

Inter Lab

Final Report on Cinterion Wireless Module PH8-P HW: Release 2, B2 SW: Revision 01.370

Report Reference:

MDE_CINTE_1107_FCCb

September 22, 2011

acc. Title 47 CFR chapter I part 22 subpart H

Date:

Note:

Test Laboratory: 7Layers AG Borsigstr. 11 40880 Ratingen Germany

DAKKS Deutsche Akkreditierungsstelle D-PL-12140-01-01

The following test results relate only to the devices specified in this document. This report shall not be reproduced in parts without the written approval of the test laboratory.

7Layers AG Borsigstrasse 11 40880 Ratingen, Germany Phone: +49 (0) 2102 749 0 Fax: +49 (0) 2102 749 350 www.7Layers.com Aufsichtsratsvorsitzender Chairman of the Supervisory Board: Markus Becker Vorstand Board: Dr. H.-J. Meckelburg Registergericht registered in: Düsseldorf, HRB 44096 USt-IdNr VAT No.: DE 203159652 TAX No. 147/5869/0385



acc. Title 47 CFR chapter I part 22 subpart H

1 Administrative Data

1.1 Project Data

Mr. René Houx
2011/09/22
2011/08/15
2011/08/20

1.2 Applicant Data

Company Name:	Cinterion Wireless Modules GmbH
Street:	Siemensdamm 50 13629 Berlin
City: Country:	Germany
1004 1004 - 20 - 20 - 20 - 20 - 20 - 20 - 20 -	
Contact Person:	Mr. Thorsten Liebig
Function:	Manager Approval
Phone:	+49 (30) 31102-8241
E-Mail:	thorsten.liebig@cinterion.com

1.3 Test Laboratory Data

The following list shows all places and laboratories involved for test result generation:

7 layers DE

Company Name :	7 layers AG	
Street :	Borsigstrasse 11	
City :	40880 Ratingen	
Country :	Germany	
Contact Person :	Mr. Michael Albert	
Phone :	+49 2102 749 201	
Fax :	+49 2102 749 444	
E Mail :	michael.albert@7Layers.de	

Laboratory Details

Lab ID	Identification	Responsible	Accreditation Info	_
Lab 1	Radiated Emissions	Mr. Robert Machulec Mr. Andreas Petz	DAkkS-Registration no. D-PL-12140-01-01	
Lab 2	Radio Lab	Mr. Robert Machulec Mr. Andreas Petz	DAkkS-Registration no. D-PL-12140-01-01	

1.4 Signature of the Testing Responsible

"additec

Robert Machulec responsible for tests performed in: Lab 1, Lab 2



acc. Title 47 CFR chapter I part 22 subpart H

1.5 Signature of the Accreditation Responsible



Accreditation scope responsible person responsible for Lab 1, Lab 2

2 Test Object Data

2.1 General OUT Description

The following section lists all OUTs (Object's Under Test) involved during testing.

OUT: PH8-P

Type / Model / Family:

Product Category:

Module

Parameter List: Parameter name

Value

Parameter for Scope FCC_v2:	
Antenna gain 1900 band	not specified (dBi)
Antenna gain 850 band	not specified (dBi)
Antenna gain GPS	not specified (dBi)
DC Power Supply	4.2 (V)
highest channel	251 (848.8MHz) for GSM850, 810 (1909.8MHz) for GSM1900, 4233 (846.6MHz) for FDD5, 9538 (1907.6MHz) for FDD2
lowest channel	128 (824.2MHz) for GSM850, 512 (1850.2MHz) for GSM1900, 4132 (826.4MHz) for FDD5, 9262 (1852.4MHz) for FDD2
mid channel	190 (836.6MHz) for GSM850, 661 (1880.0MHz) for GSM1900, 4183 (836.6MHz) for FDD5, 9400 (1880MHz) for FDD2

HW: Release 2, B2 SW: Revision 01.370

Cinterion Wireless Module PH8-P



acc. Title 47 CFR chapter I part 22 subpart H

2.2 Detailed Description of OUT Samples

<u>Sample : b01</u>

OUT Identifier	PH8-P		
Sample Description	sample #02		
Serial No.	IMEI: 00440108064	10028	
HW Status	HW Status Release 2, B2		
SW Status	Revision 01.370		
Date of Receipt	2011/08/05		
Low Voltage	3.3 V	Low Temp.	-10 °C
High Voltage	4.2 V High Temp.		
Nominal Voltage	4.2 V	Normal Temp.	+22 °C

2.3 OUT Features

Features for OUT: PH8-P

Designation	Description	Allowed Values	Supported Value(s)			
Features for	Features for scope: FCC_v2					
AC	The OUT is powered by or connected to AC Mains					
DC	The OUT is powered by or connected to DC Mains					
EDGE850	EUT supports EDGE in the band 824 MHz - 849 MHz					
EDGE1900	EUT supports EDGE in the band 1850 MHz - 1910 MHz					
FDD2	EUT supports UMTS FDD2 in the band 1850 MH: - 1910 MHz	Z				
FDD5	EUT supports UMTS FDD5 in the band 824 MHz 849 MHz	-				
GSM850	EUT supports GSM850 band 824MHz - 849MHz					
HSDPA- FDD2	EUT supports UMTS FDD2 HSDPA in the band 1850 MHz - 1910 MHz					
HSDPA- FDD5	EUT supports UMTS FDD5 HSDPA in the band 824 MHz - 849 MHz					
HSUPA- FDD2	EUT supports UMTS FDD2 HSUPA in the band 1850 MHz - 1910 MHz					
HSUPA- FDD5	EUT supports UMTS FDD5 HSUPA in the band 824 MHz - 849 MHz					
PantC	permanent fixed antenna connector, which may be built-in, designed as an indispensable part of the equipment					
PCS1900	EUT supports PCS1900 band 1850MHz - 1910MHz					



acc. Title 47 CFR chapter I part 22 subpart H

2.4 Auxiliary Equipment

AE No.	Type Designation	Serial No.	HW Status	SW Status	Description
AE 09	-	-	-	-	Direct RF coupler to SMA
AE 02	-	-	-	-	Flex cable
AE Ant1	-	-	-	-	GSM/UMTS antenna
AE Ant2	-	-	-	-	UMTS antenna
AE Ant3	ANN-MS-0-005 M827B	601657	-	-	GPS antenna
AE 01	DSB75_B1.1_0152	-	-	-	Evaluation board

2.5 Setups used for Testing

For each setup a relation is given to determine if and which samples and auxiliary equipment is used. The left side list all OUT samples and the right side lists all auxiliary equipment for the given setup.

Setup No.	List of OUT sam	nples	List of auxiliary equipment		
Sample	e No.	Sample Description	AE No.	AE Description	
B01_direc	t (used for mea	asurement using antenna	port at the n	nodule)	
Sample	e: b01	sample #02	AE 09	Direct RF coupler to SMA	
			AE 02	Flex cable	
			AE 01	Evaluation board	
B01_rad	(used for rad	iated measurement using	external ant	ennas)	
Sample	e: b01	sample #02	AE 02	Flex cable	
			AE Ant1	GSM/UMTS antenna	
			AE Ant2	UMTS antenna	
			AE Ant3	GPS antenna	
			AE 01	Evaluation board	
B01_RF1	(used for mea	asurement at external RF	connector R	-1)	
Sample	e: b01	sample #02	AE 02	Flex cable	
			AE 01	Evaluation board	

acc. Title 47 CFR chapter I part 22 subpart H



3 Results

3.1 General

Documentation of tested devices:

Interpretation of the test results:

Available at the test laboratory.

The results of the inspection are described on the following pages, where 'Conformity' or 'Passed' means that the certification criteria were verified and that the tested device is conform to the applied standard.

In cases where 'Declaration' is printed, the required documents are available in the manufacturers product documentation.

In cases where 'not applicable' is printed, the test case requirements are not relevant to the specific equipment implementation.

3.2 List of the Applicable Body

(Body for Scope: FCC_v2)

Designation

Description

FCC47CFRChIPART22PUBLIC MOBILE Part 22, Subpart H - Cellular Radiotelephone Service SERVICES

3.3 List of Test Specification

Test Specification:	FCC part 2 and 22
Version	10-1-10 Edition
Title:	PART 2 - GENERAL RULES AND REGULATIONS PART 22 - PUBLIC MOBILE SERVICES



acc. Title 47 CFR chapter I part 22 subpart H

3.4 Summary

S.4 Summary					
Test Case Identifier / Name Lab					
Test (condition)	Result	Date of Test	Ref.	Setup	
22.1 RF Power Output §2.1046, §22.913					
22.1; Frequency Band = 850, Mode = EDGE,	Passed	2011/08/19	Lab 2	B01_direct	
Channel = 128, Frequency = 824.2MHz,					
Method = conducted					
22.1; Frequency Band = 850, Mode = EDGE,	Passed	2011/08/19	Lab 2	B01_direct	
Channel = 190, Frequency = 836.6MHz,					
Method = conducted					
22.1; Frequency Band = 850, Mode = EDGE,	Passed	2011/08/19	Lab 2	B01_direct	
Channel = 251, Frequency = 848.8MHz,					
Method = conducted					
22.1; Frequency Band = 850, Mode = GSM,	Passed	2011/08/19	Lab 2	B01_direct	
Channel = 128, Frequency = 824.2MHz,					
Method = conducted					
22.1; Frequency Band = 850, Mode = GSM,	Passed	2011/08/19	Lab 2	B01_direct	
Channel = 190, Frequency = 836.6MHz,					
Method = conducted					
22.1; Frequency Band = 850, Mode = GSM,	Passed	2011/08/19	Lab 2	B01_direct	
Channel = 251, Frequency = 848.8MHz,					
Method = conducted					
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/19	Lab 2	B01_direct	
$HSDPA_subtest_1$, Channel = 4132,					
Frequency = 826.4MHz, Method = conducted					
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/19	Lab 2	B01_direct	
$HSDPA_subtest_1$, Channel = 4183,					
Frequency = 836.6MHz, Method = conducted					
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/19	Lab 2	B01_direct	
$HSDPA_subtest_1$, Channel = 4233,					
Frequency = 846.6MHz, Method = conducted					
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/19	Lab 2	B01_direct	
HSDPA_subtest_2, Channel = 4132,					
Frequency = 826.4 MHz, Method = conducted		2011/00/10			
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/19	Lab 2	B01_direct	
HSDPA_subtest_2, Channel = 4183,					
Frequency = 836.6MHz, Method = conducted	Deserved	2011/00/10			
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/19	Lab 2	B01_direct	
HSDPA_subtest_2, Channel = 4233,					
Frequency = 846.6MHz, Method = conducted 22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01_direct	
HSDPA_subtest_3, Channel = 4132 ,	rasseu	2011/08/20		DOI_unect	
Frequency = 826.4 MHz, Method = conducted					
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01 direct	
HSDPA_subtest_3, Channel = 4183,	1 43504	2011/00/20		D01_direct	
Frequency = 836.6MHz, Method = conducted					
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01_direct	
HSDPA subtest 3, Channel = 4233 ,	1 ubbeu	2011/00/20		bor_uncee	
Frequency = 846.6 MHz, Method = conducted					
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01_direct	
HSDPA_subtest_4, Channel = 4132,		,,			
Frequency = 826.4 MHz, Method = conducted					
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01 direct	
HSDPA subtest 4, Channel = 4183 ,		- ,, -			
Frequency = 836.6 MHz, Method = conducted					
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01 direct	
HSDPA subtest 4, Channel = 4233 ,				—	
Frequency = 846.6MHz, Method = conducted					
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/19	Lab 2	B01_direct	
HSUPA_subtest_1, Channel = 4132 ,					
Frequency = 826.4 MHz, Method = conducted					
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/19	Lab 2	B01_direct	
HSUPA_subtest_1, Channel = 4183,					
Frequency = 836.6 MHz, Method = conducted					



