# FCC TEST REPORT

## For

WCDMA Module Model Number:H380

# Report Number : WT148001757

Test Laboratory	:	Shenzhen Academy of Metrology and Quality Inspection National Digital Electronic Product Testing Center						
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# **Test report declaration**

Applicant	: : Fibocom Wireless Inc.
Address	. : 5/F, Block A, Shekou Technology Building II, 1057 Nanhai Blvd, Nanshan, Shenzhen, China
Manufacturer	: : Fibocom Wireless Inc.
Address	. : 5/F, Block A, Shekou Technology Building II, 1057 Nanhai Blvd, Nanshan, Shenzhen, China
EUT Description	: : WCDMA Module
Model No	: : H380
Trade mark	: :/
Serial Number	: :/
FCC ID	: : ZMOH38F

Test Standards:

#### FCC PART 22H AND 24E (2012)

The EUT described above is tested by Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory to determine the maximum emissions from the EUT. Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory is assumed full responsibility for the accuracy of the test results. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.4 (2003) and the energy emitted by the sample EUT tested as described in this report is in compliance with FCC Rules Part 22H AND 24E.

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

Project Engineer:	司律	Date:	Jun.04.2014	
Checked by:	(Liu Zheng) 残みず			
		Date:	Jun.04.2014	
Approved by:	(Yang Dongping) オギャイン			
		Date:	Jun.04.2014	
	(Lin Bin)			

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## 1. TEST RESULTS SUMMARY

#### Table 1 Test Results Summary

FCC	FCC Limits	Description	Result
Measuremen	Part(s)		
t			
Specification			
2.1046	22.913	Effective Radiated	PASS
	24.232	Power of	
		Transmitter	
2.1046	22.913	Conducted Power of	PASS
	24.232(b)	Transmitter	
2.1046	24.232(d)	Peak to Average	PASS
		Radio	
2.1047	/	Modulation	PASS
		Characteristics	
2.1049	22.917(b)	Occupied	PASS
	24.238(b)	Bandwidth	
2.1051	22.917	Spurious Emission	PASS
	24.238	at Antenna	
		Terminal	
2.1053	22.917	Radiated Spurious	PASS
	24.238	Emissions	
2.1055	22.355	Frequency Stability	PASS
	24.235		

CFR 47 (FCC) part 24 subpart E

Remark: "N/A" means "Not applicable."

The tests documented in this report were performed in accordance with TIA-603-C, FCC CFR 47 Part 2, FCC CFR 47 Part 22 Part 24.

## 2. GENERAL INFORMATION

#### 2.1. Report information

- 2.1.1.This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that SMQ approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that SMQ in any way guarantees the later performance of the product/equipment.
- 2.1.2. The sample/s mentioned in this report is/are supplied by Applicant, SMQ therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.
- 2.1.3.Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through SMQ, unless the applicant has authorized SMQ in writing to do so.

#### 2.2. Laboratory Accreditation and Relationship to Customer

The testing report were performed by the Shenzhen Academy of Metrology and quality Inspection EMC Laboratory (Guangdong EMC compliance testing center), in their facilities located at Bldg. of Metrology & Quality Inspection, Longzhu Road, Nanshan District, Shenzhen, Guangdong, China. At the time of testing, Laboratory is accredited by the following organizations:

China National Accreditation Service for Conformity Assessment (CNAS) accredits the Laboratory for conformance to FCC standards, EMC international standards and EN standards. The Registration Number is CNAS L0579.

The Laboratory is listed in the United States of American Federal Communications Commission (FCC), and the registration number are 446246 806614 994606(semi anechoic chamber).

The Laboratory is listed in Voluntary Control Council for Interference by Information Technology Equipment (VCCI), and the registration number are R-1974(open area test site), R-1966(semi anechoic chamber),C-2117(mains ports conducted interference measurement) and T-180(telecommunication ports conducted interference measurement).

The Laboratory is registered to perform emission tests with Industry Canada (IC), and the registration number is IC4174.

TUV Rhineland accredits the Laboratory for conformance to IEC and EN standards, the registration number is E2024086Z02.

## 2.3. Measurement Uncertainty

Conducted Emission 9kHz~30MHz 3.5dB

Radiated Emission 30MHz~1000MHz 4.5dB 1GHz~26.5GHz 4.6dB

## 3. PRODUCT DESCRIPTION

#### **3.1.EUT Description**

	Table 2 Specification of the Equipment under Test
Product	H380
Туре:	
Hardware Version:	V1.0
Software Version :	H380_V5H
FCC-ID:	ZMOH38F
Frequency:	GSM850/PCS1900MHz/WCDMA850MHz/WCDMA1900MHz
Type(s) of Modulation:	
Antenna Type:	External Omni directional antenna
Antenna Gain	2.5dBi
Operating voltage:	3.135V-4.4V

Remark:

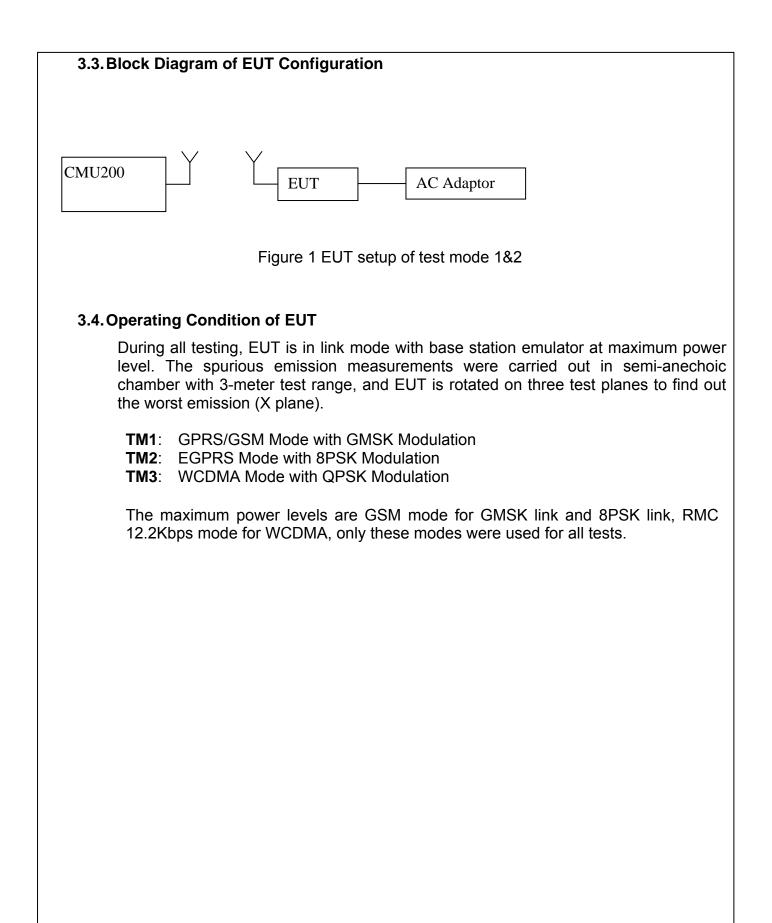
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### Table 3 Identification of the Equipment Under Test (EUT)

EUT	Serial Number/IMEI	HW Version	SW Version	Notes
1	865204020001592	V1.0	H380_V5H	Conducted testing sample.
2	865204020001592	V1.0	H380_V5H	Radiated testing sample.

#### 3.2. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: **ZMOH38F** filing to comply with FCC PART 22H AND 24E.



		<u> </u>	
The conducted pow			
		S850: GMSK Mode	_
	HANNEL	Burst AV	
FRE		power (dBm)	
	(MHz)		
	824.2	32.61	_
	836.6	32.63	
	848.8	32.47	
		350: 8PSK Mode	
_	HANNEL	Burst AV	
FRE	EQUENCY	power (dBm)	
	(MHz)		
	824.2	27.25	
	836.6	27.14	
	848.8	27.26	
		CDMA850	
	HANNEL	Burst AV	
FRE	EQUENCY	power (dBm)	
	(MHz)		
	826.4	22.49	
	836.6	22.72	
	846.6	22.85	
	GSM/GPRS	S1900: GMSK Mode	
	HANNEL	Burst AV	
FRE	EQUENCY	power (dBm)	
	(MHz)		
	1850.2	29.61	
	1880.0	29.69	
	1909.8	29.85	
	EGPRS1	900: 8PSK Mode	
CI	HANNEL	Burst AV	
FRE	EQUENCY	power (dBm)	
	(MHz)		
	1850.2	26.38	
	1880.0	26.18	
	1909.8	26.07	
		CDM1900	
	HANNEL	Burst AV	
FRE	EQUENCY	power (dBm)	
	(MHz)		
	1852.4	22.45	
	1880.0	22.62	
	1907.6	22.53	

#### 3.5. Support Equipment List

Table 4 Support Equipment List								
Name	Model No	S/N	Manufacturer					
AC Adaptar			SIHONGDA					
AC Adapter	CHD-SU0520		Electronic Co.,Ltd					
External Antenna connector	HYT-800-2100G L-5		Huayuan communication antenna factory					

#### 3.6. Test Conditions

Date of test: May 27,2014-Jun 04, 2014 Date of EUT Receive: May 27,2014 Temperature: -20-75  $^{\circ}$ C Relative Humidity: 45-56%

#### 3.7. Special Accessories

Not available for this EUT intended for grant.

