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Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053 Report No.: SZEM180200129906

Fax: +86 (0) 755 2671 0594 Page: 1 of 54

TEST REPORT

Application No.: SZEM1802001299CR

Applicant: Hytera Communications Corporation Limited

Address of Applicant: Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road,

Nanshan District, Shenzhen, 518057, China

Manufacturer: Hytera Communications Corporation Limited

Address of Manufacturer: Hytera Tower, Hi-Tech Industrial Park North, 9108# Beihuan Road,

Nanshan District, Shenzhen, 518057, China

Factory: Hytera Communications Corporation Limited Baolong Branch

Address of Factory: Plant No.3, Hytera Hi-Tech Park, Baolong Industrial Area, Longgang

District, Shenzhen, People's Republic of China

**Equipment Under Test (EUT):** 

EUT Name: Multi-mode Radio
Model No.: PDC760 V1B1

Trade mark: Hytera

FCC ID: YAMPDC760V1B1 Standard(s): 47 CFR Part 2(2017)

> 47 CFR Part 22 subpart H 47 CFR Part 24 subpart E

Date of Receipt: 2018-02-11

**Date of Test:** 2018-03-01 to 2018-03-16

**Date of Issue:** 2018-04-09

Test Result: Pass\*



Keny Xu EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



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	Revision Record							
Version	Chapter	Date	Modifier	Remark				
01		2018-04-09		Original				

Authorized for issue by:		
	Robsonti	
	Edison Li /Project Engineer	
	EvicFu	
	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, CDMA2000) 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.

DC 7.6V, 2900mAh Li-ion battery which charged by MCU Charger MCU Charger Model: CH20L08 Input: DC 12V, 2000mA Output: DC12V, 2000mA  AC Adapter Model: HKA02412020-XG Input: AC 100-240V, 50/60Hz, 0.8A Output: DC 12V, 2A  Sample Type: Portable production	
Model: CH20L08 Input: DC 12V, 2000mA Output: DC12V, 2000mA  AC Adapter Model: HKA02412020-XG Input: AC 100-240V, 50/60Hz, 0.8A Output: DC 12V, 2A	
Input: DC 12V, 2000mA Output: DC12V, 2000mA  AC Adapter Model: HKA02412020-XG Input: AC 100-240V, 50/60Hz, 0.8A Output: DC 12V, 2A	
Power supply:  AC Adapter Model: HKA02412020-XG Input: AC 100-240V, 50/60Hz, 0.8A Output: DC 12V, 2A	
AC Adapter Model: HKA02412020-XG Input: AC 100-240V, 50/60Hz, 0.8A Output: DC 12V, 2A	
AC Adapter Model: HKA02412020-XG Input: AC 100-240V, 50/60Hz, 0.8A Output: DC 12V, 2A	
Model: HKA02412020-XG Input: AC 100-240V, 50/60Hz, 0.8A Output: DC 12V, 2A	
Input: AC 100-240V, 50/60Hz, 0.8A Output: DC 12V, 2A	
Output: DC 12V, 2A	
Sample Type: Portable production	
Support Network: GSM, GPRS, EGPRS, CDMA	
Operation Frequency Band: GSM850/GSM1900; CDMA2000	
GMSK for GSM/GPRS/EGPRS;	
Modulation Type: 8PSK for EGPRS;	
QPSK for CDMA2000 1xRTT;	
QPSK/8PSK for CDMA2000 1xEV-DO;	
Supported Channel 200KHz for GSM;	
Bandwidth: 1.25MHz for CDMA;	
GPRS Class: 12	
EGPRS Class: 12	
GSM850: 245KGXW, EGPRS850: 244KG7W	
Designation of Emissions  GSM1900: 245KGXW, EGPRS1900: 249KG7W	
CDMA2000: 1M28F9W	
Antenna Type: PIFA	
Antenna Gain: GSM/CDMA: 0dBi	
Extreme temp. Tolerance: -30 °C to +50 °C	
Extreme vol. Limits: 6.46VDC to 8.74VDC (nominal: 7.6VDC)	