Fest Case Identifier / Name			Lab	
Test (condition)	Result	Date of Test	Ref.	Setup
22.1 RF Power Output §2.1046, §22.913				
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/19	Lab 2	B01_direct
HSUPA_subtest_1, Channel = 4233,				
Frequency = 846.6MHz, Method = conducted 22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01 direct
$HSUPA_subtest_2$, Channel = 4132,	1 d35Cd	2011/00/20		D01_direct
Frequency = 826.4MHz, Method = conducted				
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01_direct
HSUPA_subtest_2, Channel = 4183, Frequency = 836.6MHz, Method = conducted				
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01 direct
HSUPA_subtest_2, Channel = 4233,		- ,, -		
Frequency = 846.6MHz, Method = conducted	.	2011 (20 (20		
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_3, Channel = 4132,	Passed	2011/08/20	Lab 2	B01_direct
Frequency = 826.4 MHz, Method = conducted				
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01_direct
HSUPA_subtest_3, Channel = 4183,				
Frequency = 836.6MHz, Method = conducted 22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01 direct
$HSUPA_subtest_3$, Channel = 4233,	1 83560	2011/00/20		Do1_direct
Frequency = 846.6 MHz, Method = conducted				
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01_direct
HSUPA_subtest_4, Channel = 4132, Frequency = 826.4MHz, Method = conducted				
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01 direct
HSUPA_subtest_4, Channel = 4183,				_
Frequency = 836.6MHz, Method = conducted	Decod	2011/09/20	1-5-2	PO1 direct
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_4, Channel = 4233,	Passed	2011/08/20	Lab 2	B01_direct
Frequency = 846.6 MHz, Method = conducted				
22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01_direct
HSUPA_subtest_5, Channel = 4132,				
Frequency = 826.4MHz, Method = conducted 22.1; Frequency Band = FDD5, Mode =	Passed	2011/08/20	Lab 2	B01 direct
HSUPA_subtest_5, Channel = 4183,		//		
Frequency = 836.6MHz, Method = conducted		2011 (20 (20		
22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_5, Channel = 4233,	Passed	2011/08/20	Lab 2	B01_direct
Frequency = 846.6 MHz, Method = conducted				
22.1; Frequency Band = FDD5, Mode = W-	Passed	2011/08/19	Lab 2	B01_direct
CDMA, Channel = 4132, Frequency =				
826.4MHz, Method = conducted 22.1; Frequency Band = FDD5, Mode = W-	Passed	2011/08/19	Lab 2	B01_direct
CDMA, Channel = 4183, Frequency =	1 d35Cd	2011/00/15		bor_direct
836.6MHz, Method = conducted				
22.1; Frequency Band = FDD5, Mode = W-	Passed	2011/08/19	Lab 2	B01_direct
CDMA, Channel = 4233, Frequency = 846.6MHz, Method = conducted				
2.2 Frequency stability §2.1055 22.2; Frequency Band = 850, Mode = EDGE,	Passed	2011/08/19	Lab 2	B01_RF1
Channel = 190, Frequency = 836.6MHz	1 03550	2011/00/13		D01_KI1
22.2; Frequency Band = 850, Mode = GSM,	Passed	2011/08/19	Lab 2	B01_RF1
Channel = 190, Frequency = 836.6MHz	Dagaad	2011/00/10		
22.2; Frequency Band = FDD5, Mode = HSDPA, Channel = 4183, Frequency =	Passed	2011/08/19	Lab 2	B01_RF1
836.6MHz				
22.2; Frequency Band = FDD5, Mode =	Passed	2011/08/19	Lab 2	B01_RF1
HSUPA, Channel = 4183, Frequency =				
836.6MHz 22.2; Frequency Band = FDD5, Mode = W-	Passed	2011/08/19	Lab 2	B01_RF1
CDMA, Channel = 4183, Frequency =	1 43504	2011/00/19		
836.6MHz				



Test Case Identifier / Name			Lapter I p	art 22 Subpart H
Test (condition)	Result	Date of Test	Ref.	Setup
22.3 Spurious emissions at antenna termin	nals §2.1051, §2	22.917		
22.3; Frequency Band = 850 , Mode = EDGE, Channel = 128 , Frequency = 824.2 MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz,	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = FDD5, Mode = HSDPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = FDD5, Mode = HSDPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = FDD5, Mode = HSDPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = FDD5, Mode = HSUPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = FDD5, Mode = HSUPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = FDD5, Mode = HSUPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = FDD5, Mode = W- CDMA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = FDD5, Mode = W- CDMA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.3; Frequency Band = FDD5, Mode = W- CDMA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct



Test Case Identifier / Name			Lapter 1 pa	art 22 Subpart n
Test (condition)	Result	Date of Test	Ref.	Setup
22.4 Field strength of spurious radiation §	2.1053, §22.91	7		
22.4; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/17	Lab 1	B01_rad
22.4; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/17	Lab 1	B01_rad
22.4; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/17	Lab 1	B01_rad
22.4; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/17	Lab 1	B01_rad
22.4; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/17	Lab 1	B01_rad
22.4; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/17	Lab 1	B01_rad
22.4; Frequency Band = FDD5, Mode = HSDPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/16	Lab 1	B01_rad
22.4; Frequency Band = FDD5, Mode = HSDPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/16	Lab 1	B01_rad
22.4; Frequency Band = FDD5, Mode = HSDPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/16	Lab 1	B01_rad
22.4; Frequency Band = FDD5, Mode = HSUPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/15	Lab 1	B01_rad
22.4; Frequency Band = FDD5, Mode = HSUPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/15	Lab 1	B01_rad
22.4; Frequency Band = FDD5, Mode = HSUPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/15	Lab 1	B01_rad
22.4; Frequency Band = FDD5, Mode = W- CDMA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/16	Lab 1	B01_rad
22.4; Frequency Band = FDD5, Mode = W- CDMA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/16	Lab 1	B01_rad
22.4; Frequency Band = FDD5, Mode = W- CDMA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/16	Lab 1	B01_rad



Test Case Identifier / Name			Liapter I p	art 22 Subpart n
Test (condition)	Result	Date of Test	Ref.	Setup
22.5 Emission and Occupied Bandwidth §2	.1049, §22.917			
22.5; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = FDD5, Mode = HSDPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = FDD5, Mode = HSDPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = FDD5, Mode = HSDPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = FDD5, Mode = HSUPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = FDD5, Mode = HSUPA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = FDD5, Mode = HSUPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = FDD5, Mode = W- CDMA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = FDD5, Mode = W- CDMA, Channel = 4183, Frequency = 836.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.5; Frequency Band = FDD5, Mode = W- CDMA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct



Test Case Identifier / Name			Lab	
Test (condition)	Result	Date of Test	Ref.	Setup
22.6 Band edge compliance §2.1053, §22.9	917			
22.6; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = FDD5, Mode = HSDPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = FDD5, Mode = HSDPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = FDD5, Mode = HSUPA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = FDD5, Mode = HSUPA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = FDD5, Mode = W- CDMA, Channel = 4132, Frequency = 826.4MHz	Passed	2011/08/19	Lab 2	B01_direct
22.6; Frequency Band = FDD5, Mode = W- CDMA, Channel = 4233, Frequency = 846.6MHz	Passed	2011/08/19	Lab 2	B01_direct



acc. Title 47 CFR chapter I part 22 subpart H

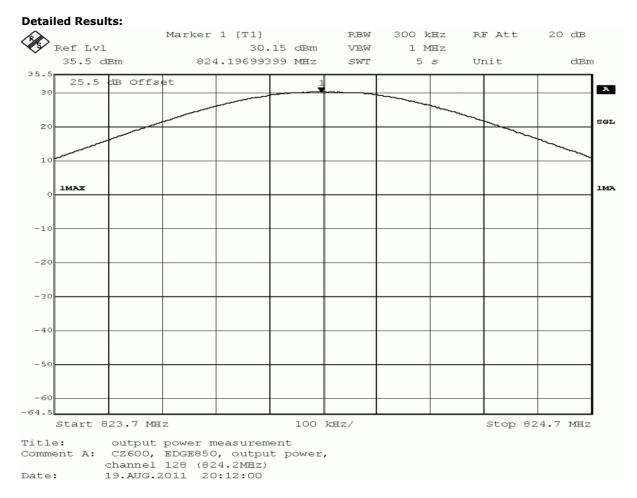
3.5 Detailed Results

3.5.1 22.1 RF Power Output §2.1046, §22.913

Test: 22.1; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 20:10
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

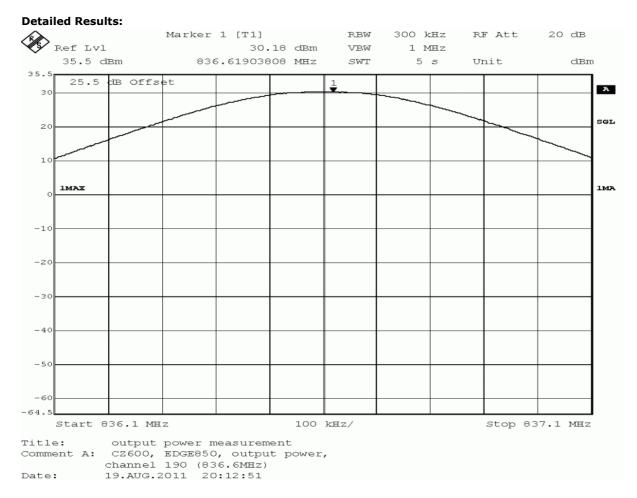
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	300	30.15	passed
average	maxhold	300	26.37	passed
rms	maxhold	300	27.03	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.44 dBi

Test: 22.1; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 20:11
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

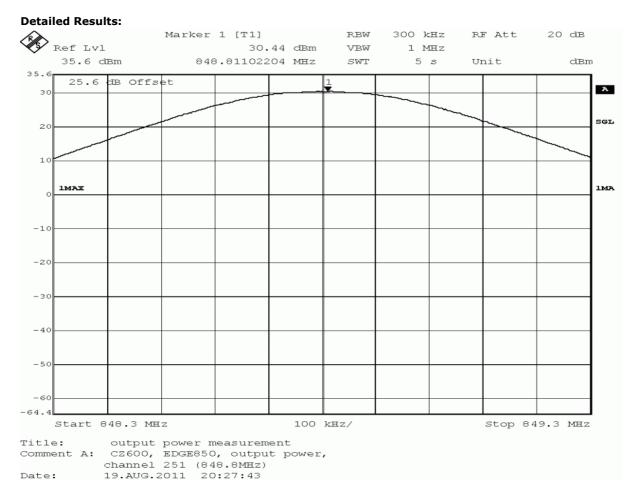
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	300	30.18	passed
average	maxhold	300	26.85	passed
rms	maxhold	300	27.00	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.41 dBi

Test: 22.1; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 20:26
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

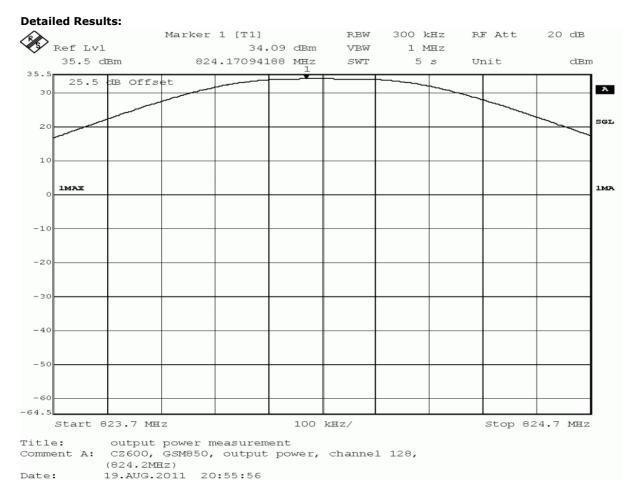
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	300	30.44	passed
average	maxhold	300	26.80	passed
rms	maxhold	300	27.07	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.15 dBi

Test: 22.1; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 20:54
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

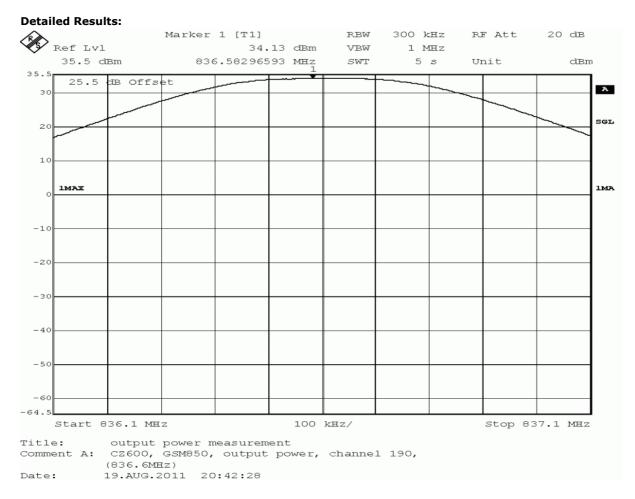
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	300	34.09	passed
average	maxhold	300	33.52	passed
rms	maxhold	300	33.52	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 6.50 dBi

