



Report No.: SZEM190101023706

Page: 1 of 55

TEST REPORT

Application No.: SZEM1901010237CR
Applicant: Hytera Communications Corporation Limited
Address of Applicant: Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road, Nanshan District, Shenzhen, People's Republic of China
Manufacturer: Hytera Communications Corporation Limited
Address of Manufacturer: Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road, Nanshan District, Shenzhen, People's Republic of China
Equipment Under Test (EUT):
EUT Name: Multi-mode Advanced Radio
Model No.: PDC680 UxB1
Trade mark: Hytera
FCC ID: YAMPDC680UXB1
Standard(s) : 47 CFR Part 2(2017)
 47 CFR Part 22 subpart H
 47 CFR Part 24 subpart E
Date of Receipt: 2019-01-09
Date of Test: 2019-01-10 to 2019-02-28
Date of Issue: 2019-03-05

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above.

Keny Xu

Keny Xu
EMC Laboratory Manager



SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch, EMC Laboratory

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2019-03-05		Original

Authorized for issue by:				
				
		Edison Li /Project Engineer		
				
		Eric Fu /Reviewer		



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2 Test Summary

Test Item	FCC Rule No.	Requirements	Verdict
Effective (Isotropic) Radiated Power Output Data	§2.1046, §22.913, §24.232	ERP≤7W(GSM850, CDMA BC0) EIRP≤2W(GSM1900)	PASS
Peak-Average Ratio	§24.232	≤13dB	PASS
Modulation Characteristics	§2.1047	Digital modulation	PASS
Bandwidth	§2.1049(h)	OBW: No limit EBW: No limit	PASS
Band Edge Compliance	§2.1051, §22.917, §24.238	≤ -13dBm/1%*EBW, in 1 MHz bands immediately outside and adjacent to the frequency block.	PASS
Spurious emissions at antenna terminals	§2.1051, §22.917, §24.238	≤ -13dBm	PASS
Field strength of spurious radiation	§2.1051, §22.917, §24.238	≤ -13dBm	PASS
Frequency stability	§2.1055, §22.355, §24.235	≤ ±2.5ppm.	PASS



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4 General Information

4.1 Details of E.U.T.

Power supply:	Switching Power Supply Model: S024AZM1200200 Input: AC 100-240V, 50/60Hz, 600mA Output: DC 12V, 2000mA DC 7.7V, 2400mAh rechargeable battery which charged by Cradle charger
Sample Type:	Portable production
Support Network:	GSM, GPRS, EGPRS, CDMA BC0
Operation Frequency Band:	GSM850/GSM1900; CDMA BC0
Modulation Type:	GMSK for GSM/GPRS/EGPRS; 8PSK for EGPRS; QPSK for CDMA BC0 1xRTT/ CDMA BC0 1xEV-DO;
Supported Channel Bandwidth:	200KHz for GSM; 1.25MHz for CDMA BC0;
GPRS Class:	12
EGPRS Class:	12
Designation of Emissions	GSM850: 242KGXW, EGPRS850: 248KG7W GSM1900: 245KGXW, EGPRS1900: 246KG7W CDMA BC0: 1M28F9W
Antenna Type:	PIFA
Antenna Gain:	GSM/CDMA: 0dBi
SIM Card:	This device has dual SIM Card sockets. Both SIM Card have been tested. SIM1 was worst case, only record SIM1.
Extreme temp. Tolerance:	-30°C to +50°C
Extreme vol. Limits:	6.54VDC to 8.85VDC (nominal: 7.7VDC)



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4.2 Test Frequency

Test mode:	TX / RX	RF Channel		
		Low (L)	Middle (M)	High (H)
GSM850	TX	Channel 128	Channel 190	Channel 251
		824.2MHz	836.6 MHz	848.8 MHz
	RX	Channel 128	Channel 190	Channel 251
		869.2 MHz	881.6 MHz	893.8 MHz
Test mode:	TX / RX	RF Channel		
		Low (L)	Middle (M)	High (H)
GSM1900	TX	Channel 512	Channel 661	Channel 810
		1850.2MHz	1880.0 MHz	1909.8 MHz
	RX	Channel 512	Channel 661	Channel 810
		1930.2 MHz	1960.0 MHz	1989.8 MHz
Test mode:	TX / RX	RF Channel		
		Low (L)	Middle (M)	High (H)
CDMA BC0	TX	Channel 1013	Channel 384	Channel 777
		824.7 MHz	836.52 MHz	848.31 MHz
	RX	Channel 1013	Channel 384	Channel 777
		869.7 MHz	881.52 MHz	893.31 MHz

4.3 Test Environment

Environment Parameter	Selected Values During Tests	
Relative Humidity	52%	
Atmospheric Pressure:	1015Pa	
Temperature:	TN	25 °C
Voltage:	VL	6.54 V
	VN	7.7 V
	VH	8.85 V

NOTE: VL= lower extreme test voltage

VN= nominal voltage

VH= upper extreme test voltage

TN= normal temperature



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4.4 Description of Support Units

The EUT has been tested independent unit.

4.5 Measurement Uncertainty

No.	Item	Measurement Uncertainty
1	Radio Frequency	$\pm 7.25 \times 10^{-8}$
2	Duty cycle	$\pm 0.37\%$
3	Occupied Bandwidth	$\pm 3\%$
4	RF conducted power	$\pm 0.75\text{dB}$
5	RF power density	$\pm 2.84\text{dB}$
6	Conducted Spurious emissions	$\pm 0.75\text{dB}$
7	RF Radiated power	$\pm 4.5\text{dB}$ (below 1GHz)
		$\pm 4.8\text{dB}$ (above 1GHz)
8	Radiated Spurious emission test	$\pm 4.5\text{dB}$ (Below 1GHz)
		$\pm 4.8\text{dB}$ (Above 1GHz)
9	Temperature test	$\pm 1^\circ\text{C}$
10	Humidity test	$\pm 3\%$
11	Supply voltages	$\pm 1.5\%$
12	Time	$\pm 3\%$

4.6 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

4.7 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **CNAS (No. CNAS L2929)**

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

- **A2LA (Certificate No. 3816.01)**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

- **VCCI**

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

- **FCC –Designation Number: CN1178**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

4.8 Deviation from Standards

None

4.9 Abnormalities from Standard Conditions

None



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5 Equipment List

RF conducted test					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date	Cal. Due date
DC Power Supply	ZhaoXin	PS-3005D	SEM011-05	2018-09-25	2019-09-24
Spectrum Analyzer (20Hz-43GHz)	Rohde & Schwarz	FSU43	SEM004-08	2018-04-13	2019-04-12
Signal Analyzer (10Hz-40GHz)	Rohde & Schwarz	FSV40	SEM008-04	2018-04-02	2019-04-01
Signal Generator (9kHz-40GHz)	KEYSIGHT	N5173B	SEM006-05	2018-09-27	2019-09-26
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.6	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-01	2018-07-12	2019-07-11
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Universal Radio Communication Tester	Rohde & Schwarz	CMW 500	SEM010-03	2018-04-02	2019-04-01
Universal Radio Communication Tester	Rohde & Schwarz	CMU200	SEM010-02	2018-04-02	2019-04-01

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date	Cal. Due date
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2018-03-13	2021-03-12
EXA Signal Analyzer (10Hz-44GHz)	Agilent Technologies Inc	N9010A	SEM004-12	2018-04-13	2019-04-12
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26
Horn Antenna (800MHz-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2018-04-13	2021-04-12
Horn Antenna (15-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16
Amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2018-09-25	2019-09-24
Pre-Amplifier (0.1-26.5GHz)	Compliance Directions Systems Inc.	PAP-0126	SEM004-11	2018-11-12	2019-11-11
Pre-amplifier (26-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2018-04-02	2019-04-01
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM026-01	2018-07-12	2019-07-11



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Substitution Antenna	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26
Signal Generator	R&S	SMA100A	102174	2018-07-12	2019-07-11

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date	Cal. Due date
3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEM001-01	2017-08-05	2020-08-04
MXE EMI Receiver (20Hz-8.4GHz)	Agilent Technologies	N9038A	SEM004-05	2018-09-25	2019-09-24
BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEM003-01	2017-06-27	2020-06-26
Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEM005-01	2018-04-02	2019-04-01
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2018-07-12	2019-07-11
Substitution Antenna	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26
Signal Generator	R&S	SMA100A	102174	2018-07-12	2019-07-11

General used equipment					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-03	2017-09-29	2018-09-28
Humidity/ Temperature Indicator	Shanghai Meteorological Industry Factory	ZJ1-2B	SEM002-04	2017-09-29	2018-09-28
Humidity/ Temperature Indicator	Mingle	N/A	SEM002-08	2017-09-29	2018-09-28
Barometer	Changchun Meteorological Industry Factory	DYM3	SEM002-01	2017-04-18	2018-04-17



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6 Radio Spectrum Matter Test Results

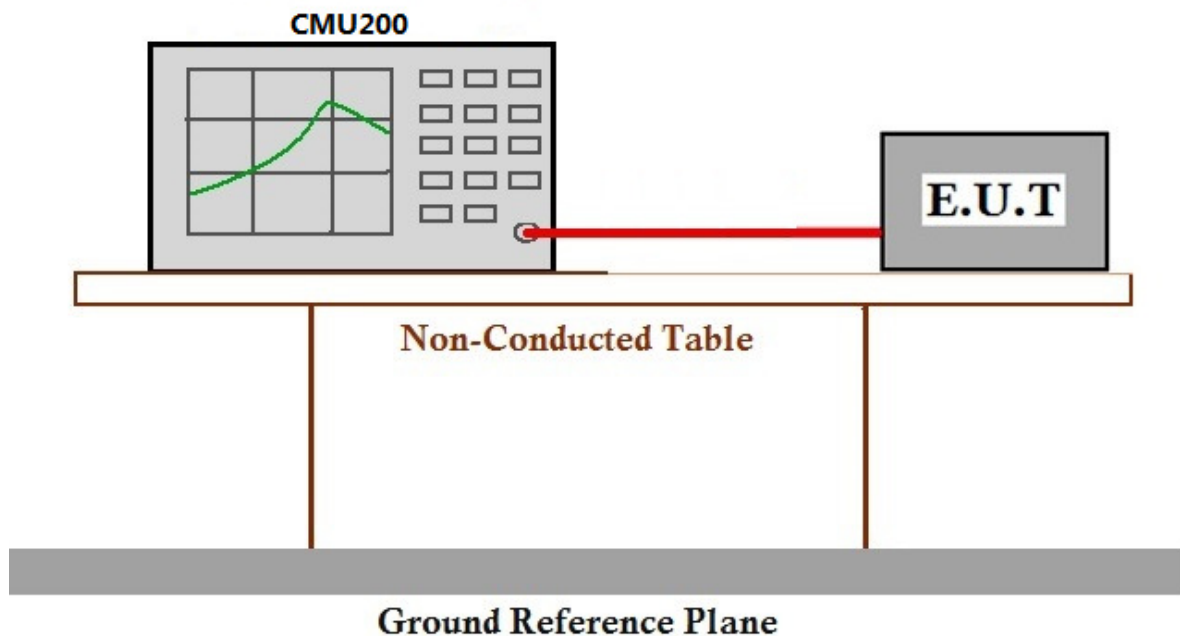
6.1 Effective (Isotropic) Radiated Power Output Data

Test Requirement: §2.1046, §22.913, §24.232
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: ERP≤7W(GSM850, CDMA BC0)
EIRP ≤ 2 W(GSM1900)

6.1.1 E.U.T. Operation

Operating Environment:
Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar
Test mode: I: Tx mode, Keep the EUT in transmitting mode.

6.1.2 Test Setup Diagram



6.1.3 Measurement Data



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Test band: GSM850										
Conducted output power(dBm)					Antenna gain (dBd)	Antenna gain (dBi)	FCC: ERP(dBm)			Limit (dBm)
Channel		128	190	251			128	190	251	
GSM(GMSK)	GSM	31.19	31.21	31.12	-2.15	0	29.04	29.06	28.97	38.45
GPRS/EGPRS (GMSK)	1 TX Slot	31.21	31.24	31.13	-2.15	0	29.06	29.09	28.98	38.45
	2 TX Slots	29.84	29.81	29.77	-2.15	0	27.69	27.66	27.62	38.45
	3 TX Slots	27.76	27.86	27.89	-2.15	0	25.61	25.71	25.74	38.45
	4 TX Slots	25.72	25.97	25.91	-2.15	0	23.57	23.82	23.76	38.45
EGPRS(8PSK)	1 TX Slot	24.54	24.69	24.56	-2.15	0	22.39	22.54	22.41	38.45
	2 TX Slots	23.49	23.55	23.56	-2.15	0	21.34	21.40	21.41	38.45
	3 TX Slots	21.77	21.95	21.99	-2.15	0	19.62	19.80	19.84	38.45
	4 TX Slots	20.84	21.05	20.92	-2.15	0	18.69	18.90	18.77	38.45

Note:

- 1) dBd= dBi-2.15
- 2) ERP= Conducted output power+Antenna gain (dBd)
- 3) EIRP= Conducted output power+Antenna gain (dBi)

Test band: GSM1900									
Conducted output power(dBm)					Antenna gain (dBi)	FCC: EIRP(dBm)			Limit (dBm)
Channel		512	661	810		512	661	810	
GSM(GMSK)	GSM	31.87	31.53	31.13	0	31.87	31.53	31.13	33
GPRS/EGPRS (GMSK)	1 TX Slot	31.89	31.54	31.15	0	31.89	31.54	31.15	33
	2 TX Slots	30.84	30.54	30.24	0	30.84	30.54	30.24	33
	3 TX Slots	28.58	28.62	28.53	0	28.58	28.62	28.53	33
	4 TX Slots	26.96	27.02	27.08	0	26.96	27.02	27.08	33
EGPRS(8PSK)	1 TX Slot	27.09	27.12	27.15	0	27.09	27.12	27.15	33
	2 TX Slots	25.98	26.03	26.05	0	25.98	26.03	26.05	33
	3 TX Slots	24.23	24.37	24.47	0	24.23	24.37	24.47	33
	4 TX Slots	22.75	22.86	22.96	0	22.75	22.86	22.96	33

Note:

- 1) EIRP= Conducted output power+Antenna gain (dBi)



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Test band: CDMA BC0									
Conducted output power(dBm)				Antenna gain (dBd)	Antenna gain (dBi)	FCC: ERP(dBm)			Limit (dBm)
Channel	1013	384	777			1013	384	777	
1XRTT RC1 SO55	23.66	24.12	23.95	-2.15	0	21.51	21.97	21.8	38.45
1XRTT RC3 SO55	23.71	24.18	23.98	-2.15	0	21.56	22.03	21.83	38.45
1XRTT RC3 SO55 (+ F-SCH)	23.77	24.15	23.95	-2.15	0	21.62	22	21.8	38.45
1XRTT RC3 SO55 (+ SCH)	23.65	24.22	23.97	-2.15	0	21.5	22.07	21.82	38.45
1XEVD0 RTAP 153.6Kbps	23.71	24.12	23.91	-2.15	0	21.56	21.97	21.76	38.45
1XEVD0 RTAP 4096Bits	23.63	24.21	23.93	-2.15	0	21.48	22.06	21.78	38.45

Note:

- 1) dBd= dBi-2.15
- 2) ERP= Conducted output power+Antenna gain (dBd)
- 3) EIRP= Conducted output power+Antenna gain (dBi)



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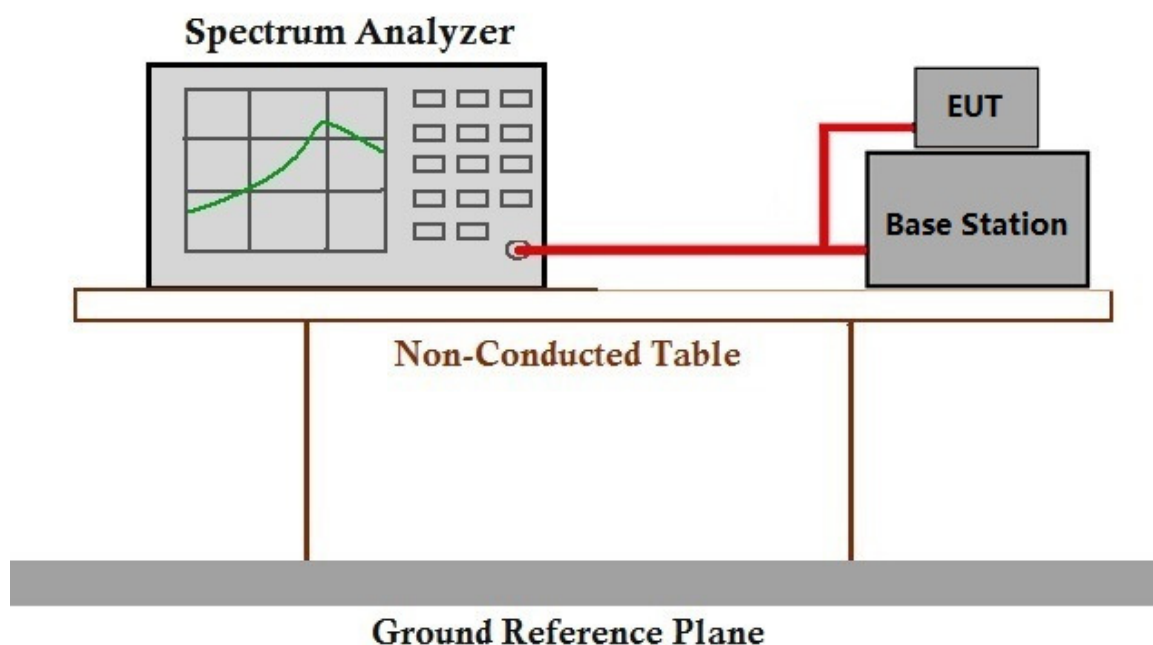
6.2 Peak-Average Ratio

Test Requirement: §24.232
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: ≤13dB

6.2.1 E.U.T. Operation

Operating Environment:
Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar
Test mode: I: Tx mode, Keep the EUT in transmitting mode.

