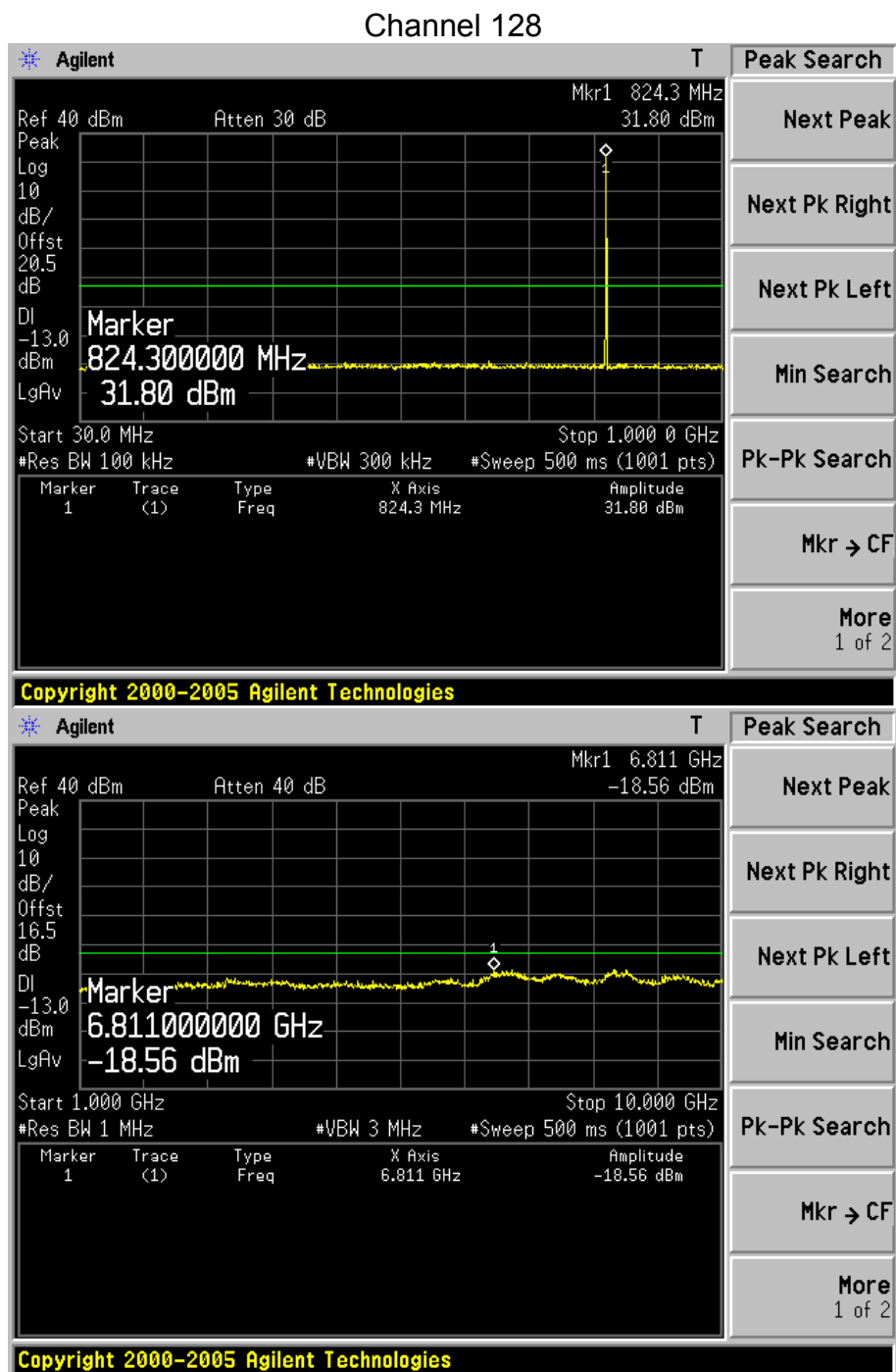
8.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	Agilent	E4407B	MY44211883	2014.09.12	2015.09.11
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2015.03.31	2016.03.30



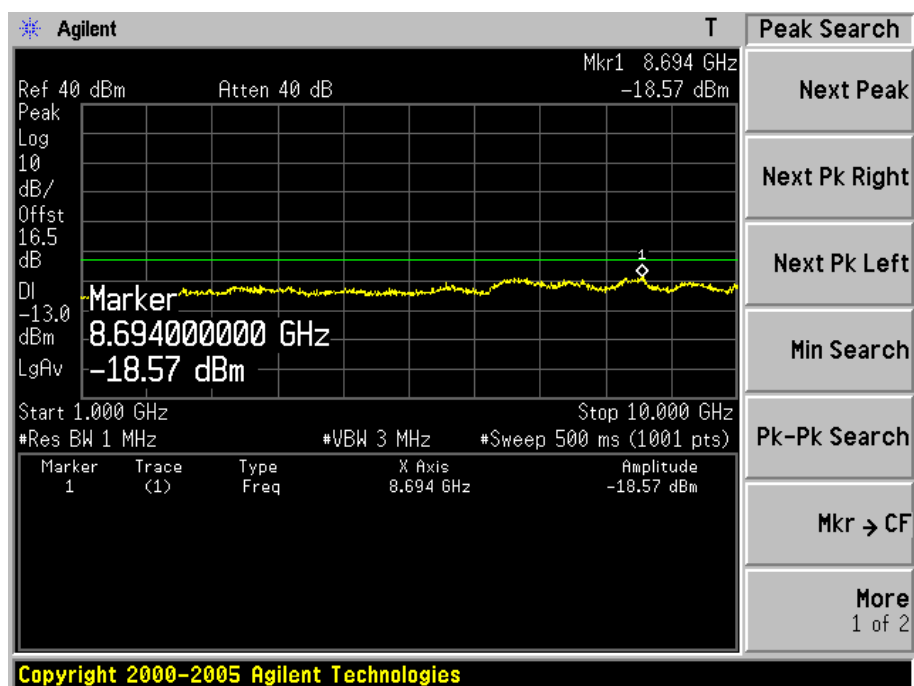
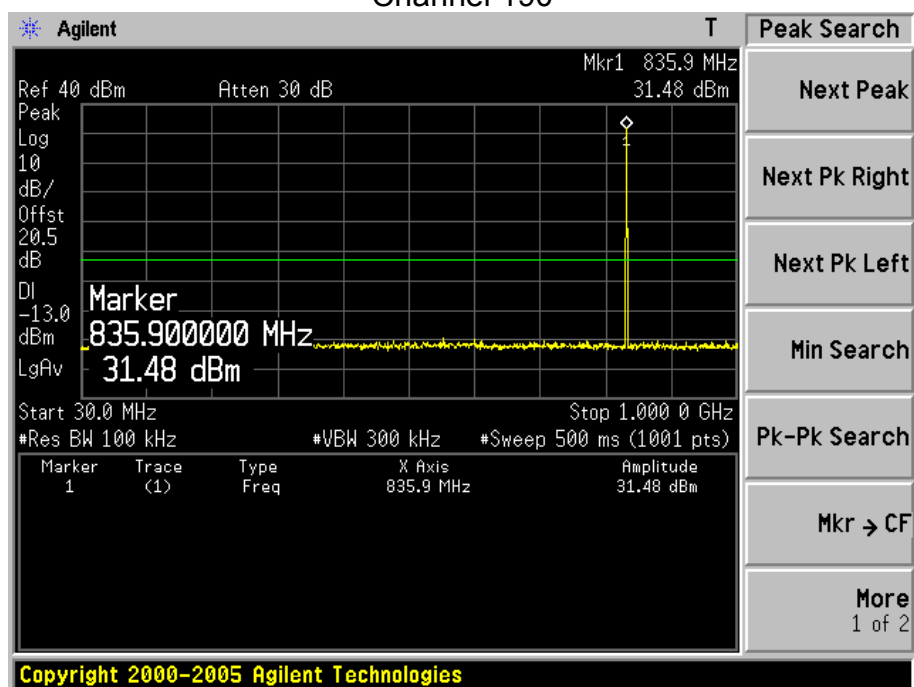
8.5. Test Result and Data

Test Item	Conducted spurious emissions, 30MHz - 20GHz
Test Mode	GSM 850
Test Date	2015-06-06



