Test Report

Product Name : IPC

Model No : AR-V5403FLxxxx (x=0~9,A~Z or Space)

FCC ID : ZJD-ARV5403FL

Applicant : Acrosser Technology Co., Ltd

Address : 10F., No.12, Lane 609, Sec. 5, Chongsin Rd., Sanchong District, New Taipei City 241, Taiwan, R.O.C.

Date of Receipt : 2011/05/10

Issued Date : 2011/05/13

Report No. : 115211R-HPUSP07V01

Report Version : V 1.0

Test Report Certification

Issued Date : 2011/05/13

Report No.: 115211R-HPUSP07V01

Accredited by NIST (NVLAP)

NVLAP Lab Code: 200533-0

Product Name	:	IPC
Applicant	:	Acrosser Technology Co., Ltd
Address	:	10F., No.12, Lane 609, Sec. 5, Chongsin Rd., Sanchong District, New Taipei City 241, Taiwan, R.O.C.
Manufacturer	:	Acrosser Technology Co., Ltd
Trade Name	:	Acrosser
Model No.	:	AR-V5403FLxxxx (x=0~9,A~Z or Space)
EUT Rated Voltage	:	AC 120V/60Hz
EUT Test Voltage	:	AC 120V/60Hz
Measurement Standard	:	FCC CFR Title 47 Part 2 22 24
Measurement Reference	:	TIA/EIA 603-C
Test Result	:	Complied

Test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of Quie Tek Corporation.

This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Documented By : Anny Chou

(Adm. Assistant / Anny Chou)

Tested By : Vorana Chen

(Engineer / Vorana Chen)

Approved By :

(Manager /Vincent Lin)

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1. GENERAL INFORMATION

1.1. EUT Description

Product Name	IPC
Model No.	AR-V5403FLxxxx (x=0~9,A~Z or Space)
Trade Name	Acrosser
IMEI No.	352974-xx-xxxxxx-x
FCC ID.	ZJD-ARV5403FL
Antenna Type	External
Antenna Kit	MFR: MOBILE MARK ; M/N: N/A ;Gain: 5dBi
TX Frequency	824MHz~849MHz(GSM 850/WCDMA Band V) 1850MHz ~ 1910MHz(PCS 1900/WCDMA Band II)
Rx Frequency	824MHz~849MHz(GSM 850/WCDMA Band V) 1850MHz ~ 1910MHz(PCS 1900/WCDMA Band II)
Function	GSM/GPRS/EGPRS/WCDMA/HSDPA/HSUPA

1.2. Operational Description

The information contained within this report is intended to show verification of compliance of the 850/1900MHz Notebook to the requirements of FCC 47 CFR Part 2, 22 and 24.

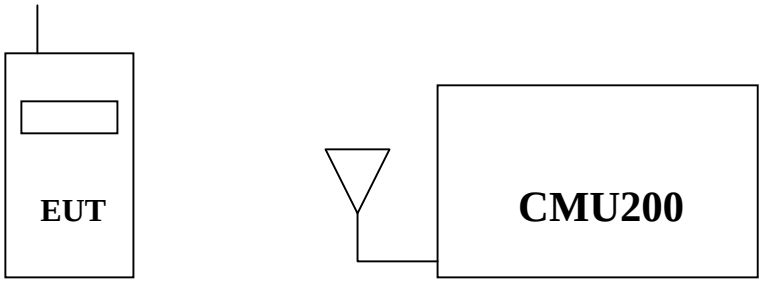
The EUT provide all functions described as above. The EUT is tested with maximum rated TX power via the Base Station simulator.

QuieTek has verified the construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

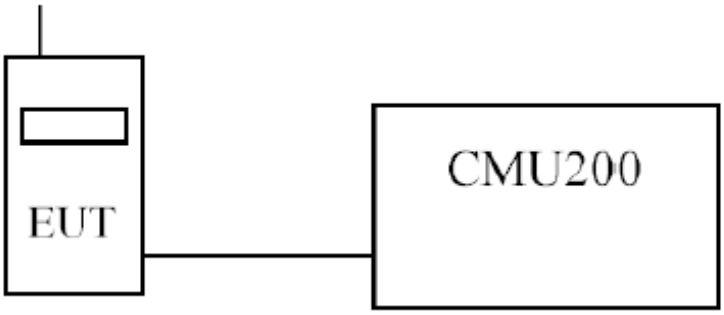
	GSM 850 GPRS
	GSM 850 EGPRS
	PCS 1900 GPRS
	PCS 1900 EGPRS
	WCDMA BAND V
	WCDMA BAND V HSDPA
	WCDMA BAND V HSUPA
	WCDMA BAND II
	WCDMA BAND II HSDPA
	WCDMA BAND II HSUPA

1.3. Configuration of tested System

(a) Configuration of Radiated measurement



(b) Configuration of Conducted measurement



1.4. EUT Setup Procedures

(1) Setup the EUT and simulators as shown on 1.3
(2) Turn on the power of all equipments.
(3) The EUT was set to communicate with CMU200.
(4) Repeat the above procedure (3).

1.5. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	21
Humidity (%RH)	25-75	53
Barometric pressure (mbar)	860-1060	982

Site Description: File on

Federal Communications Commission

FCC Engineering Laboratory

7435 Oakland Mills Road

Columbia, MD 21046

FCC Registration Number :92195

July 03, 2001 Accreditation on NVLAP
NVLAP Lab Code: 200533-0

Site Name: Quie Tek Corporation

LinKou Testing Laboratory:

No. 5-22, Rueishu Keng, Linkou Dist.,

New Taipei City 24451,

Taiwan. R.O.C.

TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789
E-Mail : service@quietek.com

FCC Accreditation Number: TW1014

1.6. Type of Emission

GSM/GPRS: 300KGXW
EGPRS: 300KG7W
WCDMA/HSDPA/HSUPA: 4M20F9W

1.7. DC voltages and DC currents

According to FCC 2.1033 (c) (8).