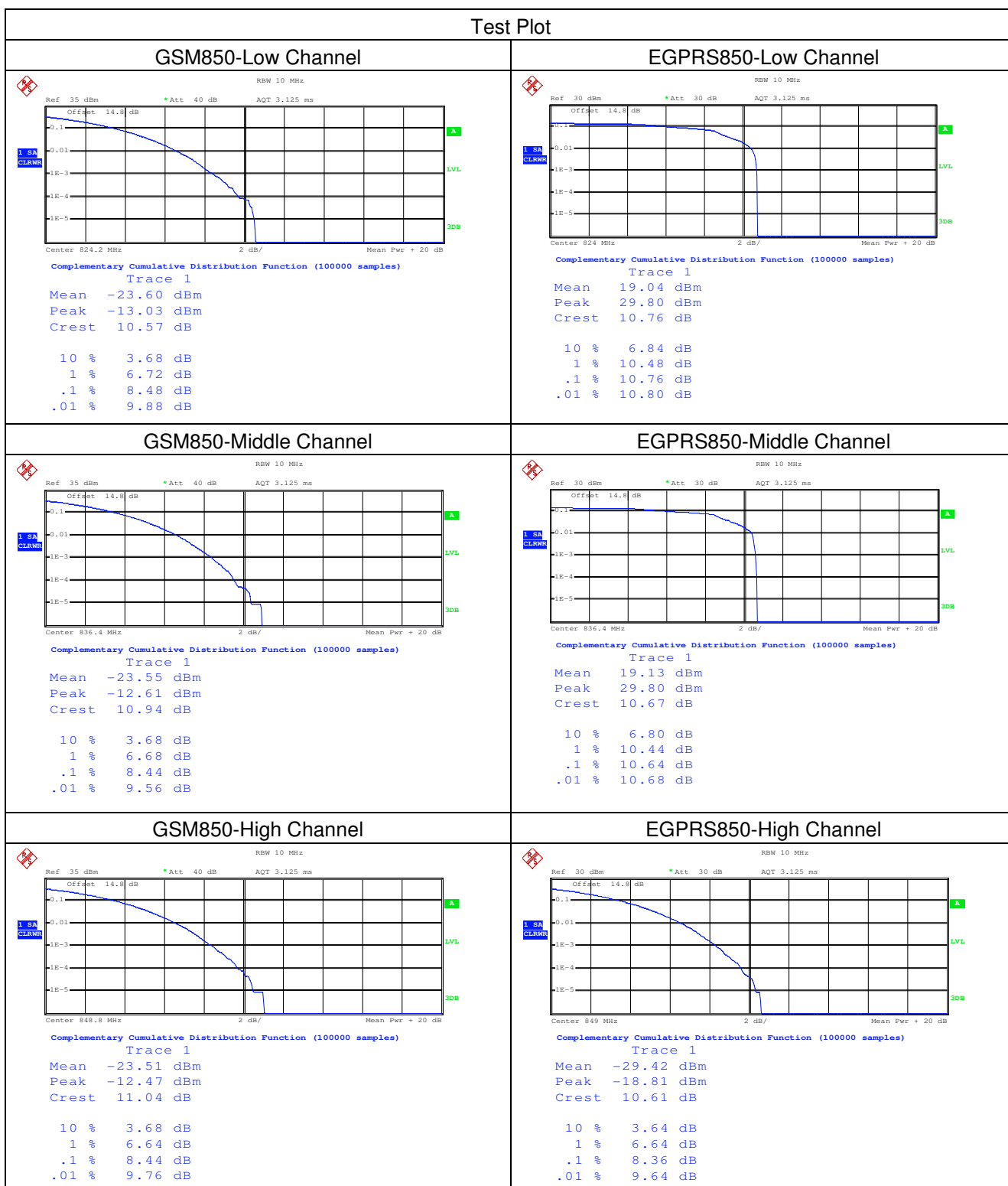
6.2.2 Test Setup Diagram



6.2.3 Measurement Data

Test mode:	Test Band	Test result (dB)			Limit (dB)	Verdict
		LCH	MCH	HCH		
GSM	GSM850	8.48	8.44	8.44	13	Pass
	EGPRS850	10.76	10.64	8.36	13	Pass
	GSM1900	7.76	7.76	7.76	13	Pass
	EGPRS1900	10.68	10.52	10.64	13	Pass
CDMA	CDMA BC0	4.42	3.36	3.16	13	Pass

Note: All modes have been tested and we found CDMA 1xRTT Test mode has the worst test result. Only record the worst test result.

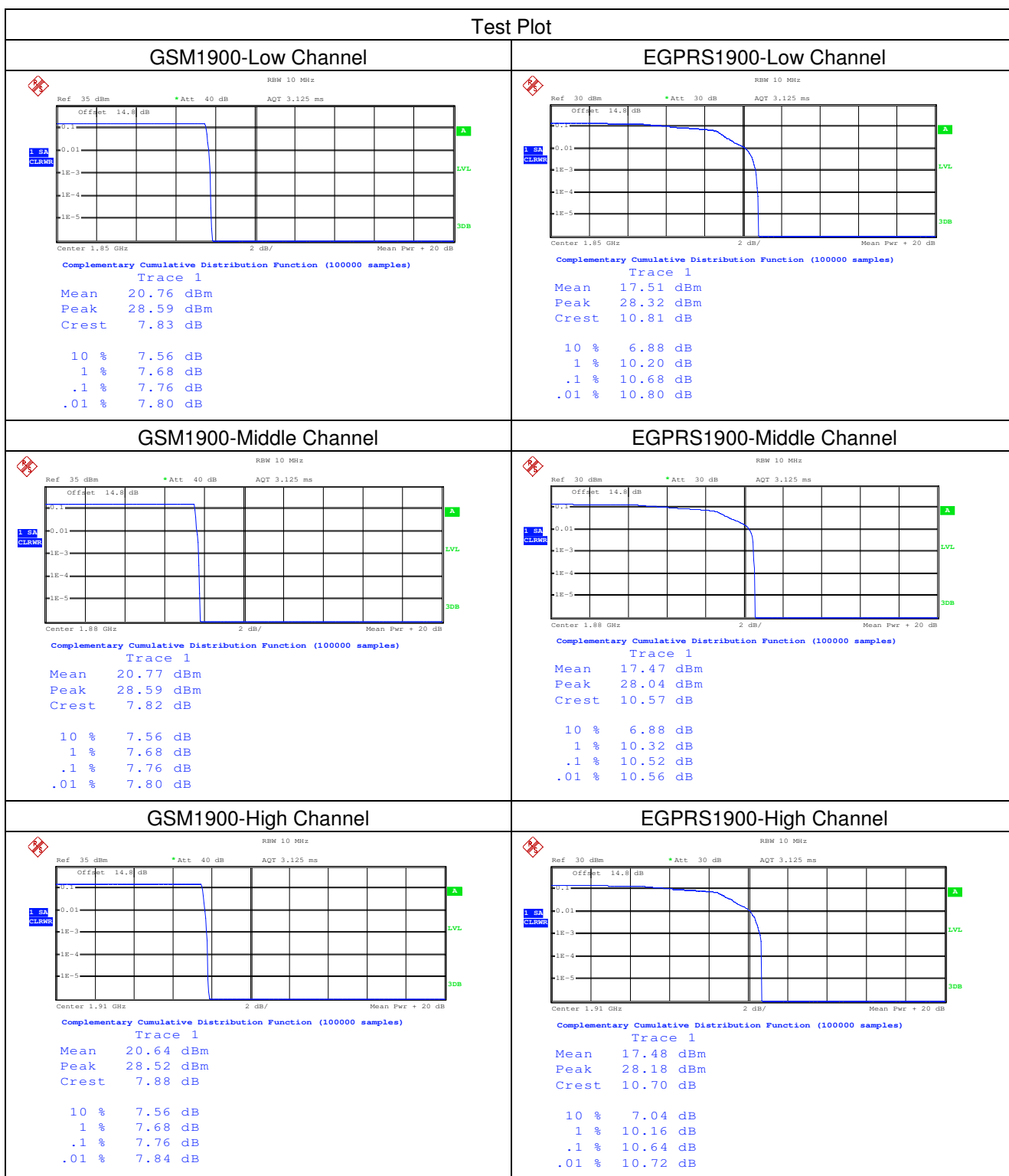


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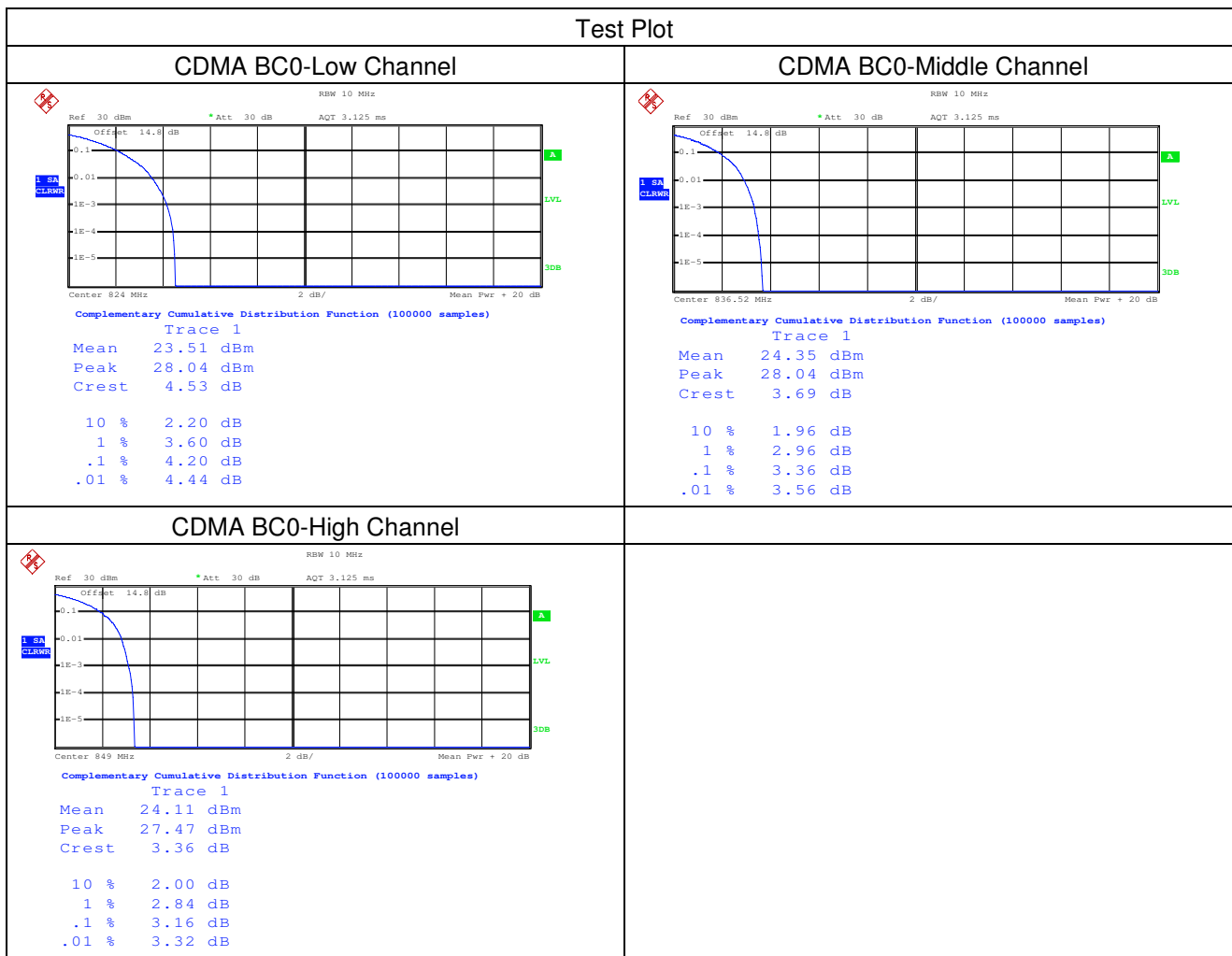
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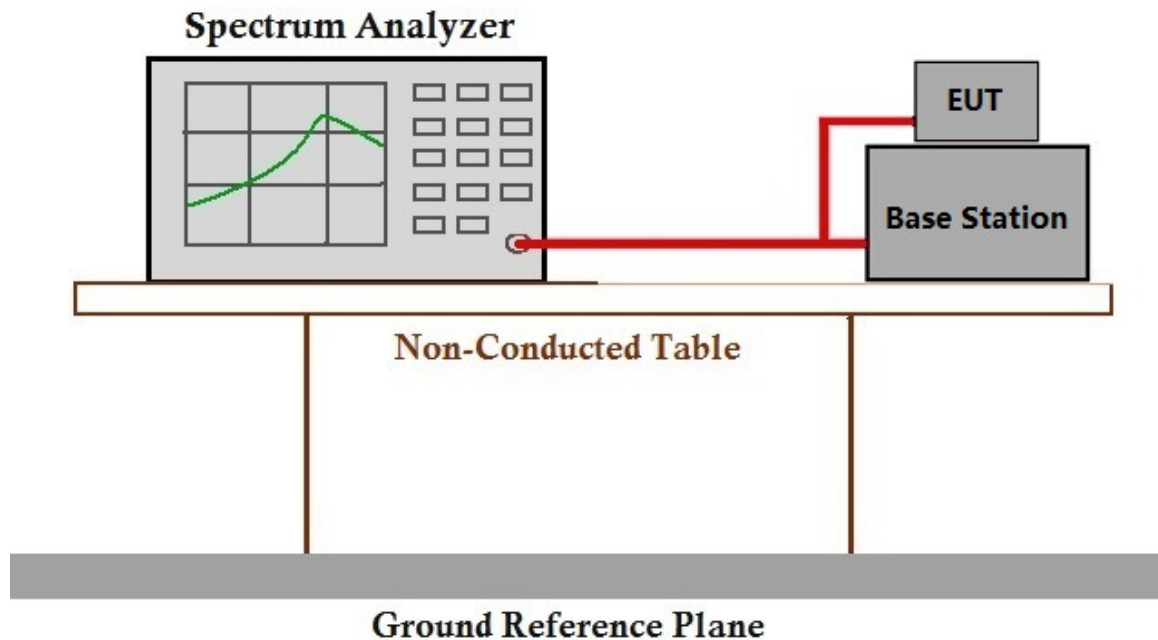
6.3 Bandwidth

Test Requirement: §2.1049(h), §22.917, §24.238
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: OBW: No limit
EBW: No limit

6.3.1 E.U.T. Operation

Operating Environment:
Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar
Test mode: I: Tx mode, Keep the EUT in transmitting mode.

6.3.2 Test Setup Diagram



6.3.3 Measurement Data



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Test mode:	Test Band	Test result of 26dB Bandwidth (MHz)			Limit (dB)	Verdict
		LCH	MCH	HCH		
GSM	GSM850	0.313	0.307	0.317	N/A	Pass
	EGPRS850	0.311	0.311	0.314	N/A	Pass
	GSM1900	0.316	0.319	0.321	N/A	Pass
	EGPRS1900	0.310	0.322	0.307	N/A	Pass
CDMA	CDMA BC0	1.410	1.422	1.422	N/A	Pass

Test mode:	Test Band	Test result of Occupied Bandwidth (MHz)			Limit (dB)	Verdict
		LCH	MCH	HCH		
GSM	GSM850	0.242	0.240	0.239	N/A	Pass
	EGPRS850	0.247	0.248	0.238	N/A	Pass
	GSM1900	0.246	0.245	0.245	N/A	Pass
	EGPRS1900	0.243	0.243	0.246	N/A	Pass
CDMA	CDMA BC0	1.275	1.272	1.272	N/A	Pass

Note: All modes have been tested and we found CDMA 1xRTT Test mode has the worst test result. Only record the worst test result.