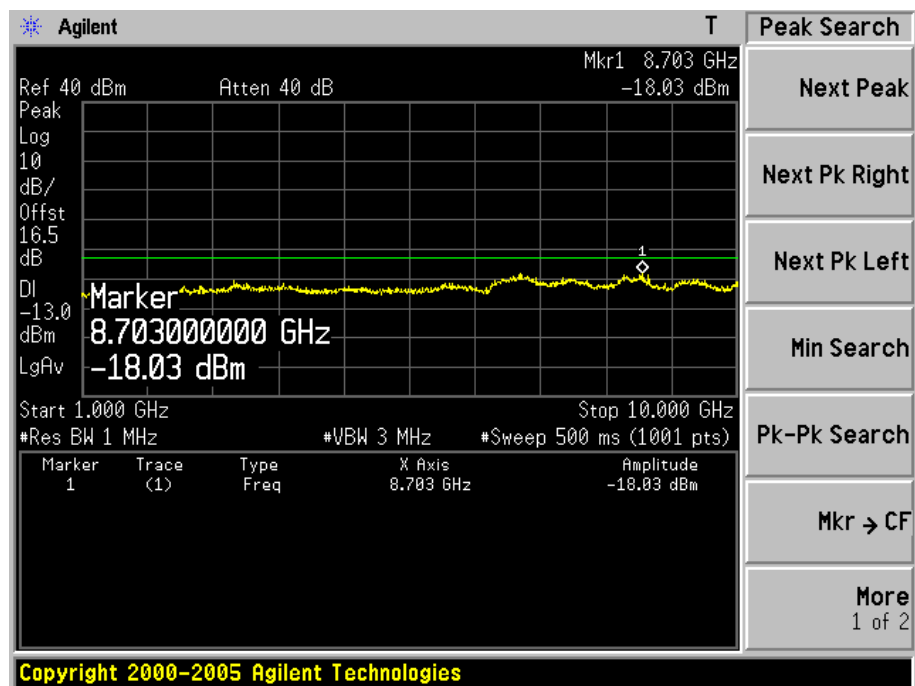
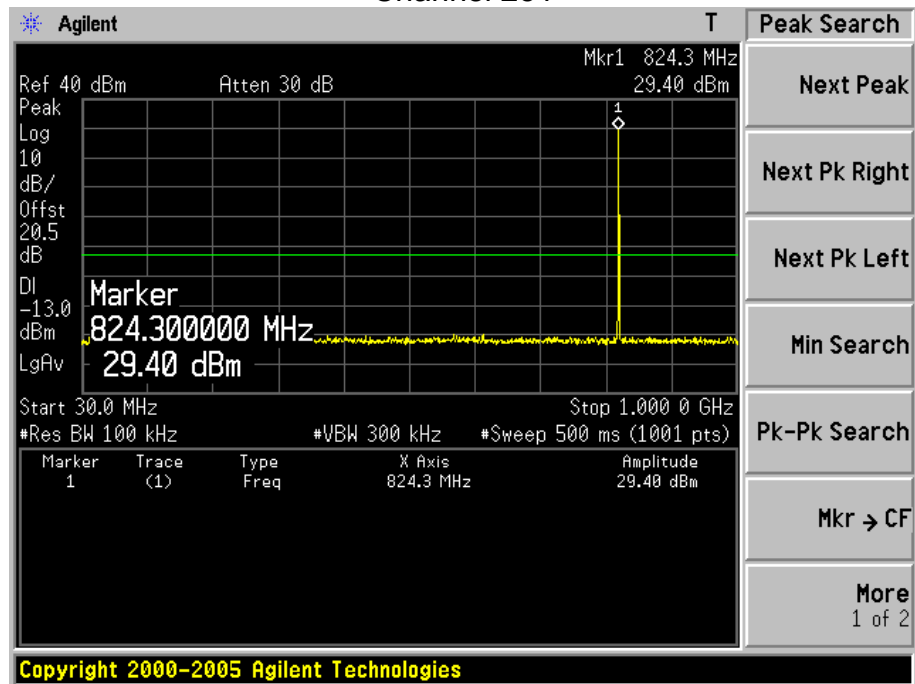


Channel 190





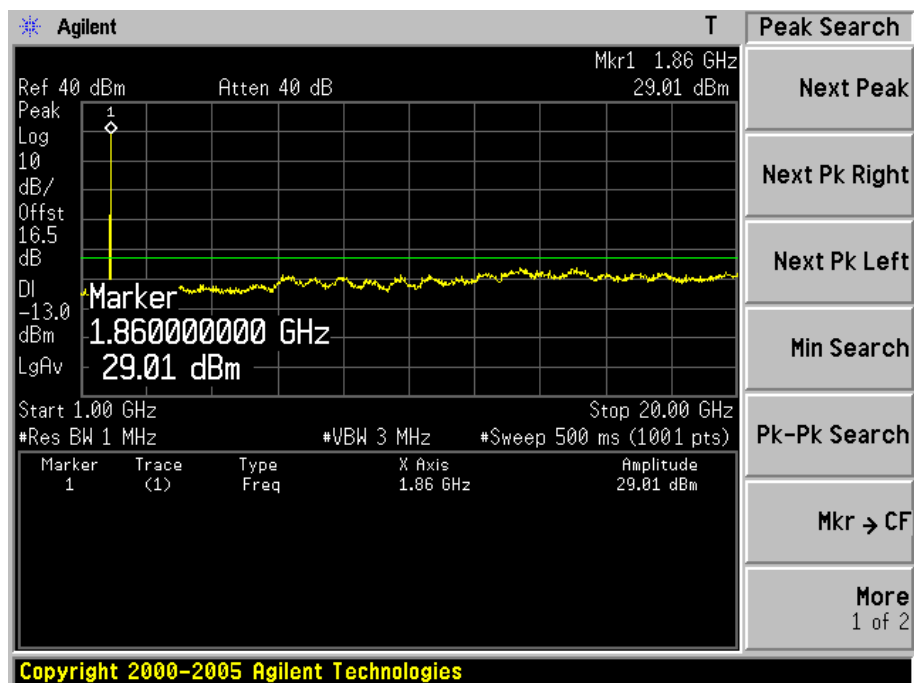
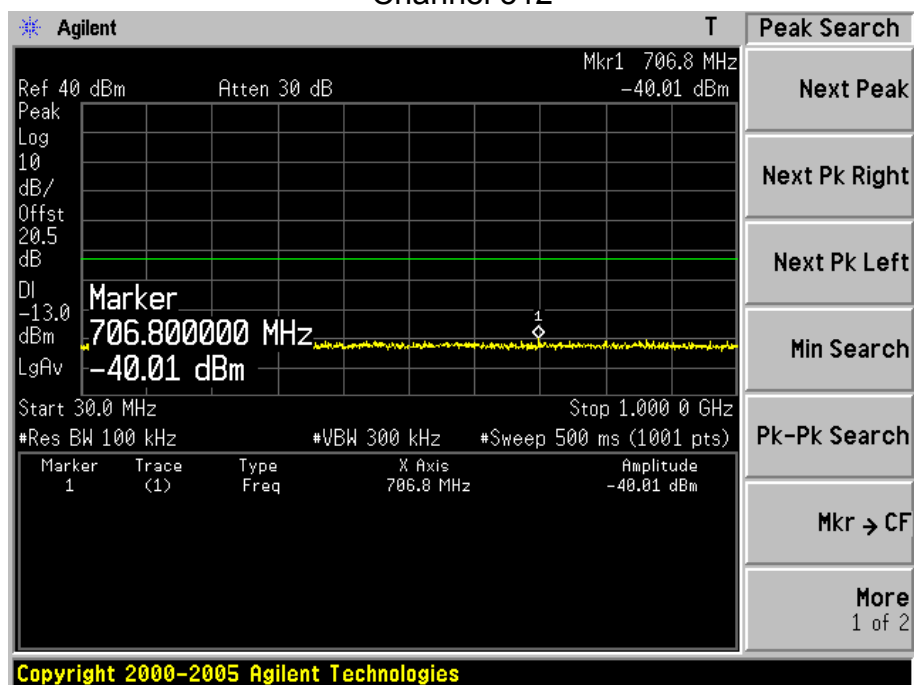
Channel 251





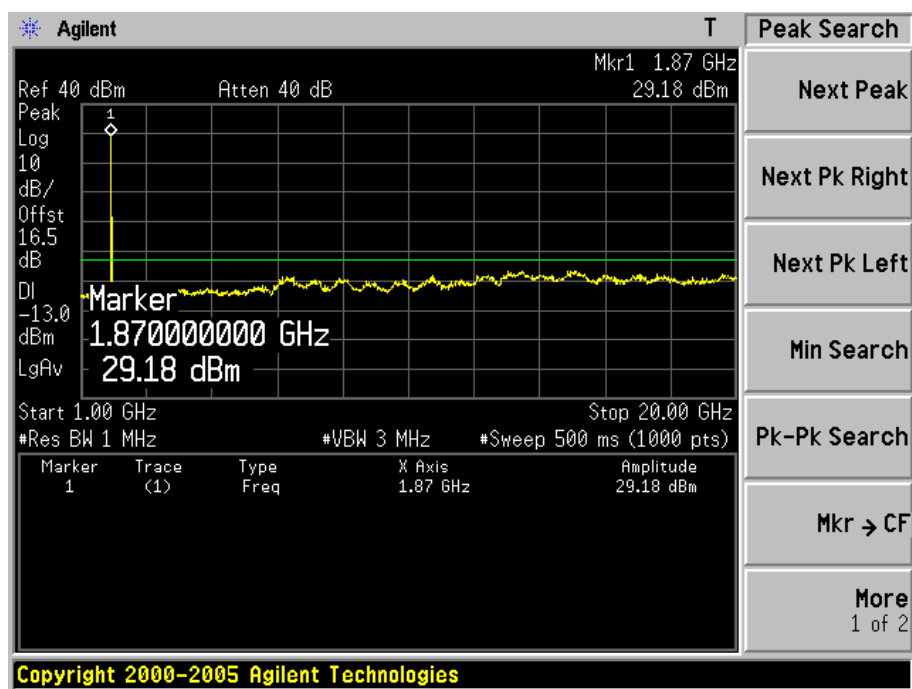
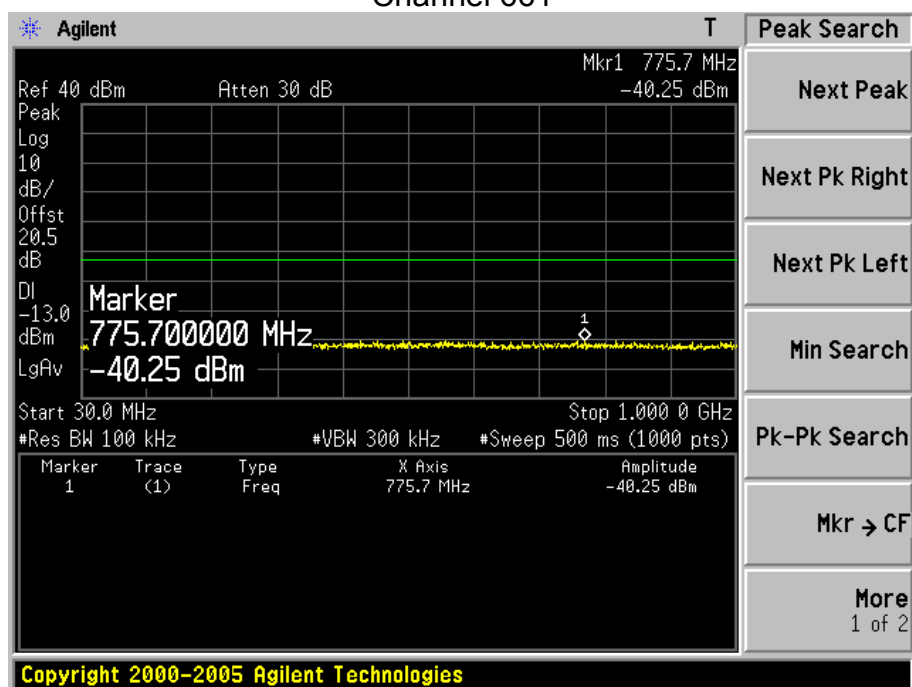
Test Item	Conducted spurious emissions, 30MHz - 20GHz
Test Mode	GSM 1900
Test Date	2015-06-06