The voltages and currents in the final RF stage is:

GPRS/EGPRS		
EUT Transmitting (in maximum power)	:	DC voltage : 3.3V , DC current : 0.80A
EUT Standby	:	DC voltage : 3.3V , DC current : 0.05A
WCDMA/HSDPA/HSUPA		
EUT Transmitting (in maximum power)	:	DC voltage : 3.3V , DC current : 0.65A
EUT Standby	:	DC voltage : 3.3V , DC current : 0.05A

2. Peak Power Output

2.1. Test Equipment

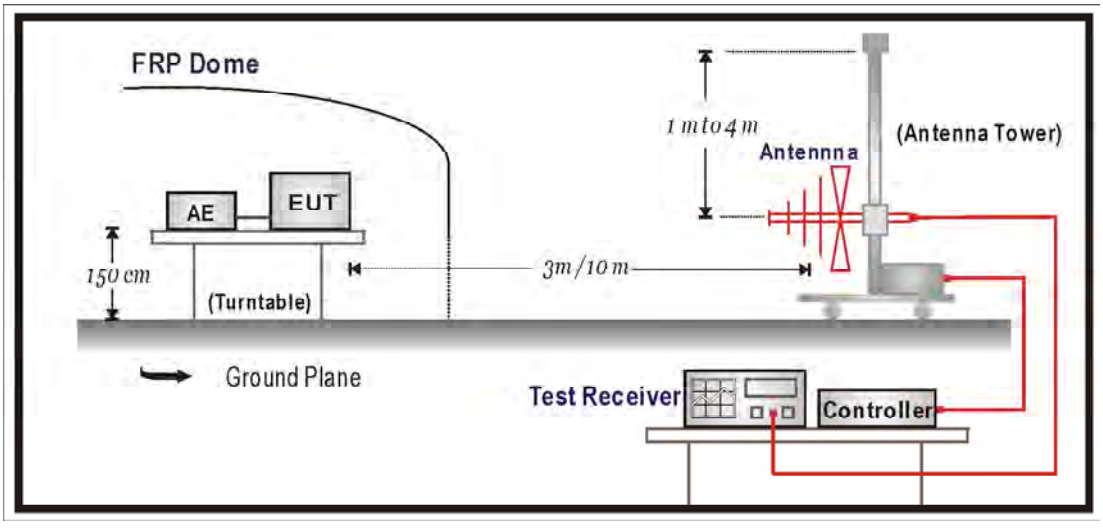
The following test equipments are used during the radiated emission test:

Test Site	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
☒OATS 4	Test Receiver	R & S	ESCS 30 / 100122	Feb., 2011
	Universal Radio Communication Tester	R & S	CMU200 / 104846	May., 2011
	Spectrum Analyzer	Agilent	E4408B/ MY45102743	Aug., 2010
	Pre-Amplifier	QTK	AP-180C	Sep., 2010
	Bilog Antenna	SCHAFFNER	CBL6112B / 2697	May., 2010
	Horn Antenna	Schwarzbeck	BBHA9120D / D305	Oct., 2010
	Pre-Amplifier	QTK	QTK-AMP-01 / 0001	Jul., 2010

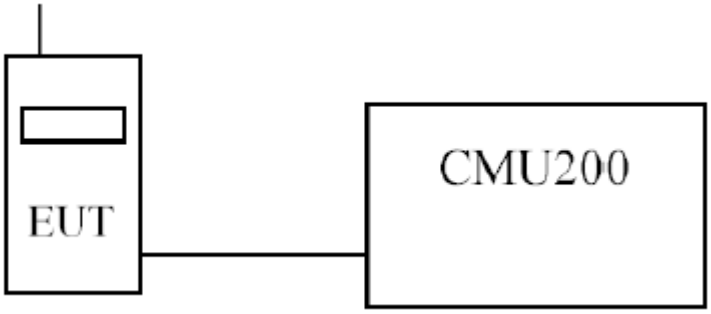
Note: 1. All equipments that need to be calibrated are with calibration period of 1 year.

2.2. Test Setup

Radiated Power Measurement



Conducted Power Measurement



2.3. Limits

Cellular Band 850	**<7W**

PCS Band 1900	**<2W or +33dBm**

2.4. Test Procedure

➢RF Out Power (Radiated)

The Spectrum Analyzer was tuned to the test frequency. The device was put into Transmit mode then rotated through 360 degrees until the highest power level was observed in both horizontal and vertical polarization. The device was then replaced with a substitution antenna, which input signal was adjusted until the received level matched that of the previously detected emission.

The EUT is tested with maximum rated TX power via the Base Station simulator.

➢RF Out Power (Conducted)

The EUT is tested with maximum rated TX power via the Base Station simulator, and the output power was measured at the antenna terminals of the EUT.

2.5. Test Specification

According to Part 2.1046, 22.913, 24.232.

2.6. Test Result of Peak Power Output

Product	IPC		
Test Mode	RF Output Power (Conducted)		
Date of Test	2011/05/10	Test Site	CTR

GPRS 850 (↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
824.2	31.55	0.4	31.95	**1.57**
836.4	31.54	0.4	31.94	1.56
848.8	31.49	0.4	31.89	1.55
GPRS 1900 (↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
1850.2	28.75	0.6	29.35	**0.86**
1880	28.55	0.6	29.15	0.82
1909.8	28.48	0.6	29.08	0.81

EGPRS 850 (↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
824.2	26.69	0.4	27.09	0.51
836.4	26.71	0.4	27.11	**0.51**
848.8	26.63	0.4	27.03	0.50
EGPRS 1900 (↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
1850.2	25.90	0.6	26.50	**0.45**
1880	25.69	0.6	26.29	0.43
1909.8	25.63	0.6	26.23	0.42

GPRS 850 (↑ ↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
824.2	31.48	0.4	31.88	**1.54**
836.4	31.47	0.4	31.87	1.54
848.8	31.41	0.4	31.81	1.52
GPRS 1900 (↑ ↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
1850.2	28.70	0.6	29.30	**0.85**
1880	28.48	0.6	29.08	0.81
1909.8	28.39	0.6	28.99	0.79

EGPRS 850 (↑ ↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
824.2	26.67	0.4	27.07	**0.51**
836.4	26.67	0.4	27.07	0.51
848.8	26.63	0.4	27.03	0.50
EGPRS 1900 (↑ ↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
1850.2	25.83	0.6	26.43	**0.44**
1880	25.63	0.6	26.23	0.42
1909.8	25.53	0.6	26.13	0.41

GPRS 850 (↑ ↑ ↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
824.2	28.50	0.4	28.90	0.78
836.4	28.52	0.4	28.92	**0.78**
848.8	28.43	0.4	28.83	0.76
GPRS 1900 (↑ ↑ ↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
1850.2	28.61	0.6	29.21	**0.83**
1880	28.40	0.6	29.00	0.79
1909.8	28.30	0.6	28.90	0.78

EGPRS 850 (↑ ↑ ↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
824.2	26.64	0.4	27.04	**0.51**
836.4	26.64	0.4	27.04	0.51
848.8	26.58	0.4	26.98	0.50
EGPRS 1900 (↑ ↑ ↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
1850.2	25.81	0.6	26.41	**0.44**
1880	25.58	0.6	26.18	0.41
1909.8	25.52	0.6	26.12	0.41

GPRS 850 (↑ ↑ ↑ ↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
824.2	25.57	0.4	25.97	0.40
836.4	25.58	0.4	25.98	**0.40**
848.8	25.48	0.4	25.88	0.39
GPRS 1900 (↑ ↑ ↑ ↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
1850.2	28.53	0.6	29.13	**0.82**
1880	28.30	0.6	28.90	0.78
1909.8	28.22	0.6	28.82	0.76