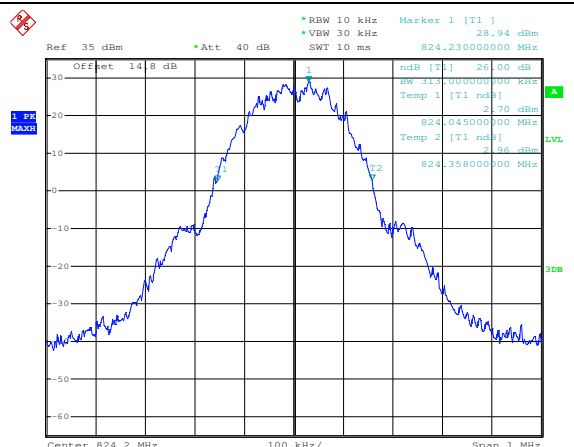
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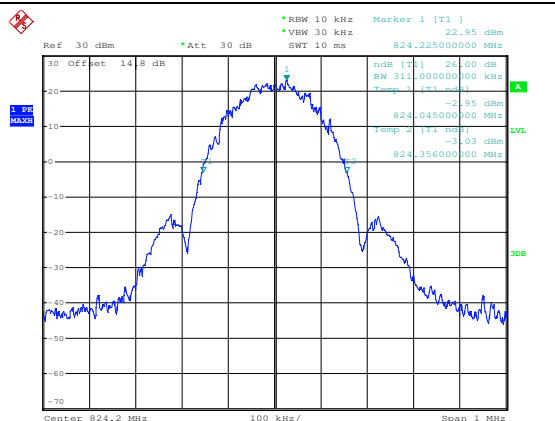


Test Plot for 26dB Bandwidth

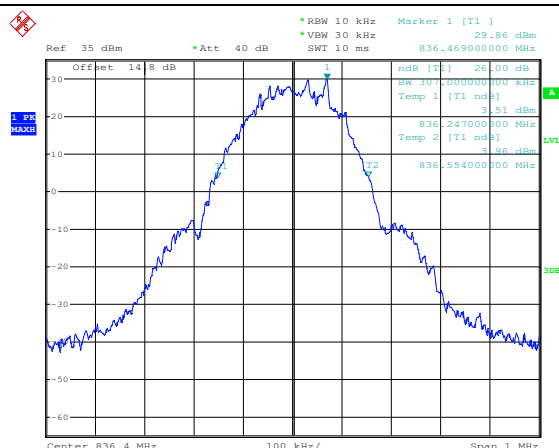
GSM850-Low Channel



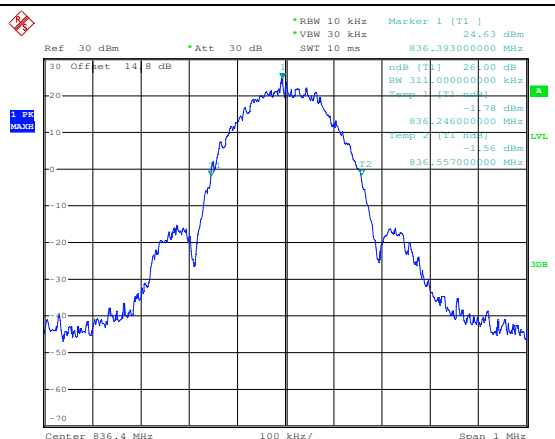
EGPRS850-Low Channel



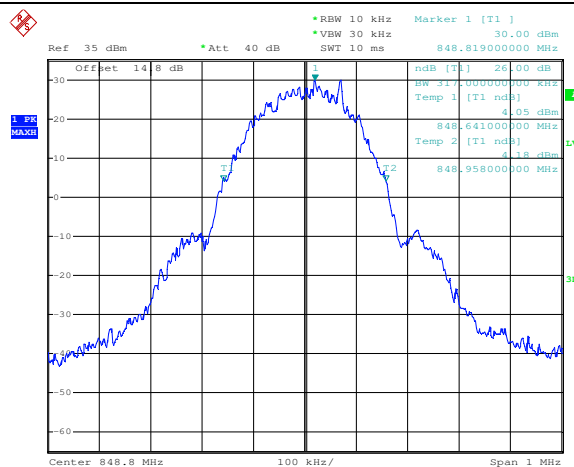
GSM850-Middle Channel



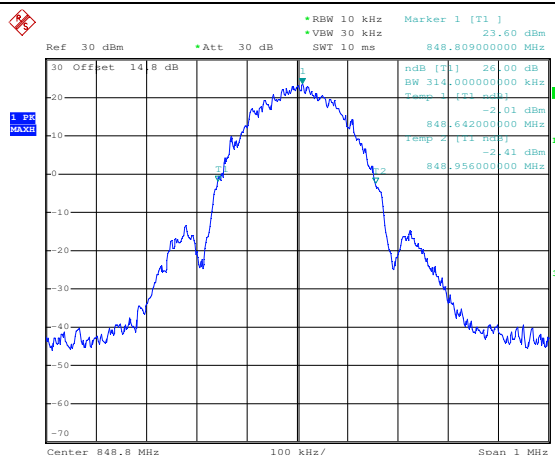
EGPRS850-Middle Channel



GSM850-High Channel



EGPRS850-High Channel



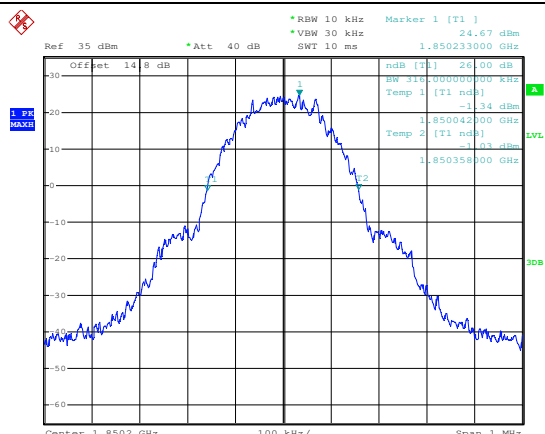
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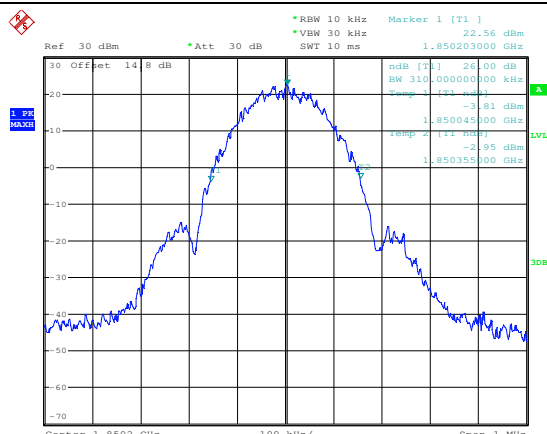


Test Plot for 26dB Bandwidth

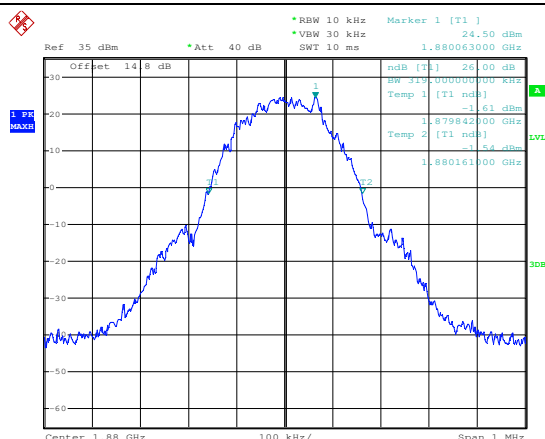
GSM1900-Low Channel



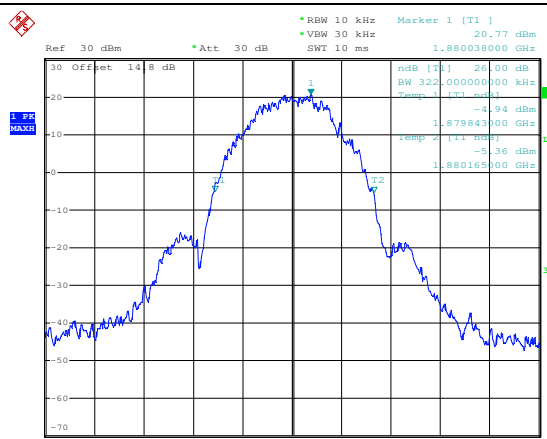
EGPRS1900-Low Channel



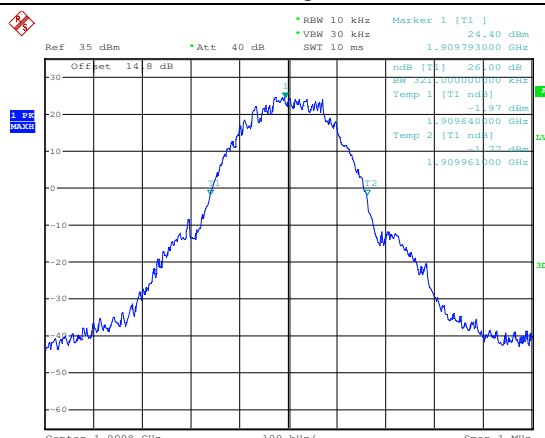
GSM1900-Middle Channel



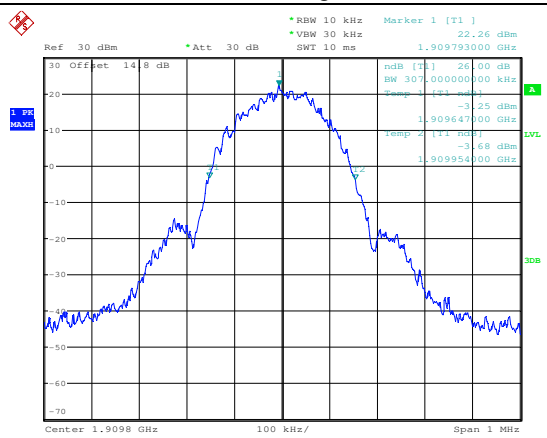
EGPRS1900-Middle Channel



GSM1900-High Channel



EGPRS1900-High Channel

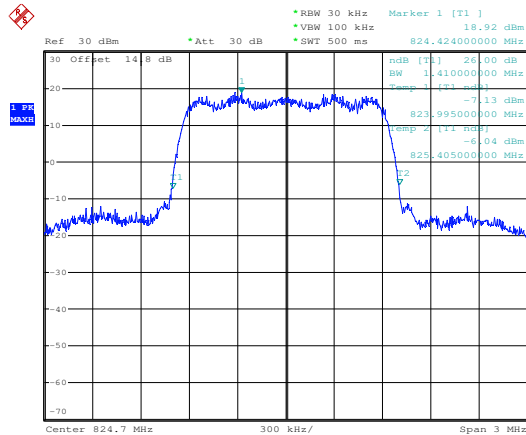


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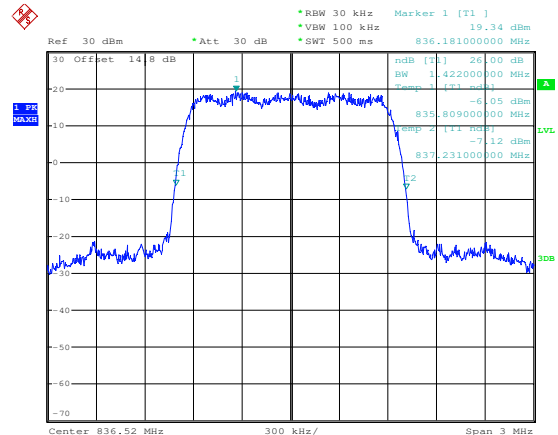
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Test Plot for 26dB Bandwidth

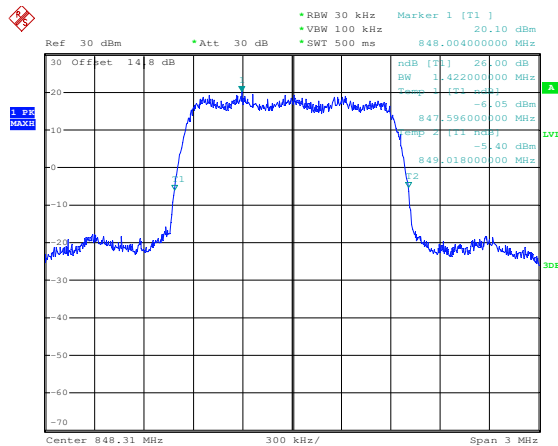
CDMA BC0-Low Channel



CDMA BC0-Middle Channel



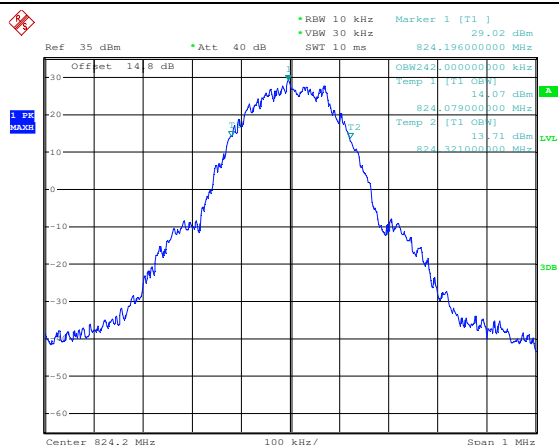
CDMA BC0-High Channel



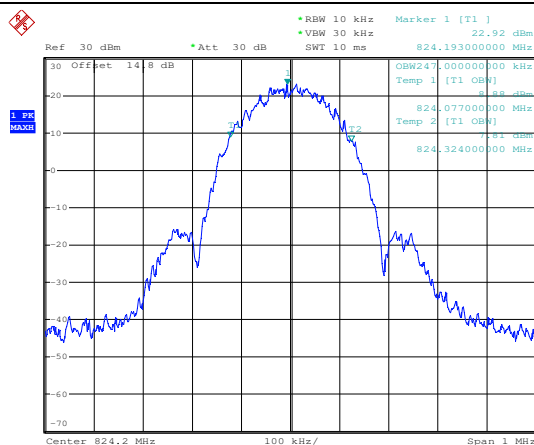


Test Plot for Occupied Bandwidth

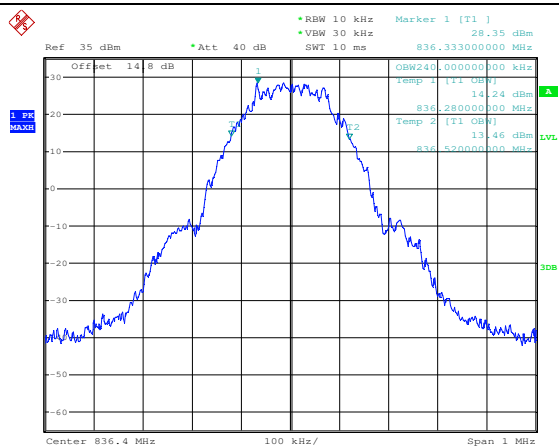
GSM850-Low Channel



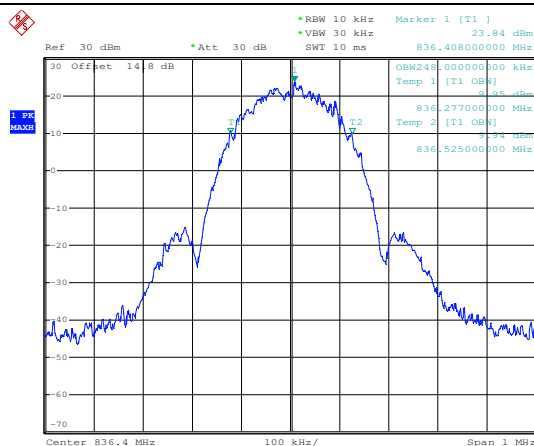
EGPRS850-Low Channel



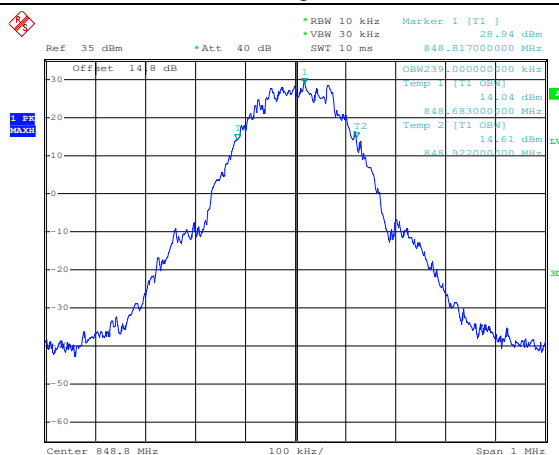
GSM850-Middle Channel



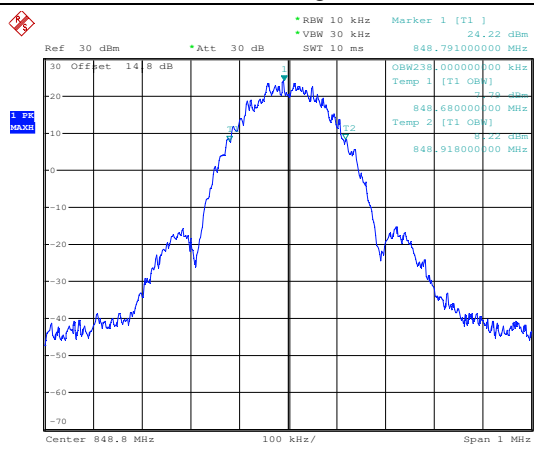
EGPRS850-Middle Channel



GSM850-High Channel



EGPRS850-High Channel



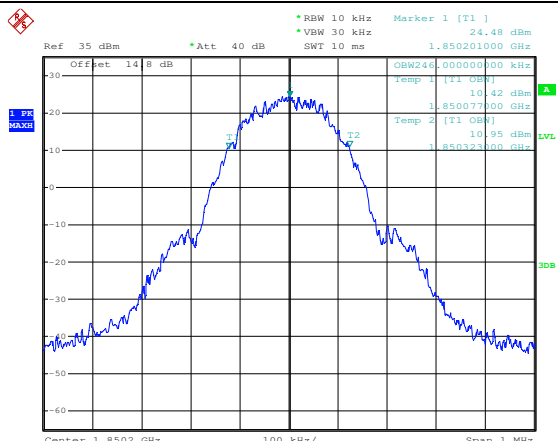
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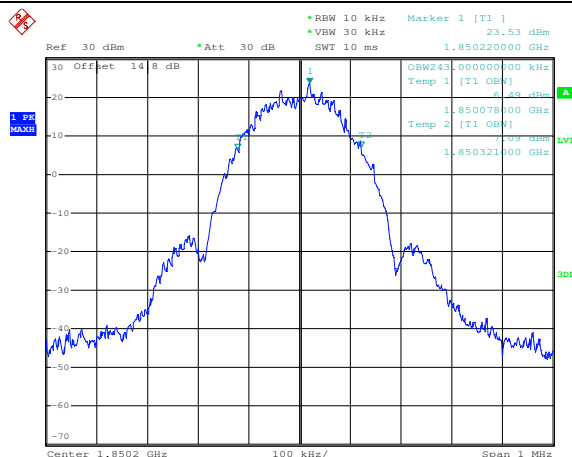