Channel 512



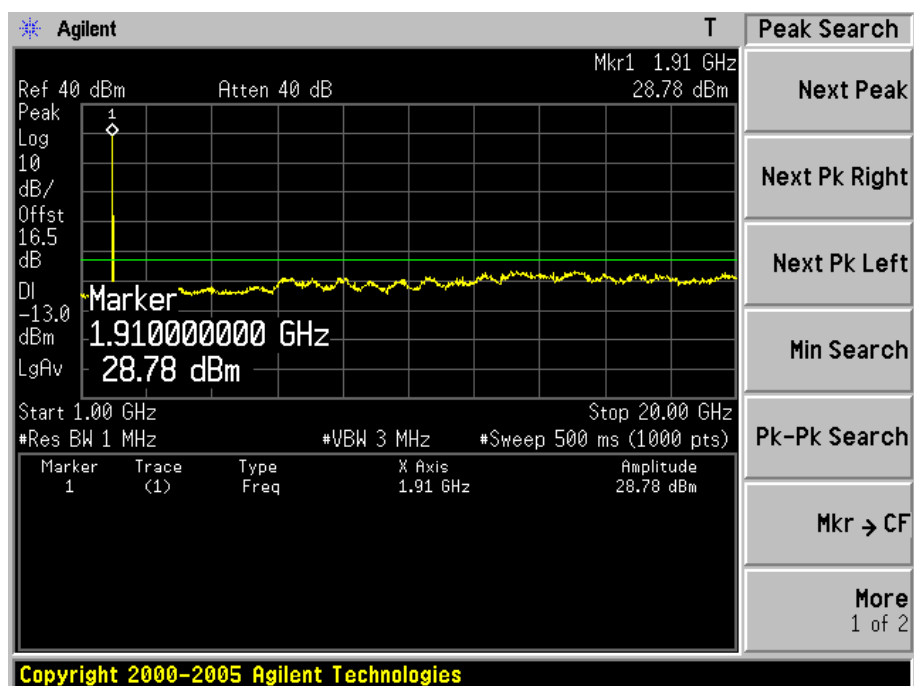
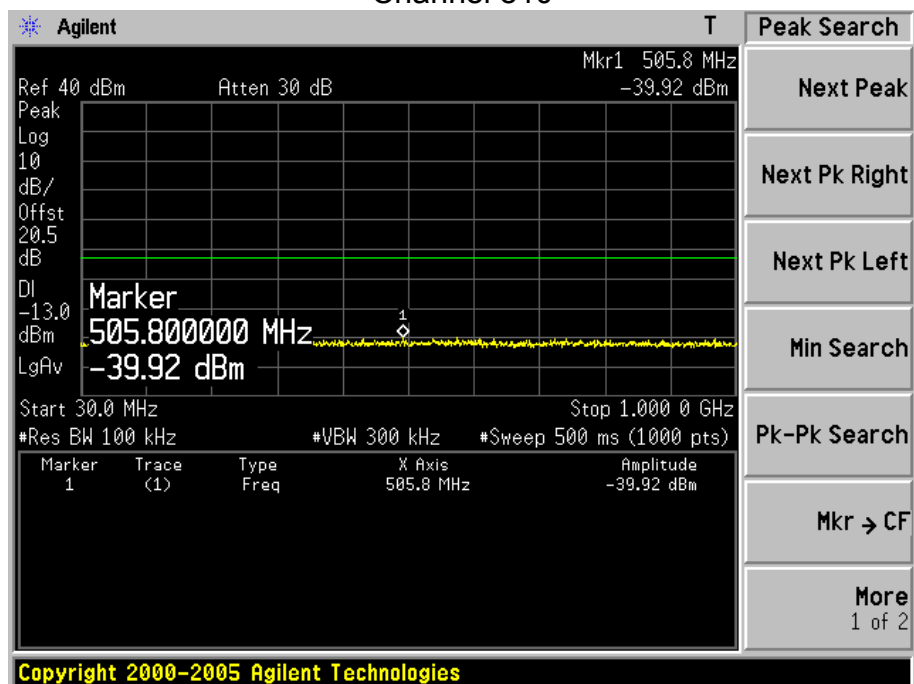


Channel 661



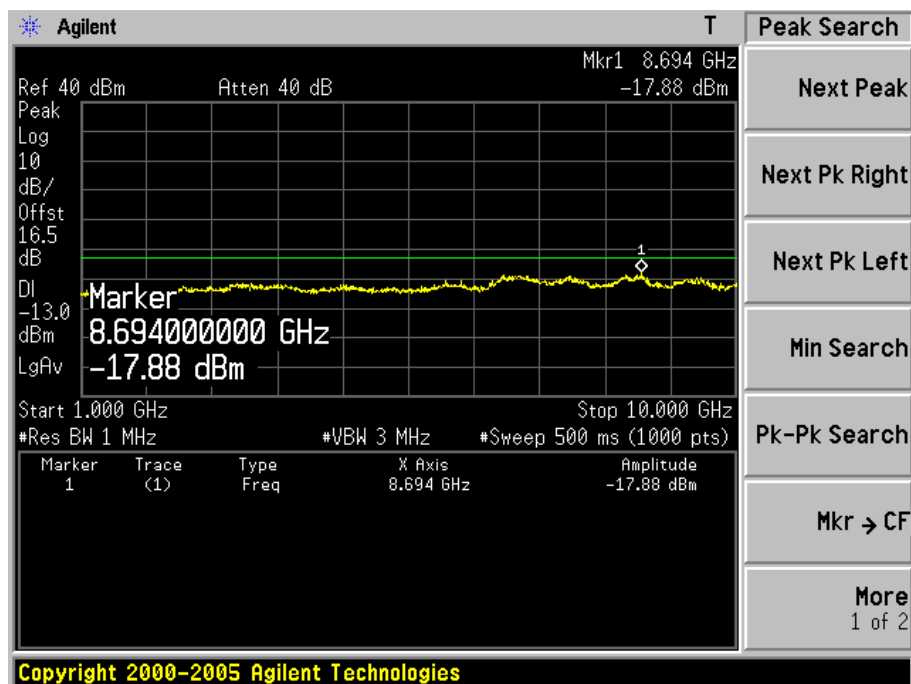
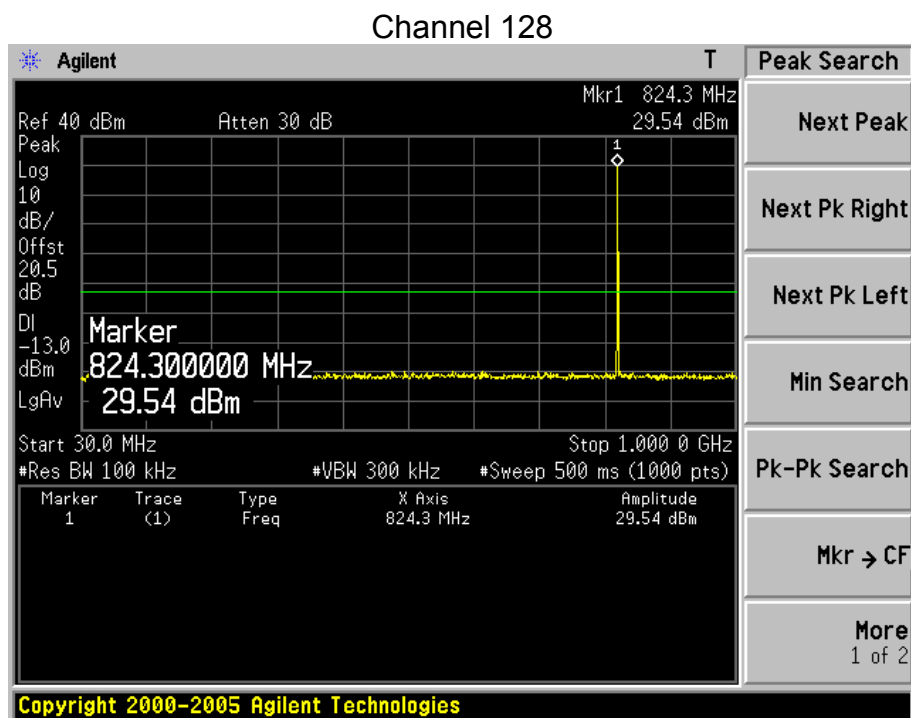