#### **3.8. Equipment Modifications**

Not available for this EUT intended for grant.

## 4. TEST EQUIPMENT USED

Table 5 Test Equipment								
No.	Equipment	Manufacturer	Model No.	Last Cal.	Cal. Interval			
SB2603	EMI Test Receiver	Rohde & Schwarz	ESCS30	Jan.20, 2014	1 Year			
SB3321	AMN	Rohde & Schwarz	ESH2-Z5	Jan.20, 2014	1 Year			
SB2604	AMN	Rohde & Schwarz	ESH3-Z5	Jan.20, 2014	1 Year			
SB8501/09	EMI Test Receiver	Rohde & Schwarz	ESU40	May.16, 2014	1 Year			
SB8501/04	Bilog Antenna	Schwarzbeck	VULB9163	May 13, 2014	1 Year			
SB5472/02	Bilog Antenna	Schwarzbeck	VULB9163	Jan.20, 2014	1 Year			
SB3435	Horn Antenna	Rohde & Schwarz	HF906	Jan.20, 2014	1 Year			
SB3434	Horn Antenna	Rohde & Schwarz	HF906	Jan.20, 2014	1 Year			
SB3435/01	Amplifier(1-18GHz)	Rohde & Schwarz		Jan.20, 2014	1 Year			
SB3435/02	Amplifier(18-40GHz)	Rohde & Schwarz		May.16, 2014	1 Year			
SB5392/02	Horn Antenna	Amplifier Research	AT4560	May.16, 2014	1 Year			
SB3450/01	3m Semi-anechoic chamber	Albatross Projects	9X6X6	Oct.12, 2012	2 Years			
SB8501/02	Communication Test Unit	Rohde & Schwarz	CMU200	Jan.7, 2014	1 Year			
SB9721/02	Signal Analyzer	Agilent	N9020A	Feb.3, 2014	1 Year			
SB3611	DC Power Supply	KENWOOD	PDS36-10	May.16, 2014	1 Year			
SB6691	Climatic Chamber	NANYA	DW-0150	Apr 13, 2014	1 Year			

#### Table 5 Test Equipment

## 5. TEST RESULTS

#### 5.1.RF Power Output

5.1.1.Test Standard

FCC: CFR Part 2.1046, CFR Part 22.913, CFR Part 24.232

5.1.2.Test Limit

FCC 22.913 (a) Effective radiated power limits. The effective radiated power (ERP) of mobile transmitters must not exceed 7 Watts.

FCC 24.232 (b)(c) Power limits.

(b) Mobile/portable stations are limited to 2 Watts effective isotropic radiated power (EIRP). (c) Peak transmit power must be measured over any interval of continuous transmission using instrumentation calibrated in terms of an rms equivalent voltage. The measurement results shall be properly adjusted for any limitations, such as detector response times, limited resolution bandwidth capability when compared to the emission bandwidth, sensitivity, etc., so as to obtain a true peak measurement over the full bandwidth of the channel.

#### 5.1.3.Test Procedure

Radiated Output Power Measurement procedure

Ref: TIA-603C 2004 -2.2.17.2 Effective Radiated Power (ERP) or Effective Isotropic 1. Connect the equipment as shown in the above diagram with the EUT's antenna in a vertical orientation.

2. Adjust the settings of the Universal Radio Communication Tester (CMU) to set the EUT to its maximum power at the required channel.

3. Set the spectrum analyzer to the channel frequency. Set the analyzer to measure peak hold with the required settings.

4. Rotate the EUT 360 . Record the peak level in dBm (LVL).

5. Replace the EUT with a vertically polarized half wave dipole or known gain antenna. The center of the antenna should be at the same location as the center of the EUT's antenna.

6. Connect the antenna to a signal generator with known output power and record the path loss in dB (LOSS). LOSS = Generator Output Power (dBm) – Analyzer reading (dBm).

7. Determine the ERP using the following equation:

ERP (dBm) = LVL (dBm) + LOSS (dB)

8. Determine the EIRP using the following equation:

EIRP (dBm) = ERP (dBm) + 2.15 (dB)

9. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.

#### 5.1.4.Test Data

Test Mode	Freq. [MHz]	SG. Level [dBm]	Cable Loss [dB]	Antenna Gain [dBd]	Substitution Level (ERP) [dBm]	Limit [dBm]	Polarizati on	Result	
TM1	824.2	26.23	0.5	5.28	31.01	38.5	Vertical	Pass	
TM1	836.6	27.37	0.5	5.28	32.15	38.5	Vertical	Pass	
TM1	848.8	27.59	0.5	5.28	32.37	38.5	Vertical	Pass	
TM2	824.2	21.96	0.5	5.28	26.74	38.5	Vertical	Pass	
TM2	836.6	21.80	0.5	5.28	26.58	38.5	Vertical	Pass	
TM2	848.8	21.56	0.5	5.28	26.34	38.5	Vertical	Pass	
TM3	826.4	13.5	0.5	5.28	18.28	38.5	Vertical	Pass	
TM3	836.6	14.5	0.5	5.28	19.28	38.5	Vertical	Pass	
TM3	846.6	14.62	0.5	5.28	19.40	38.5	Vertical	Pass	

#### Table 6 Substitution Results

Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

#### Table 7 Substitution Results

Test Mode	Freq. [MHz]	SG. Level [dBm]	Cable Loss [dB]	Antenna Gain [dBi]	Substitution Level (EIRP) [dBm]	Limit [dBm]	Polarizatio n	Result
TM1	1850.2	17.26	0.97	8.92	25.21	33	Vertical	Pass
TM1	1880	17.78	0.97	8.92	25.73	33	Vertical	Pass
TM1	1909.8	18.09	0.97	8.92	26.04	33	Vertical	Pass
TM2	1850.2	15.38	0.97	8.92	23.33	33	Vertical	Pass
TM2	1880	15.53	0.97	8.92	23.48	33	Vertical	Pass
TM2	1909.8	15.44	0.97	8.92	23.39	33	Vertical	Pass
TM3	1852.4	12.21	0.97	8.92	20.16	33	Vertical	Pass
TM3	1880.0	12.55	0.97	8.92	20.50	33	Vertical	Pass
TM3	1907.6	12.58	0.97	8.92	20.53	33	Vertical	Pass

Note: both of Vertical and Horizontal polarization are evaluated, and only the worst case is recorded in this report

#### 5.2. Peak to Average Radio

#### 5.2.1.Test Standard

CFR 47 (FCC) part 24 subpart E

#### 5.2.2.Test Limit

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

#### 5.2.3.Test Procedure

A peak to average ratio measurement is performed at the conducted port of the EUT. For WCDMA signals, the spectrum analyzers Complementary Cumulative Distribution Function (CCDF) measurement profile is used to determine the largest deviation between the average and the peak power of the EUT in a given bandwidth. The CCDF curve shows how much time the peak waveform spends at or above a given average power level. The percent of time the signal spends at or above the level defines the probability for that particular power level. For GSM signals, an average and a peak trace are used on a spectrum analyzer to determine the largest deviation between the average and the peak power of the EUT in a bandwidth greater than the emission bandwidth. The traces are generated with the spectrum analyzer set to zero span mode.

Test Band	Test Mode	Test Channel	Measured[dB]	Limit [dB]	Verdict
GSM/GPRS1900	TM1	1850.2	0.24	13	PASS
		1880	0.26	13	PASS
		1909.8	0.28	13	PASS
EGPRS1900	TM2	1850.2	2.92	13	PASS
		1880	2.90	13	PASS
		1909.8	2.92	13	PASS
WCDMA1900	TM3	1852.4	2.31	13	PASS
		1880.0	2.58	13	PASS
		1907.6	2.43	13	PASS

#### 5.2.4.Test Data

#### 5.3. Occupied Bandwidth/Emission Bandwidth

#### 5.3.1.Test Standard

FCC: CFR Part 2.1049, CFR Part 22.917, CFR Part 24.238

#### 5.3.2.Test Limit

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable.

(h) Transmitters employing digital modulation techniques-when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated.

#### 5.3.3.Test Procedure

1. Connect the equipment as shown in the above diagram.

2. Adjust the settings of the Universal Radio Communication Tester (CMU) to set the EUT to its maximum power at the required channel.

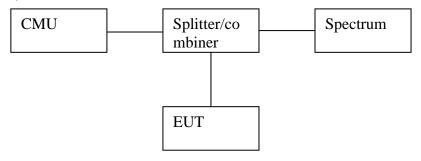
3. Set the spectrum analyzer to measure the 99% occupied bandwidth. Record the value.

4. Set the spectrum analyzer to measure the -26 dB emission bandwidth. Record the value.

5. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.

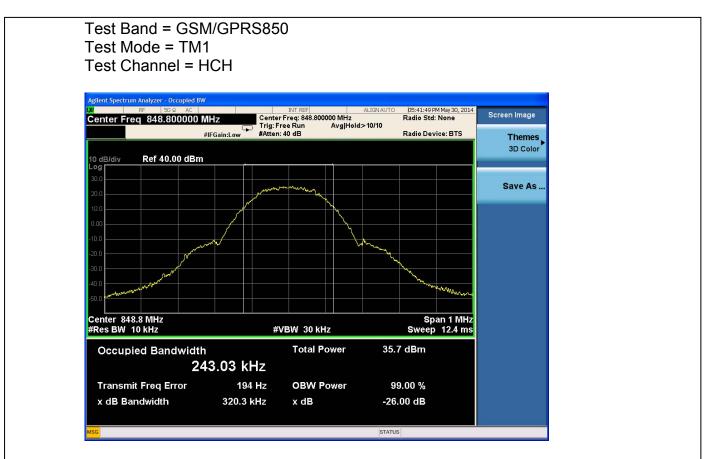
Spectrum analyzer settings: Measurement bandwidth of at least 1% of the occupied bandwidth.