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4.2 Test Frequency

4.2 Test Frequency					
Toot Mode	TX / RX	RF Channel			
Test Mode		Low (L)	Middle (M)	High (H)	
	TX	Channel 128	Channel 190	Channel 251	
CCMOEO	1.	824.2MHz	836.6 MHz	848.8 MHz	
GSM850	RX	Channel 128	Channel 190	Channel 251	
	ΠΛ	869.2 MHz	881.6 MHz	893.8 MHz	
Toot Made	TV / DV		RF Channel		
Test Mode	TX / RX	Low (L)	Middle (M)	High (H)	
	TX	Channel 512	Channel 661	Channel 810	
CCM1000		1850.2MHz	1880.0 MHz	1909.8 MHz	
GSM1900	RX -	Channel 512	Channel 661	Channel 810	
		1930.2 MHz	1960.0 MHz	1989.8 MHz	
Toot Made	TV / DV	RF Channel			
Test Mode	TX / RX	Low (L)	Middle (M)	High (H)	
	T)/	Channel 1013	Channel 384	Channel 777	
ODMAGGGG	TX	824.7 MHz	836.52 MHz	848.31 MHz	
CDMA2000	DV	Channel 1013	Channel 384	Channel 777	
	RX -	869.7 MHz	881.52 MHz	893.31 MHz	

### 4.3 Test Environment

Environment Parameter	Selected Values During Tests		
Relative Humidity	52%		
Atmospheric Pressure:	1	015Pa	
Temperature:	TN	25 ℃	
	VL	6.46 V	
Voltage:	VN	7.6 V	
	VH	8.74 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	7.25 x 10 <sup>-8</sup>
2	Duty cycle	0.37%
3	Occupied Bandwidth	3%
4	RF conducted power	0.75dB
5	RF power density	2.84dB
6	Conducted Spurious emissions	0.75dB
7	DE Dadiated names	4.5dB (below 1GHz)
	RF Radiated power	4.8dB (above 1GHz)
0	Dedicted Churique emission test	4.5dB (Below 1GHz)
8	Radiated Spurious emission test	4.8dB (Above 1GHz)
9	Temperature test	1℃
10	Humidity test	3%
11	Supply voltages	1.5%
12	Time	3%



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#### 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.

#### Industry Canada (IC)

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

#### 4.8 Deviation from Standards

None

#### 4.9 Abnormalities from Standard Conditions

None



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### 5 Equipment List

RF Conducted Test					
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date
DC Power Supply	ZhaoXin	RXN-305D	SEM011-02	2017-09-27	2018-09-26
Spectrum Analyzer	Rohde & Schwarz	FSP	SEM004-06	2017-09-27	2018-09-26
Measurement Software	JS Tonscend	JS1120-2 BT/WIFI V2.	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM031-02	2017-07-13	2018-07-12
Attenuator	Weinschel Associates	WA41	SEM021-09	N/A	N/A
Signal Generator	KEYSIGHT	N5173B	SEM006-05	2017-09-27	2018-09-26
Power Meter	Rohde & Schwarz	NRVS	SEM014-02	2017-09-27	2018-09-26
Audio Analyzer	Rohde & Schwarz	UPL	SEM0093	2017-09-27	2018-09-26
Universal Radio Communication Tester	Rohde & Schwarz	CMU200	W005-02	2017-04-14	2018-04-13
Wireless Communication Tester	Rohde & Schwarz	CMW500	W005-03	2017-04-14	2018-04-13
Splitter	MACOM	2090-6214-00	SEL0226	2017-04-14	2018-04-13