Test: 22.1; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 20:40
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

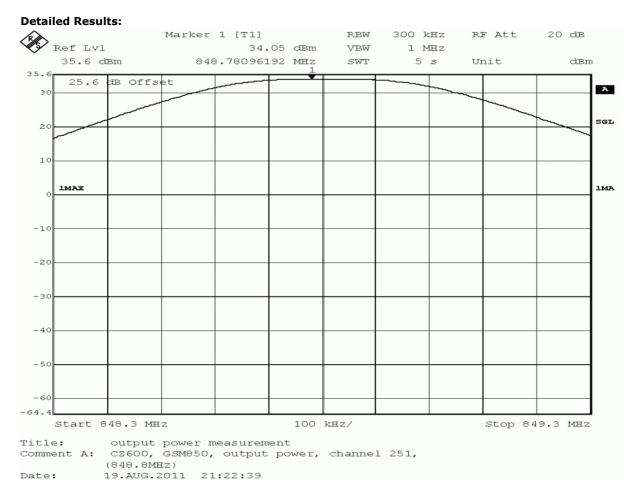
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	300	34.13	passed
average	maxhold	300	33.59	passed
rms	maxhold	300	33.55	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 6.46 dBi

Test: 22.1; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 21:21
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

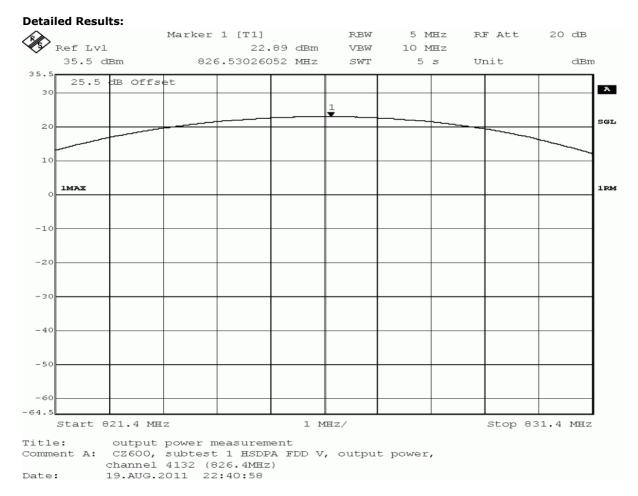
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	300	34.05	passed
average	maxhold	300	33.47	passed
rms	maxhold	300	33.49	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 6.54 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_1, Channel = 4132, Frequency = 826.4MHz, Method = conducted

Passed
B01_direct
2011/08/19 22:39
FCC47CFRChIPART22PUBLIC MOBILE SERVICES
FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

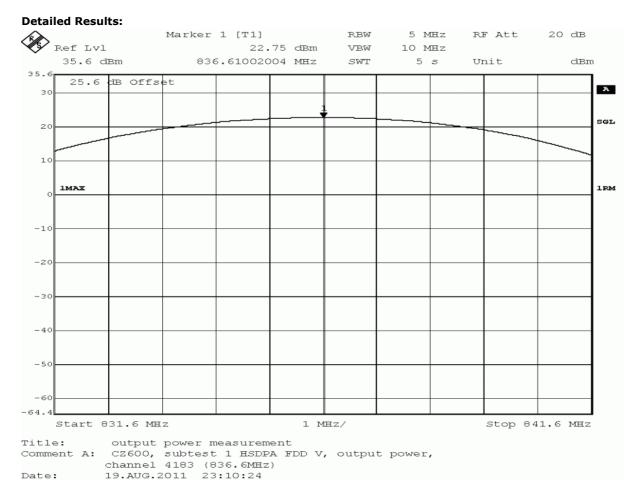
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	28.60	passed
average	maxhold	5000	22.70	passed
rms	maxhold	5000	22.89	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 11.99 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_1, Channel = 4183, Frequency = 836.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 23:08
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

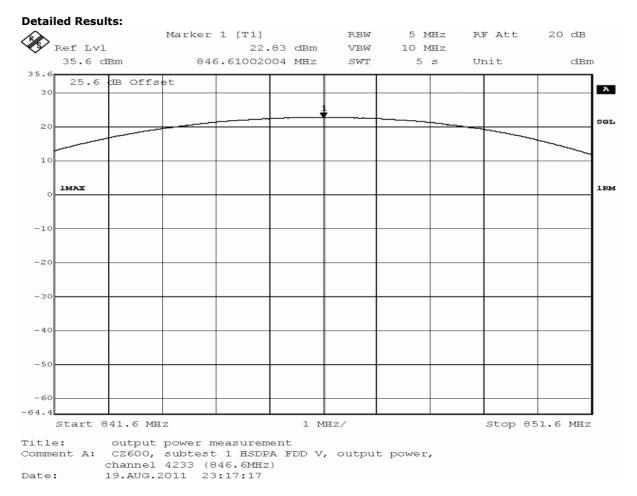
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.60	passed
average	maxhold	5000	22.50	passed
rms	maxhold	5000	22.75	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.99 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_1, Channel = 4233, Frequency = 846.6MHz, Method = conducted

Passed
B01_direct
2011/08/19 23:15
FCC47CFRChIPART22PUBLIC MOBILE SERVICES
FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

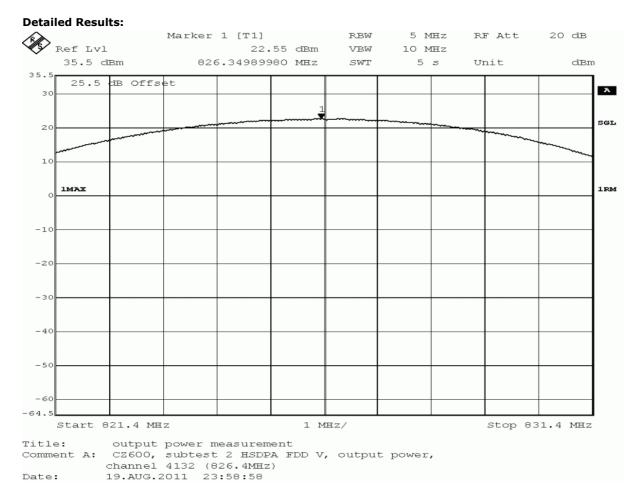
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	28.81	passed
average	maxhold	5000	22.59	passed
rms	maxhold	5000	22.83	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 11.78 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_2, Channel = 4132, Frequency = 826.4MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 23:57
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

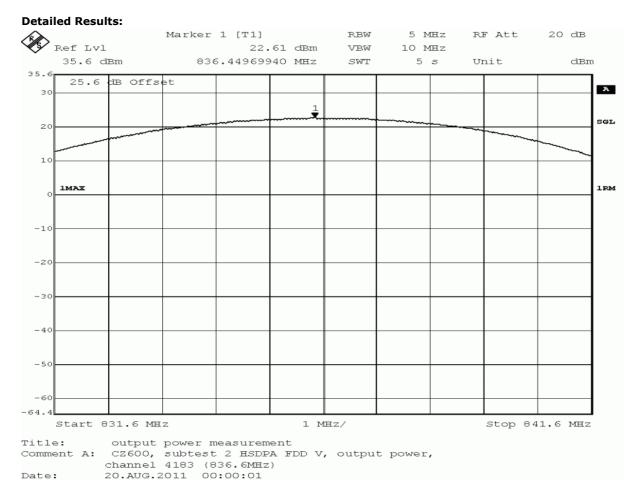
detector	trace	resolution	conducted	
		bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	30.00	passed
average	maxhold	5000	21.98	passed
rms	maxhold	5000	22.55	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.59 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_2, Channel = 4183, Frequency = 836.6MHz, Method = conducted

Passed
B01_direct
2011/08/19 23:58
FCC47CFRChIPART22PUBLIC MOBILE SERVICES
FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

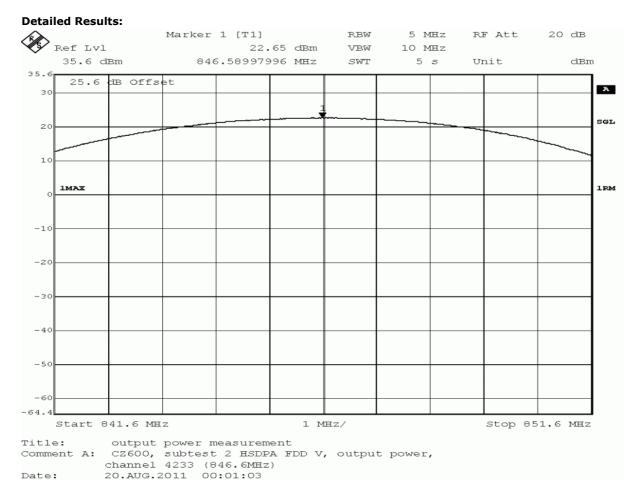
detector	trace	resolution	conducted	
		bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	30.50	passed
average	maxhold	5000	21.91	passed
rms	maxhold	5000	22.61	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.09 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_2, Channel = 4233, Frequency = 846.6MHz, Method = conducted

Passed
B01_direct
2011/08/19 23:59
FCC47CFRChIPART22PUBLIC MOBILE SERVICES
FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

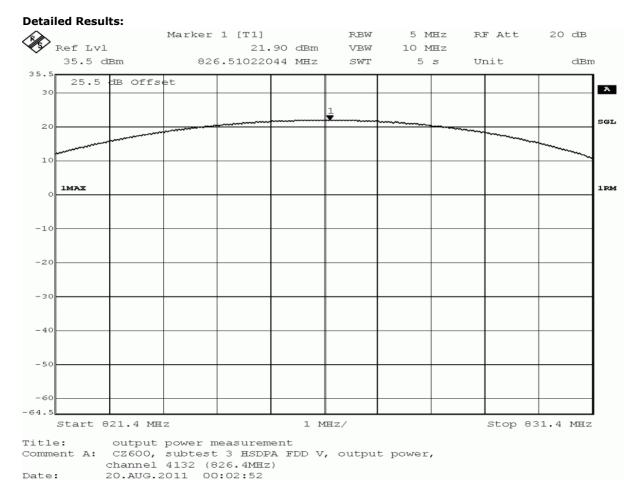
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	30.50	passed
average	maxhold	5000	21.97	passed
rms	maxhold	5000	22.65	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.09 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_3, Channel = 4132, Frequency = 826.4MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:00
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

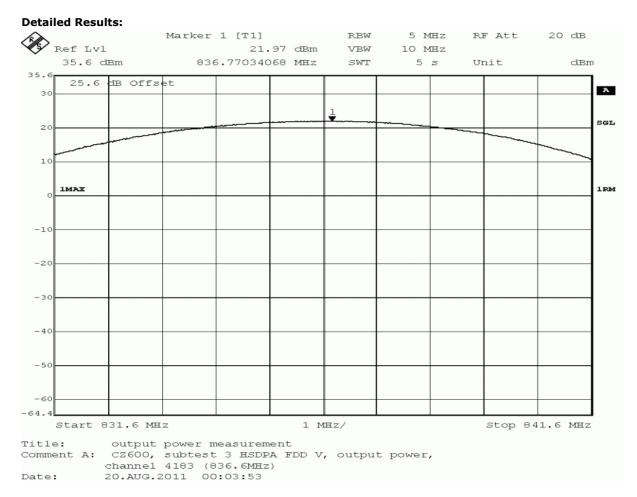
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.63	passed
average	maxhold	5000	20.97	passed
rms	maxhold	5000	21.90	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.96 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_3, Channel = 4183, Frequency = 836.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:01
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

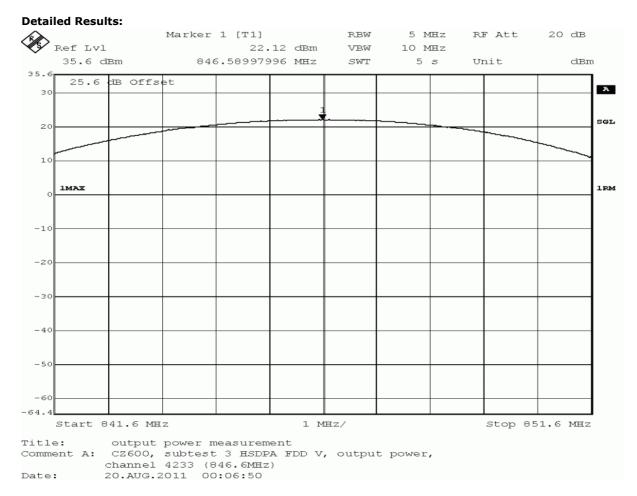
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.32	passed
average	maxhold	5000	21.01	passed
rms	maxhold	5000	21.97	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 11.27 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_3, Channel = 4233, Frequency = 846.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:04
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