Channel 810



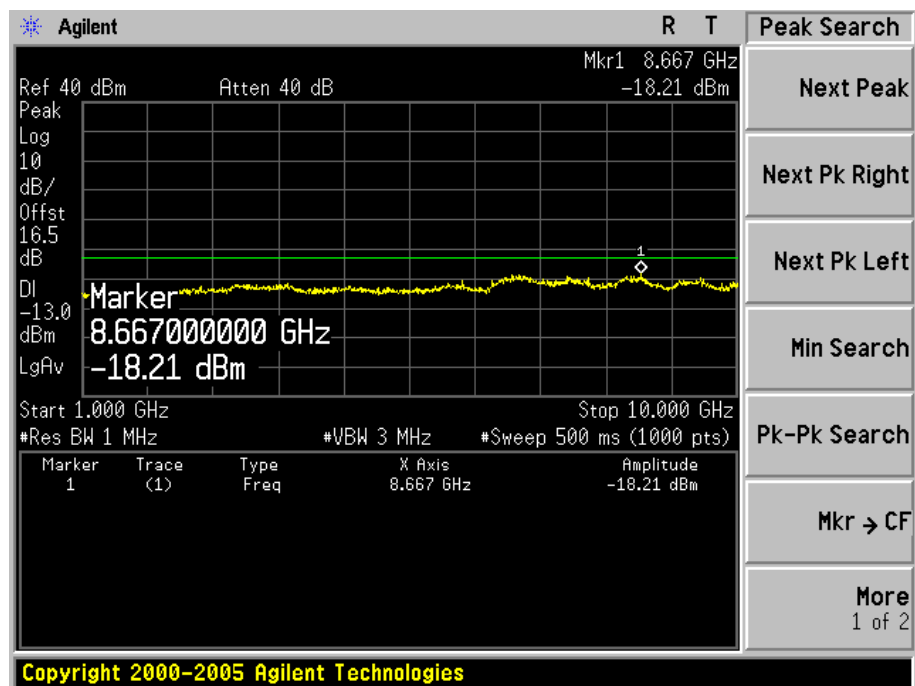
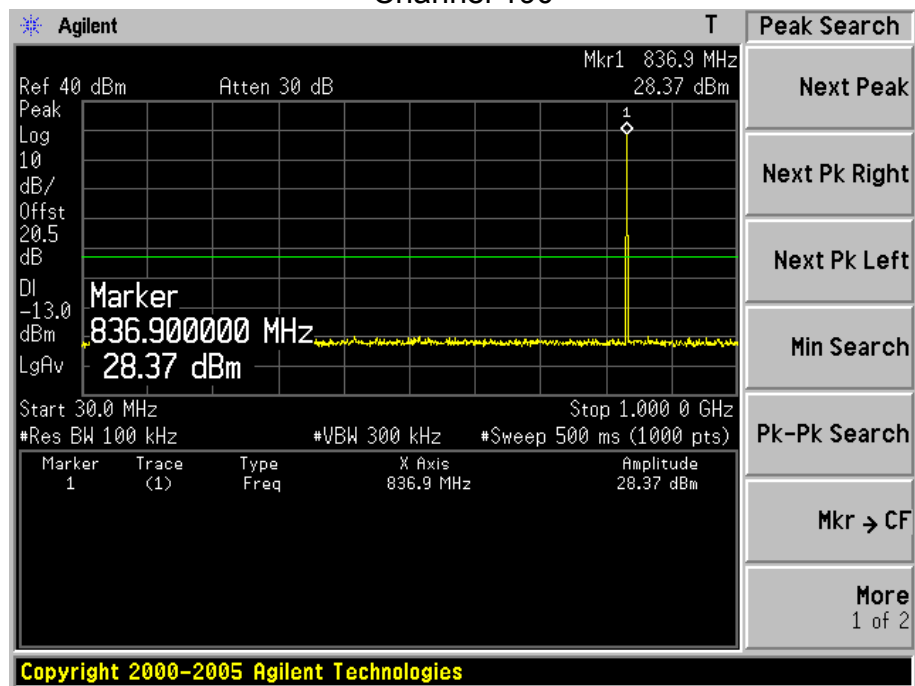


Test Item	Conducted spurious emissions, 30MHz - 20GHz
Test Mode	EDGE 850
Test Date	2015-06-06



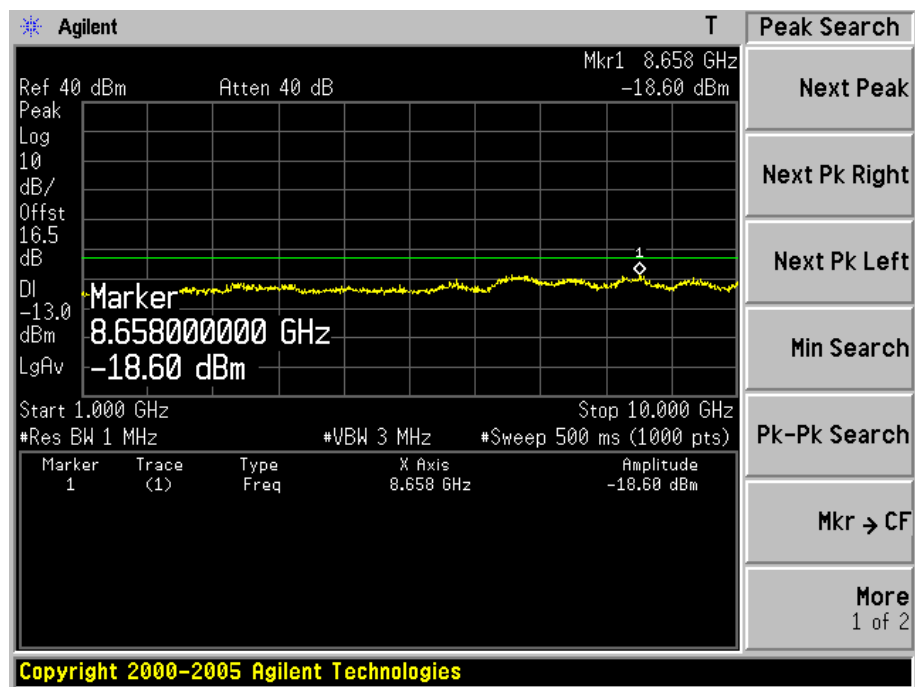
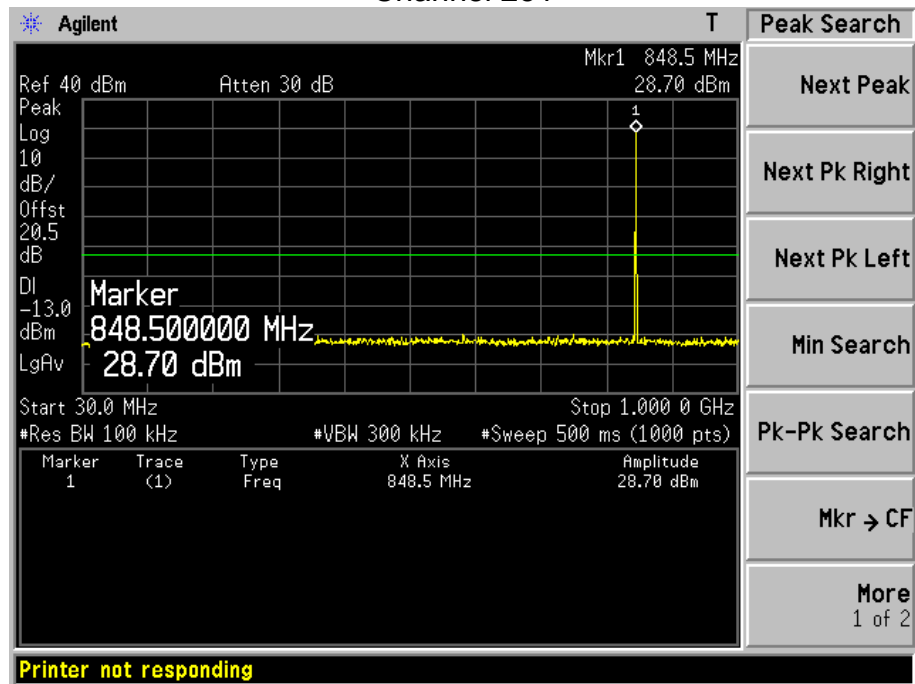


Channel 190





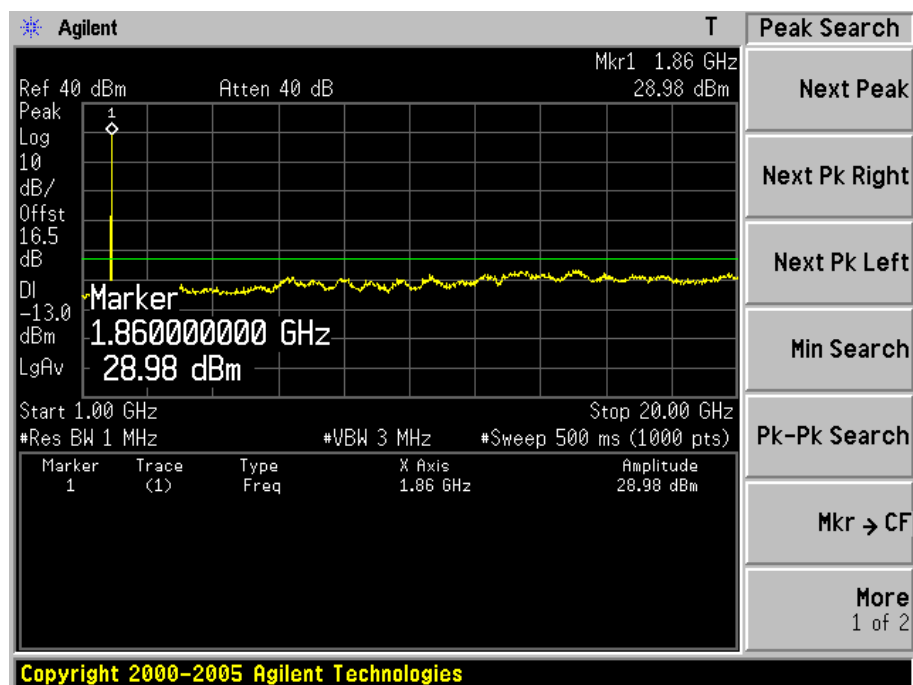
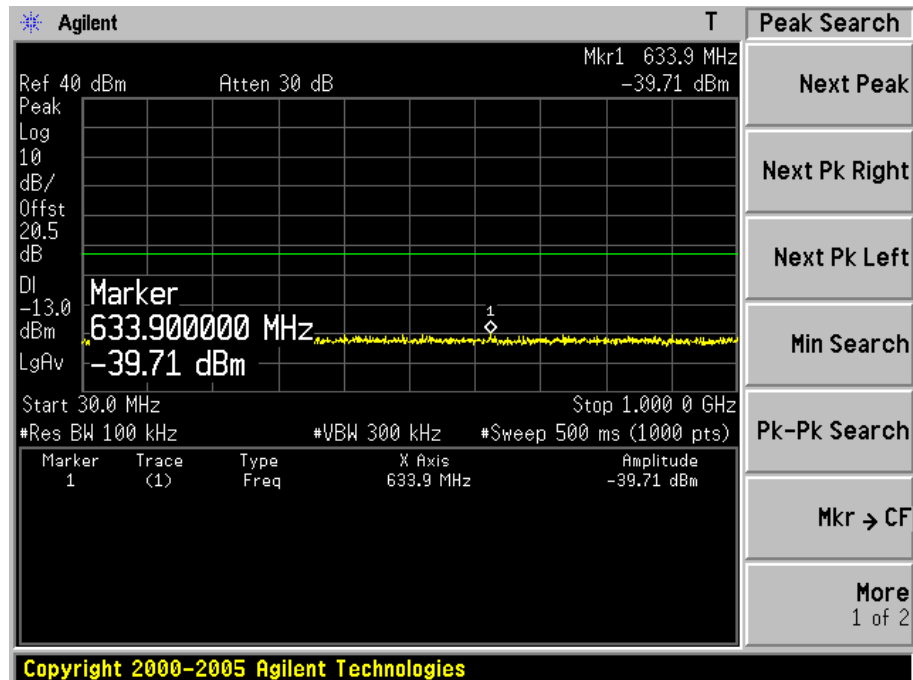
Channel 251