Radiated Spurious Emissions						
Equipment	Manufacturer	Model No	Inventory No	Cal Date	Cal Due Date	
3m Semi-Anechoic Chamber	AUDIX	N/A	SEM001-02	2017-05-02	2020-05-01	
Measurement Software	AUDIX	e3 V8.2014-6- 27	N/A	N/A	N/A	
Coaxial Cable	SGS	N/A	SEM026-01	2017-07-13	2018-07-12	
Spectrum Analyzer	Rohde & Schwarz	FSU43	SEM004-08	2017-04-14	2018-04-13	
BiConiLog Antenna (26-3000MHz)	ETS-Lindgren	3142C	SEM003-01	2017-06-27	2020-06-26	
Horn Antenna (1-18GHz)	Rohde & Schwarz	HF907	SEM003-07	2015-06-14	2018-06-13	
Horn Antenna (15GHz-40GHz)	Schwarzbeck	BBHA 9170	SEM003-15	2017-10-17	2020-10-16	
Pre-amplifier (0.1-1300MHz)	HP	8447D	SEM005-02	2017-09-27	2018-09-26	
Low Noise Amplifier (100MHz-18GHz)	Black Diamond Series	BDLNA-0118- 352810	SEM005-05	2017-09-27	2018-09-27	
Pre-amplifier(18-26GHz)	Rohde & Schwarz	CH14-H052	SEM005-17	2017-12-04	2018-12-03	
Pre-amplifier (26GHz-40GHz)	Compliance Directions Systems Inc.	PAP-2640-50	SEM005-08	2017-04-14	2018-04-13	
DC Power Supply	Zhao Xin	RXN-305D	SEM011-02	2017-09-27	2018-09-26	
Active Loop Antenna	ETS-Lindgren	6502	SEM003-08	2017-08-22	2020-08-21	
Band filter	N/A	N/A	SEM023-01	N/A	N/A	



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Universal Radio Communication Tester	Rohde & Schwarz	CMU200	W005-02	2017-04-14	2018-04-13
Wireless Communication Tester	Rohde & Schwarz	CMW500	W005-03	2017-04-14	2018-04-13

RE in Chamber					
Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Date (yyyy-mm-dd)	Cal. Due date (yyyy-mm-dd)
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	2017-09-27	2018-09-26
BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEM003-01	2017-06-27	2020-06-26
Trilog-Broadband Antenna(30M-1GHz)	Schwarzbeck	VULB9168	SEM003-18	2016-06-29	2019-06-28
Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEM005-01	2017-04-14	2018-04-13
Measurement Software	AUDIX	e3 V8.2014-6-27	N/A	N/A	N/A
Coaxial Cable	SGS	N/A	SEM025-01	2017-07-13	2018-07-12

General used equipmen	t				
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, CDMA2000)

 $EIRP \le 2 W(GSM1900)$ 

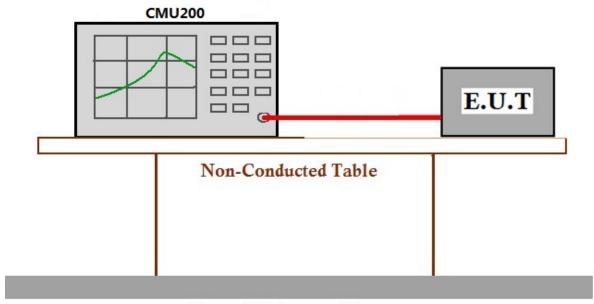
#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 18.6 °C Humidity: 29.1 % RH Atmospheric Pressure: 1025 mbar

Test mode a: Tx mode, Keep the EUT in transmitting mode.