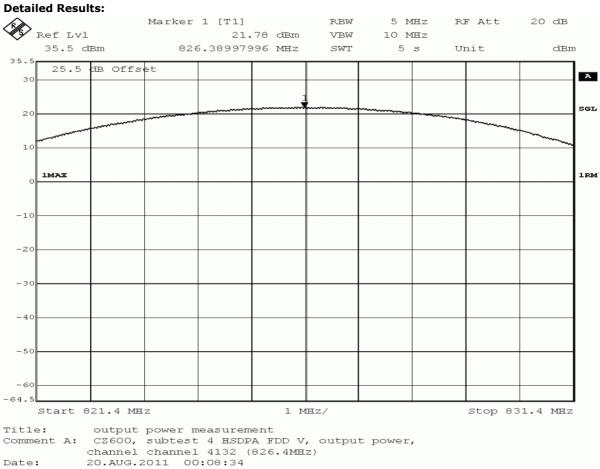
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.81	passed
average	maxhold	5000	21.10	passed
rms	maxhold	5000	22.12	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.78 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_4, Channel = 4132, Frequency = 826.4MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:06
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

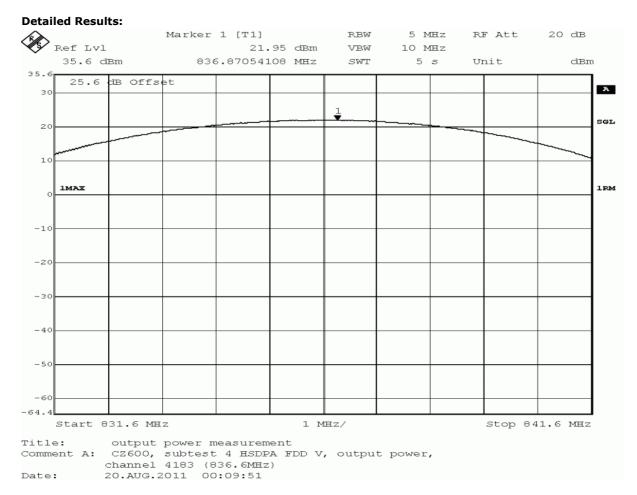
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.63	passed
average	maxhold	5000	20.84	passed
rms	maxhold	5000	21.78	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.96 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_4, Channel = 4183, Frequency = 836.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:07
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

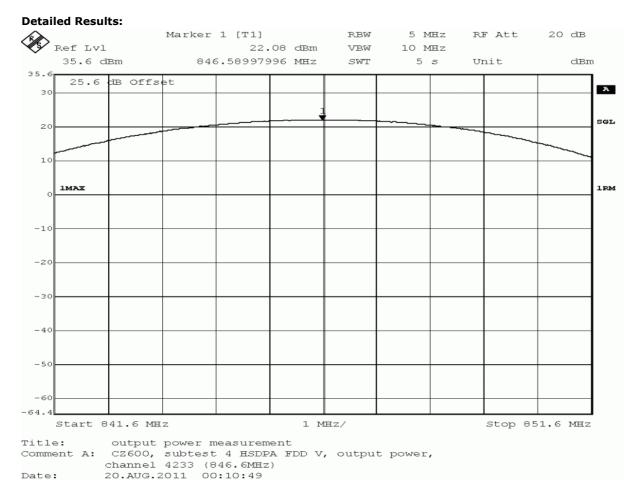
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.93	passed
average	maxhold	5000	20.94	passed
rms	maxhold	5000	21.95	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.66 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSDPA_subtest_4, Channel = 4233, Frequency = 846.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:08
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

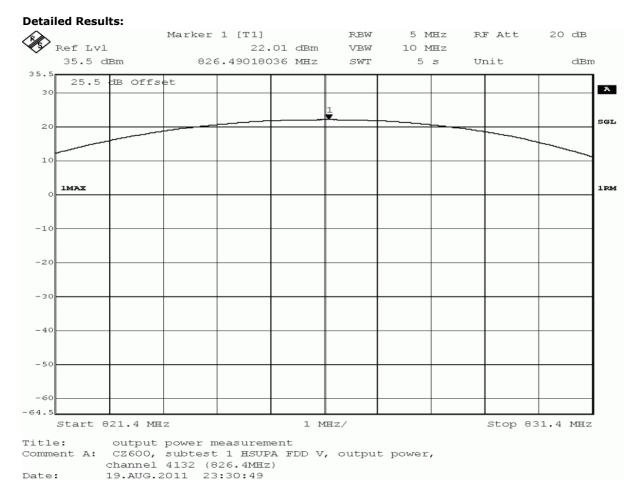
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.81	passed
average	maxhold	5000	20.98	passed
rms	maxhold	5000	22.08	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.78 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_1, Channel = 4132, Frequency = 826.4MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 23:28
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

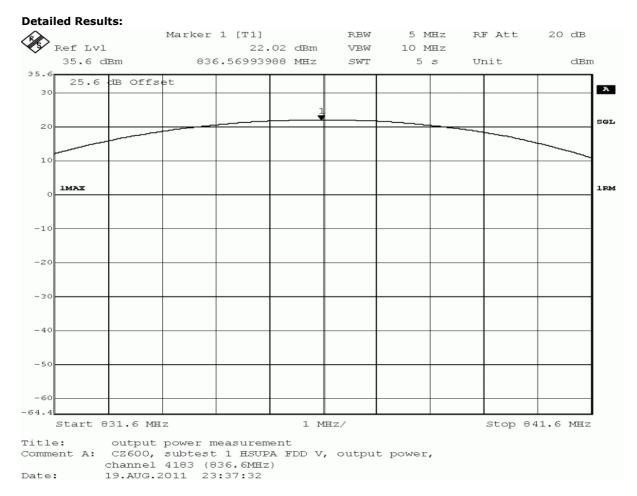
verdict
Bm
) passed
b passed
passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 11.09 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_1, Channel = 4183, Frequency = 836.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 23:35
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

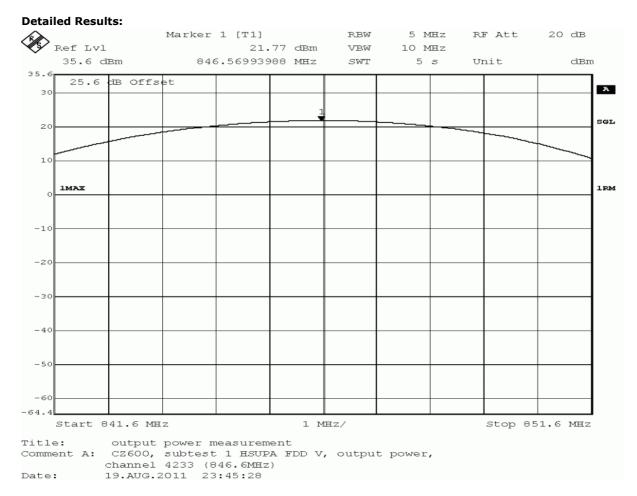
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.73	passed
average	maxhold	5000	21.58	passed
rms	maxhold	5000	22.02	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.86 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_1, Channel = 4233, Frequency = 846.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 23:43
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

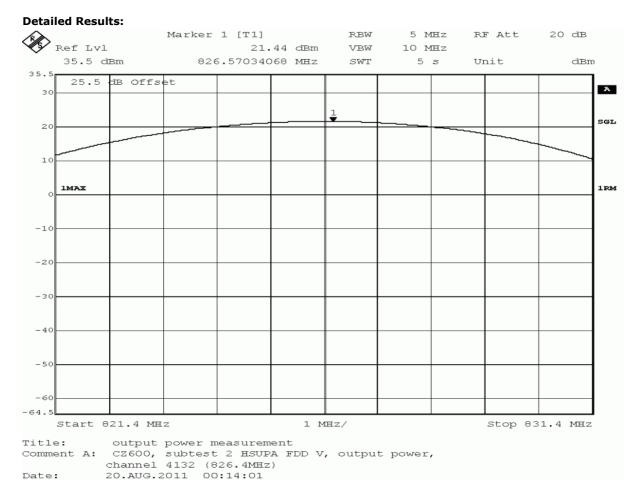
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.20	passed
average	maxhold	5000	21.32	passed
rms	maxhold	5000	21.77	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 11.39 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_2, Channel = 4132, Frequency = 826.4MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:12
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

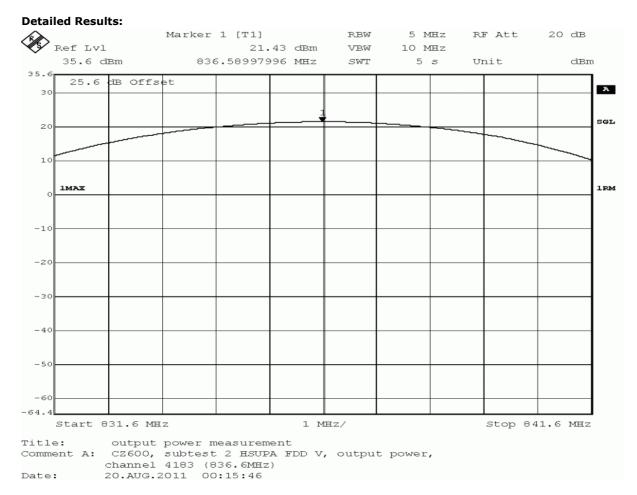
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.71	passed
average	maxhold	5000	20.58	passed
rms	maxhold	5000	21.44	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.88 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_2, Channel = 4183, Frequency = 836.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:13
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

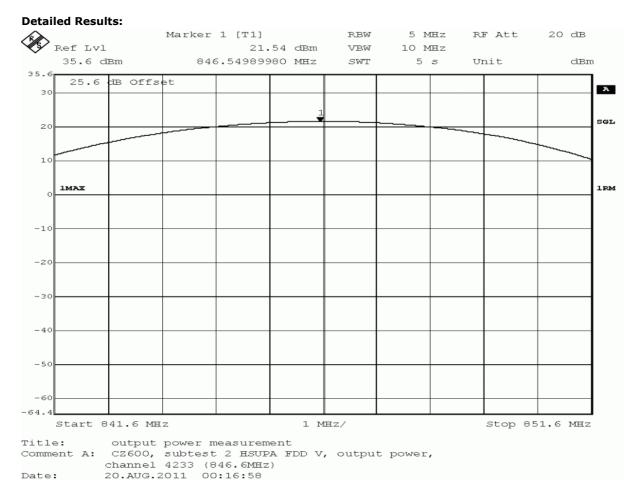
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.93	passed
average	maxhold	5000	20.53	passed
rms	maxhold	5000	21.43	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.66 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_2, Channel = 4233, Frequency = 846.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:15
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

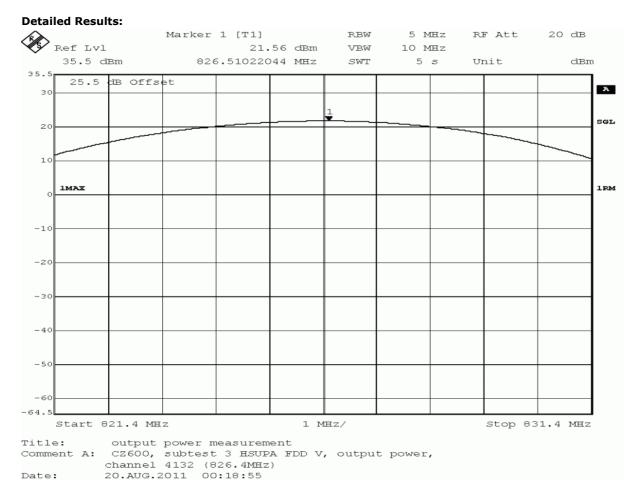
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	30.10	passed
average	maxhold	5000	20.65	passed
rms	maxhold	5000	21.54	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.49 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_3, Channel = 4132, Frequency = 826.4MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:16
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