#### 5.3.4.Test Setup

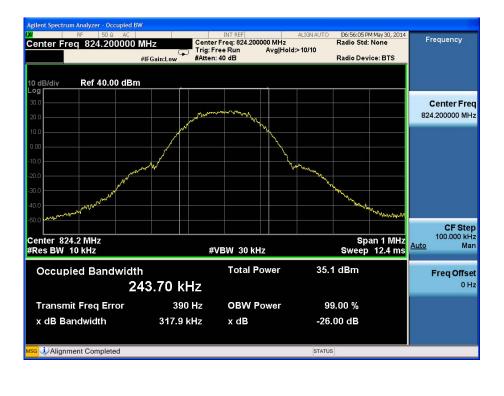


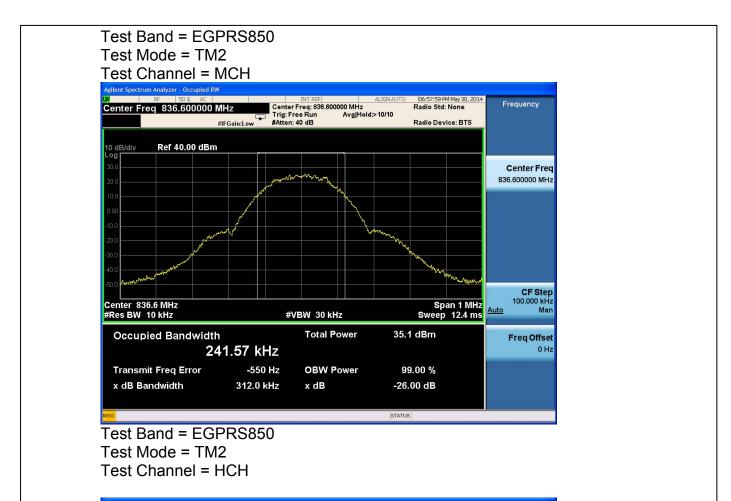
5.3.5.Test Data		
Table	8 Occupied Bandwid	dth Test Data
G	SM/GPRS850: GMS	SK Mode
CHANNEL	99% OBW	
FREQUENCY	(kHz)	26dBc BANDWIDTH
(MHz)		(kHz)
824.2	241.60	317.0
836.6	244.61	320.2
848.8	243.03	320.3
	EGPRS850: 8PSK	Mode
CHANNEL	99% OBW	
FREQUENCY	(kHz)	26dBc BANDWIDTH
(MHz)		(kHz)
824.2	243.70	317.9
836.6	241.57	312.0
848.8	244.38	316.0
	WCDMA850	•
CHANNEL	99% OBW	
FREQUENCY	(MHz)	
(MHz)		(MHz)
826.4	4.0548	4.598
836.6	4.0664	4.612
846.6	4.0468	4.560
GS	SM/GPRS1900: GM	SK Mode
CHANNEL	99% OBW	26dBc BANDWIDTH
FREQUENCY	(kHz)	(kHz)
(MHz)		(KI 12)
1850.2	245.07	317.4
1880.0	245.41	317.1
1909.8	244.17	315.7
	EGPRS1900: 8PSK	Mode
CHANNEL	99% OBW	26dBc BANDWIDTH
FREQUENCY	(kHz)	(kHz)
(MHz)		、 <i>,</i>
1850.2	246.54	312.8
1880.0	242.83	315.8
1909.8	244.70	316.9
	WCDMA1900	
CHANNEL	99% OBW	26dBc BANDWIDTH
FREQUENCY	(kHz)	(kHz)
(MHz)		· · · ·
1852.4	4.0540	4.577
1880.0	4.0551	4.599
1907.6	4.0560	4.563





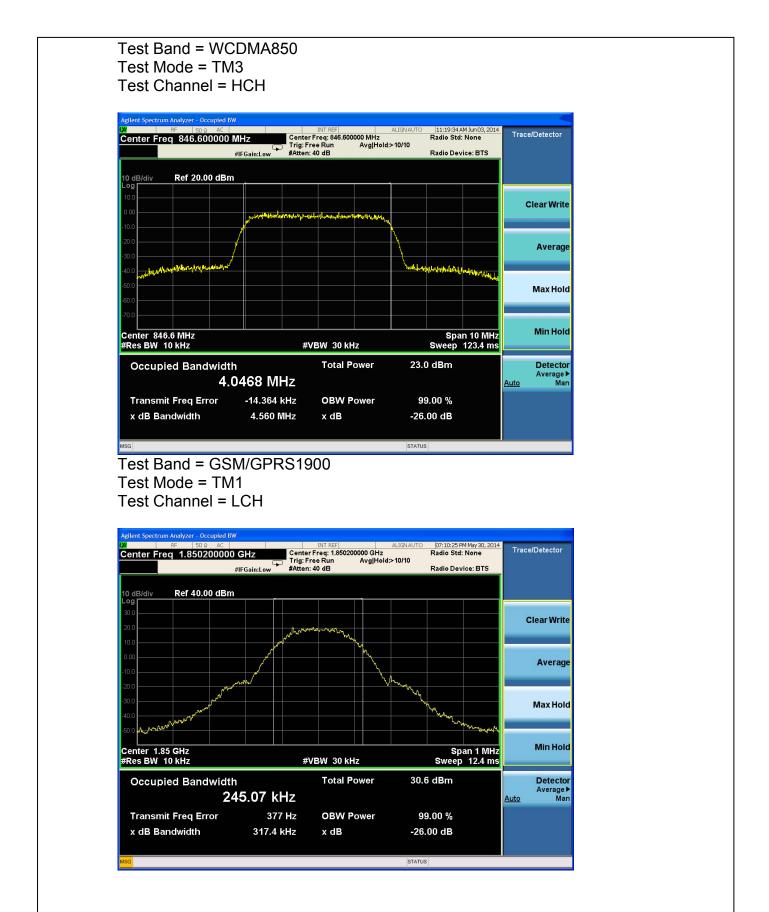
#### Test Band = EGPRS850 Test Mode =TM2 Test Channel = LCH







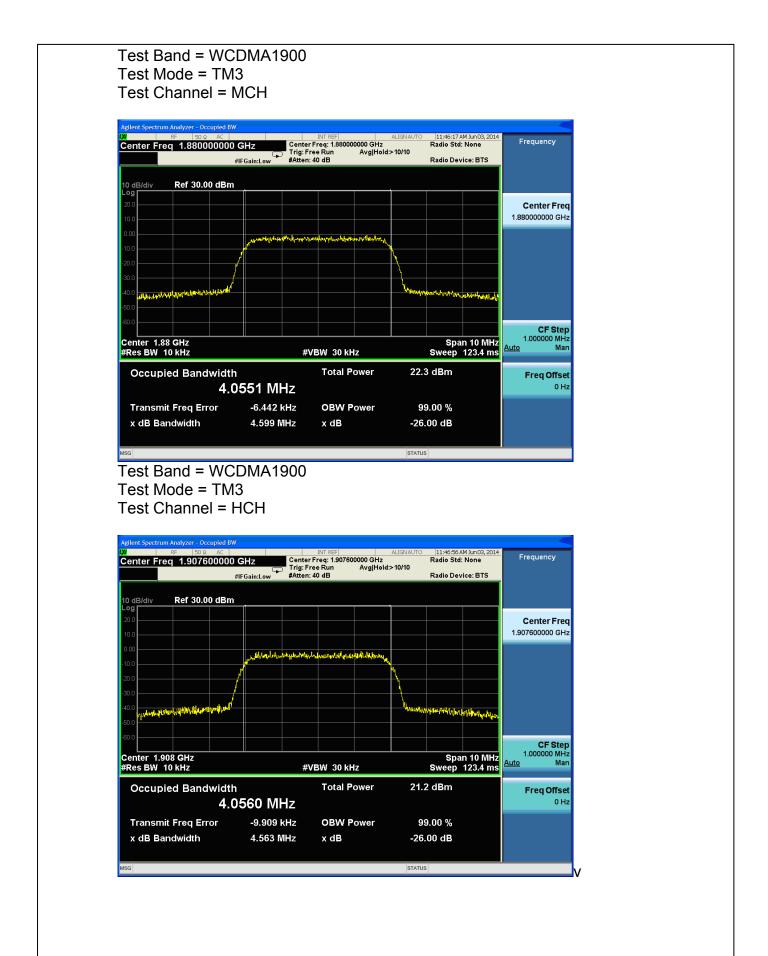












#### 5.4. Spurious Emission at Antenna Terminal

#### 5.4.1.Test Standard

FCC: CFR Part 2.1051, CFR Part 22.917, CFR Part 24.238

#### 5.4.2.Test Limit

The radio frequency voltage or power generated within the equipment and appearing on a

spurious frequency shall be checked at the equipment output terminals when properly loaded with a suitable artificial antenna. Curves or equivalent data shall show the magnitude of each harmonic and other spurious emission that can be detected when the equipment is operated under the conditions specified in FCC 2.1049 as appropriate. The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value need not be specified.