#### 6.1.2 Test Setup Diagram



Ground Reference Plane

#### 6.1.3 Measurement Data



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	Test band: GSM850										
Conduc	Antenna	Antenna	FCC: ERP(dBm)			Limit					
Channel		128	190	251	gain (dBd)	gain (dBi)	128	190	251	(dBm)	
GSM(GMSK)	GSM	32.2	32.3	32.4	-2.15	0	30.05	30.15	30.25	38.45	
	1 TX Slot	32.17	32.21	32.34	-2.15	0	30.02	30.06	30.19	38.45	
GPRS/EGPRS	2 TX Slots	32.14	32.2	32.27	-2.15	0	29.99	30.05	30.12	38.45	
(GMSK)	3 TX Slots	30.55	30.84	30.69	-2.15	0	28.4	28.69	28.54	38.45	
	4 TX Slots	29.88	29.79	29.72	-2.15	0	27.73	27.64	27.57	38.45	
	1 TX Slot	25.63	25.82	25.74	-2.15	0	23.48	23.67	23.59	38.45	
50000/0000/0	2 TX Slots	25.63	25.81	25.66	-2.15	0	23.48	23.66	23.51	38.45	
EGPRS(8PSK)	3 TX Slots	23.64	23.62	23.53	-2.15	0	21.49	21.47	21.38	38.45	
	4 TX Slots	22.52	22.48	22.33	-2.15	0	20.37	20.33	20.18	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										
Co	nducted outp	Antenna	FC	C: EIRP(d	dBm)	Limit					
Channel		512	661	810	gain (dBi)	512	661	810	(dBm)		
GSM(GMSK)	GSM	29.61	29.45	29.03	0	29.61	29.45	29.03	33		
	1 TX Slot	29.29	29.44	29	0	29.29	29.44	29	33		
GPRS/EGPRS	2 TX Slots	28.71	28.56	28.82	0	28.71	28.56	28.82	33		
(GMSK)	3 TX Slots	28.21	27.99	27.96	0	28.21	27.99	27.96	33		
	4 TX Slots	27.42	26.96	26.78	0	27.42	26.96	26.78	33		
	1 TX Slot	26.34	26.41	26.32	0	26.34	26.41	26.32	33		
EODDC/ODCIA	2 TX Slots	25.58	25.52	25.41	0	25.58	25.52	25.41	33		
EGPRS(8PSK)	3 TX Slots	25.25	25.17	24.97	0	25.25	25.17	24.97	33		
	4 TX Slots	25.02	25	24.99	0	25.02	25	24.99	33		

#### Note:

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



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	Test band: CDMA2000										
Conducted out	put powe	er(dBm)		Antenna gain gain (dBd) (dBi)	FC	C: ERP(d	Bm)	Limit			
Channel	1013	384	777		1013	384	777	(dBm)			
1XRTT RC1 SO55	21.5	21.6	21.4	-2.15	0	19.35	19.45	19.25	38.45		
1XRTT RC3 SO55	21.34	21.25	21.17	-2.15	0	19.19	19.1	19.02	38.45		
1XRTT RC3 SO55 (+ F-SCH)	21.21	21.12	21.04	-2.15	0	19.06	18.97	18.89	38.45		
1XRTT RC3 SO55 (+ SCH)	21.16	21.05	21	-2.15	0	19.01	18.9	18.85	38.45		
1XEVDO RTAP 153.6Kbps	21.62	21.37	21.24	-2.15	0	19.47	19.22	19.09	38.45		
1XEVDO RTAP 4096Bits	21.42	21.21	21.11	-2.15	0	19.27	19.06	18.96	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

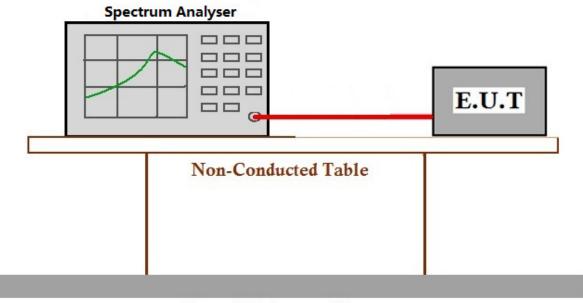
#### 6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 18.6 °C Humidity: 29.1 % RH Atmospheric Pressure: 1025 mbar

Test mode a: Tx mode, Keep the EUT in transmitting mode.