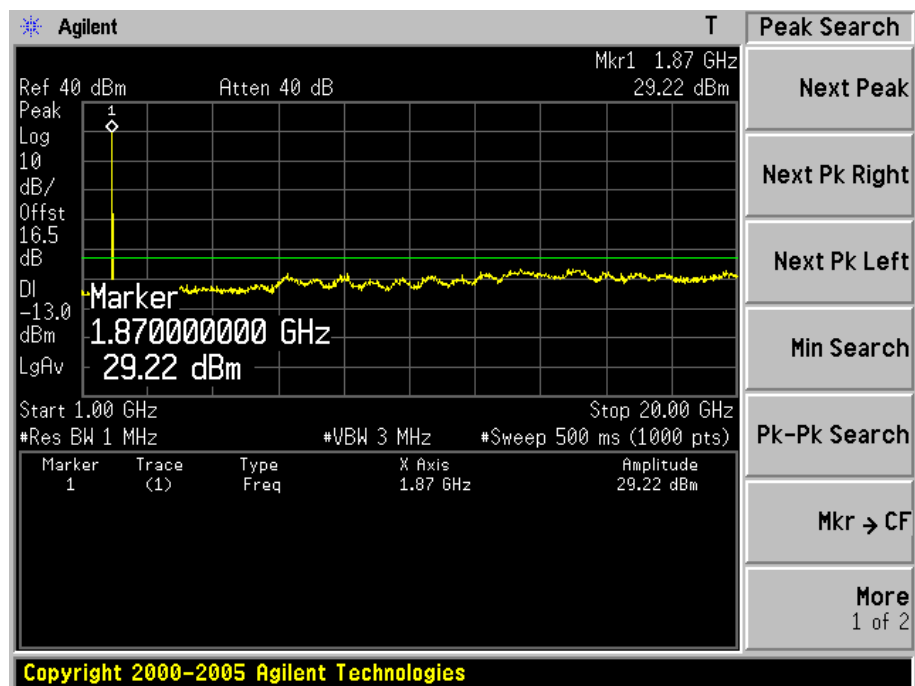
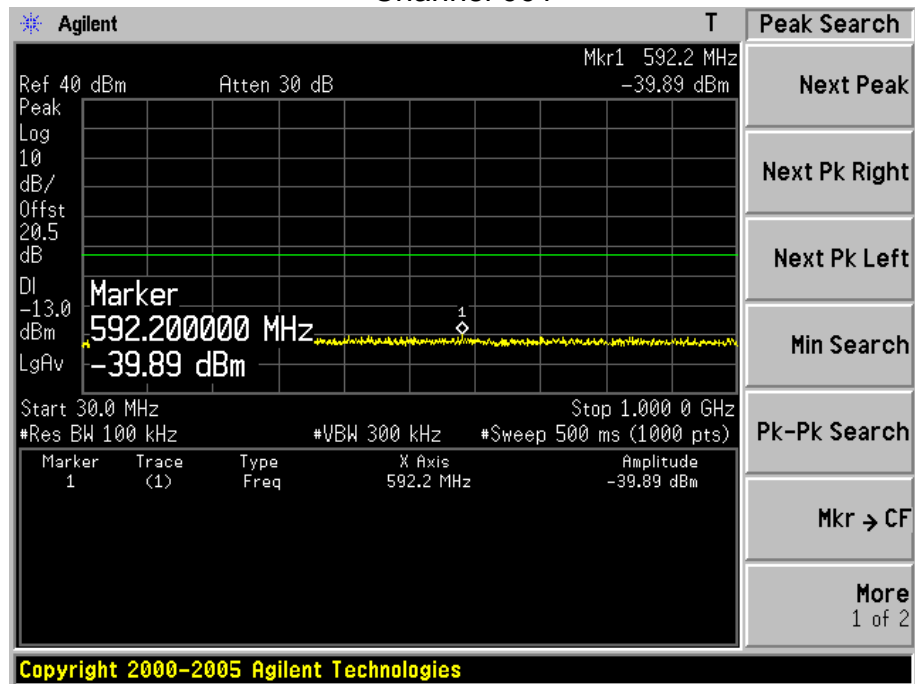
Test Item	Conducted spurious emissions, 30MHz - 20GHz
Test Mode	EDGE 1900
Test Date	2015-06-06

Channel 512



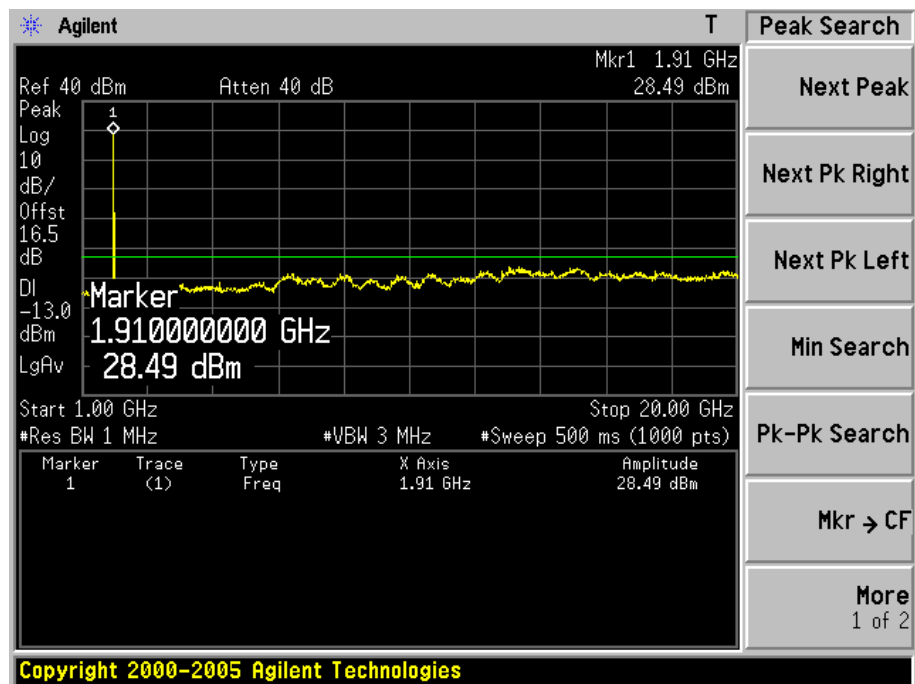
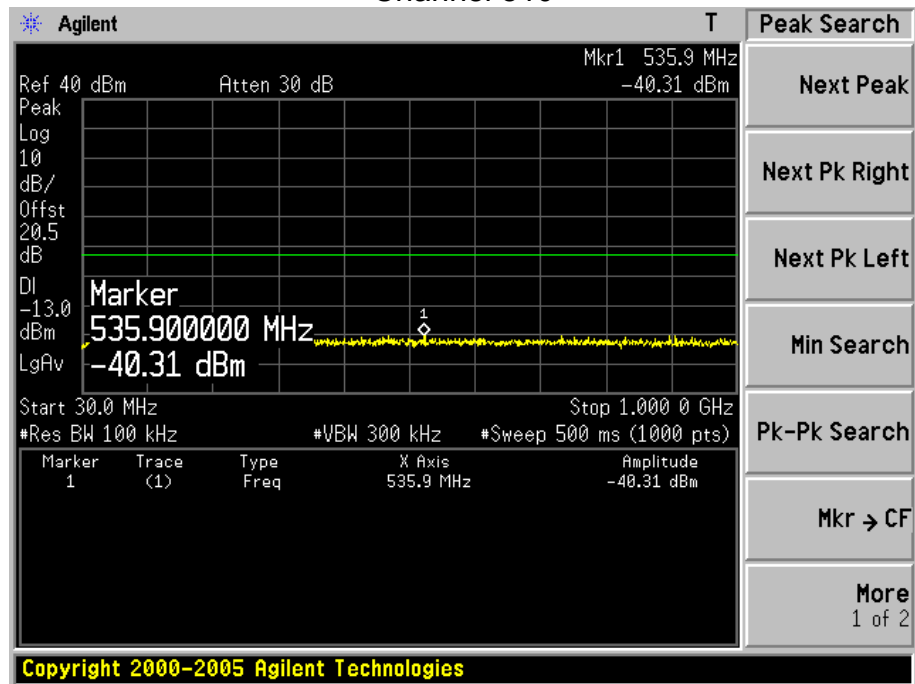


Channel 661





Channel 810





Test Item	Band Edge emissions
Test Mode	GSM 850
Test Date	2015-06-06

Figure Channel 128 (824.20MHz)