(a) Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. For all power levels +30dBm to 0dBm, this becomes a constant specification of -13dBm.

FCC 22.917 Emission limitations for cellular equipment.

The rules in this section govern the spectral characteristics of emissions in the Cellular

Radiotelephone Service.

(b) Measurement procedure. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100 kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

FCC 24.238 Emission limitations for Broadband PCS equipment.

The rules in this section govern the spectral characteristics of emissions in the Broadband Personal Communications Service.

(b) Measurement procedure. Compliance with these provisions is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 100

kHz of 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

#### 5.4.3.Test Procedure

- 1. Connect the equipment as shown in the above diagram.
- 2. Set the spectrum analyzer to measure peak hold with the required settings.

3. Set the signal generator to a known output power and record the path loss in dB (LOSS) for frequencies up to the tenth harmonic of the EUT's carrier frequency. \ LOSS = Generator Output Power (dBm) – Analyzer reading (dBm).

4. Replace the signal generator with the EUT.

5. Adjust the settings of the Universal Radio Communication Tester (CMU) to set the EUT to its maximum power at the required channel.

6. Set the spectrum analyzer to measure peak hold with the required settings. Offset the spectrum analyzer reference level by the path loss measured above.

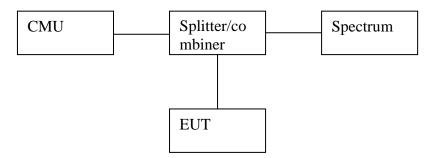
7. Measure and record all spurious emissions up to the tenth harmonic of the carrier frequency.

8. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.

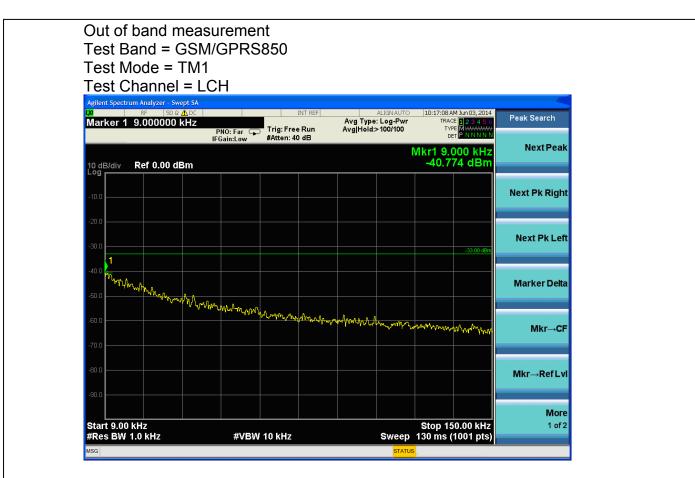
9. If necessary steps 6 and 7 may be performed with the spectrum analyzer set to average detector.

(Note: Step 3 above is performed prior to testing and LOSS is recorded by test software. Steps 2, 6, and 7 above are performed with test software.)

#### 5.4.4.Test Setup



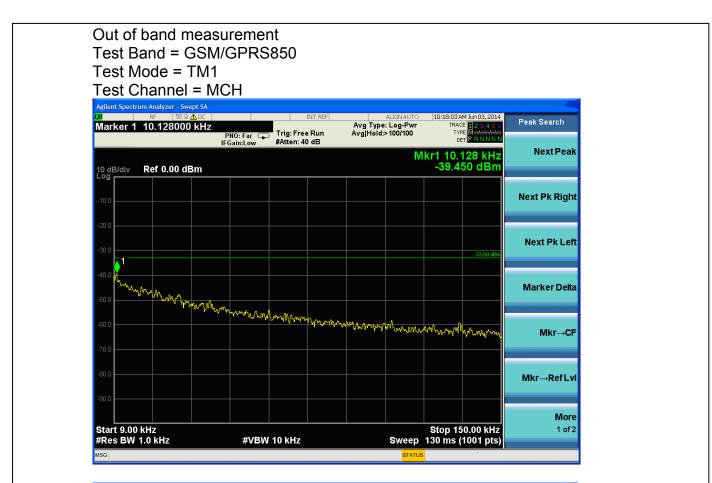
#### 5.4.5.Test Data



	RF 50 Ω 🧥 DC		INT REF	ALIGN AUTO	10:30:59 AM Jun 03, 2014	
larker 1 '	150.000000 k	HZ PNO: Fast G IFGain:Low	Trig: Free Run #Atten: 40 dB	Avg Type: Log-Pwr Avg Hold:>100/100	TRACE 123456 TYPE MWWWW DET PNNNNN	Peak Search
0 dB/div	Ref 0.00 dBm				Mkr1 150 kHz -40.406 dBm	Next Pea
10.0						Next Pk Righ
20.0 30.0					-33.00 dBm	Next Pk Le
40.0 <b>~</b> 50.0 <b></b>						Marker Del
60.0 <b>4444444</b>	v Muchanican tradi	ninalan Munyanya	Weinstein Andrewein and an	n, halan jan, var folger af her for state worde	halannihiteiteitu	Mkr→C
80.0						Mkr→RefL
tart 150 kl		#VBW	30 kHz	Sween	Stop 30.00 MHz 285 ms (1001 pts)	Moi 1 of

Marker 1 8	RF 50 Ω AC 24.139000000		e Run Avg Ho	ALIGNAUTO ype: Log-Pwr old: 20/100	08:29:15 Pf TRAC TYP DE	May 30, 2014 E <b>1 2 3 4 5 6</b> E M <del>WWWWW</del> T P N N N N N	Peak Search
10 dB/div	Ref 30.00 dBm			Mkr	1 824.1 8.1	39 MHz 29 dBm	Next Peak
20.0							Next Pk Right
10.0					¢ <sup>1</sup>		
0.00							Next Pk Left
-10.0						-13.00 dBm	Marker Delta
-20.0							
-30.0							Mkr→CF
		han Jan Leonal politikation bit also tare tare the also			a a damente		Mkr→RefLvl
-60.0	A an anal da sina da s Na sina da sina Na sina da sina	ang lagang di kanan dan Kanan kang kanya kang bertakan kanya Mang kang mang kanya kang kanya kang kanya kang kanya kang kanya kanya kanya kanya kanya kanya kanya kanya kany Mang kanya					WKT→Rei LVI
Start 30.0 M	H7				Stop 1.0	000 GHz	More 1 of 2
#Res BW 10		#VBW 300 kHz		#Sweep	3.00 s (4	0001 pts)	

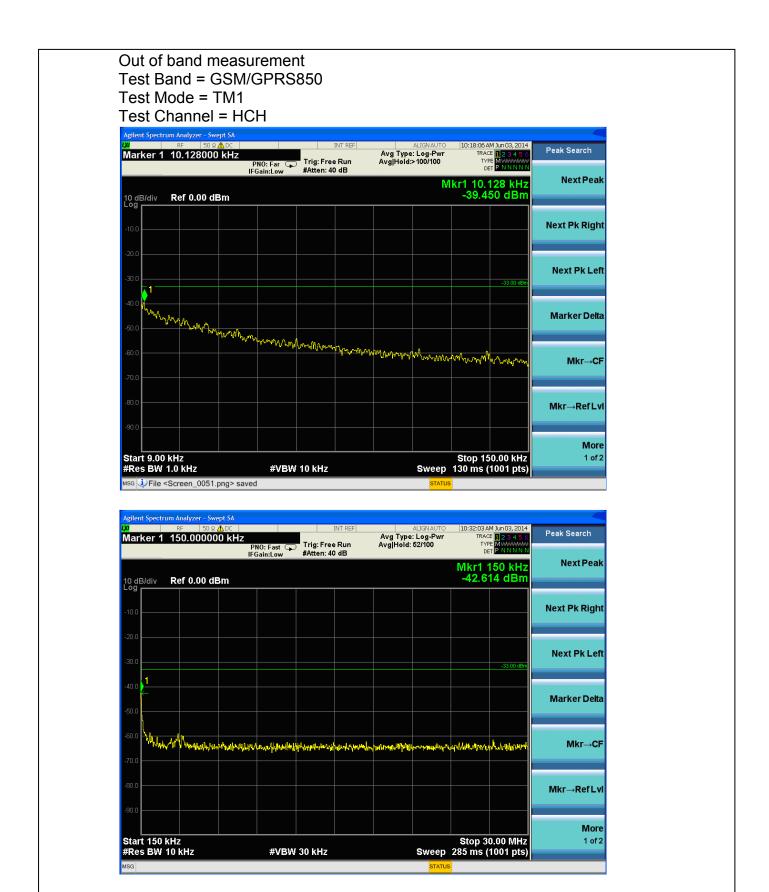
Peak Search	08:33:59 PM May 30, 2014 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	ALIGN AUTO : Log-Pwr 71/100	Avg Type Avg Hold:		GHz 10: Fast G	AC 250000 ( Pl	Analyzer - Swe RF 50 ຊ <b>2.043531</b>		xi
NextPea	2.043 53 GHz -45.313 dBm	Mkr1				IBm	ef 30.00 d	3/div R	0 dE
Next Pk Rig									20.0
Next Pk Le									10.0
	-13.00 dBm								0.00 10.0
Marker Del									20.0
Mkr→C									30.0 40.0
Mkr→RefL			linker konkleder of sol	a harift og allala provinska ga para		hand ha ha a bha			40.0 50.0
		adin binda . I i	and the second of the second		1			( and the second se	60.0
Moi 1 of	top 12.750 GHz ms (40001 pts)	Sweep 1	#	300 kHz	#VBW			t 1.000 ( s BW 10	
		STATUS							ISG