EGPRS 850 (↑ ↑ ↑ ↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
824.2	26.59	0.4	26.99	**0.50**
836.4	26.59	0.4	26.99	0.50
848.8	26.50	0.4	26.90	0.49
EGPRS 1900 (↑ ↑ ↑ ↑)				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
1850.2	25.75	0.6	26.35	**0.43**
1880	25.55	0.6	26.15	0.41
1909.8	25.46	0.6	26.06	0.40

WCDMA V				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
826.4	22.71	0.4	23.11	0.20
836.6	23.00	0.4	23.40	**0.22**
846.6	22.75	0.4	23.15	0.21

WCDMA V HSDPA								
	Set 1		Set 2		Set 3		Set 4	
Frequency (MHz)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)
826.4	22.80	0.19	22.28	0.17	22.26	0.17	21.72	0.15
836.6	**23.16**	0.21	22.40	0.17	22.53	0.18	22.02	0.16
846.6	23.04	0.20	22.43	0.17	22.51	0.18	22.04	0.16
β_c	2		12		15		15	
β_d	15		15		8		4	
Δ_{ACK}, Δ_{NACK} Δ_{CQI}	8		8		8		8	
Cable loss: 0.4dB for 850MHz ; 0.6dB for 1900MHz								

All HSDPA testing was done in Set1 configuration.

WCDMA V HSUPA										
	Set 1		Set 2		Set 3		Set 4		Set 5	
Frequency (MHz)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)
826.4	22.08	0.16	20.67	0.12	21.26	0.13	20.79	0.12	21.88	0.15
836.6	22.46	0.18	20.95	0.12	21.53	0.14	20.86	0.12	22.42	0.17
846.6	**22.84**	0.19	21.04	0.13	21.39	0.14	20.88	0.12	22.83	0.19
β_c	11		6		15		2		15	
β_d	15		15		9		15		15	
Δ_{ACK}, Δ_{NACK} Δ_{CQI}	8		8		8		8		8	
AGV	20		12		15		17		21	
Cable loss: 0.4dB for 850MHz ; 0.6dB for 1900MHz										

Note:All HSUPA testing was done in Set1 configuration.

WCDMA II				
Frequency (MHz)	Output Power (dBm)	Path Loss (dB)	Result (dBm)	Result (W)
1852.4	22.99	0.6	23.59	**0.23**
1880	22.73	0.6	23.33	0.22
1907.6	22.65	0.6	23.25	0.21

WCDMA II HSDPA								
	Set 1		Set 2		Set 3		Set 4	
Frequency (MHz)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)
1852.4	**23.66**	0.23	22.77	0.19	23.03	0.20	22.53	0.18
1880	23.37	0.22	22.81	0.19	22.91	0.20	22.40	0.17
1907.6	23.30	0.21	22.72	0.19	22.76	0.19	22.24	0.17
β_c	2		12		15		15	
β_d	15		15		8		4	
Δ_{ACK}, Δ_{NACK} Δ_{CQI}	8		8		8		8	
Cable loss: 0.4dB for 850MHz ; 0.6dB for 1900MHz								

Note : All HSDPA testing was done in Set1 configuration.

WCDMA II HSUPA										
	Set 1		Set 2		Set 3		Set 4		Set 5	
Frequency (MHz)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)	Power (dBm)	Power (Watts)
1852.4	22.82	0.19	21.17	0.13	22.00	0.16	21.22	0.13	22.81	0.19
1880	**23.12**	0.21	21.28	0.13	21.84	0.15	21.33	0.14	23.02	0.20
1907.6	22.33	0.17	21.09	0.13	21.79	0.15	20.96	0.12	22.21	0.17
β_c	11		6		15		2		15	
β_d	15		15		9		15		15	
Δ_{ACK}, Δ_{NACK} Δ_{CQI}	8		8		8		8		8	
AGV	20		12		15		17		21	
Cable loss: 0.4dB for 850MHz ; 0.6dB for 1900MHz										

Note: All HSUPA testing was done in Set1 configuration.

Product	IPC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2011/05/11	Test Site	OATS 4
Test Condition	GSM 850 GPRS		

Maximum Power-GSM 850 GPRS

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBd)	Cable Loss (dB)	Result ERP (dBm)	Result ERP (W)
824.2	21.616	30.00	1.85	0.51	31.25	**1.33**
836.4	20.164	28.63	1.85	0.51	29.88	0.97
848.8	20.167	28.64	1.85	0.51	29.89	0.97

Note:

1. The EUT meets the requirements of FCC CFR 47: Part 22, Section 22.913(a) for Effective Radiated Power.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz
3. Result ERP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	IPC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2011/05/11	Test Site	OATS 4
Test Condition	GSM 850 EGPRS		

Maximum Power-GSM 850 EGPRS

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBd)	Cable Loss (dB)	Result ERP (dBm)	Result ERP (W)
824.2	19.608	28.10	1.85	0.51	29.35	**0.86**
836.4	17.793	26.33	1.85	0.51	27.58	0.57
848.8	17.828	26.37	1.85	0.51	27.62	0.58

Note:

1. The EUT meets the requirements of FCC CFR 47: Part 22, Section 22.913(a) for Effective Radiated Power.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz
3. Result ERP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	IPC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2011/05/11	Test Site	OATS 4
Test Condition	PCS 1900 GPRS		

Maximum Power-PCS 1900 GPRS

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
1850.2	-10.241	21.946	10.4	1.020	31.326	**1.36**
1880.0	-11.350	21.052	10.4	1.020	30.432	1.10
1909.8	-12.350	20.091	10.4	1.020	29.471	0.89

Note:

1. The EUT meets the requirements of FCC CFR 47: Part 24, Section 24.232(b) for Effective Isotropically Radiated Power.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz
3. Result EIRP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	IPC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2011/05/11	Test Site	OATS 4
Test Condition	PCS 1900 EGPRS		

Maximum Power-PCS 1900 EGPRS

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
1850.2	-10.112	22.075	10.4	1.020	31.455	**1.40**
1880.0	-11.017	21.385	10.4	1.020	30.765	1.19
1909.8	-11.015	21.426	10.4	1.020	30.806	1.20

Note:

1. The EUT meets the requirements of FCC CFR 47: Part 24, Section 24.232(b) for Effective Isotropically Radiated Power.
2. Receiver setting (Peak Detector) : RBW:1MHz; VBW:1MHz
3. Result EIRP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	IPC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2011/05/11	Test Site	OATS 4
Test Condition	WCDMA BAND V		

Maximum Power- WCDMA BAND V

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBd)	Cable Loss (dB)	Result ERP (dBm)	Result ERP (W)
826.4	13.928	22.68	1.85	0.51	23.93	0.25
836.6	14.438	23.15	1.85	0.51	24.40	**0.28**
846.6	13.674	22.44	1.85	0.51	23.69	0.23

Note:

1. The EUT meets the requirements of FCC CFR 47: Part 22, Section 22.913(a) for Effective Radiated Power.
2. Receiver setting (Peak Detector) : RBW:5MHz; VBW:5MHz
3. Result ERP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	IPC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2011/05/11	Test Site	OATS 4
Test Condition	WCDMA BAND V HSDPA		

Maximum Power- WCDMA BAND V HSDPA

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBd)	Cable Loss (dB)	Result ERP (dBm)	Result ERP (W)
826.4	14.713	23.41	1.85	0.51	24.66	**0.29**
836.6	14.464	23.18	1.85	0.51	24.43	0.28
846.6	13.634	22.41	1.85	0.51	23.66	0.23

Note:

1. The EUT meets the requirements of FCC CFR 47: Part 22, Section 22.913(a) for Effective Radiated Power.
2. Receiver setting (Peak Detector) : RBW:5MHz; VBW:5MHz
3. Result ERP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	IPC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2011/05/11	Test Site	OATS 4
Test Condition	WCDMA BAND V HSUPA		

Maximum Power- WCDMA BAND V HSUPA

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBd)	Cable Loss (dB)	Result ERP (dBm)	Result ERP (W)
826.4	14.737	23.43	1.85	0.51	24.68	**0.29**
836.6	14.476	23.19	1.85	0.51	24.44	0.28
846.6	13.621	22.39	1.85	0.51	23.64	0.23

Note:

1. The EUT meets the requirements of FCC CFR 47: Part 22, Section 22.913(a) for Effective Radiated Power.
2. Receiver setting (Peak Detector) : RBW:5MHz; VBW:5MHz
3. Result ERP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	IPC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2011/05/11	Test Site	OATS 4
Test Condition	WCDMA BAND II		

Maximum Power- WCDMA BAND II

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
1852.4	-13.515	18.689	10.4	1.020	28.069	0.64
1880	-13.910	18.492	10.4	1.020	27.872	0.61
1907.6	-13.582	18.858	10.4	1.020	28.238	**0.67**

Note:

1. The EUT meets the requirements of FCC CFR 47: Part 24, Section 24.232(b) for Effective Isotropically Radiated Power.
2. Receiver setting (Peak Detector) : RBW:5MHz; VBW:5MHz
3. Result EIRP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	IPC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2011/05/11	Test Site	OATS 4
Test Condition	WCDMA BAND II HSDPA		

Maximum Power- WCDMA BAND II HSDPA

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
1852.4	-13.196	19.008	10.4	1.02	28.388	**0.69**
1880	-13.933	18.469	10.4	1.02	27.849	0.61
1907.6	-13.629	18.811	10.4	1.02	28.191	0.66

Note:

1. The EUT meets the requirements of FCC CFR 47: Part 24, Section 24.232(b) for Effective Isotropically Radiated Power.
2. Receiver setting (Peak Detector) : RBW:5MHz; VBW:5MHz
3. Result EIRP = Substitution Level + Substitution Antenna Gain - Cable Loss

Product	IPC		
Test Mode	RF Output Power (Radiated)		
Date of Test	2011/05/11	Test Site	OATS 4
Test Condition	WCDMA BAND II HSUPA		

Maximum Power- WCDMA BAND II HSUPA

Frequency (MHz)	Reading Level (dBm)	Substitution Level (dBm)	Substitution Antenna Gain (dBi)	Cable Loss (dB)	Result EIRP (dBm)	Result EIRP (W)
1852.4	-13.459	18.745	10.4	1.020	28.125	0.65
1880	-13.963	18.439	10.4	1.020	27.819	0.61
1907.6	-13.608	18.832	10.4	1.020	28.212	**0.66**

Note:

1. The EUT meets the requirements of FCC CFR 47: Part 24, Section 24.232(b) for Effective Isotropically Radiated Power.
2. Receiver setting (Peak Detector) : RBW:5MHz; VBW:5MHz
3. Result EIRP = Substitution Level + Substitution Antenna Gain - Cable Loss

3. Occupied Bandwidth

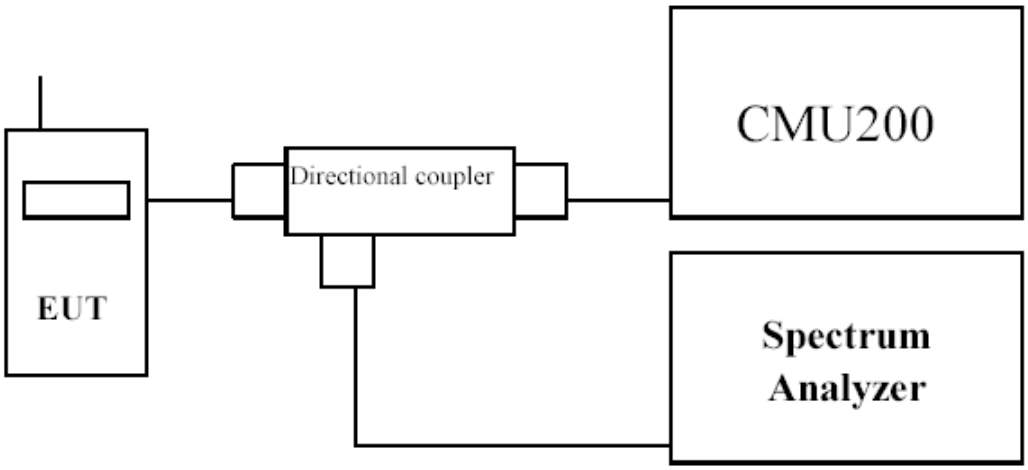
3.1. Test Equipment

The following test equipments are used during the occupied bandwidth tests:

Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Spectrum Analyzer	Agilent	N9020A/ MY48010570	May., 2011
Universal Radio Communication Tester	R & S	CMU200 / 104846	May., 2011
Directional coupler	Agilent	87300C / MY44300353	Sep., 2010
Directional coupler	Agilent	778D-012/ 50550	Sep., 2010

Note: All equipments upon which need to be calibrated are with calibration period of 1 year.

3.2. Test Setup



3.3. Test Procedure

The EUT is tested with maximum rated TX power via the Base Station simulator, and the occupied bandwidth was measured at the antenna terminals of the EUT.

The Resolution BW of the analyzer is set to 1 % of the emission bandwidth. The EUT's occupied bandwidth is measured as the width of the signal between two points, one below the carrier center frequency and one above the carrier frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

The plots below show the resultant display from the Spectrum Analyser.

3.4. Test Specification

According to Part 2.1049, 22.917(b), 24.238(b).