#### 6.2.2 Test Setup Diagram



### Ground Reference Plane

#### 6.2.3 Measurement Data

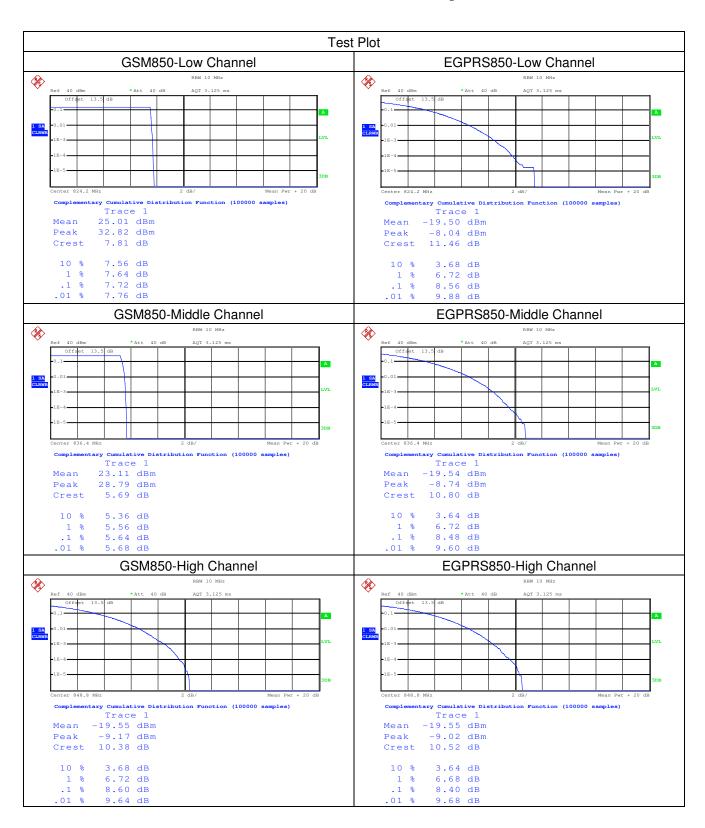
Test	Toot Bond	-	Test result (dB)	Limit	Vordiet	
mode	Test Band	LCH	MCH	НСН	(dB)	Verdict
	GSM850	7.72	5.64	8.60	13	Pass
CCM	EGPRS850	8.48	8.56	8.40	13	Pass
GSM	GSM1900	8.48	8.44	8.48	13	Pass
	EGPRS1900	8.40	8.44	8.40	13	Pass
CDMA	CDMA2000	3.76	3.84	3.60	13	Pass

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



Report No.: SZEM180200129906

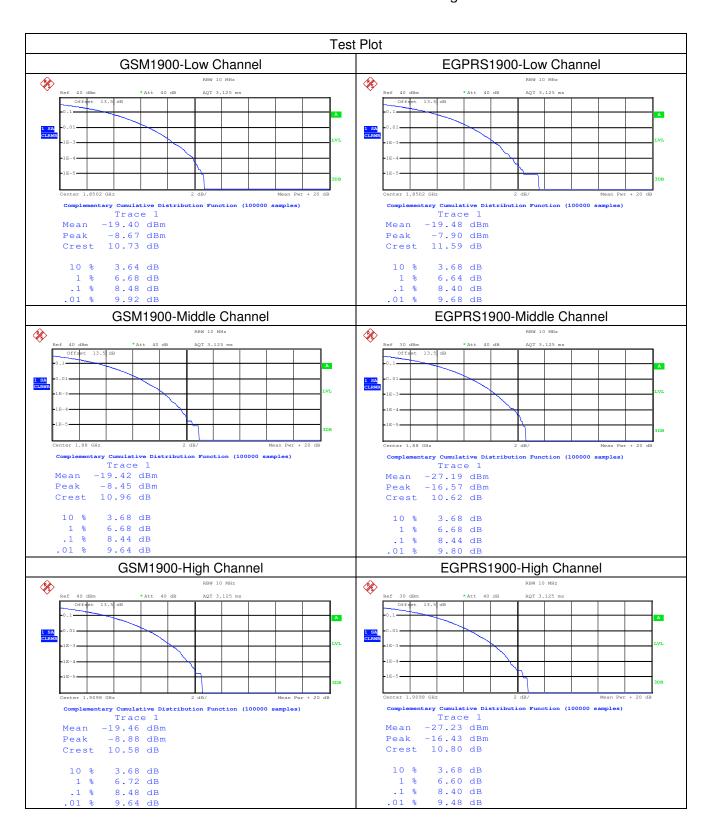
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Report No.: SZEM180200129906