Agilent Spectrum Ar	F 50 Ω 🚹 DC		INT RE		ALIGN AUTO pe: Log-Pwr	10:31:30 AM Jun 03, 2014	Peak Search
Marker 1 15	0.000000 kHz	PNO: Fast 😱 IFGain:Low	Trig: Free Run #Atten: 40 dB		ld: 27/100	TRACE 123456 TYPE MWWWWW DET PNNNNN	
IO dB/div Re	f 0.00 dBm					Mkr1 150 kHz -41.313 dBm	Next Peak
10.0							Next Pk Right
30.0						-33.00 dBm	Next Pk Lef
50.0							Marker Delta
	halvin, hhay proprior he	dof your attempts of the	rapheddaetadhuille	ลุพ <sub>ล</sub> ์ไปไม่ในประการเส	hatan an a	upm-hother defaultioner	Mkr→Cł
90.0							Mkr→RefLv
Start 150 kHz Res BW 10 k		#VBW	30 kHz		Sweep	Stop 30.00 MHz 285 ms (1001 pts)	More 1 of 2
ISG					STATUS	5	

Marker 1	836.57925	P	<b> Z</b> NO: Fast ♀ Gain:Low			Avg Type Avg Hold	ALIGNAUTO : Log-Pwr >100/100	TR 1	3 PM May 30, 2014 ACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	Peak Search
10 dB/div	Ref 30.00 c		Gam.Low	H ROTH A			Mkı	1 836.	579 MHz 356 dBm	NextPea
20.0										Next Pk Rig
10.0								1		Next Pk Le
-10.0									-13.00 dBm	Marker Del
-20.0										
-40.0										Mkr→C
-50.0		in de trint e sult.		a kostatos filmen d	a latte atalas da a				en de la statistica de la contra persona La contra de la contr	Mkr→RefL
-60.0	) MHz								.0000 GHz	Mor 1 of

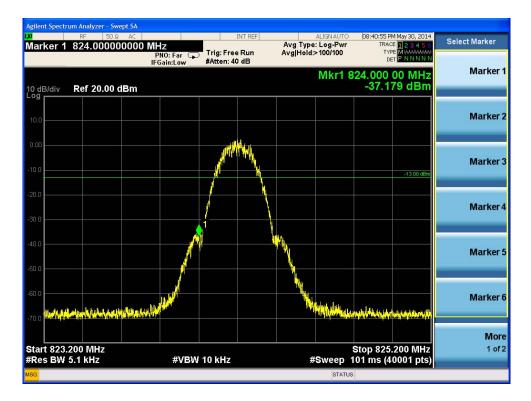
Peak Search	M May 30, 2014 26 1 2 3 4 5 6 26 M WWWWWW ET P N N N N N	TRAC	ALIGNAUTO : Log-Pwr >100/100			Hz 10: Fast 🖵 Jain:Low		ker 1 6.1	lari
NextPe	08 GHz 81 dBm	6.157	Mkr1		WALLEH. 40	am:Low	 ef 30.00 d	3/div Re	0 dE og r
Next Pk Rig									20.0
Next Pk Lo									10.0 : 0.00 :
Marker De	-13.00 dBm								0.0 :0.0
Mkr⊸(					1				:0.0 :0.0
Mkr→RefL	H <mark>arles H</mark> ondoll Geographics	natari di futuna di Vinang nationg ayarti	ر و را اور را اور و را اور و ر دو را ورو رو رو رو و و رو و و و و و و و و	in the last the film (t		u ta ata ata ata ila Manana ang ata ata ata		a dalah darih Managaran darih	i0.0 ;
<b>M</b> o 1 o	.750 GHz	Stop 12			200 1/1	4\ <b>()</b>		t 1.000 G	
	0001 pts)	01 ms (4	Sweep 1		300 kHz	#VBW	KHZ	s BW 100	Res sg

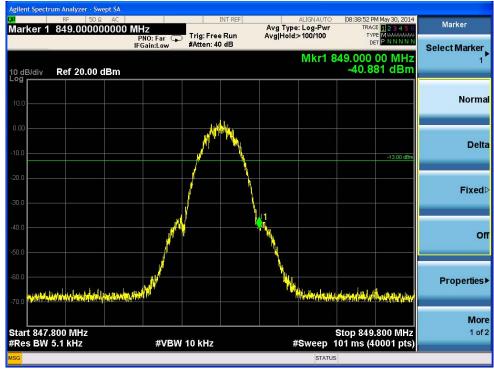


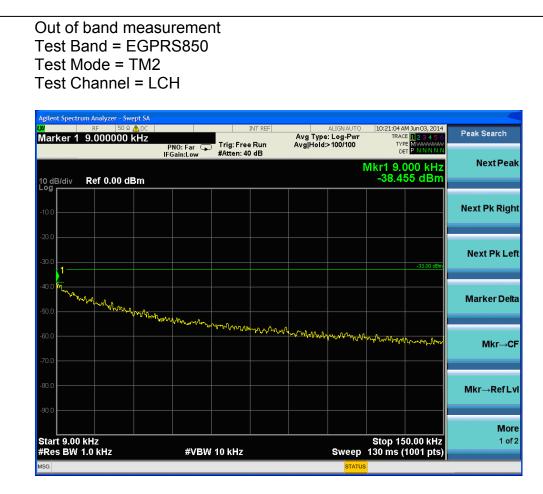
Marker 1			HZ PNO: Fast ⊊ FGain:Low				ALIGN AUTO e: Log-Pwr d:>100/100	TR	PM May 30, 2014 ACE 1 2 3 4 5 6 YPE M WWWWWW DET P N N N N N	Peak Search
10 dB/div	Ref 30.00	dBm					Mkı	1 848. 8.1	874 MHz 262 dBm	Next Peak
20.0										Next Pk Right
10.0								1		
0.00										Next Pk Left
-10.0									-13.00 dBm	Marker Date
-20.0										Marker Delta
-30.0										Mkr→CF
-40.0										
-50.0	dunia di sa di ta sa ta				feretheilde kurj	ara na ang dilikula			de linder, de le pr	Mkr→RefLvl
-60.0		and the post of a loss	na de la compañía de la constante de la constan La constante de la constante de		a shall of sec					C.
										More
Start 30.0 #Res BW			#\/BM	/ 300 kHz			#Cwoon	Stop 1	.0000 GHz 40001 pts)	1 of 2

arker 1	RF 50 Ω 7.2750875	00000 G	NO: Fast 🗔	Trig: Free		Avg Type Avg Hold:	ALIGN AUTO : Log-Pwr >100/100	TRAC	M May 30, 2014 E 123456 E M WAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Peak Search
) dB/div	Ref 30.00 c		Gain:Low	#Atten: 40	0 dB		Mkr	1 7.275	09 GHz 31 dBm	Next Pea
										Next Pk Rig
0.0										Next Pk Le
0.0									-13.00 dBm	Marker De
D.0					1-					Mkr→C
0.0 <mark>- 11 11 11 11 11 11 11 11 11 11 11 11 11</mark>							(ja lieloj, lipisatila) "Dyseinijasinijasinija	lattig series generali Regioner and series and the	k i ya di palipara di di palip Mana ka ka ka ka ka ka ka	Mkr→RefL
tart 1.00 Res BW	0 GHz 100 kHz		#VBW	300 kHz		#	Sweep_1	Stop 12 01 ms <u>(</u> 4	.750 GHz 0001 pts)	Mo 1 of
G							STATUS			

Band edge measurement Test Band = GSM/GPRS850 Test Mode = TM1 Test Channel = LCH/HCH



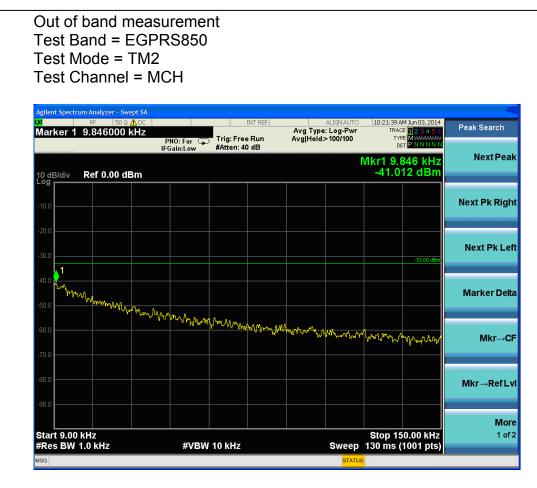




gilent Spectrum A	.F 50 Ω 🔥 DC		INT	REF	ALIGN AU	JTO 10:32:2:	LAM Jun 03, 2014	
			Trig: Free R		g Type: Log-P g Hold: 21/100	Wr TR	ACE 123456 YPE MWWWWW DET PNNNNN	Trace/Det
		PNO: Fast 🖵 IFGain:Low	#Atten: 40 d		3 Fiold: 21/100		DET PNNNNN	Select Trace
0 dB/div Re	ef 0.00 dBm					Mkr1 -44.	150 kHz 903 dBm	Trace 1
og								
10.0								Clear Writ
0.0							+	
0.0								Trace Averag
0.0							-33.00 dBm	
0.0 1								
←								Max Ho
0.0								
0.0								
<sup>04</sup> 47444741447 <sup>11</sup>	14 property integration	a manual and	www.alalited.	hushawalaraha	Monorthan	knownabarana	hHunn/urdathi	Min Hol
0.0								View/Blank Trace On
0.0								Hace on
0.0-								
tart 150 kHz	<u></u>					Ston	30.00 MHz	Moi 1 of
Res BW 10 H		#VBW	30 kHz		Swe		(1001 pts)	
SG					ST	ATUS		