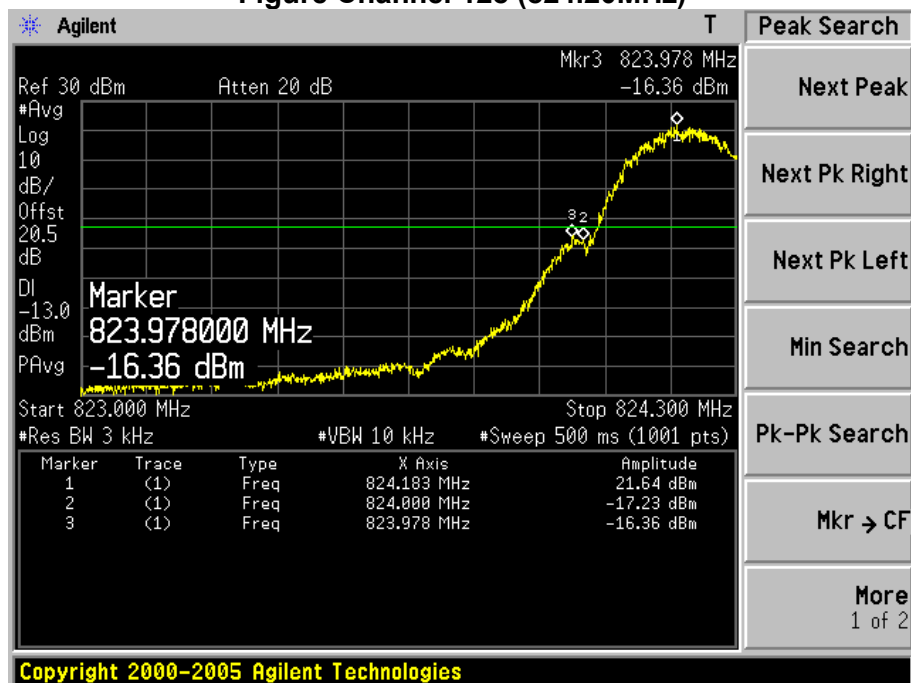
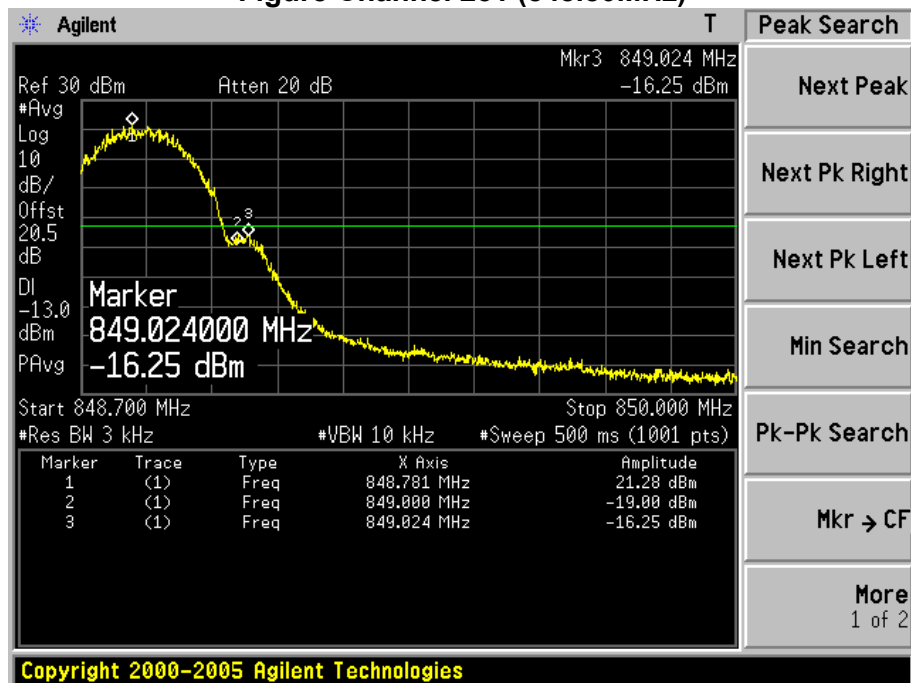


Figure Channel 251 (848.80MHz)





Test Item	Band Edge emissions
Test Mode	GSM 1900
Test Date	2015-06-06

Figure Channel 512 (1850.20MHz)

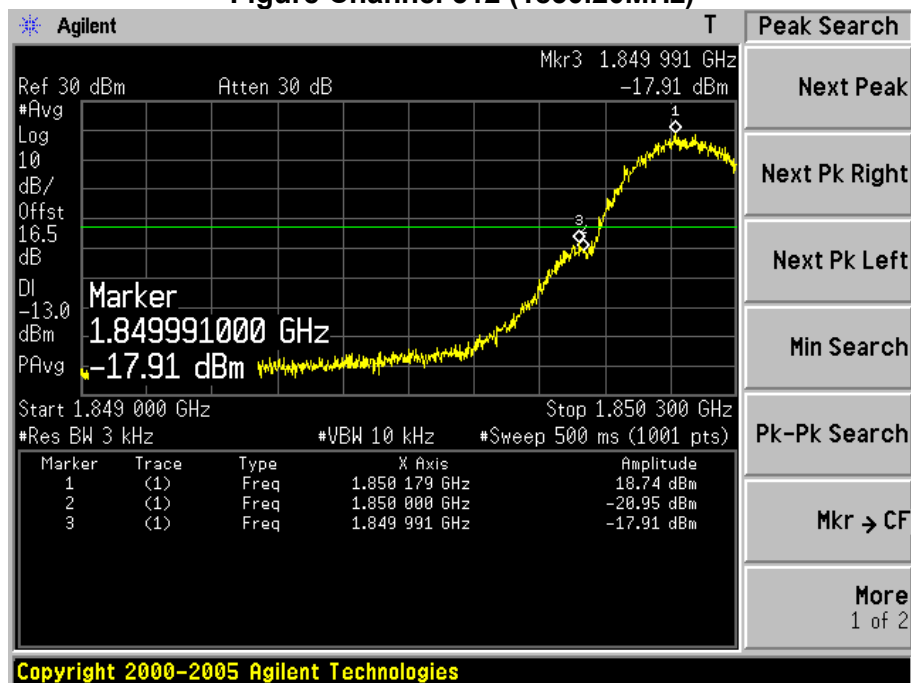
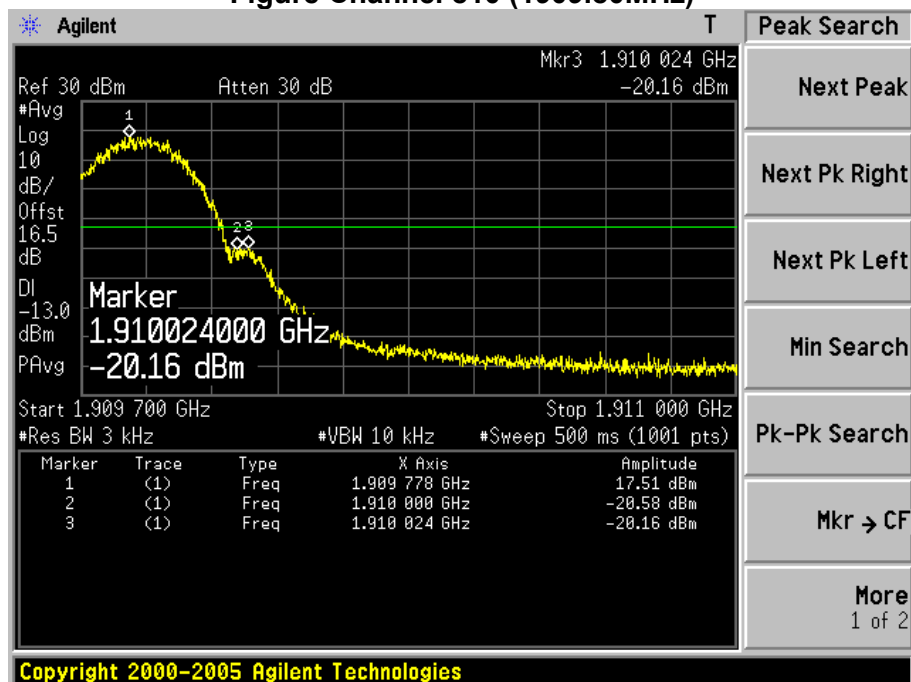


Figure Channel 810 (1909.80MHz)





Test Item	Band Edge emissions
Test Mode	EDGE 850
Test Date	2015-06-06

Figure Channel 128 (824.20MHz)

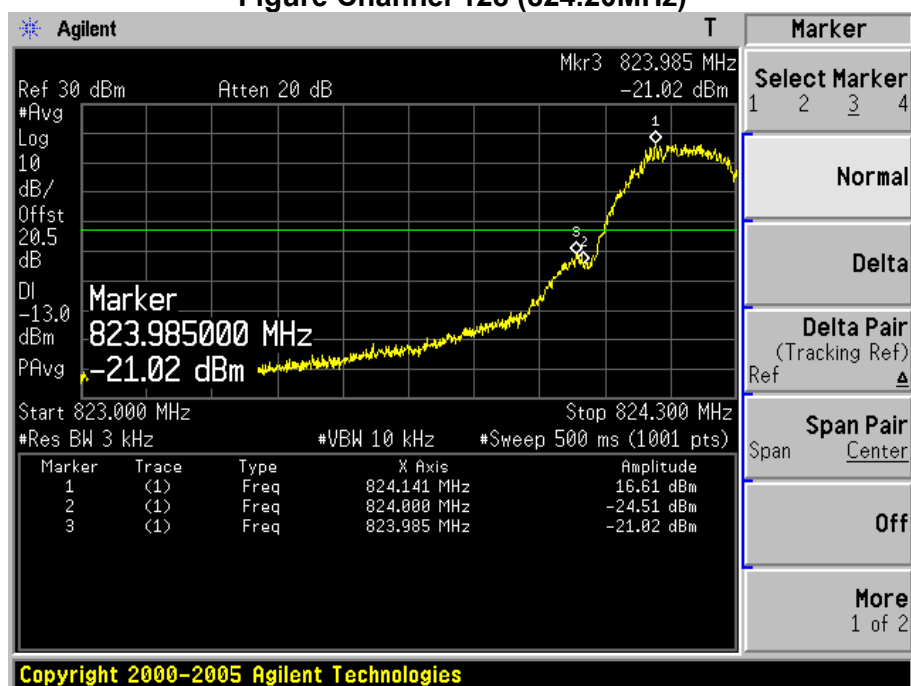
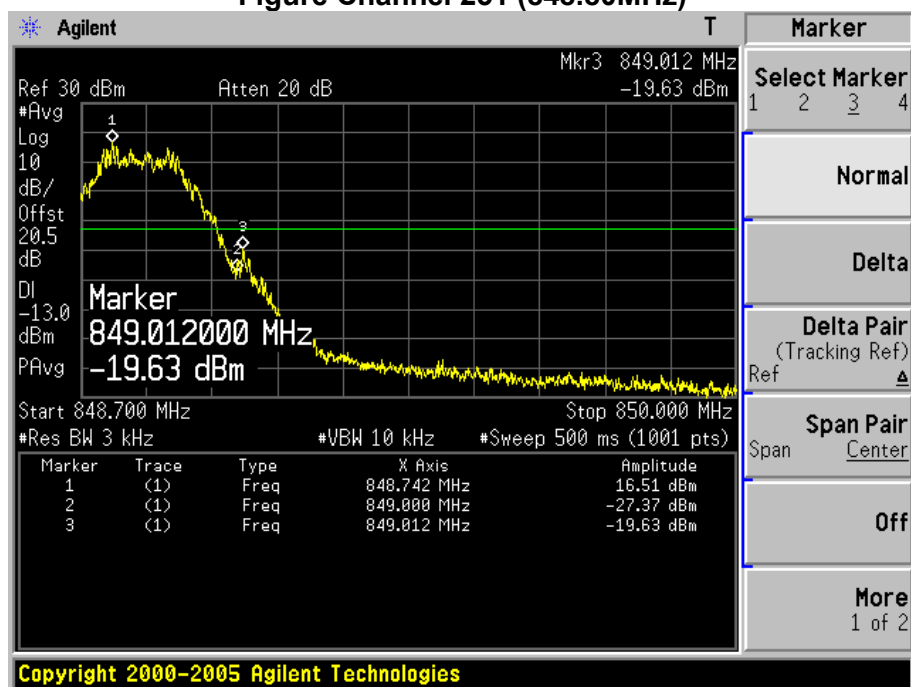