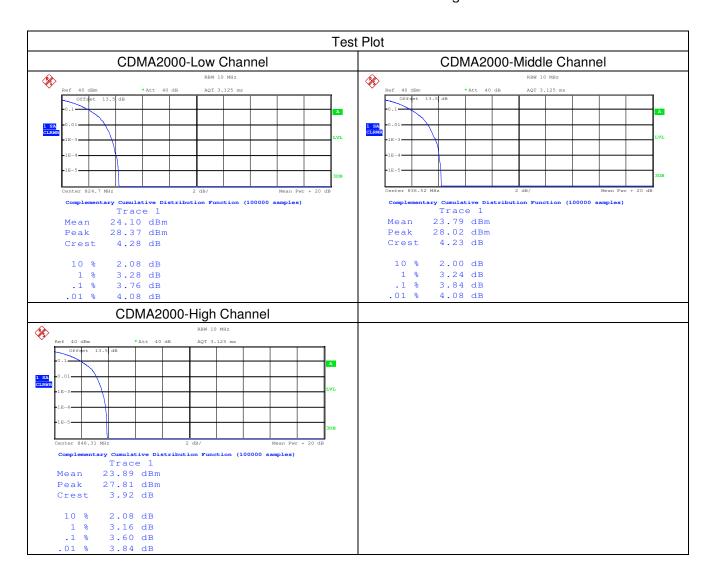
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#### 6.3 Bandwidth

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

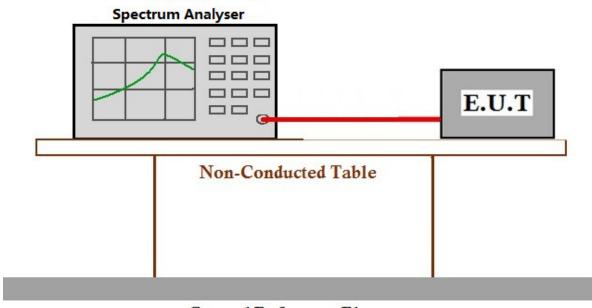
#### 6.3.1 E.U.T. Operation

Operating Environment:

Temperature: 18.6 °C Humidity: 29.1 % RH Atmospheric Pressure: 1025 mbar

Test mode a: Tx mode, Keep the EUT in transmitting mode.

#### 6.3.2 Test Setup Diagram



Ground Reference Plane

#### 6.3.3 Measurement Data



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Test	Took Dond	Test result	of 26dB Bandy	Limit	Voudiat	
mode	Test Band	LCH	MCH	НСН	(dB)	Verdict
	GSM850	0.312	0.311	0.315	N/A	Pass
CCM	EGPRS850	0.307	0.294	0.305	N/A	Pass
GSM	GSM1900	0.310	0.313	0.303	N/A	Pass
	EGPRS1900	0.310	0.294	0.306	N/A	Pass
CDMA	CDMA2000	1.419	1.422	1.416	N/A	Pass