Test Plot for Occupied Bandwidth

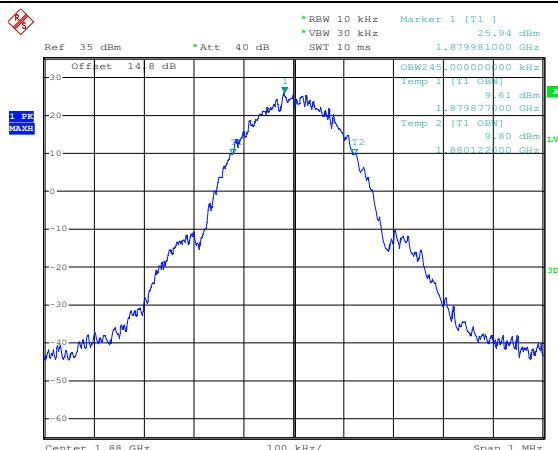
GSM1900-Low Channel



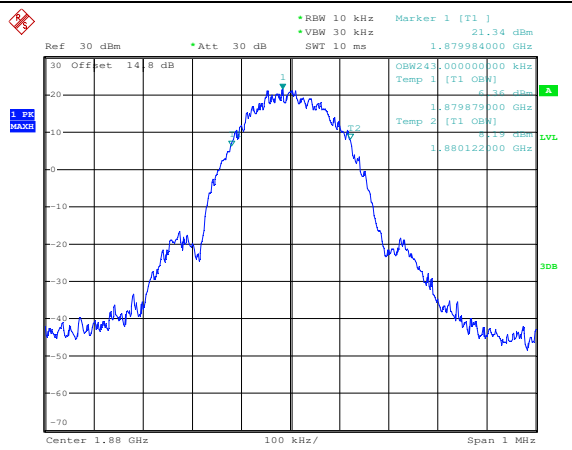
EGPRS1900-Low Channel



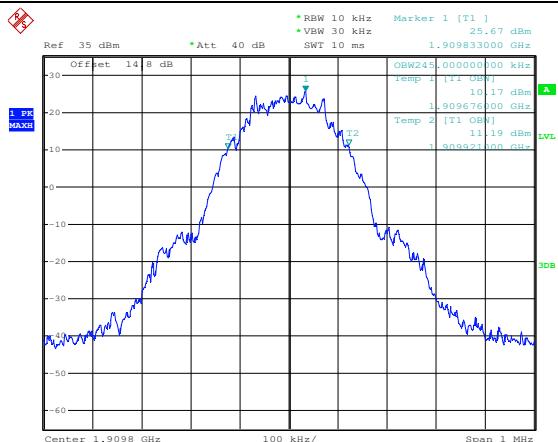
GSM1900-Middle Channel



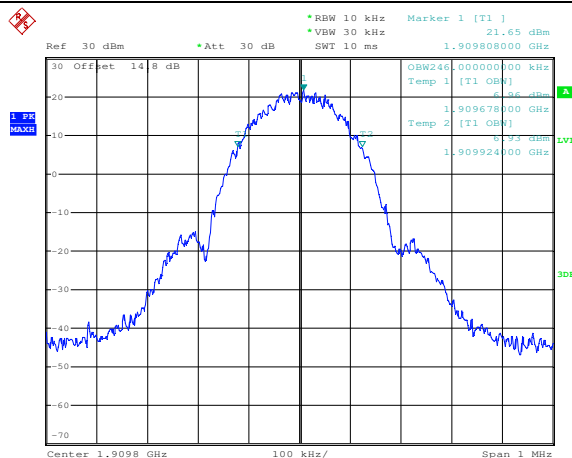
EGPRS1900-Middle Channel



GSM1900-High Channel



EGPRS1900-High Channel



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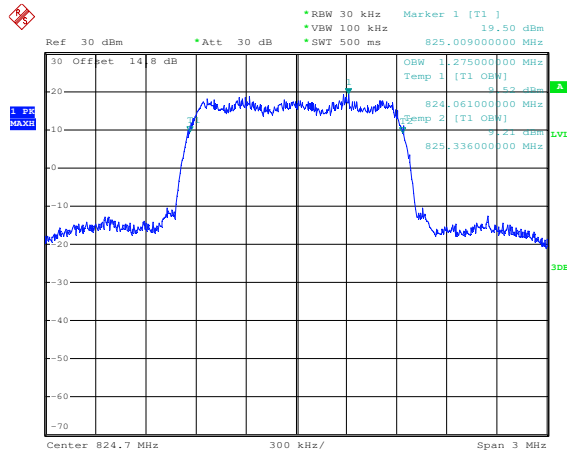
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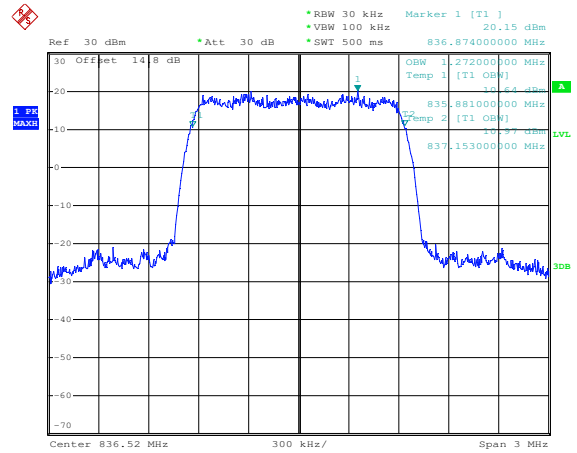
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Test Plot for Occupied Bandwidth

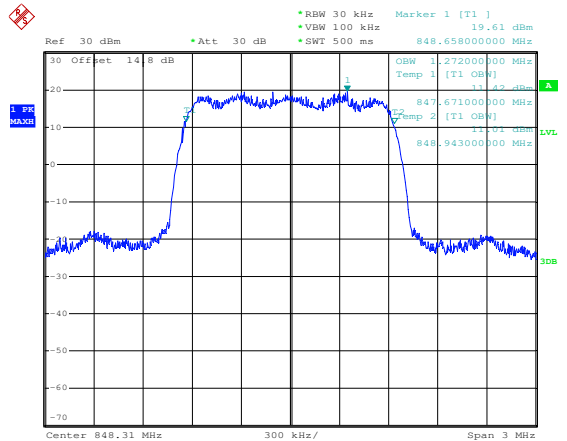
CDMA BC0-Low Channel



CDMA BC0-Middle Channel



CDMA BC0-High Channel



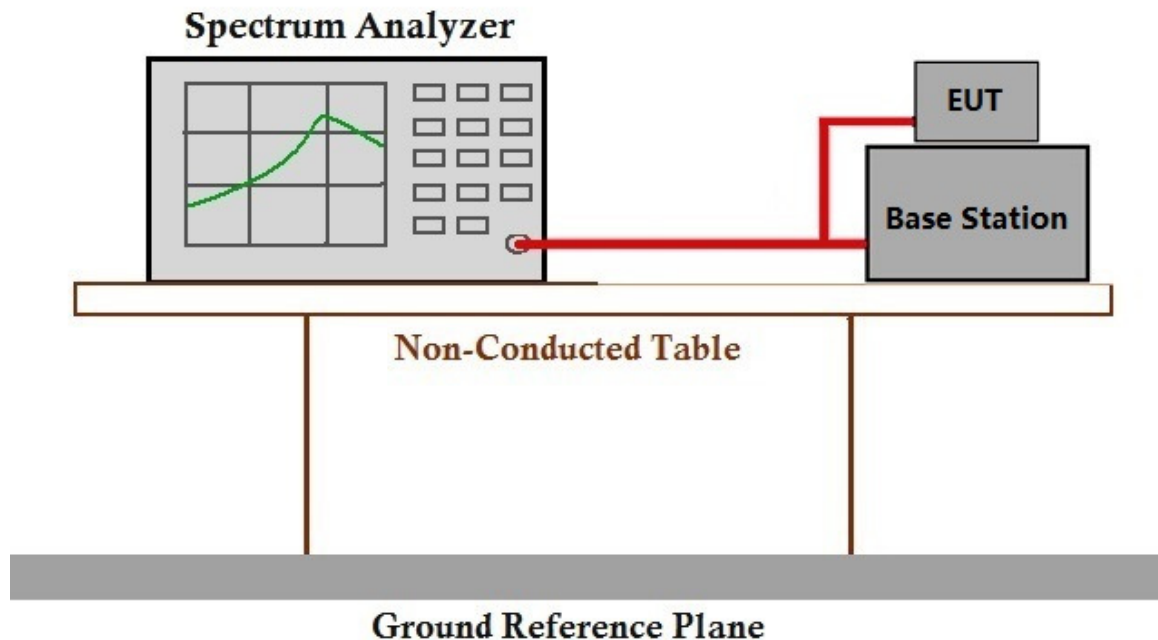
6.4 Band Edge Compliance

Test Requirement: §2.1051, §22.917, §24.238
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: $\leq -13\text{dBm}/1\% \cdot \text{EBW}$, in 1 MHz bands immediately outside and adjacent to the frequency block.

6.4.1 E.U.T. Operation

Operating Environment:
Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar
Test mode: I: Tx mode, Keep the EUT in transmitting mode.

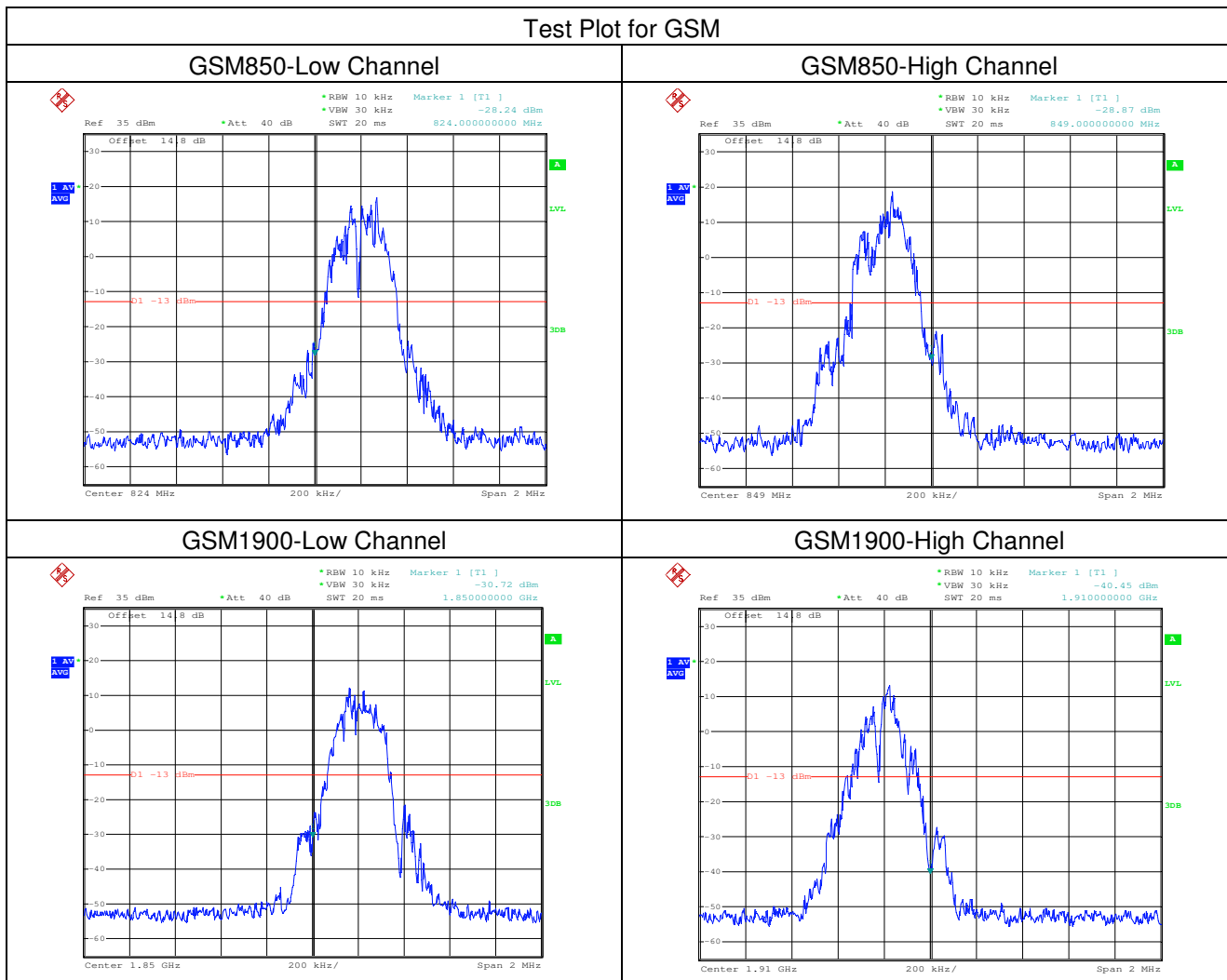
6.4.2 Test Setup Diagram



6.4.3 Measurement Data



Test Plot for GSM



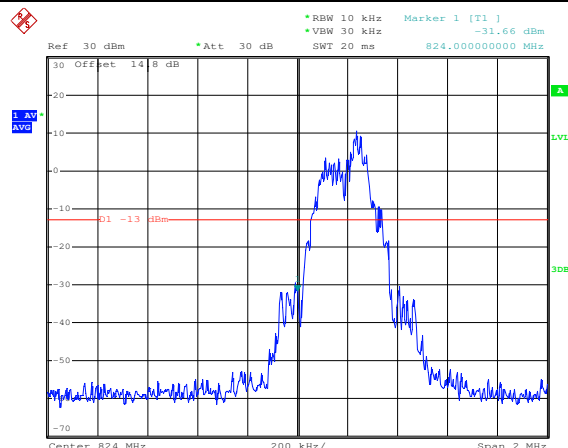
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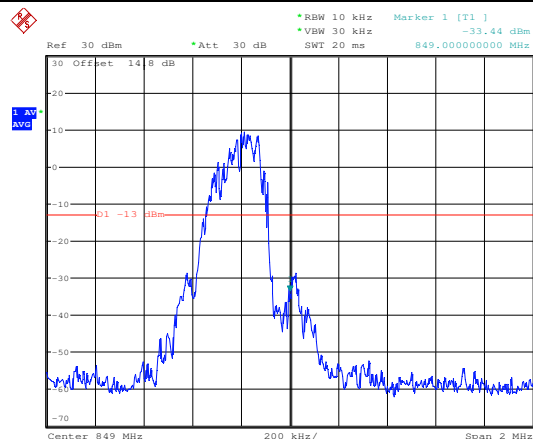