Marker 1 824.21175000	OMHZ PNO: Fast IFGain:Low #Atten: 40 dB	Avg Type: Log-Pwr Avg Hold>100/100 Det P N N N N	
10 dB/div Ref 30.00 dBm		Mkr1 824.212 MHz 8.333 dBm	Next Peak
20.0			Next Pk Right
10.0		1	
0.00			Next Pk Left
-10.0		-13.00 dBm	
-20.0			Marker Delta
-30.0			Mire of
-40.0			Mkr→CF
-50.0 hab do it, all do malline and do mitted	n bar an har early saturbaha dan kiriki <b>kada a liki kuraka</b> ada asara dan Jawa	ر من المربعة معرفة من المربعة المربعة المربعة من المربعة من المربعة من معرفة مربعة المربعة المربعة المربعة الم	Mkr→RefLvl
		a a firm and a state the strategic first of the state of	
		Stop 1.0000 GHz	More 1 of 2

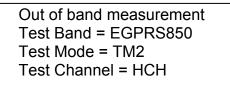
		00.05 (F)						AC	Analyzer - Swe	nt Spectrun
Peak Search	M May 30, 2014 E 1 2 3 4 5 6 E M WWWWWW	TRA	ALIGNAUTO		NT REF			50000 G	.9640812	ker 1 :
NextPeal	08 GHz 37 dBm	۔ <b>5.964</b>	Avg Hold: 88/100 Mkr1		dB	Trig: Free Run #Atten: 40 dB		IFO		
	37 abm	-40.1		1			1	1Bm	ef 30.00 c	3/div
Next Pk Righ										
Next Pk Lef										
	-13.00 dBm									
Marker Delt										
Mkr→C										
					وروب والمقدور التقديد					
Mkr→RefLv			ingen fall an film fan ste An de film fan ste f		all methodological Processing and pro-	anti angarang Attitution to de	and the second s	atalia da parte da parte Referencia da parte d	Literation of the second s	ne ser del debe
				4 4 4 4 4						
More										
1 of 2	tart 1.000 GHz Stop 12.750 GHz Res BW 100 kHz #VBW 300 kHz #Sweep 101 ms (40001 pts)									
	ooo i prsj	or ins (4	Sweep 1	#		300 KHZ	#VDVV			5 DW 1



	10:32:42 AM Jun 03, 2014	ALIGNAUTO		INT REF			lyzer - Swept SA 50 Ω ΛΩC	ent Spectrum A
Peak Search	TRACE 1 2 3 4 5 6 TYPE MWWWW DET P N N N N N	e: Log-Pwr	Avg Typ Avg Hold	e Run		PNO: Fast 🖵 FGain:Low	.000000 kHz	
Next Peal	Mkr1 150 kHz -41.788 dBm			5 48	#Atten: 4	FGain:Low	0.00 dBm	dB/div Re
Next Pk Righ								
Next Pk Lef	-33.00 dBm							
Marker Delt								
Mkr→Cl	innin na nahari di shahavya bila ha	hilinitalititati	wrytanlytaul	utykerna (t <sup>ar</sup> al featr	plan magali	nir Yddfach Addyn Brw	white when the second	
Mkr→RefLv								
Mor 1 of	Stop 30.00 MHz 285 ms (1001 pts)	Sweep			30 kHz	#VBW	lz	urt 150 kHz es BW 10 l
		STATUS						

Marker 1 836.57925000		ALIGNAUTO 08:31:55 PM May 30, 2014 Avg Type: Log-Pwr TRACE 2:345 Avg Hold:>100/100 DET PINNINN DET PINNINN	Peak Search
10 dB/div Ref 30.00 dBm	IFGain:Low #Atten: 40 dB	Mkr1 836.579 MHz 8.282 dBm	Next Peak
20.0			Next Pk Right
10.0		<b>1</b>	
0.00			Next Pk Left
-10.0		-13.00 dBm	Marker Delta
-20.0			
-30.0			Mkr→CF
-40.0			
-50.0	r har i ta an	والمحمد المارية والمتعاركة المحمد المحمد والمحمد والمحمد والمحمد والمحمد والمحمد المحمد والمحمد والم	Mkr→RefLvl
			More
Start 30.0 MHz #Res BW 100 kHz	#VBW 300 kHz	Stop 1.0000 GHz #Sweep 101 ms (40001 pts	

Peak Search	3:36:19 PM May 30, 2014 TRACE 1 2 3 4 5 6 TYPE MWWWWW	ALIGNAUTO : Log-Pwr >100/100	Avg Type Avg Hold		Hz N0: Fast	AC 50000 G	Analyzer - Swa   RF 50 Ω   .5692812	
NextPeal	.569 28 GHz 45.143 dBm			#Atten: 40	Gain:Low	IFO	tef 30.00 c	
Next Pk Righ								
Next Pk Lei								
Marker Delt	-13.00 dBm							
Mkr→Cl				1				
Mkr→RefLv	in an	te bildus patro Up da na sela seconda la par			appelle de thathaile agus an		a da da ang ang ang ang ang ang ang ang ang an	egyet <mark>i desta ta t</mark>
Mor 1 of:	op 12.750 GHz ms (40001 pts)	Sweep 1	#	300 kHz	#VBW			rt 1.000 es BW 1
		STATUS						



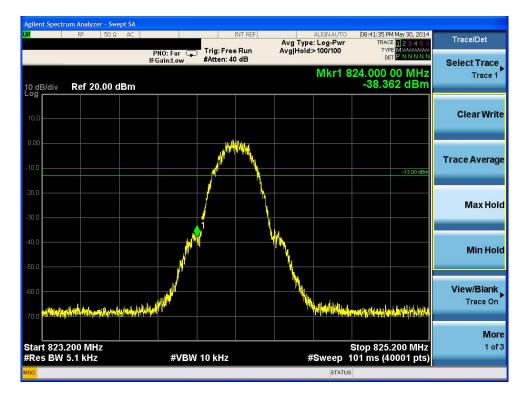
<mark>x</mark> Marker 1	RF 50 Ω <u>∧</u> DC 9.423000 kHz	PNO: Far 🖵 Trig: Fre	e Run Avg Ho	ALIGNAUTO /pe: Log-Pwr ld: 88/100	10:22:07 AM Jun 03, 2014 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P. N N N N N	Peak Search
10 dB/div	Ref 0.00 dBm	IFGain:Low #Atten: 4	0 dB	1	/kr1 9.423 kHz -39.510 dBm	Next Pea
- <b>og</b>						Next Pk Righ
30.0					-33.00 dBm	Next Pk Le
-40.0	hun month man	M An A.				Marker Del
60.0 70.0		Munning	Muran and a factor way	whathand	when how allow	Mkr→C
80.0						Mkr→RefL
Start 9.00	I KHZ 1.0 KHZ	#VBW 10 kHz		Sweep	Stop 150.00 kHz 130 ms (1001 pts)	Mor 1 of

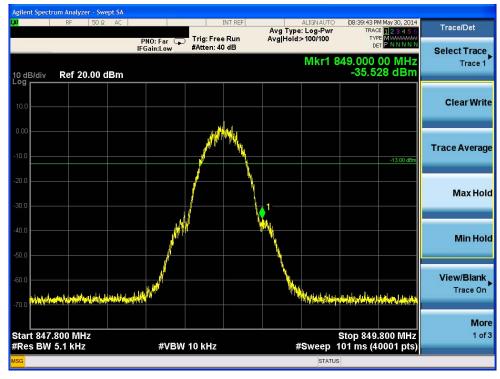
gnent spect	rum Analyzer - Swep RF 50 ຊ 🥂			I	NT REF		ALIGN AUTO		M Jun 03, 2014	Deels Orestal
larker 1	150.000000		Fast 🗔	Trig: Free	Run	Avg Type Avg Hold:		TRAC TY	2E 1 2 3 4 5 6 PE MWWWWW ET P N N N N N	Peak Search
		IFGain	Low	#Atten: 40	dB					NextPea
0 dB/div	Ref 0.00 dBi	m							150 kHz 92 dBm	iioati o
0.0										Next Pk Rig
0.0										
										Next Pk Lo
0.0									-33.00 dBm	
0.0 1										
<u></u>										Marker De
0.0										
50.0 <b>.</b>										
Mary.	dy Harry history	el nort-parlon-half fold	hand	the way of	www.Allaun	and when the second	44Minupation	worphiliplenen	nt yight much the	Mkr→
'0.0										
30.0										Mkr→RefL
										WIKI →KCI L
90.0										
								<b>a</b> t 0		Mo
tart 150 Res BW			#VBW 3	0 kHz			Sweep		0.00 MHz (1001 pts)	1 0
SG							STATUS	_		