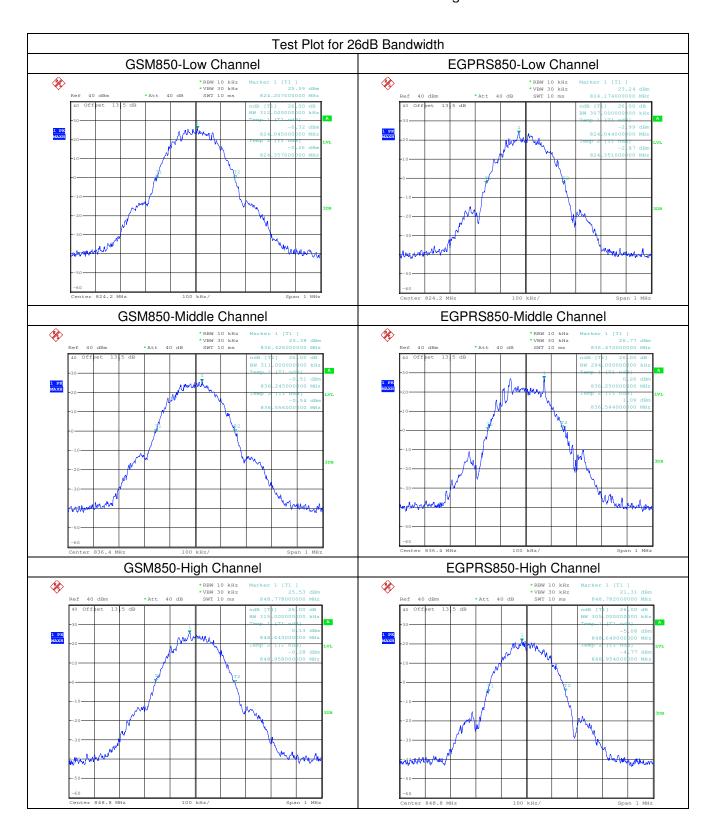
Test	Toot Bond	Test result of	Occupied Ban	Limit	Vordict	
mode	Test Band	LCH MCH HCH (dB)		(dB)	Verdict	
	GSM850	0.244	0.245	0.242	N/A	Pass
0014	EGPRS850	0.244	0.237	0.243	N/A	Pass
GSM	GSM1900	0.245	0.242	0.243	N/A	Pass
	EGPRS1900	0.244	0.241	0.249	N/A	Pass
CDMA	CDMA2000	1.278	1.275	1.278	N/A	Pass