Test Plot for EGPRS

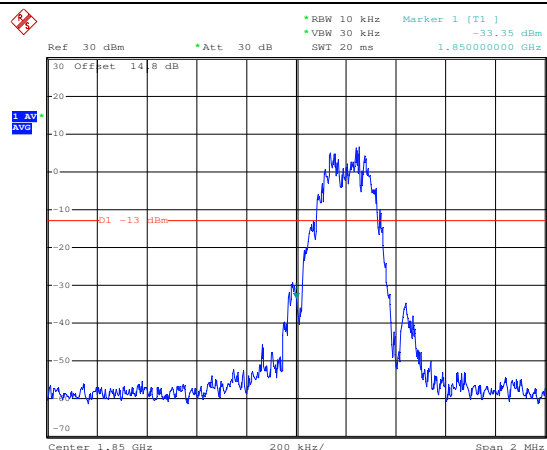
EGPRS850-Low Channel



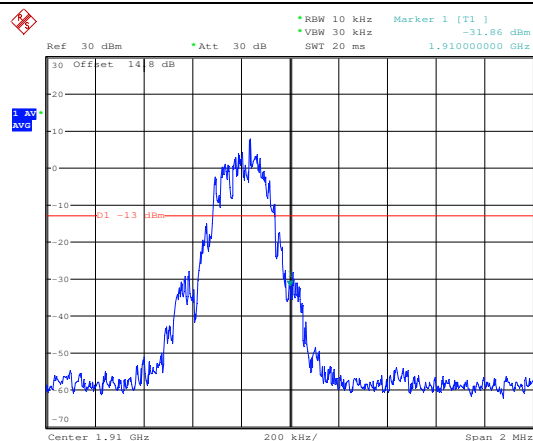
EGPRS850-High Channel



EGPRS1900-Low Channel



EGPRS1900-High Channel

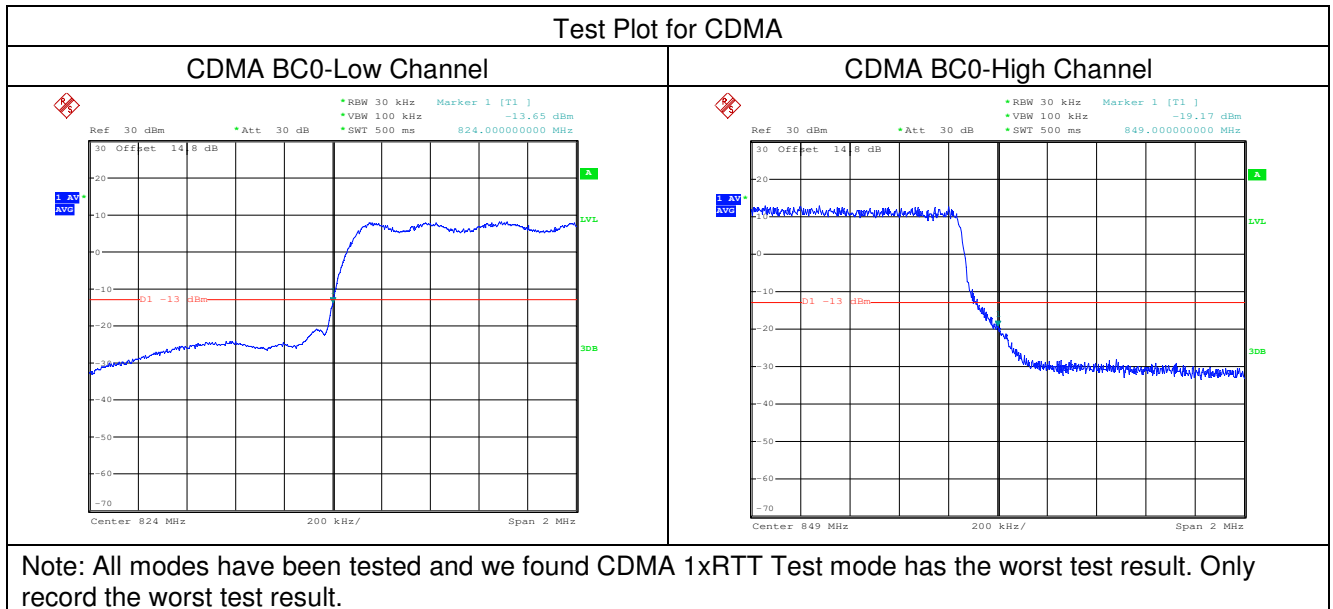


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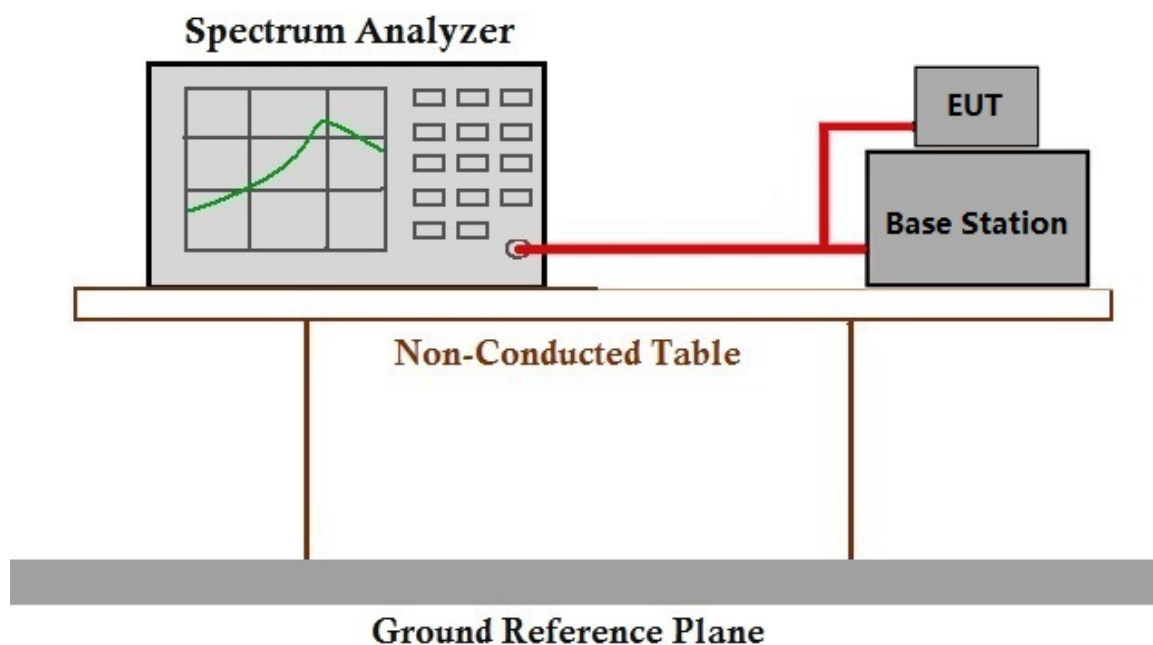
6.5 Spurious emissions at antenna terminals

Test Requirement: §2.1051, §22.917, §24.238
 Test Method: ANSI C63.26, KDB 971168 D01 v03
 Limit: $\leq -13\text{dBm}$

6.5.1 E.U.T. Operation

Operating Environment:
 Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar
 Test mode: I: Tx mode, Keep the EUT in transmitting mode.

6.5.2 Test Setup Diagram



6.5.3 Measurement Data



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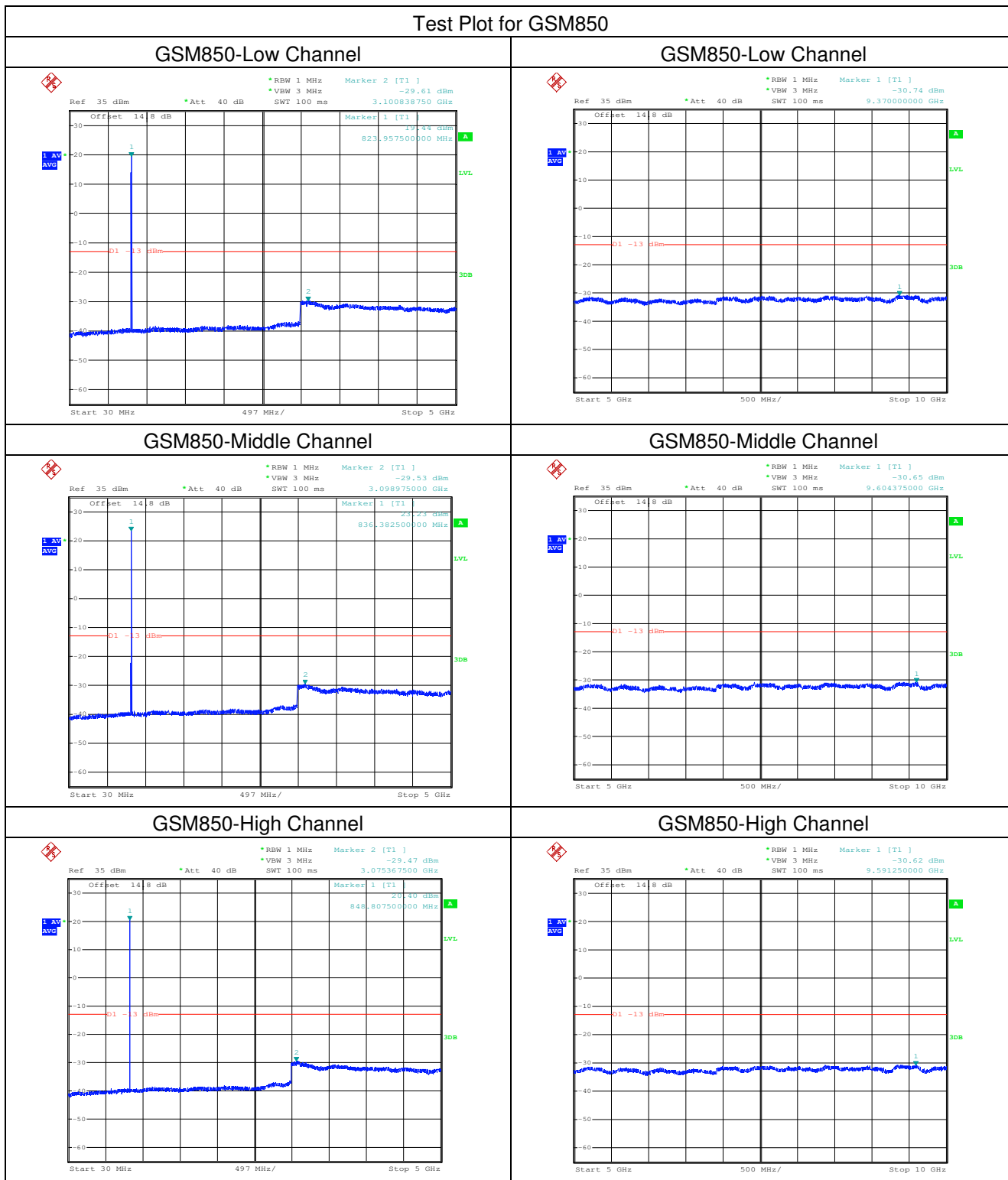
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Test Plot for GSM850



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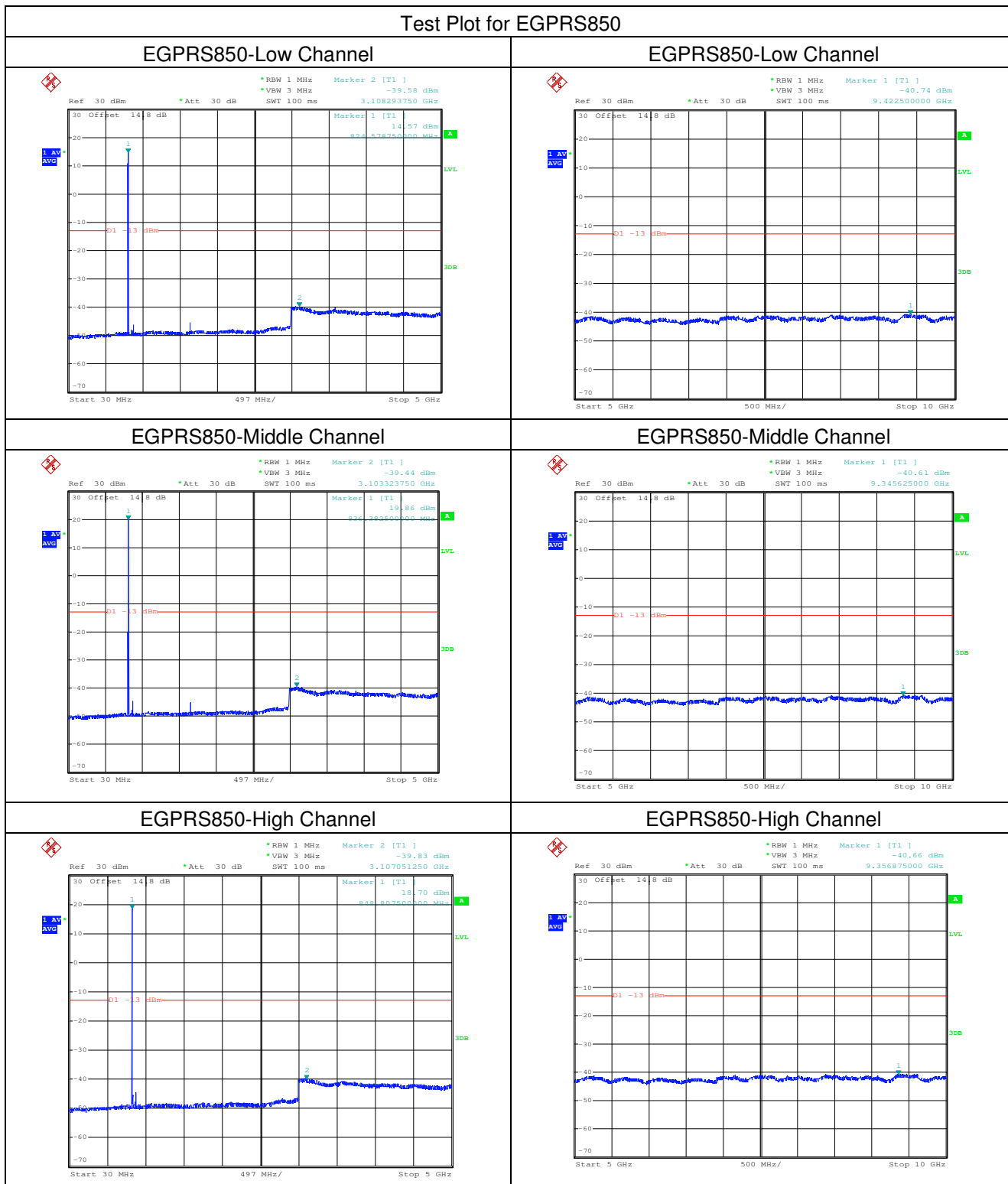
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Test Plot for EGPRS850



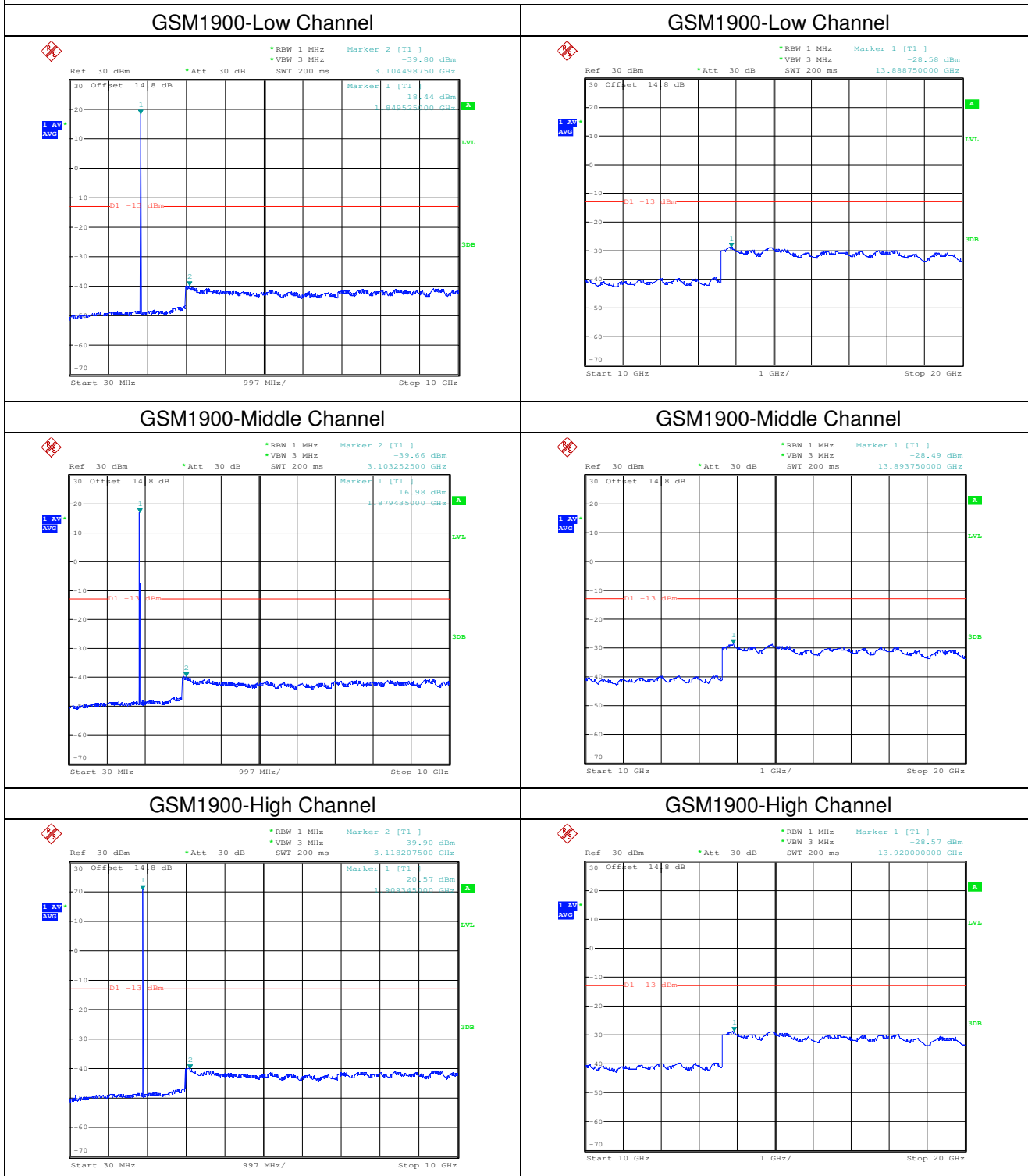
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Test Plot for GSM1900