Figure Channel 251 (848.80MHz)





Test Item	Band Edge emissions
Test Mode	EDGE 1900
Test Date	2015-06-06

Figure Channel 512 (1850.20MHz)

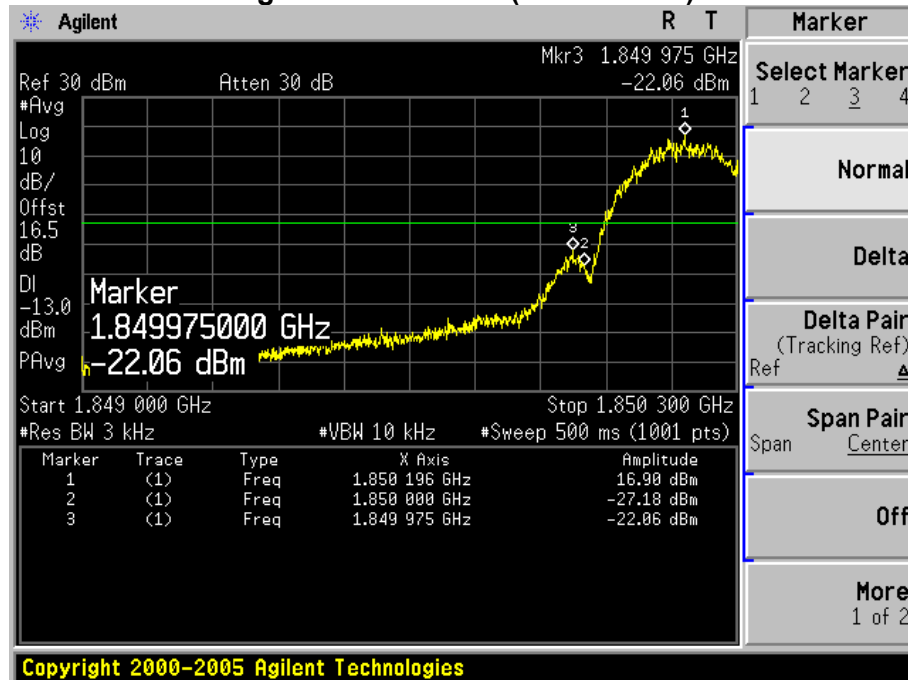
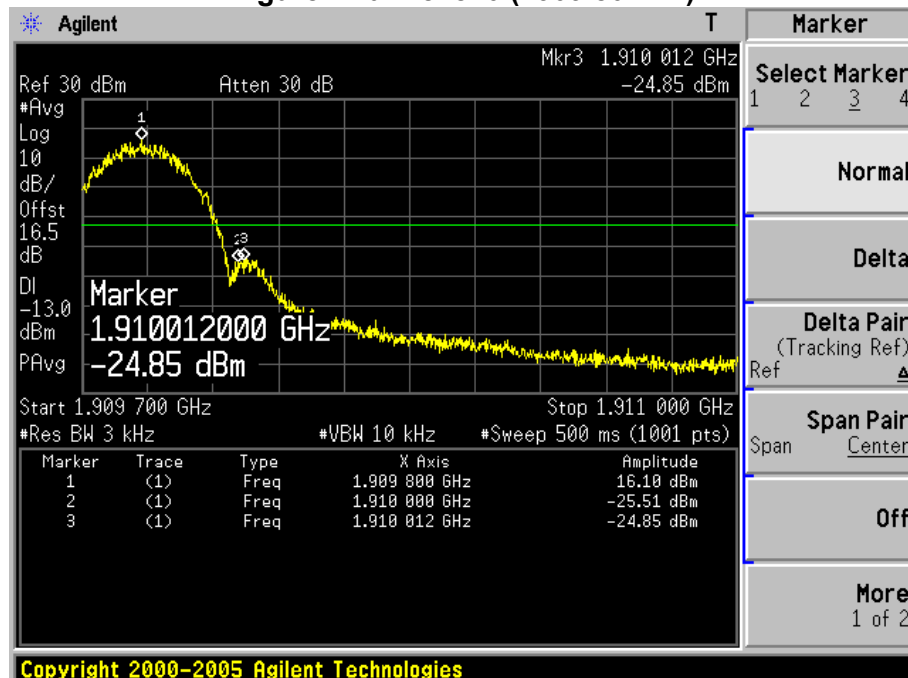


Figure Channel 810 (1909.80MHz)





9. Peak-Average Ratio

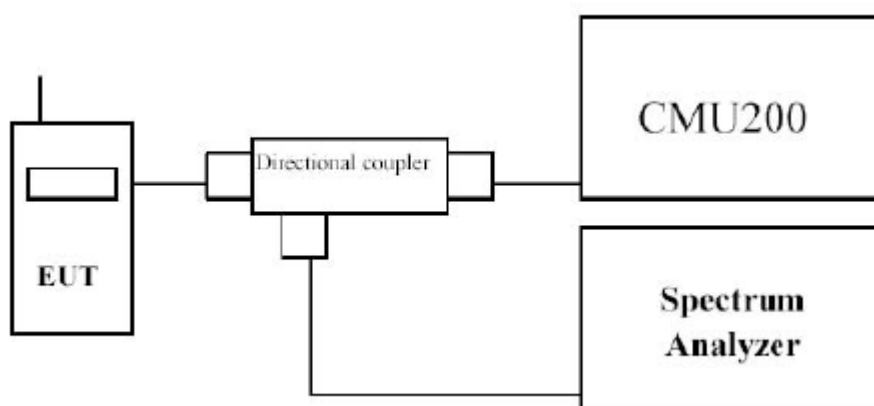
9.1. Test Limit

The transmitter's peak-to-average power ratio (PAPR) shall not exceed 13 dB for more than 0.1% of the time using a signal corresponding to the highest PAPR during periods of continuous transmission.

9.2. Test Procedure

KDB 971168 D01v02r01 - Section 5.7 & ANSI/TIA-603-D-2010

9.3. Test Setup

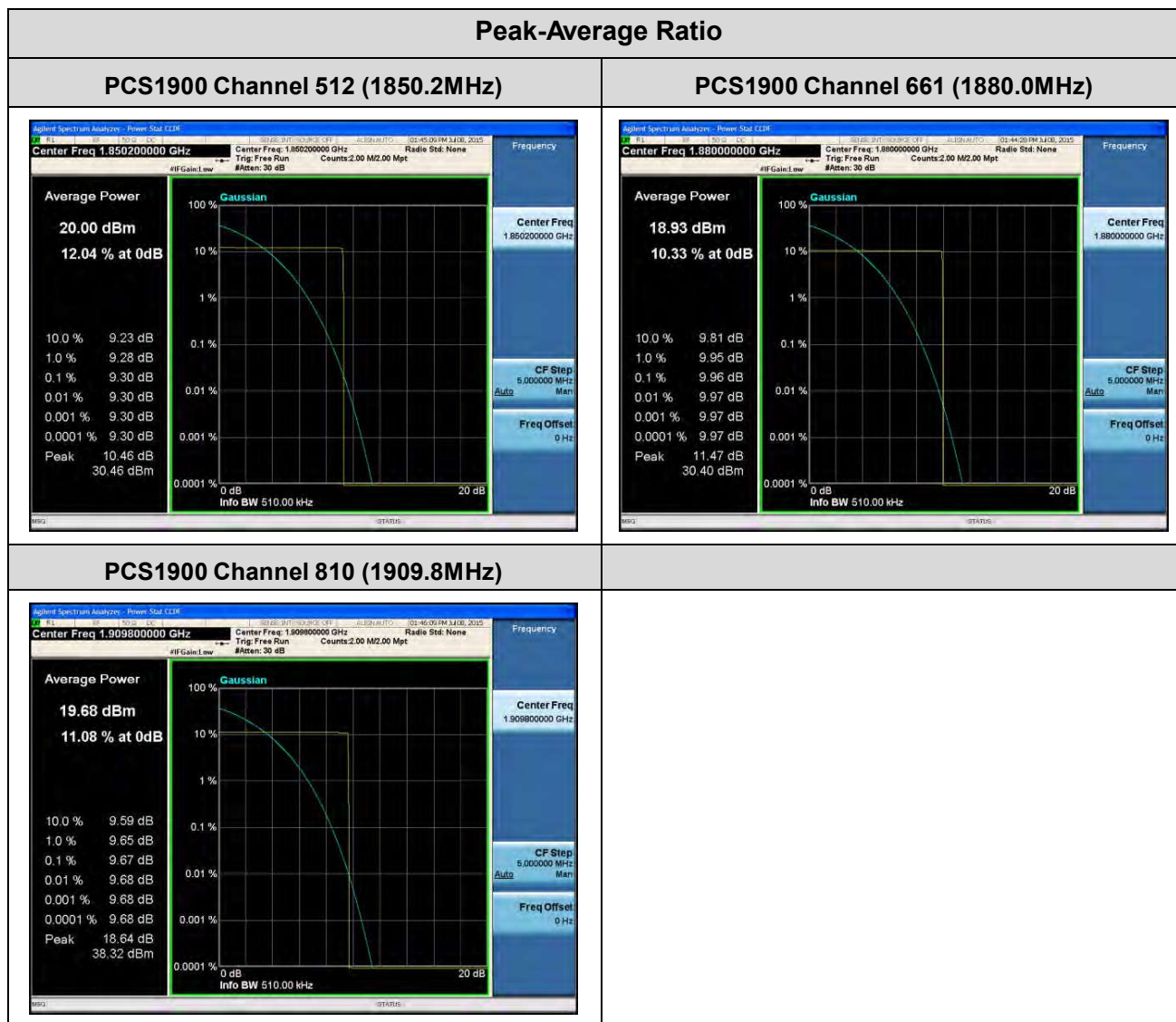


9.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	Agilent	N9010A	MY53400169	2014.11.12	2015.11.11
Universal Radio Communication Tester	CMU200	R&S	108823	2015.03.29	2016.03.28
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2015.03.31	2016.03.30