KF 50 Ω AC	0 MHz	ALIGNAUTO 08:33:01 PM Ma Avg Type: Log-Pwr TRACE	2 3 4 5 6 Peak Search
10 dB/div Ref 30.00 dBm	PNO: Fast 🎧 Trig: Free Run IFGain:Low #Atten: 40 dB	Avg Hold: 75/100 TVPE DET Mkr1 848.777 8.345	2 3 4 5 0 NNNNN NNNNN MHz dBm
			Next Pk Right
0.00			Next Pk Left
-10.0			-13.00 dem Marker Delta
-30.0			Mkr→CF
-50.0 It in the protocol distance in the later	ntan para kang melangan bilang di nang di kala nang na Mang di paragan pang di kala kala nang mela kang di kala di kal	n blan i periori da marca da presidente da presidente da presidente da presidente da presidente da presidente d Nacional de la constancia da presidente da presidente da presidente da presidente da presidente da presidente d	
-60.0 Start 30.0 MHz #Res BW 100 kHz	#VBW 300 kHz	Stop 1.000 #Sweep 101 ms (400	More 0 GHz 1 of 2

larker 1		2 AC 250000 0	GHz		INT REF		ALIGNAUTO : Log-Pwr	TRAC	4 May 30, 2014 E 1 2 3 4 5 6	Peak Search
		1	PNO: Fast 🖵 Gain:Low	Trig: Free #Atten: 40		Avg Hold:	84/100	TYF De	E MWWWWW T P N N N N N	
0 dB/div	Ref 30.00	dBm					Mkr	1 6.133 -45.10	28 GHz 05 dBm	NextPea
										Next Pk Rigi
20.0										Hext Fit Right
10.0										
										Next Pk Le
10.0									-13.00 dBm	
20.0										Marker Del
30.0										
										Mkr→C
10.0			dia	• <sup>1</sup>						
50.0 <mark>Highenet</mark>		n data da angla da angla Madata da angla da an	ale de la companya de la companya. Ny fantana de la companya de la comp	and the second second	and the state of t		a dia mpa dia dia m mpa mpa dia dia mpanana mpikampika mpikampika mpikampika mpikampika mpikampika mpikampika m mpikampikampika mpikampika mpikampika mpikampika mpikampika mpikampika mpikampika mpikampika mpikampika mpikamp	<mark>illik disesinden kadal</mark> <sup>Men</sup> andersky pare <sup>ter</sup>		Mkr→RefL
io.o										
										Мо
tart 1.00 Res BW	00 GHz 100 kHz		#VBW	300 kHz		#	Sweep 1	Stop 12 01 ms <u>(</u> 4	.750 GHz 0001 pts)	1 of
G							STATUS	-		

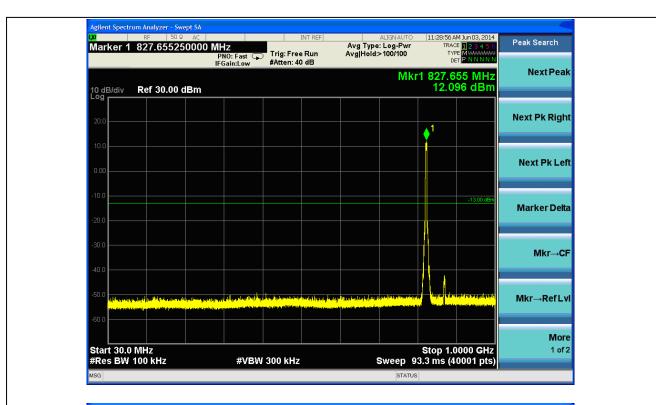
Band edge measurement Test Band = EGPRS850 Test Mode = TM2 Test Channel = LCH/HCH







-								t Spectrum Analy	
Peak Search	10:33:20 AM Jun 03, 2014 TRACE 1 2 3 4 5 6	ALIGNAUTO		INT REF			50 Ω <u>Λ</u> DC 00000 kHz	<sup>RF</sup> ker 1 150.0	<mark>x</mark> Mark
	TYPE MWWWWWW DET P N N N N N	27/100	Avg Hold		Trig: Fre #Atten: 4	PNO: Fast 🖵 FGain:Low			
NextPeal	Mkr1 150 kHz -42.668 dBm						00 dBm	3/div Ref 0	10 dB Log r
Next Pk Righ									-10.0 -
Next Pk Lei	-33.00 dBm								-20.0 -
Marker Delt									-40.0
Mkr→C	hishahaldhiduman	nyknenyelmenye	garlar bely turned	trifignustiss	rability and the second	yahdepermentur	เป็นขุงญี่ปางสะการใจๆระม	un and the second se	-60.0 -
Mkr→RefLv									-80.0 -
<b>Mon</b> 1 of:	Stop 30.00 MHz 285 ms (1001 pts)	Sweep			30 kHz	#VBW		t 150 kHz s BW 10 kHz	
		STATUS							MSG

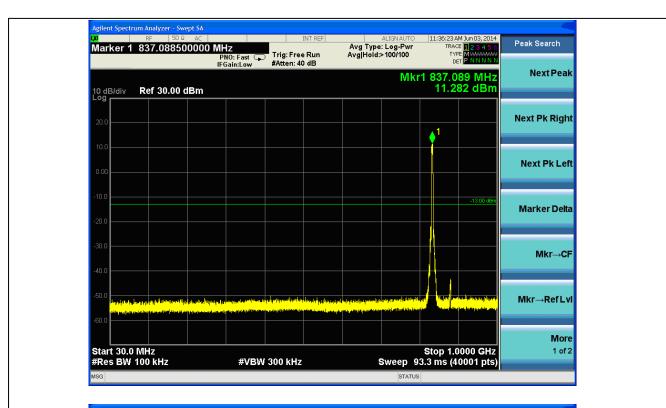


Peak Search	4 AM Jun 03, 2014 ACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	TRA	ALIGN AUTO : Log-Pwr 17/100	Avg Typ Avg Hold			NO: Fast 🗔	PI	RF 50 Ω 9585000	ker 15
Next Pea	8 50 GHz 842 dBm	1 5.958 -46.8	Mkr			#Atten: 40	Gain:Low		ef 30.00 c	3/div
Next Pk Rig										
Next Pk Lo										
Marker De	-13.00 dBm									
Mkr→(										
Mkr→RefL	particular daga dalah manan da Manang daga daga daga daga daga daga daga	lan ing Kalenari in			dy bliffer dat son fy <mark>para frances dat son fy</mark>		n dhad ya shah Mara ya shahaya ba		al de Mark (a diffe	andreas Media Me
<b>M</b> a 1 o	2.750 GHz (40001 pts)	Stop 12 1.13 s_(4	Sweep			300 kHz	#VBW			t 1.000 s BW 10
			STATUS							

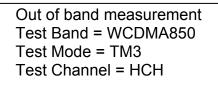
Out of band measurement Test Band = WCDMA850 Test Mode = TM3 Test Channel = MCH

RF 50 Ω 🚹 DC		INT REF	ALIGN AUTO	10:23:12 AM Jun 03, 2014	Peak Search
larker 1 9.000000 kHz	PNO: Far 😱 Trig: Fre IFGain:Low #Atten: 4	e Run Avg Ho	/pe: Log-Pwr ld: 88/100	TRACE 123456 TYPE MWWWW DET PNNNNN	Peak Search
D dB/div Ref 0.00 dBm			Ν	1kr1 9.000 kHz -41.058 dBm	Next Pea
0.0					Next Pk Rigi
				-33.00 dBm	Next Pk Le
0.0	M				Marker Del
0.00 mm hard hard hard hard hard hard hard hard	. www.ammartin/w/w	And and a start	l production	womahay wanad	Mkr→C
					Mkr→RefL
tart 9.00 kHz Res BW 1.0 kHz	#VBW 10 kHz		Sweep	Stop 150.00 kHz 130 ms (1001 pts)	<b>Mo</b> i 1 of

Agilent Spectrum Analyzer - Swept SA					
₩ RF 50 Ω <u>A</u> DC Marker 1 150.000000 kHz			ALIGNAUTO	10:33:35 AM Jun 03, 2014 TRACE 1 2 3 4 5 6	Peak Search
	PNO: Fast Trig: Free IFGain:Low #Atten: 40		a: 21/100	TYPE MWWWWW DET PNNNNN	
10 dB/div Ref 0.00 dBm				Mkr1 150 kHz -40.595 dBm	NextPeal
-10.0					Next Pk Righ
-20.0				-33.00 dBm	Next Pk Le
-40.0					Marker Delt
-60.0	intrastricturation	alamkulyaanna akhalaa	addygyapatallagy	lupumalitikaangme	Mkr→C
.80.0					Mkr→RefL
-90.0 Start 150 kHz				Stop 30.00 MHz	Mor 1 of
#Res BW 10 kHz	#VBW 30 kHz		Sweep STATUS	285 ms (1001 pts)	