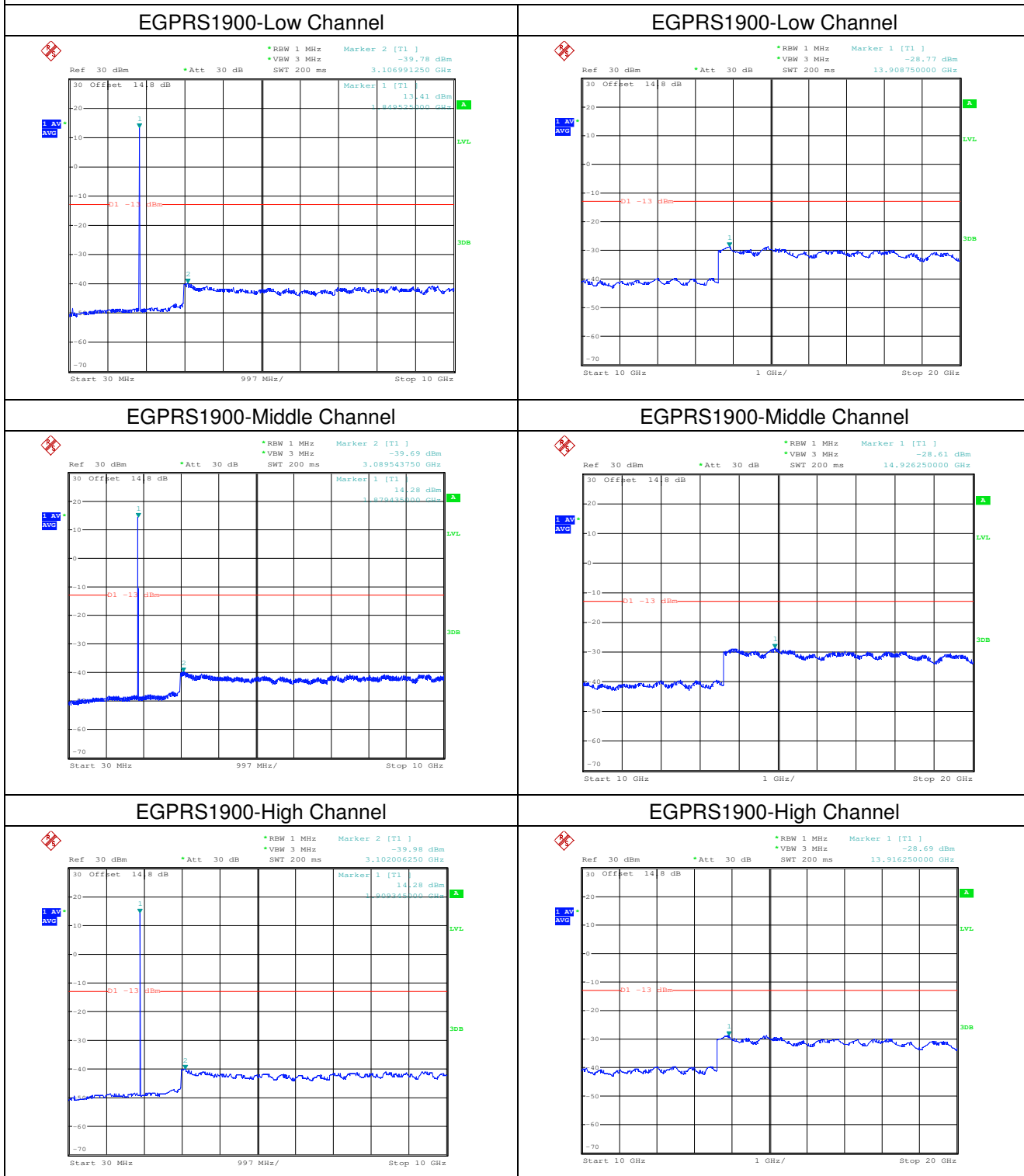
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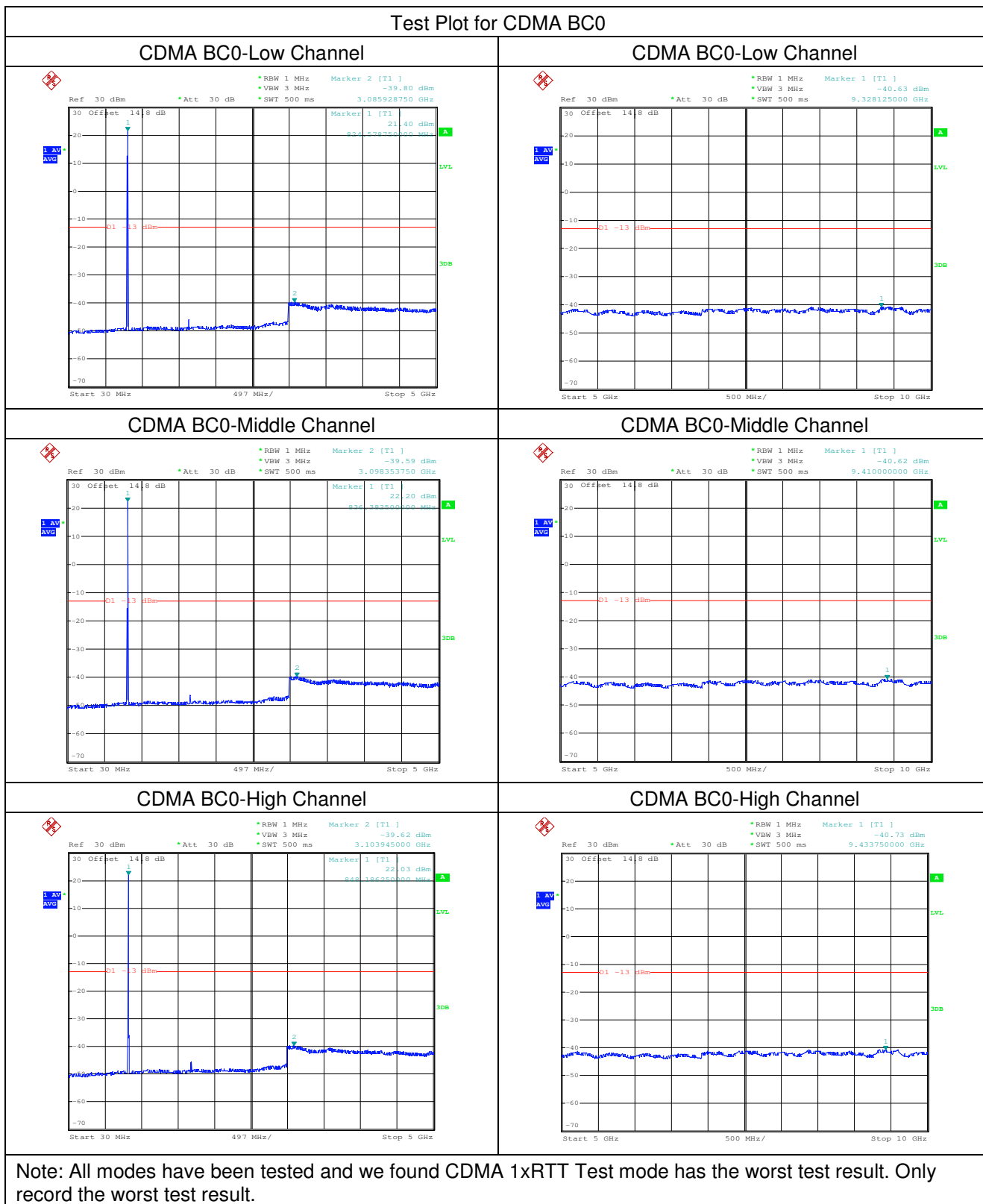


Test Plot for EGPRS1900



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Note: All modes have been tested and we found CDMA 1xRTT Test mode has the worst test result. Only record the worst test result.



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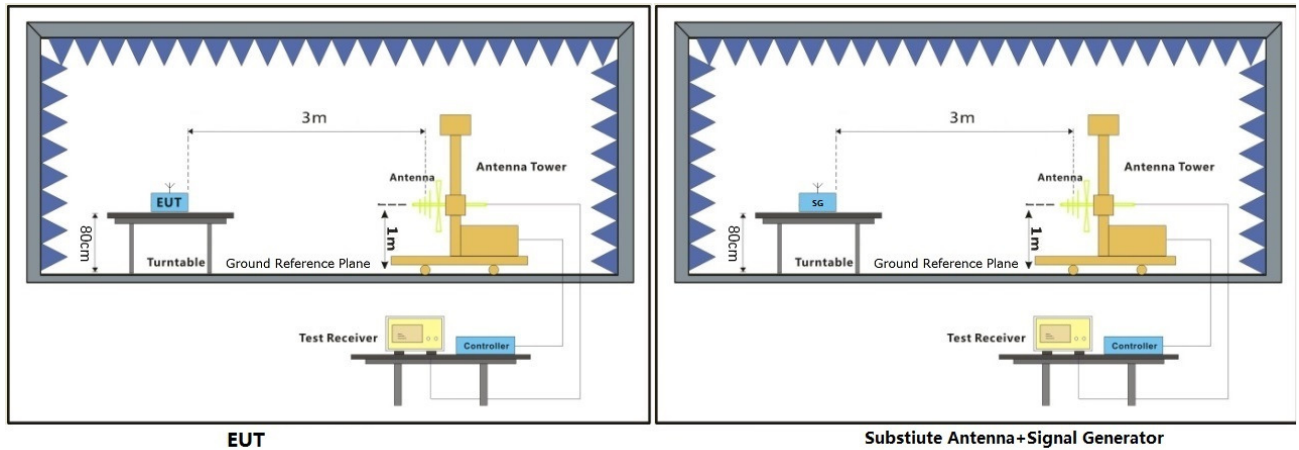
6.6 Field strength of spurious radiation

Test Requirement: §2.1051, §22.917, §24.238,
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: $\leq -13\text{dBm}$

6.6.1 E.U.T. Operation

Operating Environment:
Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar
Test mode: I: Tx mode, Keep the EUT in transmitting mode.

6.6.2 Test Setup Diagram



6.6.3 Measurement Procedure and Data

Test Procedure:

- (1) On a test site, the EUT shall be placed on a turntable and in the position closest to the normal use as declared by the user.
- (2) The test antenna shall be oriented initially for vertical polarization located 3m from the EUT to correspond to the transmitter.
- (3) The output of the antenna shall be connected to the measuring receiver and either a peak or quasi-peak detector was used for the measurement as indicated on the report. The detector selection is based on how close the emission level was approaching the limit.
- (4) The transmitter shall be switched on; if possible, without the modulation and the measurement receiver shall be tuned to the frequency of the transmitter under test.
- (5) The test antenna shall be raised and lowered through the specified range of height until the measuring receiver detects a maximum signal level.
- (6) The transmitter shall then be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
- (7) The test antenna shall be raised and lowered again through the specified range of height until the measuring receiver detects a maximum signal level.
- (8) The maximum signal level detected by the measuring receiver shall be noted.
- (9) The measurement shall be repeated with the test antenna set to horizontal polarization.
- (10) Replace the antenna with a proper Antenna (substitution antenna).
- (11) The substitution antenna shall be oriented for vertical polarization and, if necessary, the length of the substitution antenna shall be adjusted to correspond to the frequency of transmitting.
- (12) The substitution antenna shall be connected to a calibrated signal generator.
- (13) If necessary, the input attenuator setting of the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
- (14) The test antenna shall be raised and lowered through the specified range of the height to ensure that the maximum signal is received.
- (15) The input signal to substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the transmitter radiated power was measured, corrected for the change of input attenuation setting of the measuring receiver.
- (16) The input level to the substitution antenna shall be recorded as power level in dBm, corrected for any change of input attenuator setting of the measuring receiver.
- (17) The measurement shall be repeated with the test antenna and the substitution antenna oriented for horizontal polarization.



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GSM850-Low channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1648.4	-65.85	0.52	6	-60.37	-13	-47.37	Horizontal	Pass
2472.6	-61.1	0.53	5.8	-55.83	-13	-42.83	Horizontal	Pass
3296.8	-58.76	0.65	6.2	-53.21	-13	-40.21	Horizontal	Pass
1648.4	-66.28	0.52	6	-60.8	-13	-47.8	Vertical	Pass
2472.6	-60.58	0.53	5.8	-55.31	-13	-42.31	Vertical	Pass
3296.8	-58.35	0.65	6.2	-52.8	-13	-39.8	Vertical	Pass

GSM850-Middle channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1672.8	-47.51	0.52	6	-42.03	-13	-29.03	Horizontal	Pass
2509.2	-51.97	0.59	5.3	-47.26	-13	-34.26	Horizontal	Pass
3345.6	-56.51	0.65	6.2	-50.96	-13	-37.96	Horizontal	Pass
1672.8	-50.77	0.52	6	-45.29	-13	-32.29	Vertical	Pass
2509.2	-49.25	0.59	5.3	-44.54	-13	-31.54	Vertical	Pass
3345.6	-56.74	0.65	6.2	-51.19	-13	-38.19	Vertical	Pass
1672.8	-47.51	0.52	6	-42.03	-13	-29.03	Horizontal	Pass

GSM850-High channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1697.6	-65.11	0.52	6	-59.63	-13	-46.63	Horizontal	Pass
2546.4	-61.05	0.59	5.3	-56.34	-13	-43.34	Horizontal	Pass
3395.2	-58.86	0.65	6.2	-53.31	-13	-40.31	Horizontal	Pass
1697.6	-64.63	0.52	6	-59.15	-13	-46.15	Vertical	Pass
2546.4	-60.21	0.59	5.3	-55.5	-13	-42.5	Vertical	Pass
3395.2	-58.65	0.65	6.2	-53.1	-13	-40.1	Vertical	Pass



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EGPRS850-Low channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1648.4	-65.71	0.52	6	-60.23	-13	-47.23	Horizontal	Pass
2472.6	-63.17	0.53	5.8	-57.9	-13	-44.9	Horizontal	Pass
3296.8	-57.71	0.65	6.2	-52.16	-13	-39.16	Horizontal	Pass
1648.4	-65.01	0.52	6	-59.53	-13	-46.53	Vertical	Pass
2472.6	-63.23	0.53	5.8	-57.96	-13	-44.96	Vertical	Pass
3296.8	-58.59	0.65	6.2	-53.04	-13	-40.04	Vertical	Pass

EGPRS850-Middle channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1672.8	-66.72	0.52	6	-61.24	-13	-48.24	Horizontal	Pass
2509.2	-63.16	0.59	5.3	-58.45	-13	-45.45	Horizontal	Pass
3345.6	-60	0.65	6.2	-54.45	-13	-41.45	Horizontal	Pass
1672.8	-66.46	0.52	6	-60.98	-13	-47.98	Vertical	Pass
2509.2	-62.03	0.59	5.3	-57.32	-13	-44.32	Vertical	Pass
3345.6	-59.94	0.65	6.2	-54.39	-13	-41.39	Vertical	Pass
1672.8	-66.72	0.52	6	-61.24	-13	-48.24	Horizontal	Pass