3.5. Test Result of Occupied Bandwidth

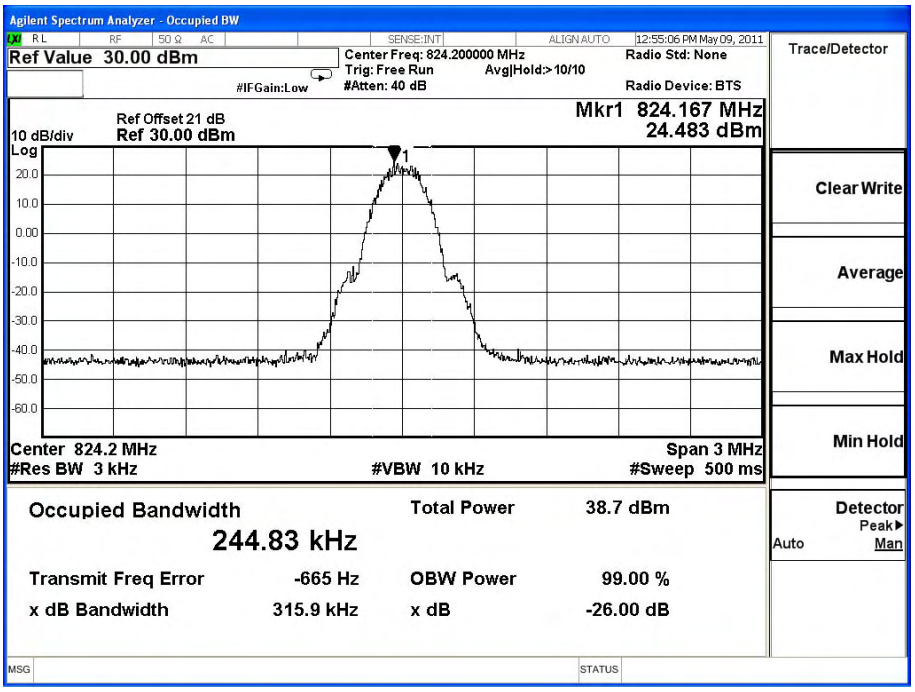
Product	IPC
Test Mode	Occupied Bandwidth
Test Site	CTR

Test Mode	Channel & TX Frequency (MHz)	99% Occupied Bandwidth (KHz)	26 dB bandwidth (KHz)	Required Limit (MHz)	Result
GSM 850 GPRS	128(824.2)	244.83	315.9	N/A	Pass
	189(836.4)	246.09	317.8	N/A	Pass
	251(848.8)	246.23	316.2	N/A	Pass
GSM 850 EGPRS	128(824.2)	243.26	309.3	N/A	Pass
	189(836.4)	251.79	314.2	N/A	Pass
	251(848.8)	241.63	314.4	N/A	Pass
PCS 1900 GPRS	512(1850.2)	249.51	312.8	N/A	Pass
	661(1880)	247.10	317.8	N/A	Pass
	810(1909.8)	242.83	314.3	N/A	Pass
PCS 1900 EGPRS	512(1850.2)	246.84	306.4	N/A	Pass
	661(1880)	246.51	310.0	N/A	Pass
	810(1909.8)	246.49	306.0	N/A	Pass

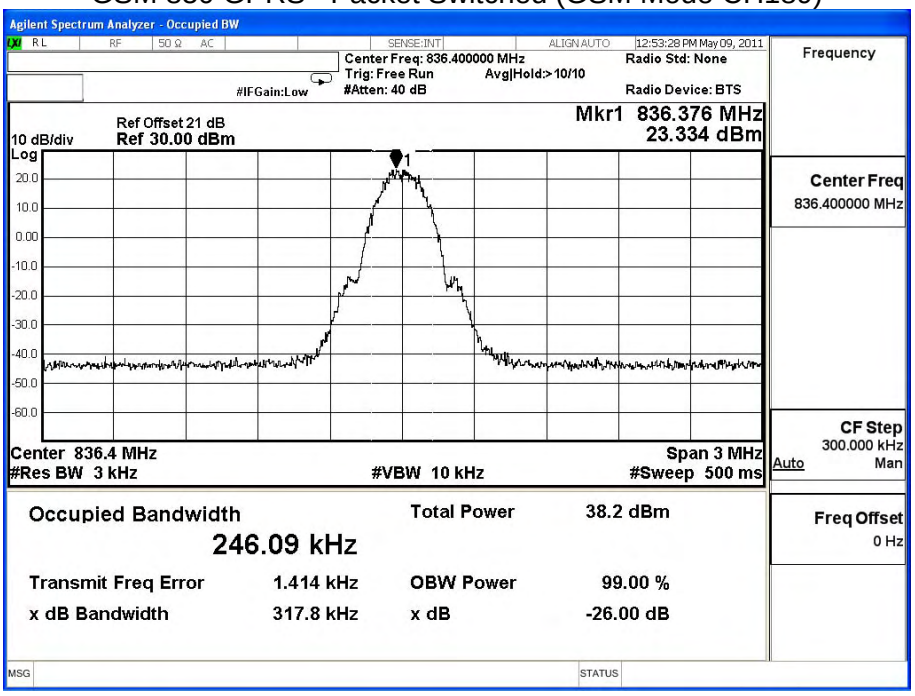
Test Mode	Channel & TX Frequency (MHz)	99% Occupied Bandwidth (MHz)	26 dB bandwidth (MHz)	Required Limit (MHz)	Result
WCDMA V	4132(826.4)	4.1796	4.674	N/A	Pass
	4183(836.6)	4.1689	4.665	N/A	Pass
	4233(846.6)	4.1741	4.674	N/A	Pass
WCDMA V HSDPA	4132(826.4)	4.1725	4.680	N/A	Pass
	4183(836.6)	4.1706	4.671	N/A	Pass
	4233(846.6)	4.1781	4.680	N/A	Pass
WCDMA V HSUPA	4132(826.4)	4.1760	4.688	N/A	Pass
	4183(836.6)	4.1882	4.691	N/A	Pass
	4233(846.6)	4.1904	4.679	N/A	Pass
WCDMA II	9262(1852.4)	4.1738	4.682	N/A	Pass
	9400(1880)	4.1772	4.683	N/A	Pass
	9538(1907.6)	4.1611	4.681	N/A	Pass
WCDMA II HSDPA	9262(1852.4)	4.1788	4.683	N/A	Pass
	9400(1880)	4.1813	4.685	N/A	Pass
	9538(1907.6)	4.1643	4.688	N/A	Pass
WCDMA II HSUPA	9262(1852.4)	4.1827	4.688	N/A	Pass
	9400(1880)	4.1739	4.680	N/A	Pass
	9538(1907.6)	4.1528	4.683	N/A	Pass

Product	IPC		
Test Mode	Occupied Bandwidth		
Date of Test	2011/05/09	Test Site	CTR
Test Condition	GSM 850 GPRS		

GSM 850 GPRS - Packet Switched (GSM Mode CH 128)