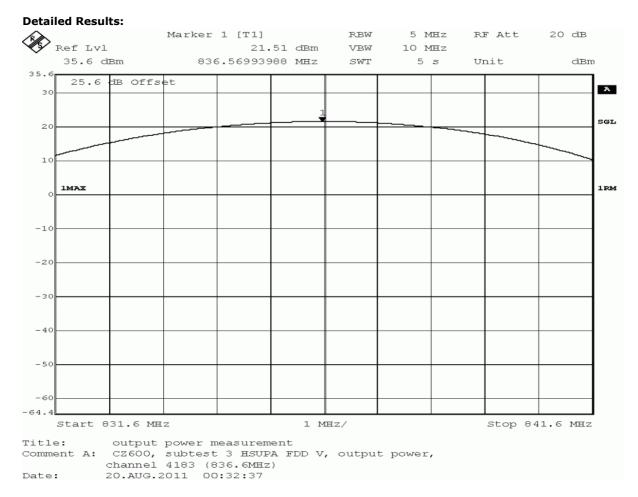
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	30.25	passed
average	maxhold	5000	20.69	passed
rms	maxhold	5000	21.56	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.34 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_3, Channel = 4183, Frequency = 836.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:30
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

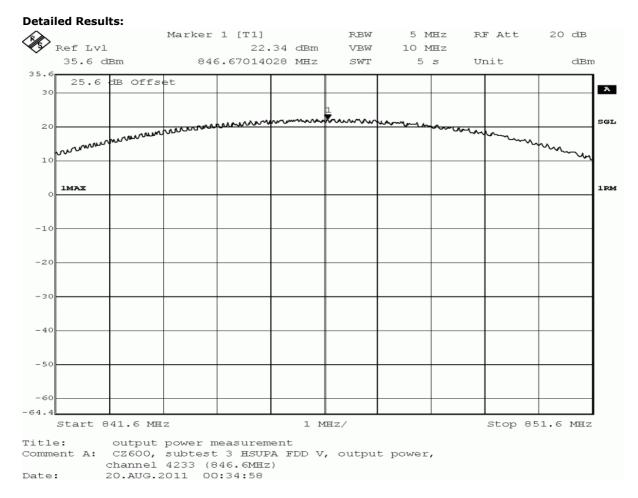
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.73	passed
average	maxhold	5000	20.60	passed
rms	maxhold	5000	21.51	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.86 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_3, Channel = 4233, Frequency = 846.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:33
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

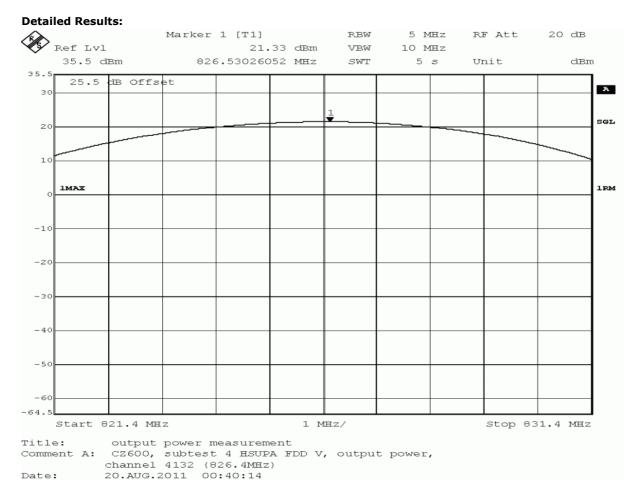
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	30.50	passed
average	maxhold	5000	21.51	passed
rms	maxhold	5000	22.34	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.09 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_4, Channel = 4132, Frequency = 826.4MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:38
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

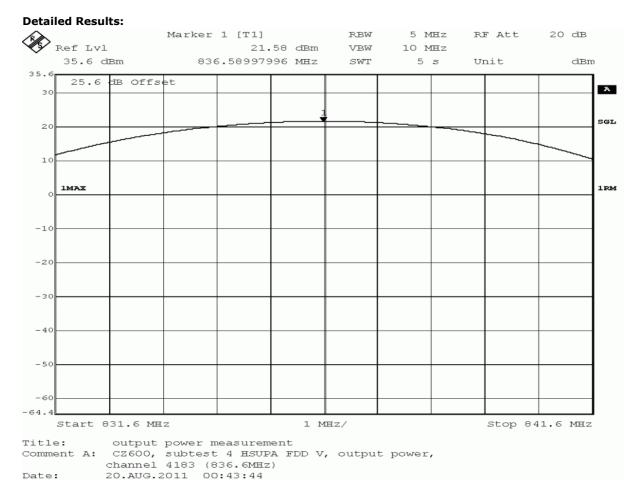
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.50	passed
average	maxhold	5000	20.55	passed
rms	maxhold	5000	21.33	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 11.09 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_4, Channel = 4183, Frequency = 836.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:41
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

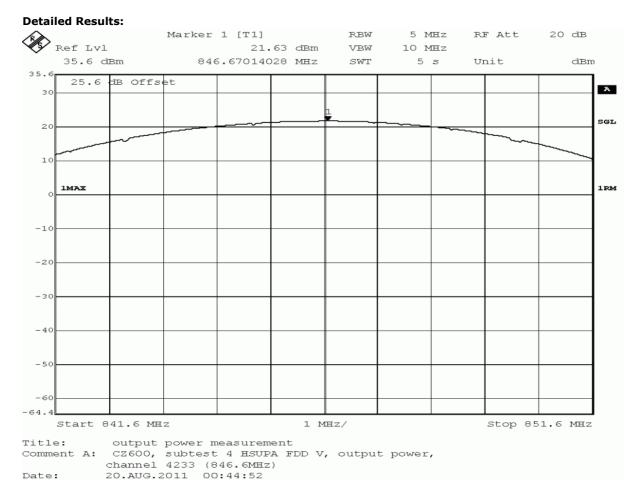
		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.73	passed
average	maxhold	5000	20.60	passed
rms	maxhold	5000	21.58	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.86 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_4, Channel = 4233, Frequency = 846.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:42
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22







acc. Title 47 CFR chapter I part 22 subpart H

		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.81	passed
average	maxhold	5000	20.73	passed
rms	maxhold	5000	21.63	passed

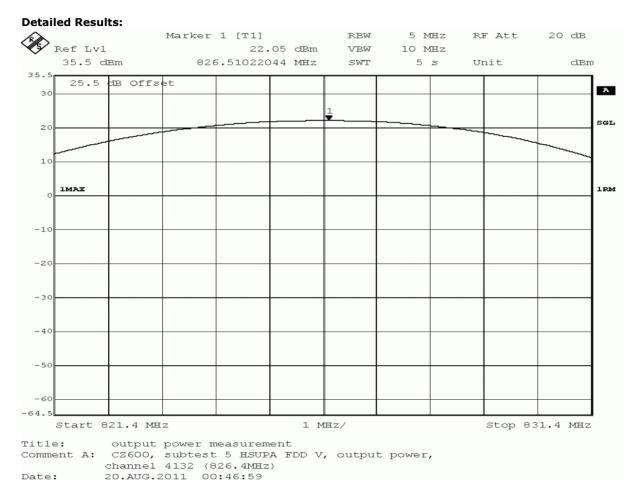
no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.78 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_5, Channel = 4132, Frequency = 826.4MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:45
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H





acc. Title 47 CFR chapter I part 22 subpart H

		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	29.63	passed
average	maxhold	5000	21.70	passed
rms	maxhold	5000	22.05	passed

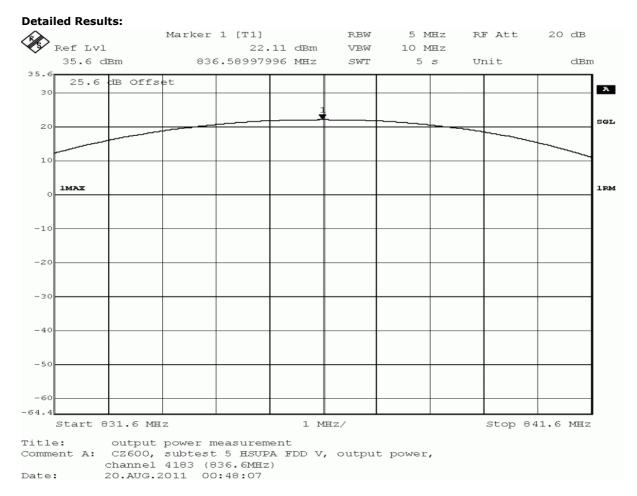
no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 10.96 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_5, Channel = 4183, Frequency = 836.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:46
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H





acc. Title 47 CFR chapter I part 22 subpart H

		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	28.94	passed
average	maxhold	5000	21.72	passed
rms	maxhold	5000	22.11	passed

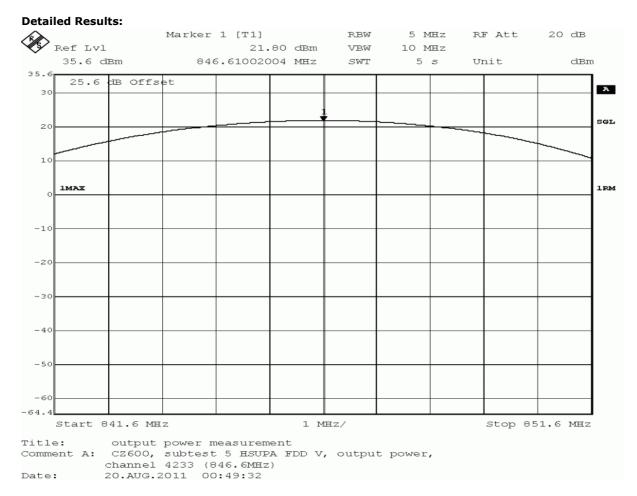
no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 11.65 dBi

Test: 22.1; Frequency Band = FDD5, Mode = HSUPA_subtest_5, Channel = 4233, Frequency = 846.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/20 0:47
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H





acc. Title 47 CFR chapter I part 22 subpart H

		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	28.70	passed
average	maxhold	5000	21.05	passed
rms	maxhold	5000	21.80	passed
	maxmola		21.00	puodea

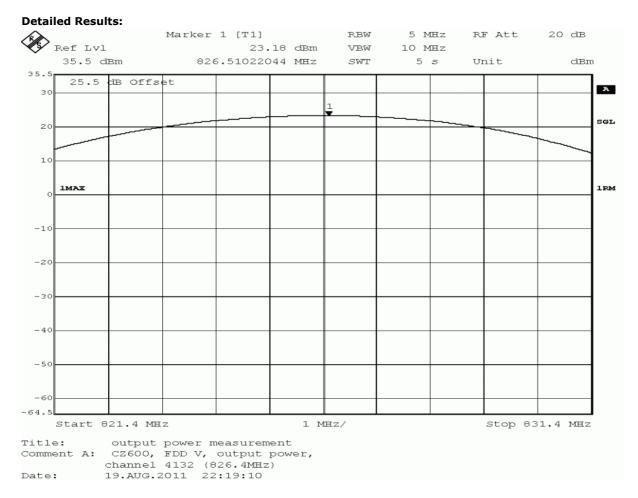
no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 11.89 dBi

Test: 22.1; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4132, Frequency = 826.4MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 22:17
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H





acc. Title 47 CFR chapter I part 22 subpart H

	resolution	conducted	
trace	bandwidth	peak	verdict
	/kHz	value /dBm	
maxhold	5000	28.84	passed
maxhold	5000	23.07	passed
maxhold	5000	23.18	passed
	maxhold maxhold	trace bandwidth /kHz maxhold 5000 maxhold 5000 maxhold 5000	tracebandwidthpeak/kHzvalue /dBmmaxhold500028.84maxhold500023.07maxhold500023.18

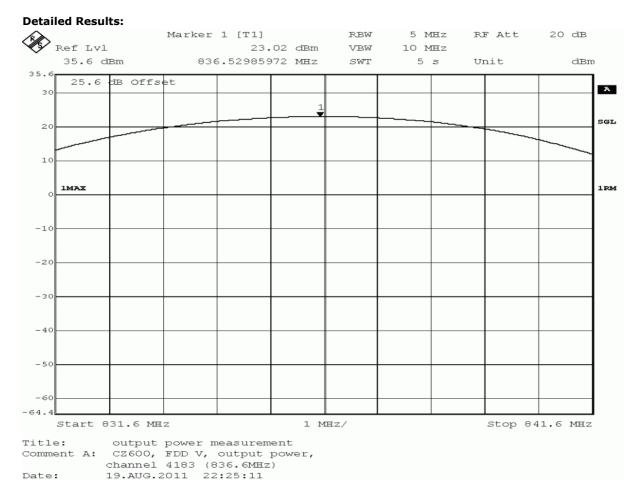
no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 11.75 dBi