EGPRS850-High channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1697.6	-65.85	0.52	6	-60.37	-13	-47.37	Horizontal	Pass
2546.4	-62.21	0.59	5.3	-57.5	-13	-44.5	Horizontal	Pass
3395.2	-58.27	0.65	6.2	-52.72	-13	-39.72	Horizontal	Pass
1697.6	-65.79	0.52	6	-60.31	-13	-47.31	Vertical	Pass
2546.4	-61.88	0.59	5.3	-57.17	-13	-44.17	Vertical	Pass
3395.2	-58.45	0.65	6.2	-52.9	-13	-39.9	Vertical	Pass



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GSM1900-Low channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3700.4	-60.75	0.71	7.6	-53.86	-13	-40.86	Horizontal	Pass
5550.6	-58.02	0.85	10.3	-48.57	-13	-35.57	Horizontal	Pass
7400.8	-59.75	1	12.9	-47.85	-13	-34.85	Horizontal	Pass
3700.4	-60.75	0.71	7.6	-53.86	-13	-40.86	Vertical	Pass
5550.6	-59.54	0.85	10.3	-50.09	-13	-37.09	Vertical	Pass
7400.8	-58.6	1	12.9	-46.7	-13	-33.7	Vertical	Pass

GSM1900-Middle channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3760	-60.69	0.71	7.6	-53.8	-13	-40.8	Horizontal	Pass
5640	-58.26	0.85	10.3	-48.81	-13	-35.81	Horizontal	Pass
7520	-60.35	0.99	13.2	-48.14	-13	-35.14	Horizontal	Pass
3760	-60.54	0.71	7.6	-53.65	-13	-40.65	Vertical	Pass
5640	-58.66	0.85	10.3	-49.21	-13	-36.21	Vertical	Pass
7520	-59.8	0.99	13.2	-47.59	-13	-34.59	Vertical	Pass

GSM1900-High channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3819.6	-59.08	0.71	7.6	-52.19	-13	-39.19	Horizontal	Pass
5729.4	-57.4	0.85	10.3	-47.95	-13	-34.95	Horizontal	Pass
7639.2	-59.76	0.99	13.2	-47.55	-13	-34.55	Horizontal	Pass
3819.6	-59.81	0.71	7.6	-52.92	-13	-39.92	Vertical	Pass
5729.4	-57.6	0.85	10.3	-48.15	-13	-35.15	Vertical	Pass
7639.2	-58.96	0.99	13.2	-46.75	-13	-33.75	Vertical	Pass



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EGPRS1900-Low channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3700.4	-61.06	0.71	7.6	-54.17	-13	-41.17	Horizontal	Pass
5550.6	-58.86	0.85	10.3	-49.41	-13	-36.41	Horizontal	Pass
7400.8	-60.78	1	12.9	-48.88	-13	-35.88	Horizontal	Pass
3700.4	-60.96	0.71	7.6	-54.07	-13	-41.07	Vertical	Pass
5550.6	-58.72	0.85	10.3	-49.27	-13	-36.27	Vertical	Pass
7400.8	-60.13	1	12.9	-48.23	-13	-35.23	Vertical	Pass

EGPRS1900-Middle channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3760	-59.96	0.71	7.6	-53.07	-13	-40.07	Horizontal	Pass
5640	-58.32	0.85	10.3	-48.87	-13	-35.87	Horizontal	Pass
7520	-59.69	0.99	13.2	-47.48	-13	-34.48	Horizontal	Pass
3760	-59.83	0.71	7.6	-52.94	-13	-39.94	Vertical	Pass
5640	-57.95	0.85	10.3	-48.5	-13	-35.5	Vertical	Pass
7520	-59.08	0.99	13.2	-46.87	-13	-33.87	Vertical	Pass

EGPRS1900-High channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3819.6	-59.03	0.71	7.6	-52.14	-13	-39.14	Horizontal	Pass
5729.4	-58.44	0.85	10.3	-48.99	-13	-35.99	Horizontal	Pass
7639.2	-59.59	0.99	13.2	-47.38	-13	-34.38	Horizontal	Pass
3819.6	-59.24	0.71	7.6	-52.35	-13	-39.35	Vertical	Pass
5729.4	-58.14	0.85	10.3	-48.69	-13	-35.69	Vertical	Pass
7639.2	-59.95	0.99	13.2	-47.74	-13	-34.74	Vertical	Pass



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CDMA BC0-Low channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1649.4	-66.05	0.52	6	-66.05	-13	-47.57	Horizontal	Pass
2474.1	-61.26	0.53	5.8	-61.26	-13	-42.99	Horizontal	Pass
3298.8	-57.44	0.65	6.2	-57.44	-13	-38.89	Horizontal	Pass
1649.4	-66.65	0.52	6	-66.65	-13	-48.17	Vertical	Pass
2474.1	-62.37	0.53	5.8	-62.37	-13	-44.1	Vertical	Pass
3298.8	-57.83	0.65	6.2	-57.83	-13	-39.28	Vertical	Pass

CDMA BC0-Middle channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1673.04	-65.86	0.52	6	-60.38	-13	-47.38	Horizontal	Pass
2509.56	-62.67	0.59	5.3	-57.96	-13	-44.96	Horizontal	Pass
3346.08	-59.2	0.65	6.2	-53.65	-13	-40.65	Horizontal	Pass
1673.04	-64.79	0.52	6	-59.31	-13	-46.31	Vertical	Pass
2509.56	-62.79	0.59	5.3	-58.08	-13	-45.08	Vertical	Pass
3346.08	-59.05	0.65	6.2	-53.5	-13	-40.5	Vertical	Pass

CDMA BC0-High channel								
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1696.62	-66.28	0.52	6	-60.8	-13	-47.8	Horizontal	Pass
2544.93	-62.87	0.59	5.3	-58.16	-13	-45.16	Horizontal	Pass
3393.24	-59.27	0.65	6.2	-53.72	-13	-40.72	Horizontal	Pass
1696.62	-65.37	0.52	6	-59.89	-13	-46.89	Vertical	Pass
2544.93	-62.72	0.59	5.3	-58.01	-13	-45.01	Vertical	Pass
3393.24	-60.03	0.65	6.2	-54.48	-13	-41.48	Vertical	Pass

Note: All modes have been tested and we found CDMA 1xRTT Test mode has the worst test result. Only record the worst test result.



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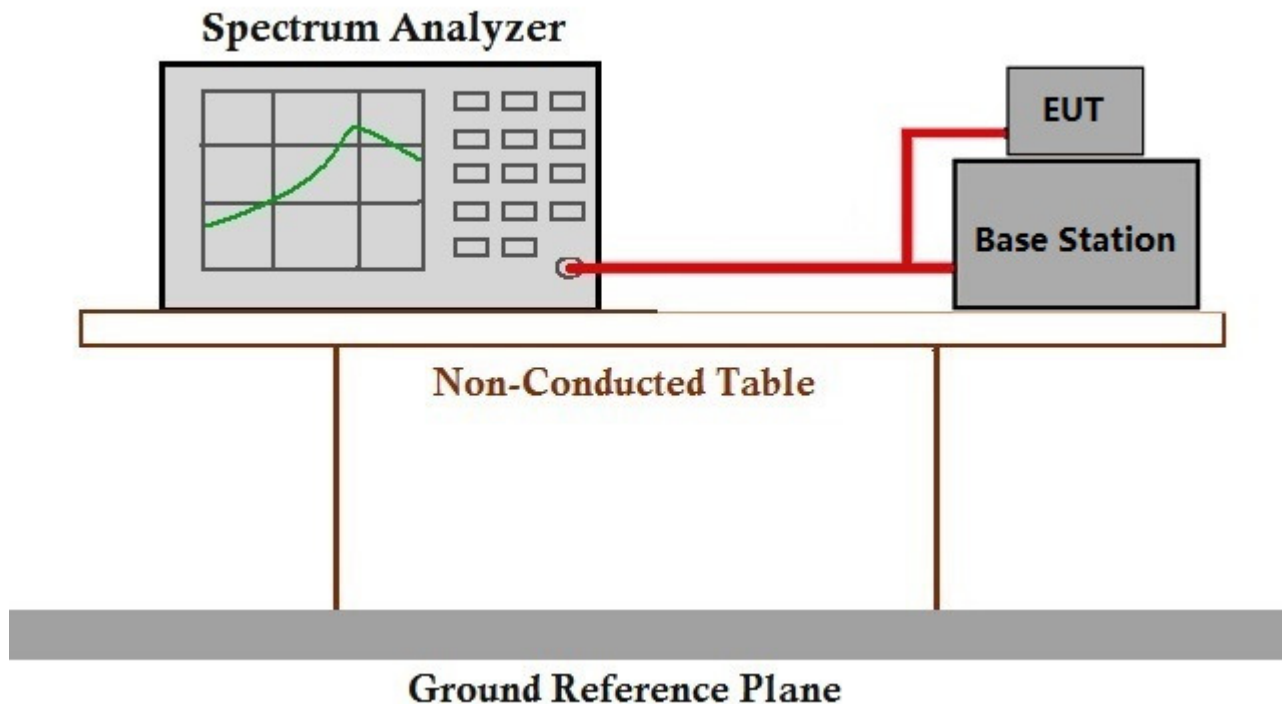
6.7 Frequency stability

Test Requirement: §2.1055, §22.355, §24.235
 Test Method: ANSI C63.26, KDB 971168 D01 v03
 Limit: $\leq \pm 2.5\text{ppm}$.

6.7.1 E.U.T. Operation

Operating Environment:
 Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar
 Test mode: I: Tx mode, Keep the EUT in transmitting mode.

6.7.2 Test Setup Diagram



6.7.3 Measurement Data



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Frequency Error VS. Voltage

Test Band	Test mode:	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM 850	GSM	LCH	TN	VL	2.79	0.003384	PASS
				VN	1.71	0.002074	PASS
				VH	-3.37	-0.004088	PASS
		MCH	TN	VL	-1.99	-0.002379	PASS
				VN	-1.35	-0.001614	PASS
				VH	-4.04	-0.004829	PASS
		HCH	TN	VL	3.96	0.004665	PASS
				VN	-0.88	-0.001037	PASS
				VH	-2.23	-0.002627	PASS
	EGPRS	LCH	TN	VL	-3.67	-0.004452	PASS
				VN	1.4	0.001698	PASS
				VH	-2.54	-0.003081	PASS
		MCH	TN	VL	3.74	0.004470	PASS
				VN	2.46	0.002940	PASS
				VH	-4.54	-0.005427	PASS
		HCH	TN	VL	1.03	0.001213	PASS
				VN	-3.28	-0.003864	PASS
				VH	2.4	0.002828	PASS



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Test Band	Test mode:	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM 1900	GSM	LCH	TN	VL	-4.13	-0.002232	PASS
				VN	2.8	0.001513	PASS
				VH	2.23	0.001205	PASS
		MCH	TN	VL	1.72	0.000915	PASS
				VN	-2.18	-0.001160	PASS
				VH	3.88	0.002064	PASS
		HCH	TN	VL	-2.15	-0.001126	PASS
				VN	2.8	0.001466	PASS
				VH	-3.77	-0.001974	PASS
	EGPRS	LCH	TN	VL	1.75	0.000946	PASS
				VN	-3.39	-0.001832	PASS
				VH	3.28	0.001773	PASS
		MCH	TN	VL	-3.76	-0.002000	PASS
				VN	2.31	0.001229	PASS
				VH	1.36	0.000723	PASS
		HCH	TN	VL	-1.87	-0.000979	PASS
				VN	4.37	0.002288	PASS
				VH	-4.37	-0.002288	PASS

Test Band	Test mode:	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
CDMA BC0	CDMA 1xRTT	LCH	TN	VL	-3.82	-0.004632	PASS
				VN	3.2	0.003880	PASS
				VH	2.61	0.003165	PASS
		MCH	TN	VL	2.07	0.002475	PASS
				VN	-1.83	-0.002188	PASS
				VH	4.19	0.005009	PASS
		HCH	TN	VL	-1.81	-0.002134	PASS
				VN	3.15	0.003713	PASS
				VH	-3.43	-0.004043	PASS

Note: All modes have been tested and we found CDMA 1xRTT Test mode has the worst test result. Only record the worst test result.



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Frequency Error VS. Temperature

Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM 850	GSM	LCH	VN	-30	1.88	0.002281	PASS
				-20	1.8	0.002184	PASS
				-10	2.09	0.002536	PASS
				0	-2.23	-0.002706	PASS
				10	1.08	0.001310	PASS
				20	-4.71	-0.005715	PASS
				30	1.74	0.002111	PASS
				40	-0.59	-0.000716	PASS
				50	-3.51	-0.004259	PASS
		MCH	VN	-30	-2.07	-0.002474	PASS
				-20	-2.14	-0.002558	PASS
				-10	-0.55	-0.000657	PASS
				0	-3.04	-0.003634	PASS
				10	1.98	0.002367	PASS
				20	2.79	0.003335	PASS
				30	1.65	0.001972	PASS
				40	1.04	0.001243	PASS
				50	-4.16	-0.004973	PASS
		HCH	VN	-30	3.92	0.004618	PASS
				-20	3.94	0.004642	PASS
				-10	3.73	0.004394	PASS
				0	-5.23	-0.006162	PASS
				10	1.74	0.002050	PASS
				20	-1.99	-0.002344	PASS
				30	3.76	0.004430	PASS
				40	-0.09	-0.000106	PASS
				50	-4.03	-0.004748	PASS



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Shenzhen Branch

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Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM 850	EGPRS	LCH	VN	-30	-1.6	-0.001941	PASS
				-20	-1.64	-0.001990	PASS
				-10	2.97	0.003603	PASS
				0	-3.33	-0.004040	PASS
				10	2.28	0.002766	PASS
				20	-3.18	-0.003858	PASS
				30	-3.92	-0.004756	PASS
				40	-3.74	-0.004538	PASS
				50	-3.16	-0.003834	PASS
		MCH	VN	-30	-1.64	-0.001960	PASS
				-20	-1.67	-0.001996	PASS
				-10	4.24	0.005068	PASS
				0	-4.45	-0.005319	PASS
				10	2.46	0.002940	PASS
				20	-3.26	-0.003897	PASS
				30	-3	-0.003586	PASS
				40	-1.92	-0.002295	PASS
				50	-3.15	-0.003765	PASS
		HCH	VN	-30	-3.26	-0.003841	PASS
				-20	-3.21	-0.003782	PASS
				-10	-2.15	-0.002533	PASS
				0	-1.85	-0.002180	PASS
				10	-2.14	-0.002521	PASS
				20	1.83	0.002156	PASS
				30	-4.15	-0.004889	PASS
				40	-2.97	-0.003499	PASS
				50	-2.41	-0.002839	PASS



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Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM 1900	GSM	LCH	VN	-30	-3.11	-0.001681	PASS
				-20	-3.12	-0.001686	PASS
				-10	-4.29	-0.002319	PASS
				0	2.69	0.001454	PASS
				10	-3.57	-0.001930	PASS
				20	-0.5	-0.000270	PASS
				30	1.6	0.000865	PASS
				40	-3.2	-0.001730	PASS
				50	-2.59	-0.001400	PASS
		MCH	VN	-30	-4.31	-0.002293	PASS
				-20	-4.32	-0.002298	PASS
				-10	1.38	0.000734	PASS
				0	-2.49	-0.001324	PASS
				10	4.42	0.002351	PASS
				20	-3.79	-0.002016	PASS
				30	-1.92	-0.001021	PASS
				40	-3.85	-0.002048	PASS
				50	-4.63	-0.002463	PASS
		HCH	VN	-30	-3.2	-0.001676	PASS
				-20	-3.21	-0.001681	PASS
				-10	3.36	0.001759	PASS
				0	1.68	0.000880	PASS
				10	-0.51	-0.000267	PASS
				20	-3.41	-0.001786	PASS
				30	-4.28	-0.002241	PASS
				40	1.49	0.000780	PASS
				50	-3.11	-0.001628	PASS



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Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
GSM 1900	EGPRS	LCH	VN	-30	-2.39	-0.001292	PASS
				-20	-2.4	-0.001297	PASS
				-10	-4.27	-0.002308	PASS
				0	2.13	0.001151	PASS
				10	-2.07	-0.001119	PASS
				20	-1.76	-0.000951	PASS
				30	-4.05	-0.002189	PASS
				40	2.12	0.001146	PASS
				50	-3.3	-0.001784	PASS
		MCH	VN	-30	-2.98	-0.001585	PASS
				-20	-2.97	-0.001580	PASS
				-10	-2.15	-0.001144	PASS
				0	-3.79	-0.002016	PASS
				10	1.91	0.001016	PASS
				20	-2.77	-0.001473	PASS
				30	-1.65	-0.000878	PASS
				40	-3.27	-0.001739	PASS
				50	1.3	0.000691	PASS
		HCH	VN	-30	-2.57	-0.001346	PASS
				-20	-2.58	-0.001351	PASS
				-10	3.4	0.001780	PASS
				0	2.24	0.001173	PASS
				10	-2.96	-0.001550	PASS
				20	-4.28	-0.002241	PASS
				30	-3.38	-0.001770	PASS
				40	-2.17	-0.001136	PASS
				50	-1.86	-0.000974	PASS



Test Band	Test mode:	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
CDMA BC0	CDMA 1xRTT	LCH	VN	-30	-2.07	-0.002510	PASS
				-20	-2.08	-0.002522	PASS
				-10	-4.02	-0.004874	PASS
				0	2.37	0.002874	PASS
				10	-1.79	-0.002170	PASS
				20	-1.49	-0.001807	PASS
				30	-3.78	-0.004583	PASS
				40	2.38	0.002886	PASS
				50	-3.03	-0.003674	PASS
		MCH	VN	-30	-0.74	-0.000885	PASS
				-20	-0.75	-0.000897	PASS
				-10	-1.9	-0.002271	PASS
				0	-3.52	-0.004208	PASS
				10	2.21	0.002642	PASS
				20	-2.5	-0.002989	PASS
				30	-1.45	-0.001733	PASS
				40	-3.01	-0.003598	PASS
				50	1.55	0.001853	PASS
		HCH	VN	-30	-2.29	-0.002699	PASS
				-20	-2.3	-0.002711	PASS
				-10	3.67	0.004326	PASS
				0	2.51	0.002959	PASS
				10	-1.71	-0.002016	PASS
				20	-0.99	-0.001167	PASS
				30	-3.11	-0.003666	PASS
				40	-1.92	-0.002263	PASS
				50	-1.59	-0.001874	PASS

Note: All modes have been tested and we found CDMA 1xRTT Test mode has the worst test result. Only record the worst test result.