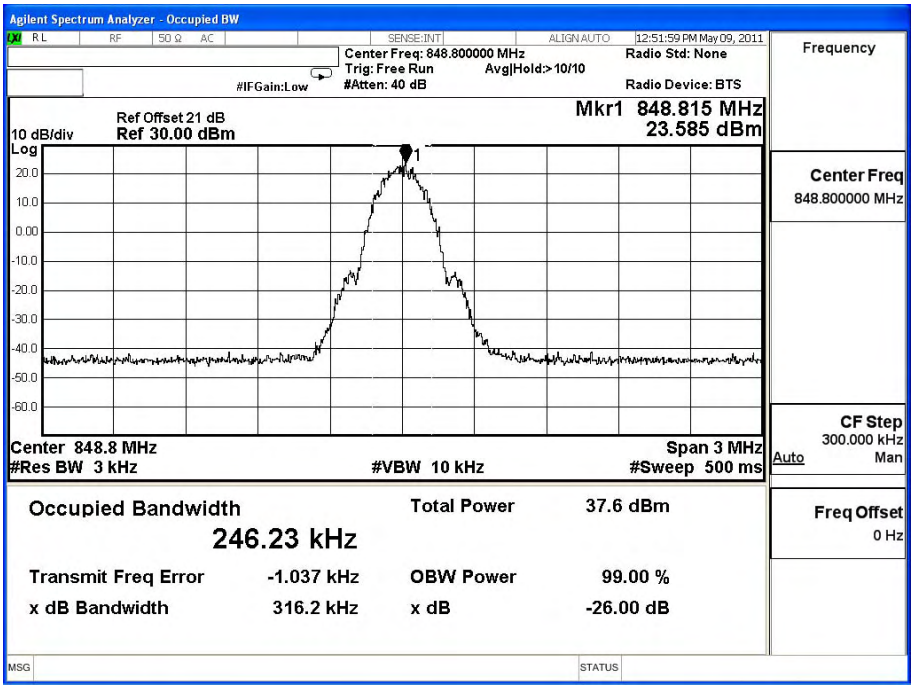


GSM 850 GPRS - Packet Switched (GSM Mode CH189)



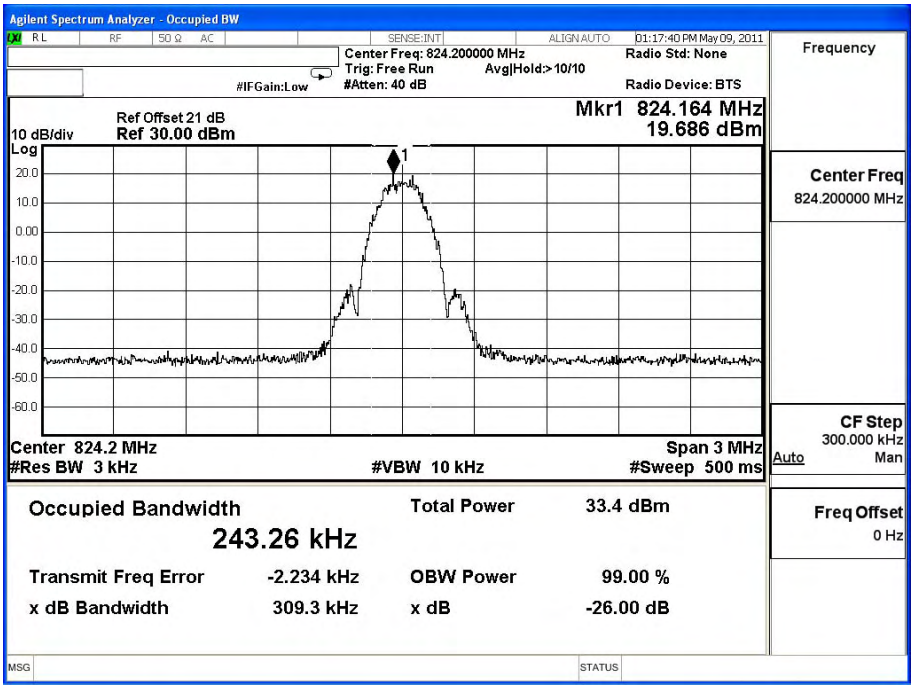
Product	IPC		
Test Mode	Occupied Bandwidth		
Date of Test	2011/05/09	Test Site	CTR
Test Condition	GSM 850 GPRS		

GSM 850 GPRS - Packet Switched (GSM Mode CH 251)

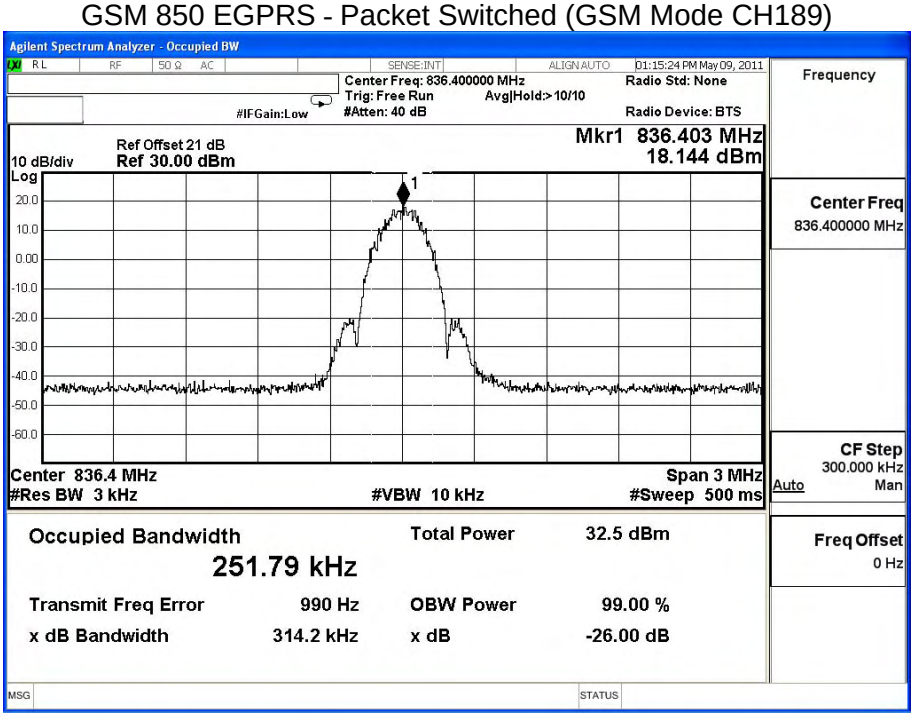


Product	IPC		
Test Mode	Occupied Bandwidth		
Date of Test	2011/05/09	Test Site	CTR
Test Condition	GSM 850 EGPRS		

GSM 850 EGPRS - Packet Switched (GSM Mode CH 128)