Test: 22.1; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4183, Frequency = 836.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 22:23
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H





acc. Title 47 CFR chapter I part 22 subpart H

		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	28.42	passed
average	maxhold	5000	22.69	passed
rms	maxhold	5000	23.02	passed

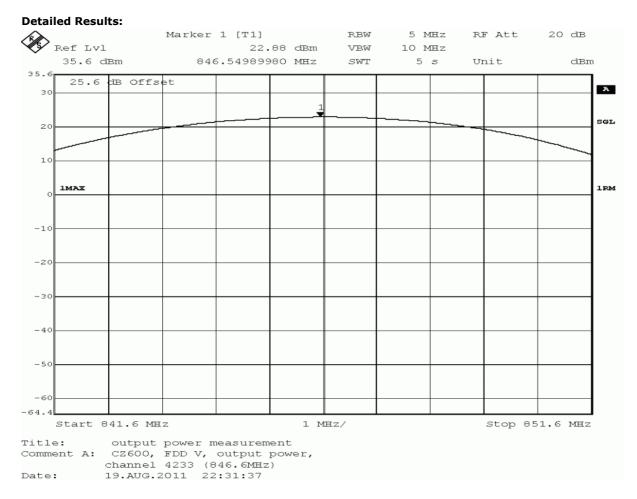
no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 12.17 dBi

Test: 22.1; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4233, Frequency = 846.6MHz, Method = conducted

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 22:29
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H





acc. Title 47 CFR chapter I part 22 subpart H

		resolution	conducted	
detector	trace	bandwidth	peak	verdict
		/kHz	value /dBm	
peak	maxhold	5000	28.57	passed
average	maxhold	5000	22.67	passed
rms	maxhold	5000	22.88	passed

no external antenna gain is specified, the verdict is valid for external antenna gains equal or less than 12.02 dBi



acc. Title 47 CFR chapter I part 22 subpart H

3.5.2 22.2 Frequency stability §2.1055

Test: 22.2; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz

Result:	Passed
Setup No.:	B01_RF1
Date of Test:	2011/08/19 8:58
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H

$\circ C$ min Average Max. (Hz) Image Max. (Hz) Image Max. (Hz) -30 0 33 39 Image Im		FCC part 22 frequency stability									
Image: Second				EDGE	850 TCH 1	90					
Image: Second											
Image: Second											
Temp. Duration Freq. error Freq. error Max. (Hz) Max. (Hz) <t< td=""><td></td><td></td><td>Normal V</td><td>oltage / V</td><td></td><td></td><td></td><td></td></t<>			Normal V	oltage / V							
$\circ C$ min Average Max. (Hz) Image Max. (Hz) Image Max. (Hz) -30 0 33 39 Image Im			4	.2							
$\circ C$ min Average Max. (Hz) Image Max. (Hz) Image Max. (Hz) -30 0 33 39 Image Im	Tomp	Duration	Frog orror	Frag arrar							
30 0 33 39 -30 5 35 44	-										
-30 5 35 44 Image: constraint of the state of th			(11.)								
·30 10 38 45											
-20 0 31 37											
$\begin{array}{c c c c c c c c c c c c c c c c c c c $											
$\begin{array}{c c c c c c c c c c c c c c c c c c c $											
$\begin{array}{c c c c c c c c c c c c c c c c c c c $											
$\begin{array}{c c c c c c c c c c c c c c c c c c c $											
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			-20	-35							
0 5 21 28 Image: constraint of the symbol is and the symbol is andifferent symbol is and the symbol is andifferent sym	-10	10	26	33							
0 10 15 22 Image: mark state in the state i	0	0	24	29							
10 0 -14 -22 Image: marked ma	0	5	21	28							
10 5 -39 -45 Image: constraint of the sector of th	0	10	15	22							
10 10 -31 -36 Image: constraint of the second seco	10	0	-14	-22							
30 0 -46 -56 Image: constraint of the stress of th	10	5	-39	-45							
30 5 -42 -46 Image: constraint of the second secon	10	10	-31	-36							
30 10 -29 -33	30	0	-46	-56							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	30	5	-42	-46							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	30	10	-29	-33							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	40	0	-42	-52							
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	40	5	-22	-27							
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	40	10	-36	-41							
5010-45-52Image: constraint of the second secon		0		-22							
RemarknoneImage: Constraint of the second se											
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	50	10	-45	-52							
Number Name 85%=3.3 100%=4.2 115%=x.x Temp. Duration Freq. error Freq. error Freq. error Freq. error Freq. error Average Max. (Hz) Freq. error Max. (Hz) Freq. error Average Max. (Hz) Max	Remark	none									
Number Network85%=3.3100%=4.2115%=x.xTemp.DurationFreq. errorFreq. errorFreq. errorFreq. errorFreq. errorFreq. error°CminAverageMax. (Hz)AverageMax. (Hz)Max. (Hz)Max. (Hz)200-37-44-31-40205-38-43-24-28											
Number Network85%=3.3100%=4.2115%=x.xTemp.DurationFreq. errorFreq. errorFreq. errorFreq. errorFreq. errorFreq. error°CminAverageMax. (Hz)AverageMax. (Hz)Max. (Hz)Max. (Hz)200-37-44-31-40205-38-43-24-28			Minsingstown		Newsel V		Marian				
Temp.Duration °CFreq. error MinFreq. error AverageFreq. error AverageFreq. error AverageFreq. error Max. (Hz)Freq. error AverageFreq. error Max. (Hz)Freq. error Max. (Hz)200-37-44-31-40205-38-43-24-28											
°C min Average Max. (Hz) Average Max. (Hz) Average Max. (Hz) 20 0 -37 -44 -31 -40 - - 20 5 -38 -43 -24 -28 - -	Tomn	Duration									
20 0 -37 -44 -31 -40 - - 20 5 -38 -43 -24 -28 - -											
20 5 -38 -43 -24 -28 -			(11)		(11.)		(11)				
	20	10	-38 -31	-43 -36	-24 -11	-28 -16	-	-			
Remark The EUT was not able to reach (115% of normal voltage)	Remark	The EUT w	as not able to	reach (115%	of normal vol	tage)					



acc. Title 47 CFR chapter I part 22 subpart H

Test: 22.2; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz

Result:	Passed
---------	--------

Setup No.: B01_RF1

Date of Test:

Body:

FCC part 2 and 22

FCC47CFRChIPART22PUBLIC MOBILE SERVICES

2011/08/19 8:58

Detailed Results:

Test Specification:

			GSM	850 TCH 19	90				
		Normal V	oltage / V						
		4	.2						
Temp.	Duration	Freq. error	Freq. error						
°C	min	Average	Max. (Hz)						
-30	0	5	9						
-30	5	-3	-6						
-30	10	18	11						
-20	0	16	23						
-20	5	-4	-11						
-20	10	14	19						
-10	0	20	25						
-10	5	12	16						
-10	10	25	28						
0	0	18	28						
0	5	12	19						
0	10	10	14						
10	0	-12	-19						
10	5	-5	-10						
10	10	-2	-6						
30	0	-24	-33						
30	5	-26	-37						
30	10	-12	-17						
40	0	-16	-24						
40	5	-8	-11						
40	10	-8	-13						
50	0	-24	-45						
50	5	-11	-17						
50	10	-18	-30						
emark	none								
				Minimum Voltage / V			oltage / V		Voltage / V
				85%=3.3 100%=4				ó=x.x	
Гemp.	Duration	Freq. error	Freq. error	Freq. error	Freq. error	Freq. error	Freq. error		
°C	min	Average	Max. (Hz)	Average	Max.(Hz)	Average	Max. (Hz)		
20	0	-18	-25	-31	-40	-	-		
20	5	-10	-16	-24	-28	-	-		
20	10	2	6	-11	-16	-	-		



acc. Title 47 CFR chapter I part 22 subpart H

Test: 22.2; Frequency Band = FDD5, Mode = HSDPA, Channel = 4183, Frequency = 836.6MHz

sed
5

Setup No.: B01_RF1

Date of Test:

Body:

2011/08/19 8:55 FCC47CFRChIPART22PUBLIC MOBILE SERVICES

Test Specification:

FCC part 2 and 22

Detailed Results:

		UTF		ISDPA UAI	RFCN 4183				
		•							
		Normal V	oltage / V						
			.2						
Temp.	Duration	Freq. error	Freq. error						
°C	min	Average	Max. (Hz)						
-30	0	-7	-11						
-30	5	-5	-10						
-30	10	-2	-5						
-20	0	-2	-9						
-20	5	-3	-9						
-20	10	-2	-8						
-10	0	-3	-11						
-10	5	-4	-9						
-10	10	-3	-7						
0	0	6	15						
0	5	4	11						
0	10	4	9						
10	0	-4	-11						
10	5	0	10						
10	10	2	8						
30	0	-2	-8						
30	5	1	7						
30	10	2	8						
40	0	-4	-9						
40	5	-5	-10						
40	10	-5	-9						
50	0	-4	10						
50	5	-4	14						
50	10	-3	-18						
Remark	none								
				Minimum Voltage / V			oltage / V		Voltage / V
		85%=3.3			6=4.2		‰=x.x		
Temp.	Duration	Freq. error Average	Freq. error Max. (Hz)	Freq. error Average	Freq. error Max. (Hz)	Freq. error Average	Freq. error Max. (Hz)		
°C	min					Average	1.10×. (112)		
20	0	-4	-13	-5	-12	-	-		
20	5	-5	-14	1	7	-	-		
20	10 The EUT w	-2	-13	2	9	-	-		



acc. Title 47 CFR chapter I part 22 subpart H

Test: 22.2; Frequency Band = FDD5, Mode = HSUPA, Channel = 4183, Frequency = 836.6MHz

Result:	Passed
---------	--------

Setup No.: B01_RF1

Date of Test:

Body:

2011/08/19 8:59 FCC47CFRChIPART22PUBLIC MOBILE SERVICES

Test Specification:

FCC part 2 and 22

Detailed Results:

		UTF		ISUPA UAI	RFCN 4183		
		Normal V	oltage / V				
		4	.2				
Temp.	Duration	Freq. error	Freq. error				
°C	min	Average	Max. (Hz)				
-30	0	-4	-8				
-30	5	-2	-4				
-30	10	3	17				
-20	0	-4	-10				
-20	5	-2	-4				
-20	10	3	16				
-10	0	-3	-11				
-10	5	2	19				
-10	10	5	22				
0	0	-4	-12				
0	5	-4	-9				
0	10	0	-7				
10	0	-3	-9				
10	5	-5	-7				
10	10	-2	-5				
30	0	-1	-10				
30	5	-2	-7				
30	10	3	6				
40	0	-6	-12				
40	5	-5	-9				
40	10	-4	-6				
50	0	2	9				
50	5	3	10				
50	10	-1	-4				
Remark	none						
			/oltage / V		oltage / V		Voltage / V
		85%=3.3		100%=4.2			ó=x.x
Temp.	Duration	Freq. error					
°C	min	Average	Max. (Hz)	Average	Max. (Hz)	Average	Max.(Hz)
20	0	-4	-9	-3	-8	-	-
20	5	-5	-7	-2	-5	-	-
20	10	-4	-9	-1	-3	-	-



acc. Title 47 CFR chapter I part 22 subpart H

Test: 22.2; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4183, Frequency = 836.6MHz

Result:	Passed
---------	--------

Setup No.: B01_RF1

Date of Test: 2011/08/19 8:59

Body:

FCC47CFRChIPART22PUBLIC MOBILE SERVICES FCC part 2 and 22

Test Specification:

		F	CC part 22	frequency	stability		
			UTRA FDD	V UARFC	N 4183		
		Normal V	oltage / V				
		4	.2				
Temp.	Duration	Freq. error	Freq. error				
°C	min	Average	Max.(Hz)				
-30	0	-6	-20				
-30	5	-1	-18				
-30	10	-5	-18				
-20	0	2	19				
-20	5	-5	-17				
-20	10	-4	-16				
-10	0	-3	-19				
-10	5	-3	-14				
-10	10	-5	-18				
0	0	5	21				
0	5	3	14				
0	10	4	18				
10	0	-1	-22				
10	5	-6	-11				
10	10	-6	-15				
30	0	6	16				
30	5	6	12				
30	10	-1	-14				
40	0	-4	-20				
40	5	-3	-11				
40	10	-4	-15				
50	0	-4	-11				
50	5	-4	-12				
50	10	-3	-16				
emark	none						
		Minimum V	/oltage / V	Normal V	oltage / V	Maximum	Voltage / V
		85%=3.3		100%	6=4.2	115%	‰=x.x
Temp.	Duration	Freq. error	Freq. error	Freq. error	Freq. error	Freq. error	Freq. error
°C	min	Average	Max. (Hz)	Average	Max.(Hz)	Average	Max.(Hz)
20	0	-1	9	0	12	-	-
20	5	-8	-21	5	15	-	-
20	10	-8	-18	-2	-11	-	-



acc. Title 47 CFR chapter I part 22 subpart H

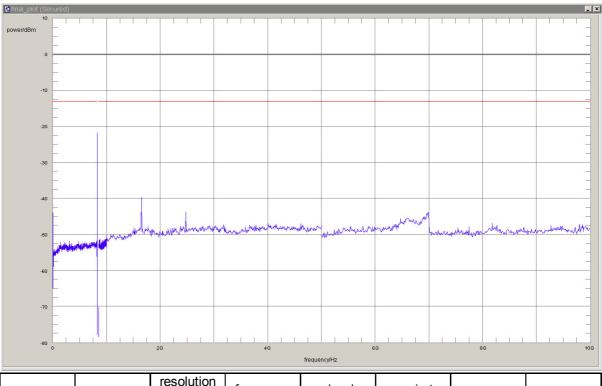
3.5.3 22.3 Spurious emissions at antenna terminals §2.1051, §22.917

Test: 22.3; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 20:22
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
maxhold	3	823.9379	-31.8	18.8	-13.0	passed
maxhold	3	823.9559	-26.3	13.3	-13.0	passed
maxhold	3	823.9800	-21.8	8.8	-13.0	passed
maxhold	3	823.9900	-23.0	10.0	-13.0	passed
	maxhold maxhold maxhold	trace bandwidth /kHz maxhold 3 maxhold 3 maxhold 3	trace bandwidth /kHz frequency /MHz maxhold 3 823.9379 maxhold 3 823.9559 maxhold 3 823.9800	tracebandwidth /kHzfrequency /MHzpeak value /dBmmaxhold3823.9379-31.8maxhold3823.9559-26.3maxhold3823.9800-21.8	tracebandwidth /kHzfrequency /MHzpeak value /dBmmargin to limit /dBmaxhold3823.9379-31.818.8maxhold3823.9559-26.313.3maxhold3823.9800-21.88.8	tracebandwidth /kHzfrequency /MHzpeak value /dBmmargin to limit /dBlimit /dBmmaxhold3823.9379-31.818.8-13.0maxhold3823.9559-26.313.3-13.0maxhold3823.9800-21.88.8-13.0

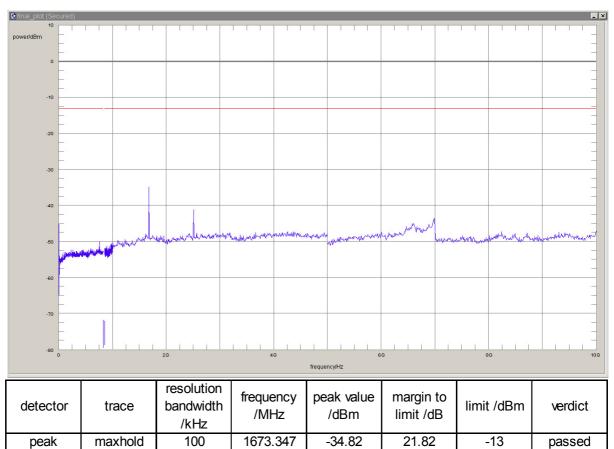
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = 850, Mode = EDGE, Channel = 190, Frequency = 836.6MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 20:05
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

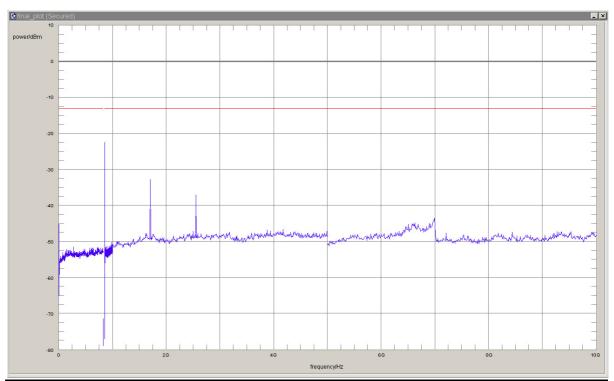
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 20:36
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
peak	maxhold	3	849.0020	-23.6	10.6	-13.0	passed
peak	maxhold	3	849.0080	-23.8	10.8	-13.0	passed
peak	maxhold	3	849.0240	-22.5	9.5	-13.0	passed
peak	maxhold	3	849.0321	-22.9	9.9	-13.0	passed
peak	maxhold	3	849.0501	-25.8	12.8	-13.0	passed
peak	maxhold	3	849.0561	-32.9	19.9	-13.0	passed
peak	maxhold	3	849.0701	-30.3	17.3	-13.0	passed
peak	maxhold	100	1697.39	-32.8	19.8	-13.0	passed

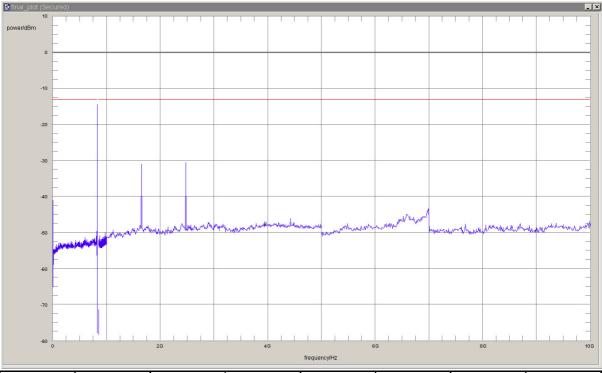
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz,

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 22:14
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
peak	maxhold	3	823.9178	-24.4	11.4	-13.0	passed
peak	maxhold	3	823.9419	-21.8	8.8	-13.0	passed
peak	maxhold	3	823.9719	-15.0	2.0	-13.0	passed
peak	maxhold	3	823.9820	-14.8	1.8	-13.0	passed
peak	maxhold	3	823.9980	-14.4	1.4	-13.0	passed
peak	maxhold	100	1649.30	-31.0	18.0	-13.0	passed
peak	maxhold	100	2474.95	-30.6	17.6	-13.0	passed

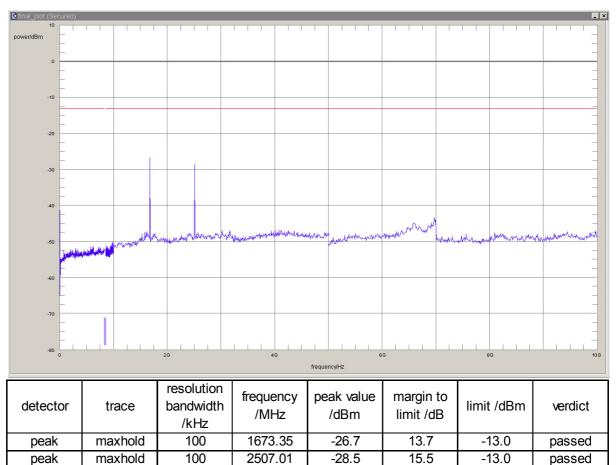
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = 850, Mode = GSM, Channel = 190, Frequency = 836.6MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 20:51
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

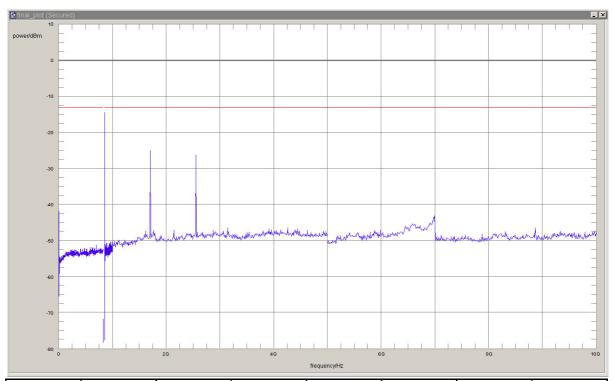
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = 850, Mode = GSM, Channel = 251, Frequency = 848.8MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 21:58
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	margin to limit /dB	limit /dBm	verdict
peak	maxhold	3	849.0020	-17.3	4.3	-13.0	passed
peak	maxhold	3	849.0281	-14.5	1.5	-13.0	passed
peak	maxhold	3	849.0341	-15.7	2.7	-13.0	passed
peak	maxhold	3	849.0541	-18.7	5.7	-13.0	passed
peak	maxhold	3	849.0641	-22.6	9.6	-13.0	passed
peak	maxhold	3	849.0922	-30.9	17.9	-13.0	passed
peak	maxhold	100	1697.39	-25.1	12.1	-13.0	passed
peak	maxhold	100	2547.09	-26.2	13.2	-13.0	passed

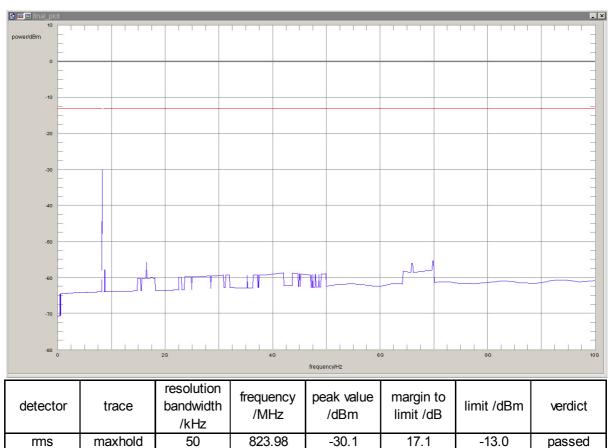
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = FDD5, Mode = HSDPA, Channel = 4132, Frequency = 826.4MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 22:52
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

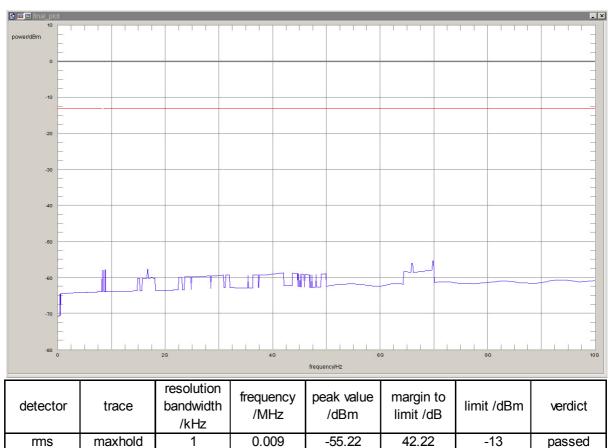
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = FDD5, Mode = HSDPA, Channel = 4183, Frequency = 836.6MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 23:11
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

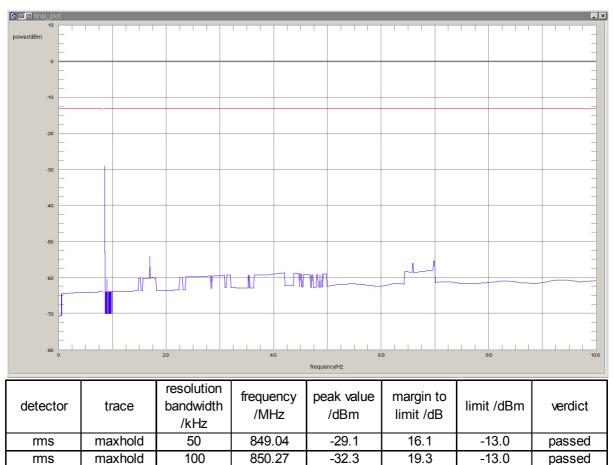
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = FDD5, Mode = HSDPA, Channel = 4233, Frequency = 846.6MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 23:18
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

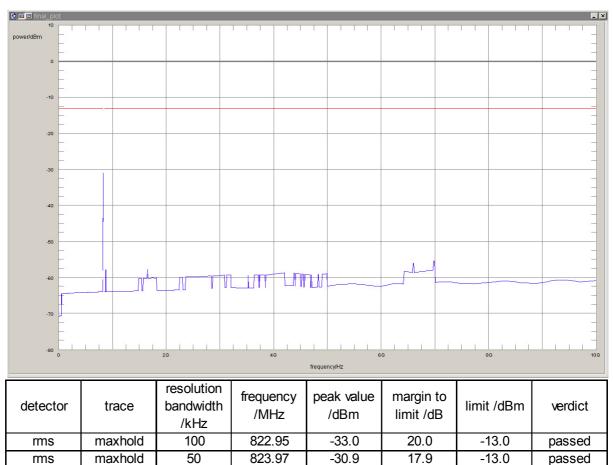
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = FDD5, Mode = HSUPA, Channel = 4132, Frequency = 826.4MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 23:31
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