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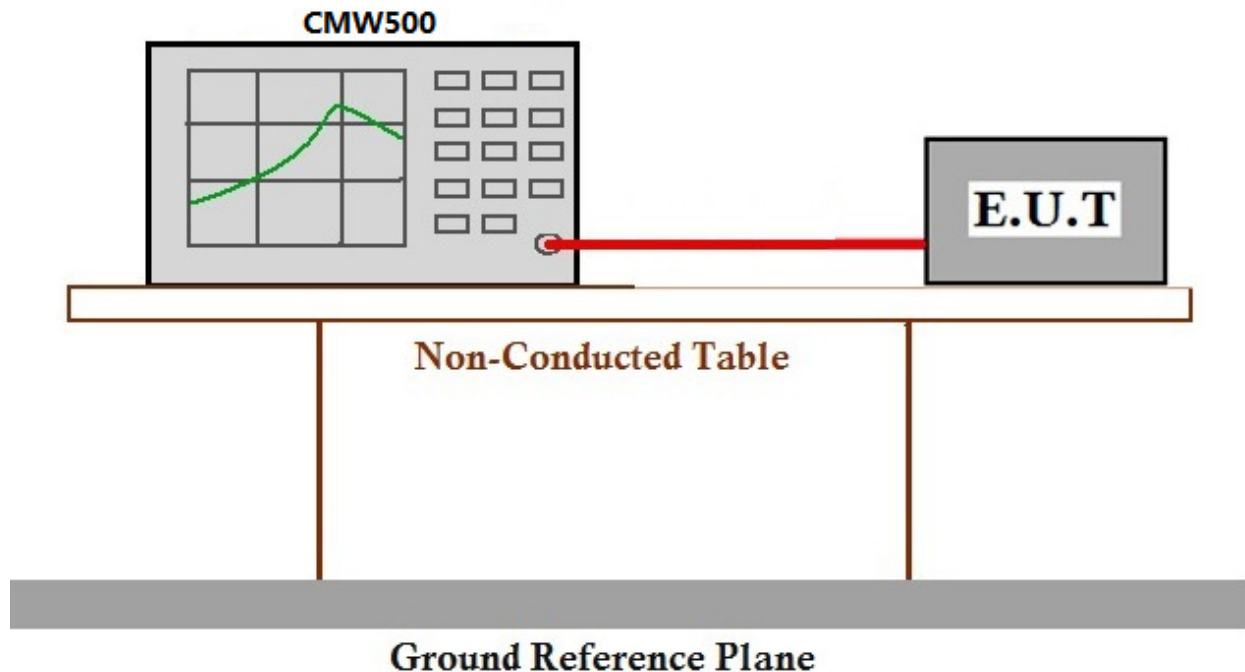
6.8 Modulation Characteristics

Test Requirement: §2.1047
Test Method: ANSI C63.26, KDB 971168 D01 v03
Limit: Digital modulation

6.8.1 E.U.T. Operation

Operating Environment:
Temperature: 22.7 °C Humidity: 68.2 % RH Atmospheric Pressure: 1030 mbar
Test mode: I: Tx mode, Keep the EUT in transmitting mode.

6.8.2 Test Setup Diagram



6.8.3 Measurement Data

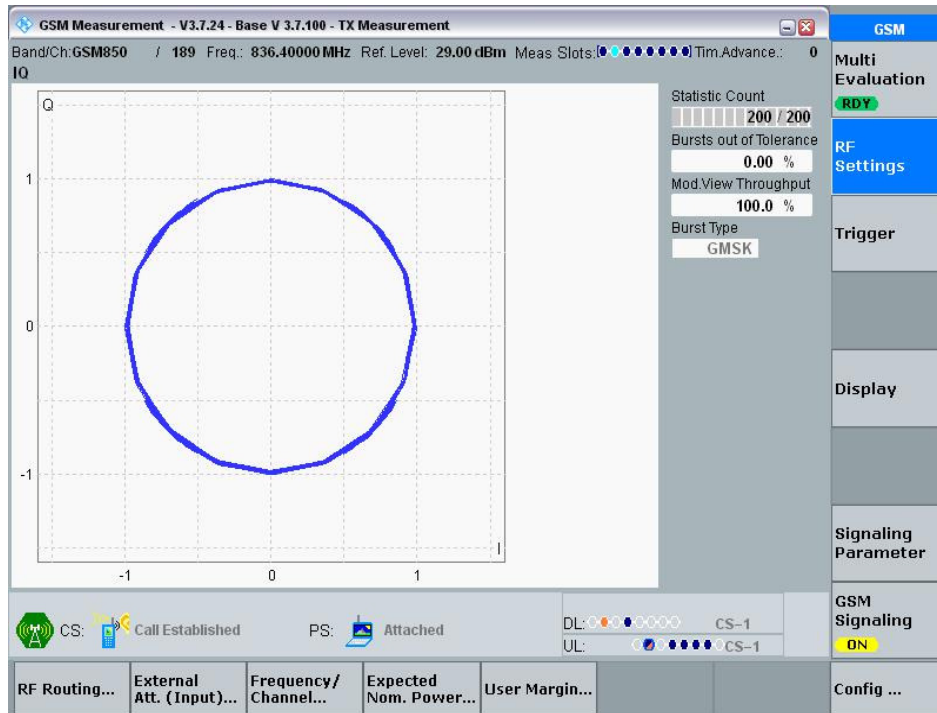


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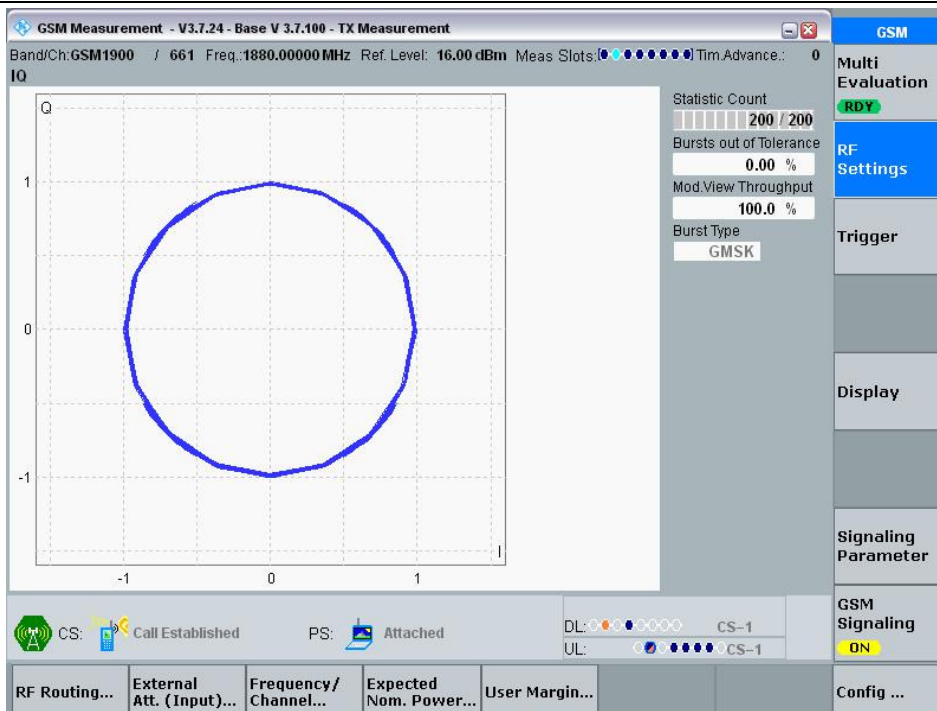
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Test Plot

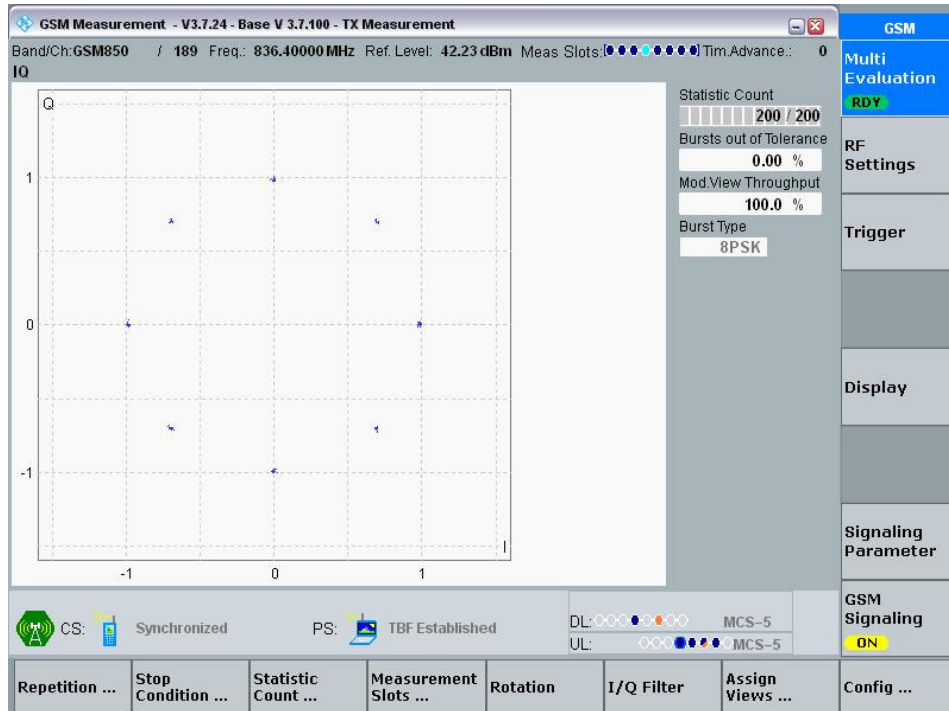
GSM850



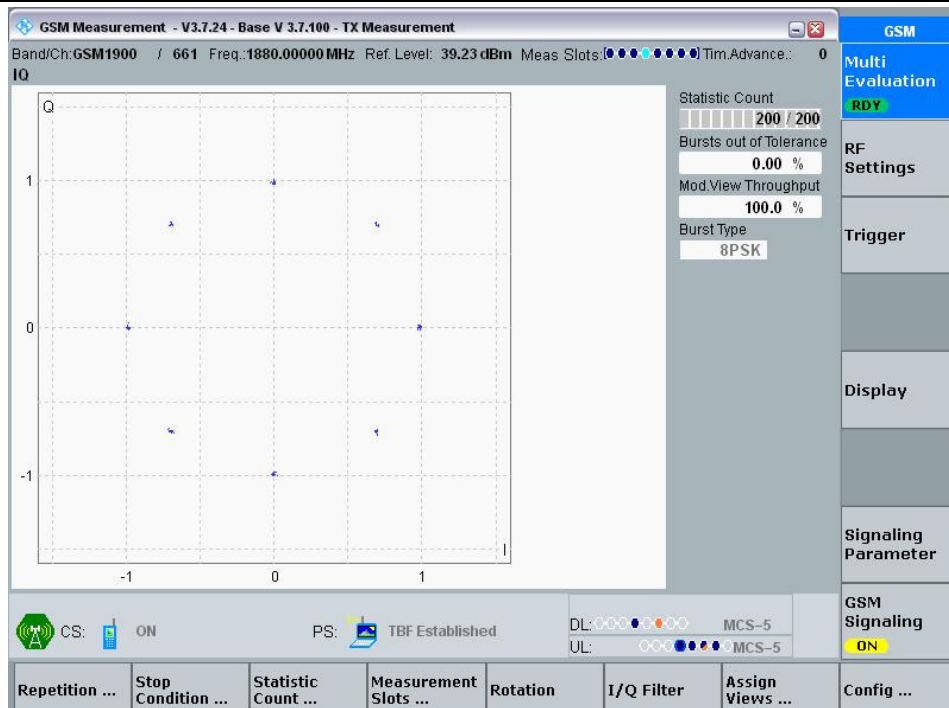
GSM1900

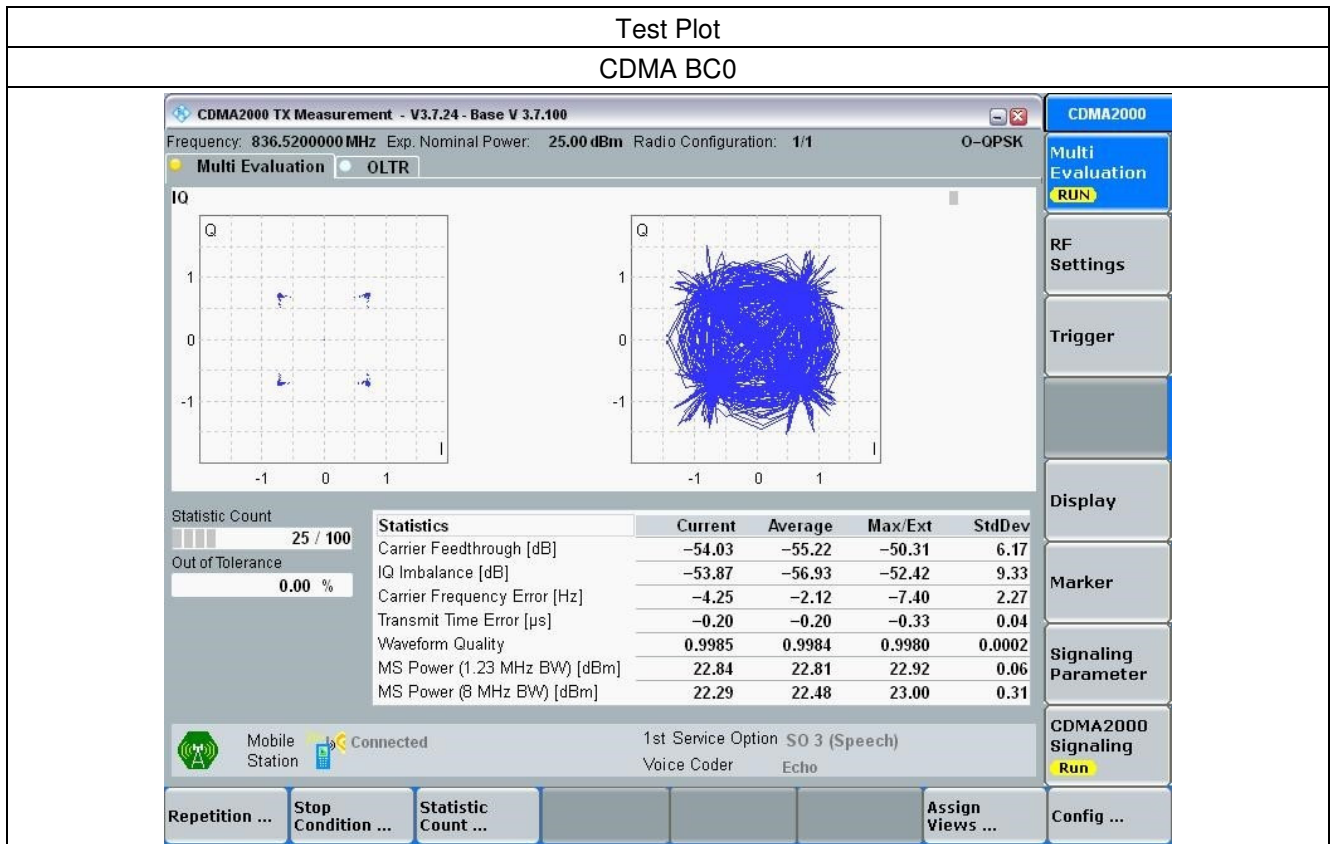


Test Plot
 EGPRS850



EGPRS1900





- End of the Report -