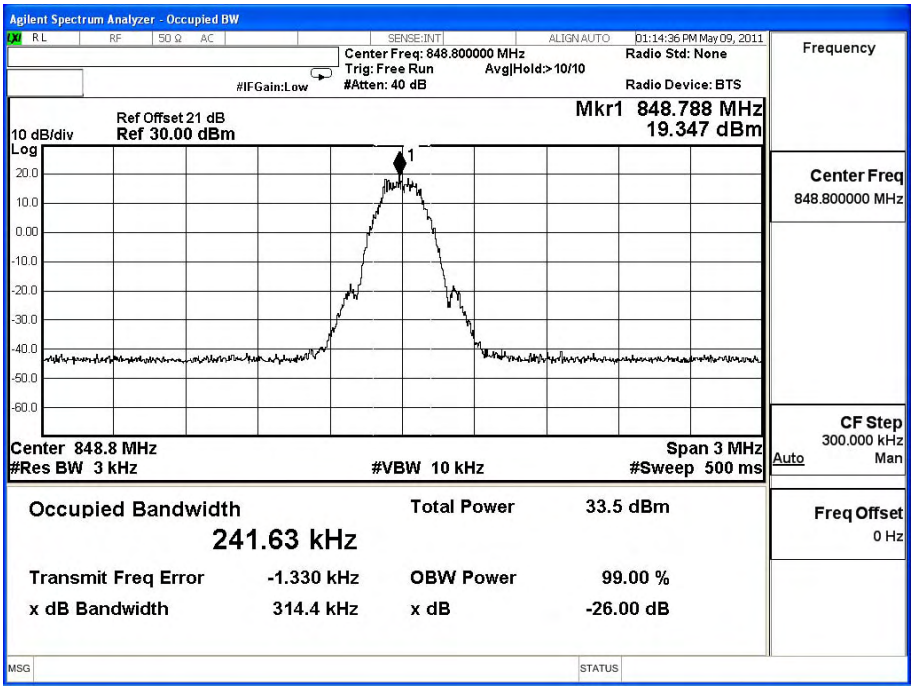


GSM 850 EGPRS - Packet Switched (GSM Mode CH189)



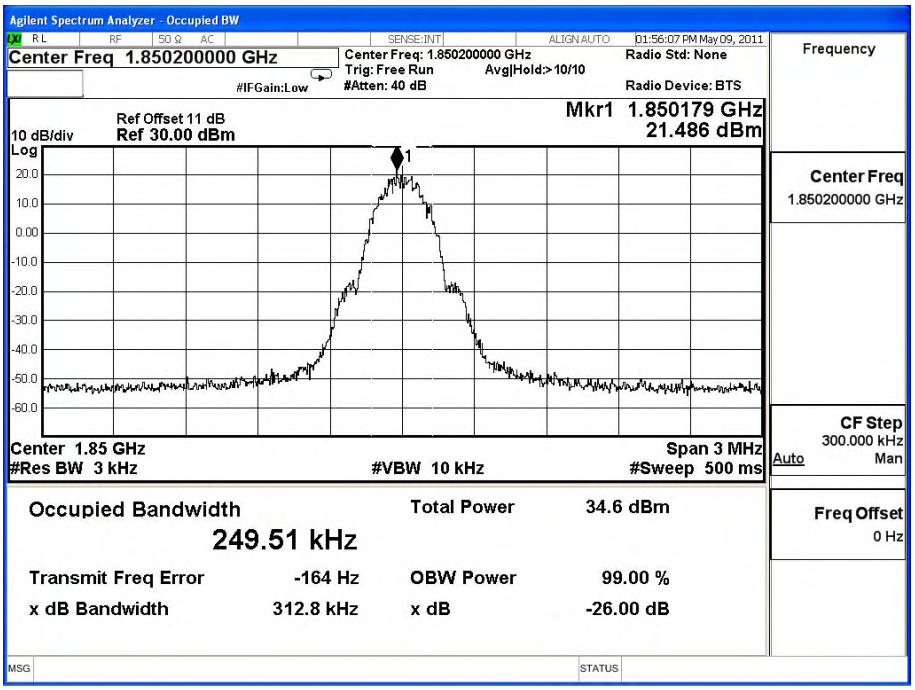
Product	IPC		
Test Mode	Occupied Bandwidth		
Date of Test	2011/05/09	Test Site	CTR
Test Condition	GSM 850 EGPRS		

GSM 850 EGPRS - Packet Switched (GSM Mode CH 251)

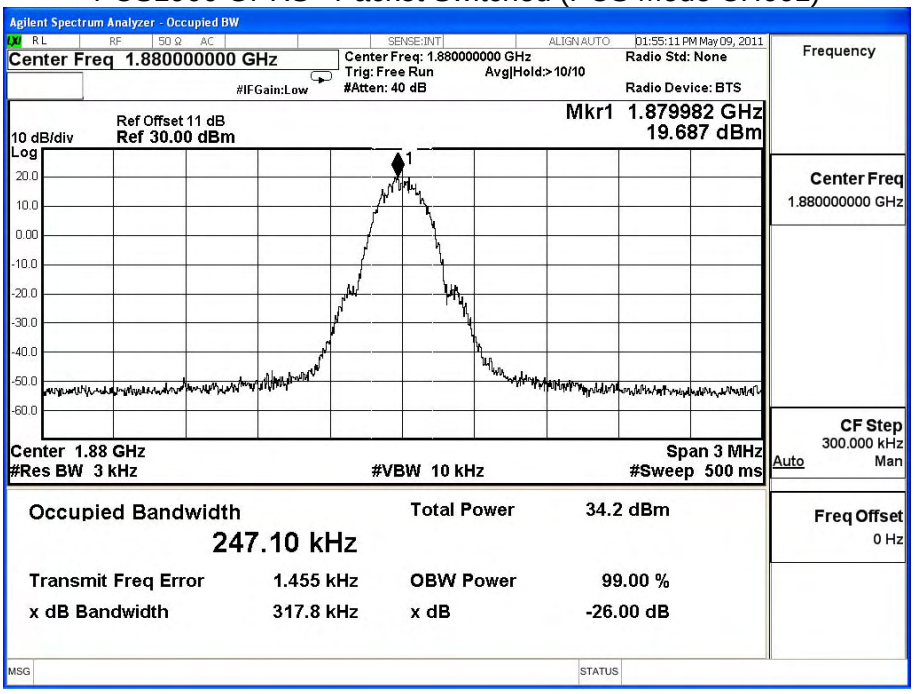


Product	IPC		
Test Mode	Occupied Bandwidth		
Date of Test	2011/05/09	Test Site	CTR
Test Condition	PCS1900 GPRS		

PCS1900 GPRS - Packet Switched (PCS Mode CH 512)