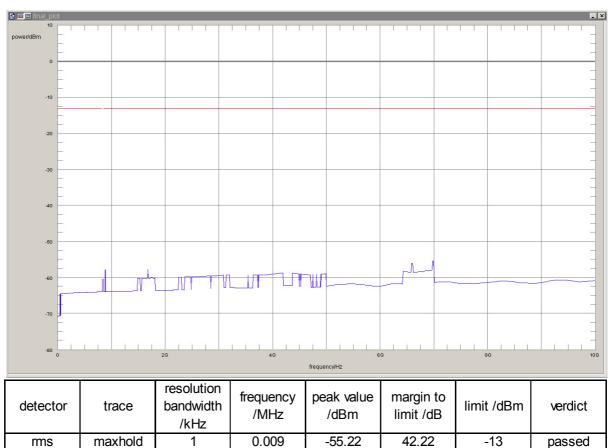
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = FDD5, Mode = HSUPA, Channel = 4183, Frequency = 836.6MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 23:38
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

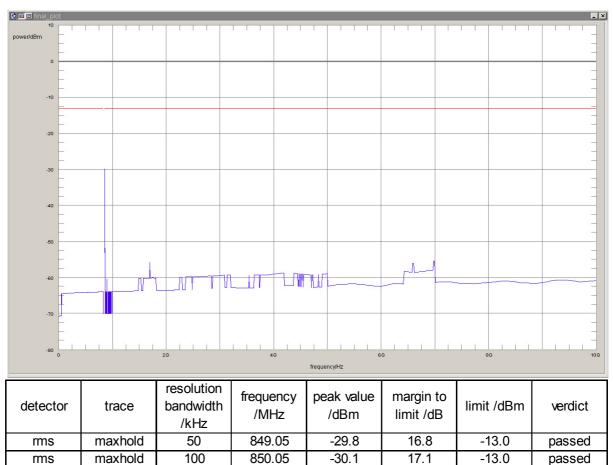
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = FDD5, Mode = HSUPA, Channel = 4233, Frequency = 846.6MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 23:51
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

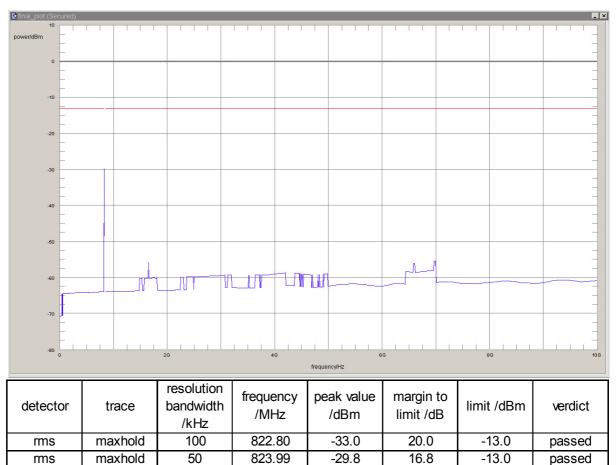
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4132, Frequency = 826.4MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 22:19
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

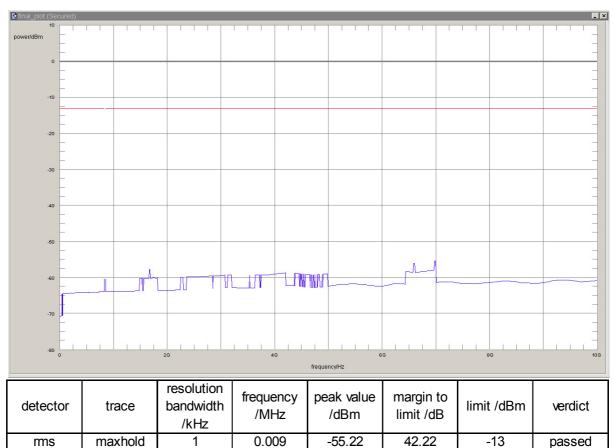
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4183, Frequency = 836.6MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 22:25
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

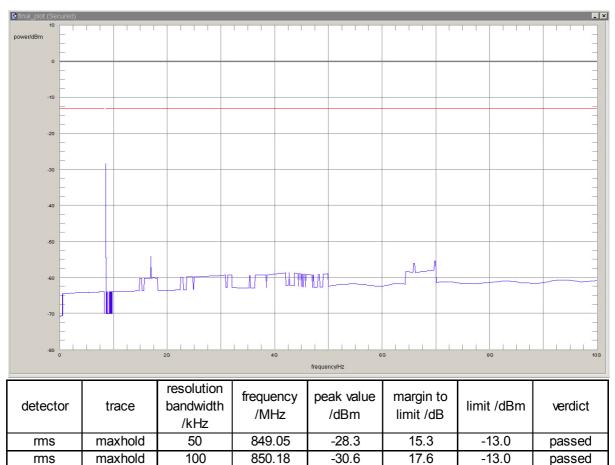
no further values have been found with a margin of less than 20 dB

Test: 22.3; Frequency Band = FDD5, Mode = W-CDMA, Channel = 4233, Frequency = 846.6MHz

Result:	Passed
Setup No.:	B01_direct
Date of Test:	2011/08/19 22:32
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed Results:

no further values have been found with a margin of less than 20 dB



acc. Title 47 CFR chapter I part 22 subpart H

3.5.4 22.4 Field strength of spurious radiation §2.1053, §22.917

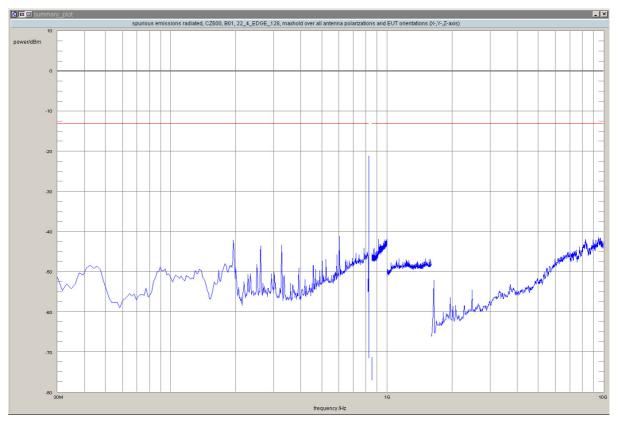
Test: 22.4; Frequency Band = 850, Mode = EDGE, Channel = 128, Frequency = 824.2MHz

Result:	Passed
Setup No.:	B01_rad
Date of Test:	2011/08/17 7:13
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22

Detailed Results:

detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	limit /dBm	margin to limit /dB	azimuth /°	antenna polarization	EUT orientation	verdict
peak	maxhold	3	823.9279	-31.32	-13.00	18.32	-180.0	vertical	horizontal	passed
peak	maxhold	3	823.9459	-26.59	-13.00	13.59	90.0	vertical	vertical	passed
peak	maxhold	3	823.9519	-24.47	-13.00	11.47	-180.0	vertical	horizontal	passed
peak	maxhold	3	823.9599	-31.89	-13.00	18.89	-90.0	vertical	vertical	passed
peak	maxhold	3	823.9739	-21.12	-13.00	8.12	-180.0	vertical	horizontal	passed
peak	maxhold	3	823.9800	-27.46	-13.00	14.46	0.0	vertical	horizontal	passed
peak	maxhold	3	823.9880	-25.23	-13.00	12.23	-180.0	vertical	horizontal	passed
peak	maxhold	3	823.9940	-23.56	-13.00	10.56	-180.0	vertical	horizontal	passed
peak	maxhold	3	824.0000	-27.98	-13.00	14.98	90.0	vertical	vertical	passed

no further values have been found with a margin of less than 20 dB

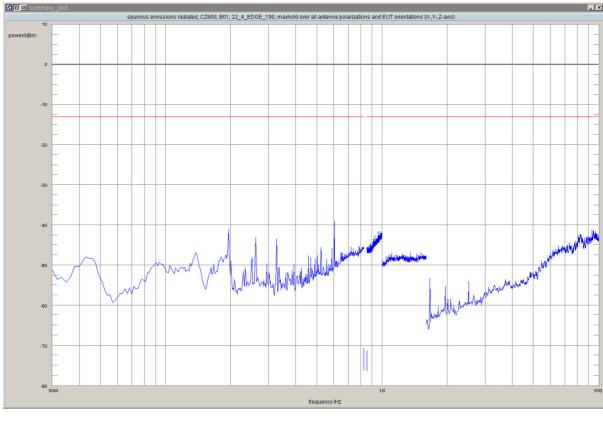




acc. Title 47 CFR chapter I part 22 subpart H

•	Test: 22.4; Frequency Band = 85	i0, Mode = EDGE, Channel = 190, Frequency = 836.6MHz
	Result:	Passed
	Setup No.:	B01_rad
	Date of Test:	2011/08/17 6:12
	Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
	Test Specification:	FCC part 2 and 22

Detailed Results:



detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	limit /dBm	margin to limit /dB	azimuth /°	antenna polarization	EUT orientation	verdict
peak	maxhold	1000	602.1	-38.98	-13.00	25.98	-90.0	vertical	vertical	passed

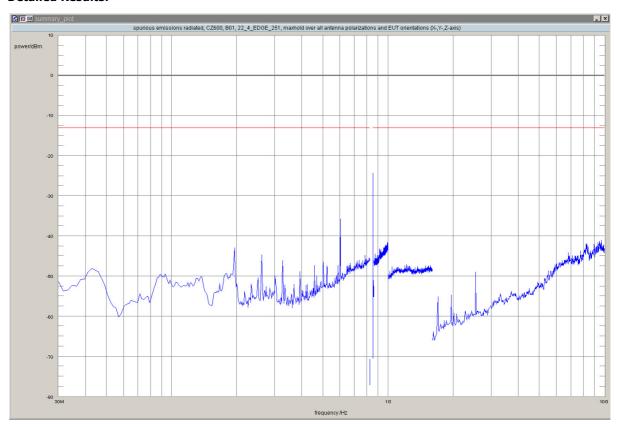
no further values have been found with a margin of less than 20 dB

Test: 22.4; Frequency Band = 850, Mode = EDGE, Channel = 251, Frequency = 848.8MHz

Result:	Passed
Setup No.:	B01_rad
Date of Test:	2011/08/17 8:13
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22



acc. Title 47 CFR chapter I part 22 subpart H



Detailed	Results:

detector	trace	resolution bandwidth /kHz	frequency /MHz	peak value /dBm	limit /dBm	margin to limit /dB	azimuth /°	antenna polarization	EUT orientation	verdict
peak	maxhold	3	849.0020	-25.41	-13.00	12.41	0.0	vertical	horizontal	passed
peak	maxhold	3	849.0060	-26.91	-13.00	13.91	90.0	horizontal	vertical	passed
peak	maxhold	3	849.0120	-24.83	-13.00	11.83	-180.0	vertical	horizontal	passed
peak	maxhold	3	849.0160	-26.01	-13.00	13.01	90.0	vertical	vertical	passed
peak	maxhold	3	849.0261	-26.42	-13.00	13.42	-90.0	horizontal	vertical	passed
peak	maxhold	3	849.0301	-29.00	-13.00	16.00	-90.0	vertical	vertical	passed
peak	maxhold	3	849.0341	-24.30	-13.00	11.30	-180.0	vertical	horizontal	passed
peak	maxhold	3	849.0381	-26.05	-13.00	13.05	90.0	vertical	vertical	passed
peak	maxhold	3	849.0481	-29.19	-13.00	16.19	90.0	vertical	vertical	passed
peak	maxhold	3	849.0541	-30.79	-13.00	17.79	-180.0	vertical	horizontal	passed
peak	maxhold	3	849.0601	-31.95	-13.00	18.95	90.0	vertical	vertical	passed
peak	maxhold	3	849.0661	-32.74	-13.00	19.74	0.0	vertical	horizontal	passed

no further values have been found with a margin of less than 20 dB

Test: 22.4; Frequency Band = 850, Mode = GSM, Channel = 128, Frequency = 824.2MHz

Result:	Passed
Setup No.:	B01_rad
Date of Test:	2011/08/17 1:14
Body:	FCC47CFRChIPART22PUBLIC MOBILE SERVICES
Test Specification:	FCC part 2 and 22