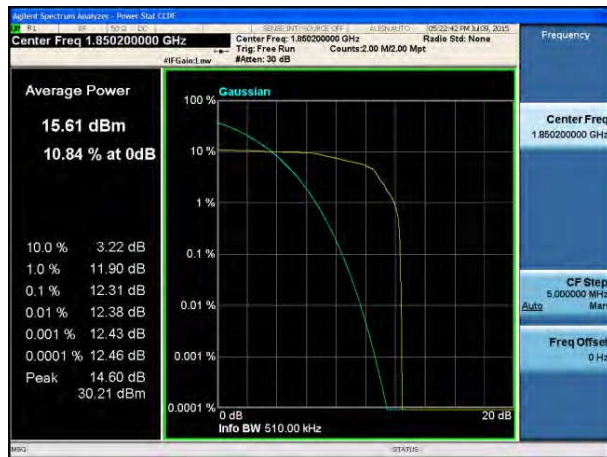
9.5. Test Result





Peak-Average Ratio

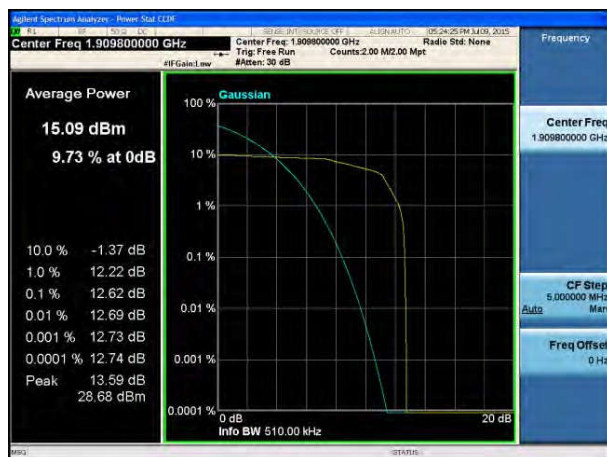
EDGE1900 Channel 512 (1850.2MHz)



EDGE1900 Channel 661 (1880.0MHz)



EDGE1900 Channel 810 (1909.8MHz)





10. FREQUENCY STABILITY V.S. TEMPERATURE MEASUREMENT

10.1. Test Limit

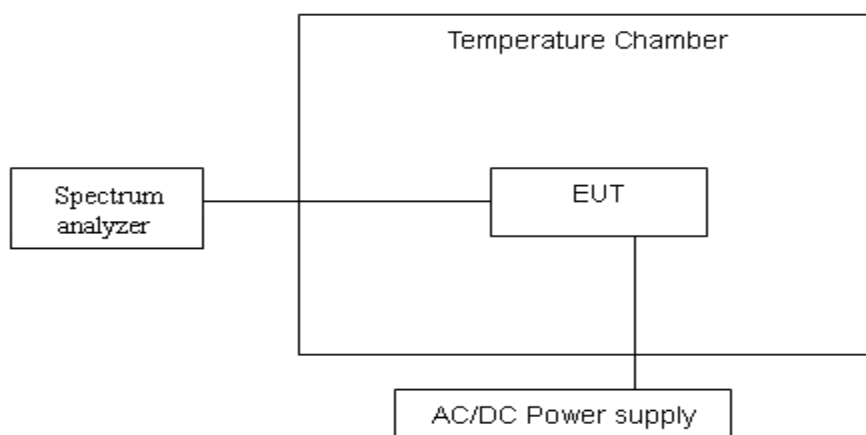
According to FCC §2.1055, FCC §22.355, .FCC §24.235.

Frequency Tolerance: 2.5 ppm

10.2. Test Procedure

The equipment under test was connected to an external AC or DC power supply and input rated voltage. RF output was connected to a frequency counter or spectrum analyzer via feed through attenuators. The EUT was placed inside the temperature chamber. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and measure EUT 20°C operating frequency as reference frequency. Turn EUT off and set the chamber temperature to –30°C. After the temperature stabilized for approximately 30 minutes recorded the frequency. Repeat step measure with 10°C increased per stage until the highest temperature of +50°C reached.

10.3. Test Setup Layout



10.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	Agilent	E4407B	MY44211883	2014.09.12	2015.09.11
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2015.03.31	2016.03.30

**10.5. Test Result and Data**

Test Item	FREQUENCY STABILITY V.S. TEMPERATURE
Test Mode	GSM 850 Channel 190
Test Date	2015-06-06

Reference Frequency: 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	836600059	59	2090
	40	836600028	28	
	30	836600008	08	
	20	836600000	0	
	10	836600041	41	
	0	836600026	26	
	-30	836600063	63	

Test Item	FREQUENCY STABILITY V.S. TEMPERATURE
Test Mode	GSM 1900 Channel 661
Test Date	2015-06-06

Reference Frequency: 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	1880000009	09	4700
	40	1880000051	51	
	30	1880000032	32	
	20	1880000000	0	
	10	1880000012	12	
	0	1880000039	39	
	-30	1880000015	15	



Test Item	FREQUENCY STABILITY V.S. TEMPERATURE
Test Mode	EDGE 850 Channel 190
Test Date	2015-06-06

Reference Frequency: 836.6 MHz @ 20°C				
Limit: +/- 2.5 ppm = 2090 Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	836600023	23	2090
	40	836600031	31	
	30	836600044	44	
	20	836600000	0	
	10	836600031	31	
	0	836600009	9	
	-30	836600023	23	

Test Item	FREQUENCY STABILITY V.S. TEMPERATURE
Test Mode	EDGE 1900 Channel 661
Test Date	2015-02-23

Reference Frequency: 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
3.7	50	1880000011	11	4700
	40	1880000047	47	
	30	1880000033	33	
	20	1880000000	0	
	10	1880000036	36	
	0	1880000040	40	
	-30	1880000021	21	



11. FREQUENCY STABILITY V.S. VOLTAGE MEASUREMENT

11.1. Test Limit

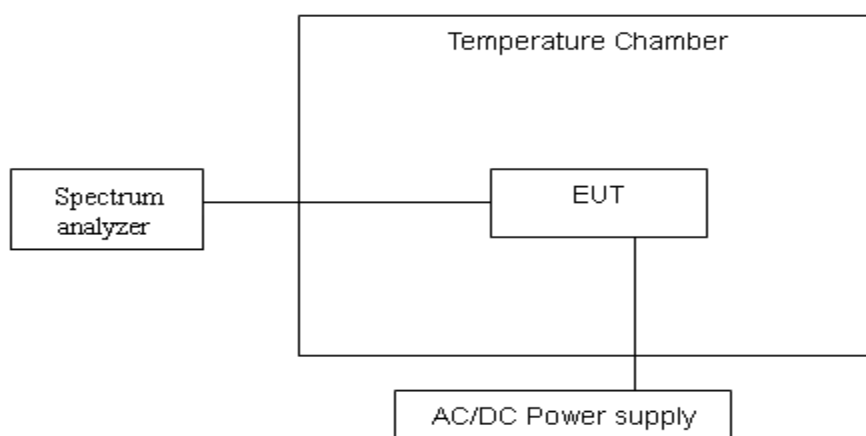
According to FCC §2.1055, FCC §22.355, .FCC §24.235.

11.2. Test Procedure

Set chamber temperature to 20°C. Use a variable AC power supply / DC power source to power the EUT and set the voltage to rated voltage. Set the spectrum analyzer RBW low enough to obtain the desired frequency resolution and recorded the frequency.

Reduce the input voltage to specify extreme voltage variation ($\pm 10\%$) and endpoint, record the maximum frequency change.

11.3. Test Setup Layout



11.4. Measurement Equipment

Instrument/Ancillary	Model No.	Manufacturer	Serial No.	Calibration Date	Valid Date
Spectrum Analyzer	Agilent	E4407B	MY44211883	2014.09.12	2015.09.25
Temperature/ Humidity Meter	Zhicheng	ZC1-11	CEP-TH-002	2015.03.31	2016.03.30

**11.5. Test Result and Data**

Test Item	REQUENCY STABILITY V.S. VOLTAGE
Test Mode	GSM 850 Channel 190
Test Date	2015-06-07

Reference Frequency: 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.1	20	836599971	29	2090
3.7		836600000	0	
3.3		836599982	18	

Test Item	REQUENCY STABILITY V.S. VOLTAGE
Test Mode	GSM 1900 Channel 661
Test Date	2015-06-07

Reference Frequency: 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.1	20	1879999985	15	4700
3.7		1880000000	0	
3.3		1879999974	26	



Test Item	REQUENCY STABILITY V.S. VOLTAGE
Test Mode	EDGE 850 Channel 190
Test Date	2015-06-07

Reference Frequency: 836.6 MHz @ 20°C				
Limit: ± 2.5 ppm = 2090Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.1	20	836599982	18	2090
3.7		836600000	0	
3.3		836599979	21	

Test Item	REQUENCY STABILITY V.S. VOLTAGE
Test Mode	EDGE 1900 Channel 661
Test Date	2015-06-07

Reference Frequency: 1880 MHz @ 20°C				
Limit: ± 2.5 ppm = 4700 Hz				
Power Supply Vac	Environment Temperature (°C)	Frequency (Hz)	Delta (Hz)	Limit (Hz)
4.1	20	1879999979	21	4700
3.7		1880000000	0	
3.3		1879999992	08	