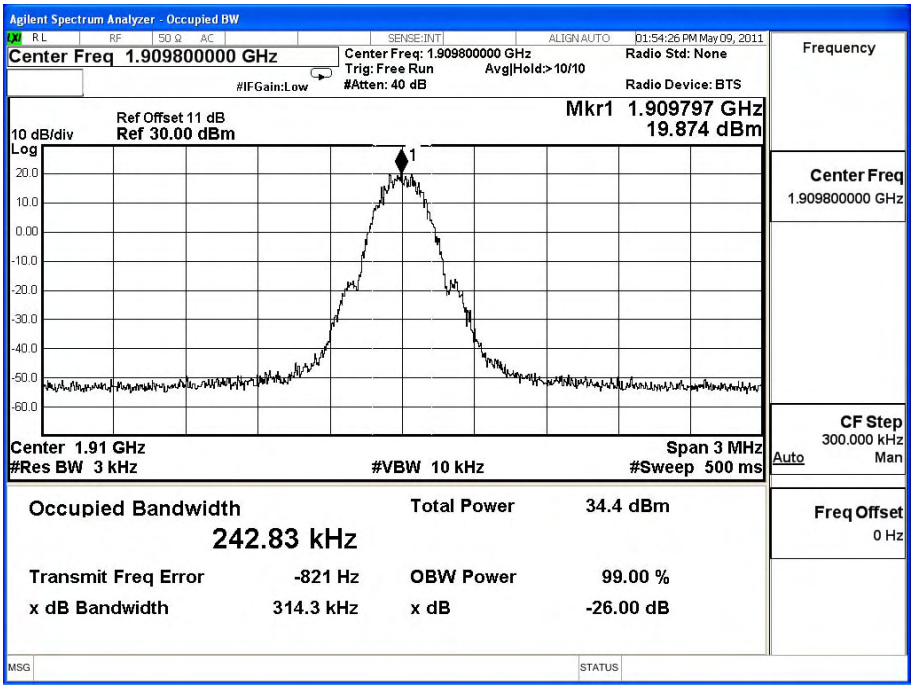


PCS1900 GPRS - Packet Switched (PCS Mode CH661)



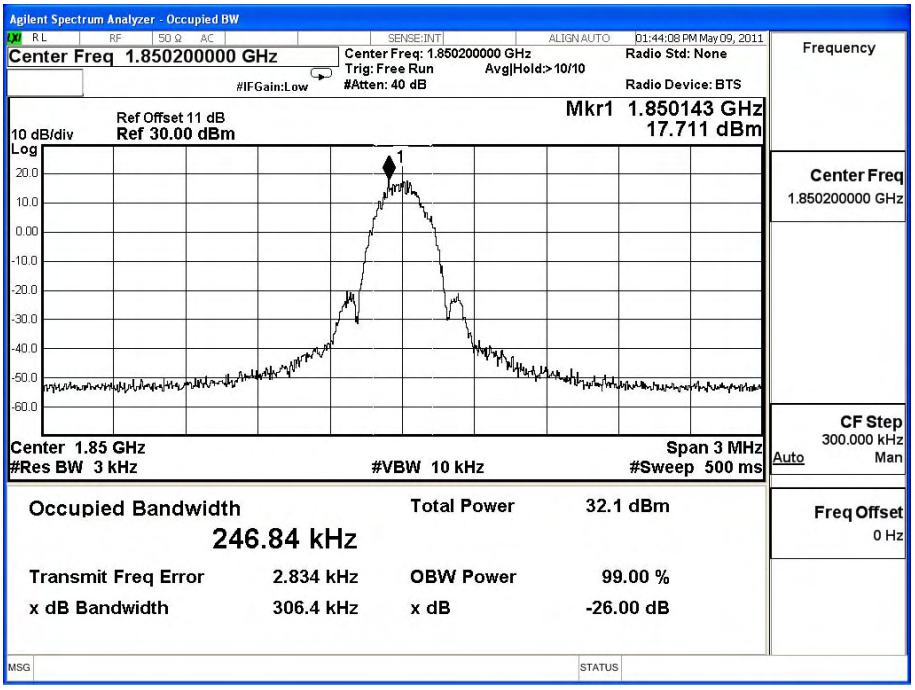
Product	IPC		
Test Mode	Occupied Bandwidth		
Date of Test	2011/05/09	Test Site	CTR
Test Condition	PCS1900 GPRS		

PCS1900 GPRS - Packet Switched (PCS Mode CH 810)

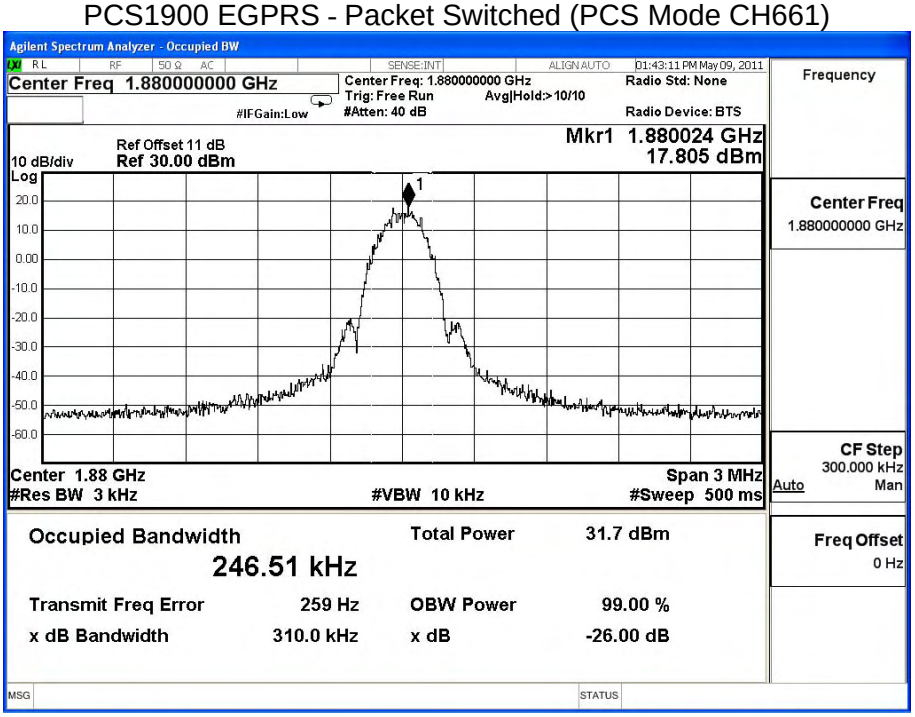


Product	IPC		
Test Mode	Occupied Bandwidth		
Date of Test	2011/05/09	Test Site	CTR
Test Condition	PCS1900 EGPRS		

PCS1900 EGPRS - Packet Switched (PCS Mode CH 512)



PCS1900 EGPRS - Packet Switched (PCS Mode CH661)



Product	IPC		
Test Mode	Occupied Bandwidth		
Date of Test	2011/05/09	Test Site	CTR
Test Condition	PCS1900 EGPRS		

PCS1900 EGPRS - Packet Switched (PCS Mode CH 810)