Peak Search	M Jun 03, 2014 <sup>26</sup> 1 2 3 4 5 6 <sup>26</sup> M WWWWWW T P N N N N N	TRAG	ALIGNAUTO : Log-Pwr 24/100	Avg Typ Avg Hold		GHz NO: Fast 🖵 Gain:Low	500000 P	κ 50 Ω 2.710637		ar
Next Pe	64 GHz 52 dBm	12.710 -46.7	Mkr1			Gam.cow		ef 30.00 c	3/div R	) dE
Next Pk Rig										.0.0
Next Pk Lo										0.0 .00
Marker De	-13.00 dBm									0.0 0.0
Mkr→(										).0 - ).0 -
Mkr→RefL		finderna fers manne Anna air anna an an an	alifi ang		dillerid lister born So <sup>rten d</sup> essered	ara ya ku ku ku ku ku ku ku Mana ku		u bulaha sebé nganénangéné	Contractive participation	0.0 0.0
<b>М</b> о 1 о	.750 GHz 0001 pts)	Stop 12 1.13 s (4	Sweep		300 kHz	#VBW			t 1.000 G s BW 10	tari
			STATUS							G



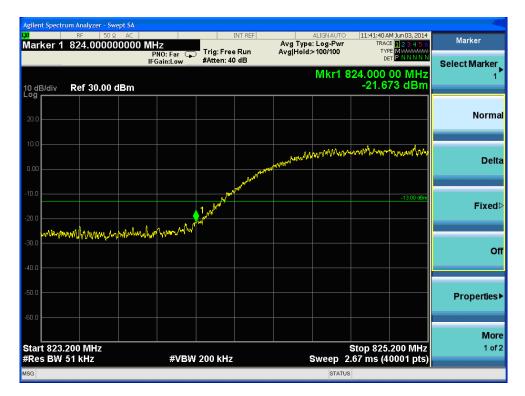
gilent Spectrum Analyzer - Swept SA		INT REF	ALIGNAUTO	10:23:38 AM Jun 03, 2014	De l O en l
Marker 1 9.987000 kHz	PNO: Far Trig: Free	eRun Avg Hold	e: Log-Pwr i: 92/100	TRACE 123456 TYPE MWWWWW DET P N N N N N	Peak Search
0 dB/div Ref 0.00 dBm	IFGain:Low #Atten: 40			Mkr1 9.987 kHz -40.329 dBm	Next Pea
10.0					Next Pk Righ
30.0				-33.00 dBm	Next Pk Le
40.0 have have have have have have have have					Marker Del
000 have how	- Mary Mr. Low	m. Mahananan	yw <sup>a</sup> lmhydyna	way a way and a second strang	Mkr→C
30 0					Mkr→RefL
Start 9.00 kHz Res BW 1.0 kHz	#VBW 10 kHz		Sweep	Stop 150.00 kHz 130 ms (1001 pts)	Mor 1 of
SG			STATUS		

Agilent Spectrum Analyzer - Swept SA					-
₩ RF 50 Q ALDC Marker 1 150.000000 kHz	PNO: Fast 😱 Trig: Free	e Run Avg Ho	ALIGNAUTO (pe: Log-Pwr Id: 23/100	10:33:53 AM Jun 03, 2014 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P. N.N.N.N.	Peak Search
10 dB/div Ref 0.00 dBm	IFGain:Low #Atten: 40	0 dB		Mkr1 150 kHz -42.112 dBm	NextPeal
-10.0					Next Pk Righ
30.0				-33.00 dBm	Next Pk Le
40.0					Marker Delt
60.0	r-nuunnnhannuunuun	- Minimum - Sali yang dalar	die anthein Ardina	Allehaway'illehanan'ainan	Mkr→C
30.0					Mkr→RefL
Start 150 kHz #Res BW 10 kHz	#VBW 30 kHz		Sweep	Stop 30.00 MHz 285 ms (1001 pts)	<b>Mor</b> 1 of
MSG			STATUS		

ໝ թերցում Marker 1 846.327750		Avg Type: Log-Pwr TRACE 1 2 3 4 5 6   Avg Hold:>100/100 TYPE MWWWWW   Det P N N N N	Peak Search
10 dB/div Ref 30.00 dE	3m	Mkr1 846.328 MHz 12.490 dBm	Next Peal
20.0			Next Pk Righ
0.00			Next Pk Lef
-10.0		-13.00 dBm	Marker Delta
-30.0			Mkr→CF
		une foresteresteresteresterest	Mkr→RefLv
-60.0	nang mina na ang ng pang ng mang mang na ng mina ng min Ing mina ng mina		More
Start 30.0 MHz #Res BW 100 kHz	#VBW 300 kHz	Stop 1.0000 GHz Sweep 93.3 ms (40001 pts)	1 of 2

lent Spectrum	Analyzer - Swept			INT REF		ALIGNAUTO	08:36:50 PM May	-00, 0014	
arker 16	6.133281250	0000 GHz	Trig: Fre		Avg Type Avg Hold:	: Log-Pwr		2 3 4 5 6	Peak Search
dB/div	Ref 30.00 dB	PNO: Fa IFGain:Lo M					DET P 6.133 28 -45.105	GHz	Next Pea
).0									Next Pk Rig
00									Next Pk Lo
).0							-	13.00 dBm	Marker De
0.0			1_						Mkr⊸
		The second states of the secon	Apple And an and a first sector An an Apple and a first sector of the se	la più la prese d'i Una a Ny fisia dia mandri dia mandri Ny fisia dia mandri dia mandri	delate del stransfactore de Necesia del seguero del	a filman pa film fi tran Marian ang ang ang ang ang ang ang ang ang a	<mark>lijk kansterken sokulen biel</mark> Na kanster <sub>ke</sub> n sokulen sok		Mkr→RefL
art 1.000 ( Res BW 10		#	VBW 300 kHz		#	Sweep_1	Stop 12.750 01 ms (4000	0 GHz 11 pts)	<b>M</b> a 1 o
3						STATUS			

Band edge measurement Test Band = WCDMA850 Test Mode = TM3 Test Channel = LCH/HCH





Out of band measurement Test Band = GSM/GPRS1900 Test Mode = TM1 Test Channel = LCH 10:24:11 AM Jun 03, 2014 TRACE 1 2 3 4 5 6 TYPE MWWWW DET P N N N N N INT REF ALIGNAUTO Avg Type: Log-Pwr Avg|Hold:>100/100 Peak Search Marker 1 9.564000 kHz PNO: Far Trig: Free Run IFGain:Low #Atten: 40 dB Next Peak Mkr1 9.564 kHz -40.589 dBm 10 dB/div Log Ref 0.00 dBm Next Pk Right Next Pk Left 1 Munay have burn when we Marker Delta N. A.M. Anow you to the more many the Mkr→CF Mkr→RefLvl More Start 9.00 kHz #Res BW 1.0 kHz Stop 150.00 kHz Sweep 130 ms (1001 pts) 1 of 2 #VBW 10 kHz

	10:34:14 AM Jun 03, 2014	ALIGN AUTO		INT REF			Swept SA	rum Analyzer RF	ilent Spect
Trace/Det	TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	e: Log-Pwr	Avg Typ Avg Hold			PNO: Fast 😱	o m 📶 De	Nr.	
Select Trace Trace 1	Mkr1 150 kHz			) dB	#Atten: 40	FGain:Low			
	-42.836 dBm						dBm	Ref 0.0	) dB/div
Clear Writ									
Clear writ									0.0
									0.0
Trace Averag									
	-33.00 dBm								0.0
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Max Ho									
									0.0
Min Ho									0.0
	where a contraction of the second	putrana applicition		a hille (m. M. a		wouldhand	Ministra	Any and which the	0.0
									0.0
View/Blank Trace On									0.0
Trace On									0.0
Mo									0.0
1 of	Stop 30.00 MHz							kHz	tart 150
	285 ms (1001 pts)	Sweep			30 kHz	#VBW		10 kHz	Res BW
		STATUS							G

₩ RF 50 Q AC Marker 1 821.13200000		ALIGNAUTO 08:05:55 PM May 30, 2014 Avg Type: Log-Pwr TRACE 1 2 3 4 5 6 Avg Hold>100/100 TYPE MWH	Peak Search
10 dB/div Ref 30.00 dBm	IFGam:Low Pricent 40 4B	Mkr1 821.132 MHz -49.675 dBm	Next Peak
20.0			Next Pk Right
0.00			Next Pk Left
-20.0		-13.00 dBm	Marker Delta
-30.0			Mkr→CF
-50.0 Harmonics, pile the based is a future of states of a signature of the based of the signature of the	a per seren ya 1 karana dalah pana dan dari dari dari dari dari dari dari dari		Mkr→RefLvl
Start 30.0 MHz #Res BW 100 kHz	#VBW 300 kHz	Stop 1.0000 GHz Sweep 93.3 ms (40001 pts)	More 1 of 2

arker 1	RF 50 1.850232				INT REF		ALIGNAUTO : Log-Pwr		M May 30, 2014	Peak Search
arker i	1.050252	P	NO: Fast 🖵 Gain:Low	Trig: Free #Atten: 40		Avg Hold:		TY		
) dB/div	Ref 30.00		Gam.cow				Mkr1	1.850 2 23.8	232 GHz 06 dBm	NextPea
	•1									Next Pk Rig
0.0										Next Pk Le
0.0									-13.00 dBm	Marker De
D.O										Mkr⊸(
							n al dalla certifi Angli angli angli angli angli angli angli angli ang ing ing ing ing ing ing ing ing ing i	do to de La constante da la con La constante da la constante da	tere ut te steritt	Mkr→RefL
tart 30 M	/IHz 100 kHz		#VBW	300 kHz			Sweep	Stop 12 1.22 s <u>(</u> 4	.750 ĜHz 0001 pts)	<b>Мо</b> 1 о
G							STATUS			