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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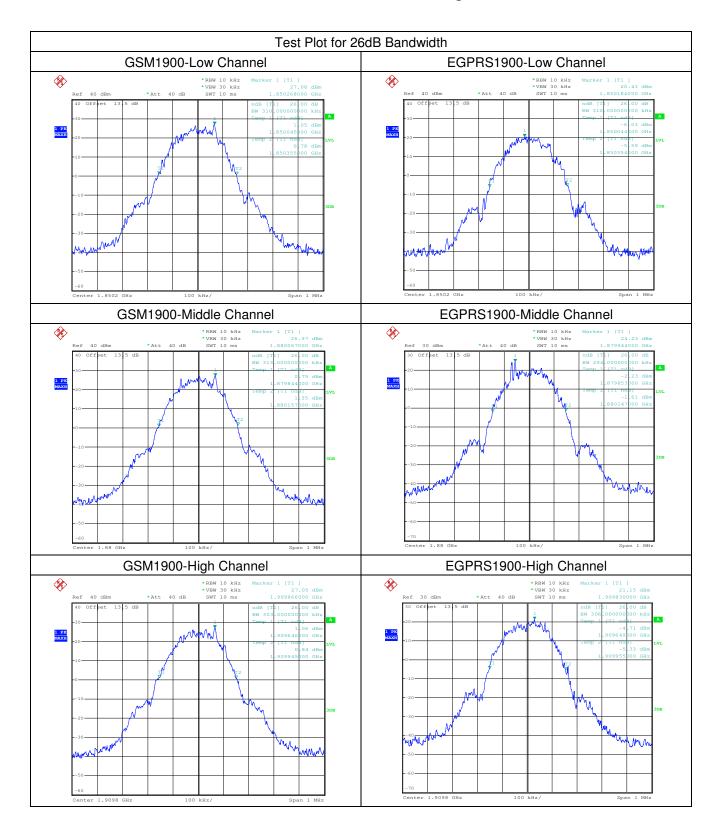
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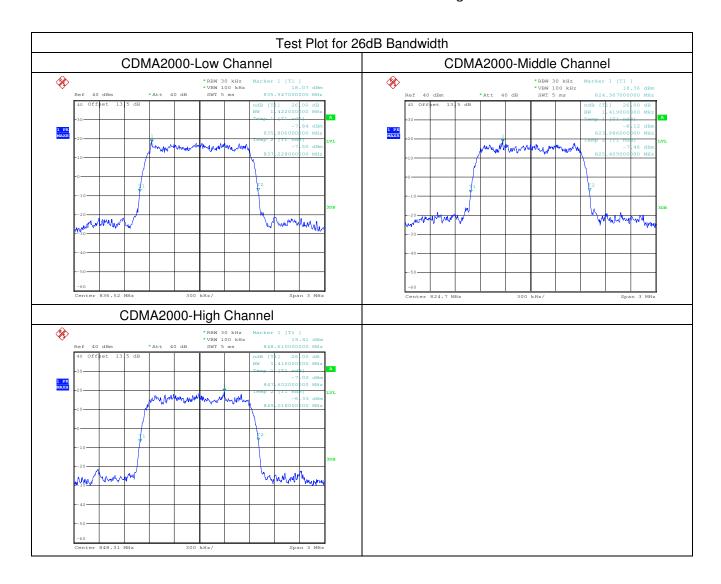
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Report No.: SZEM180200129906

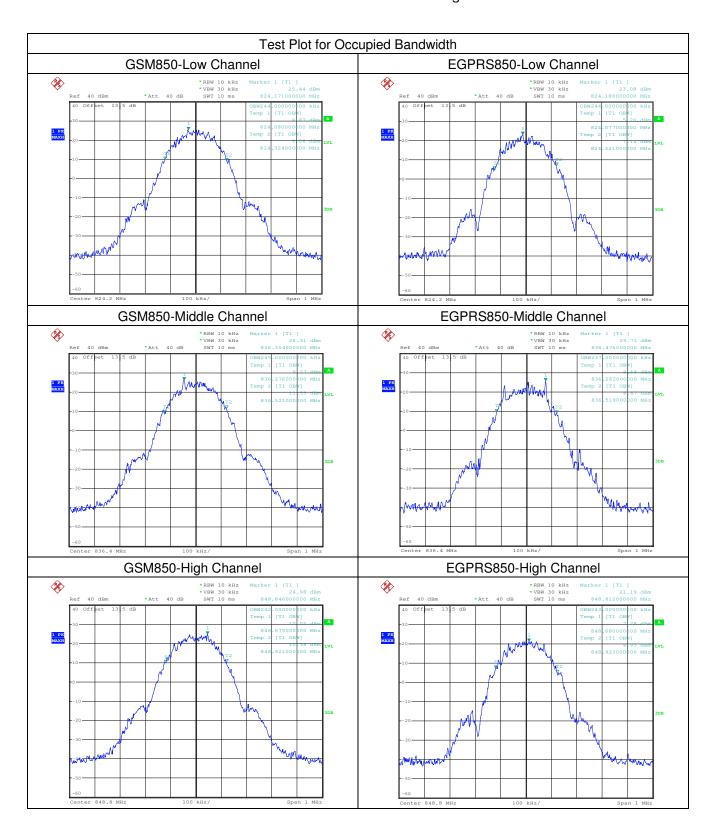
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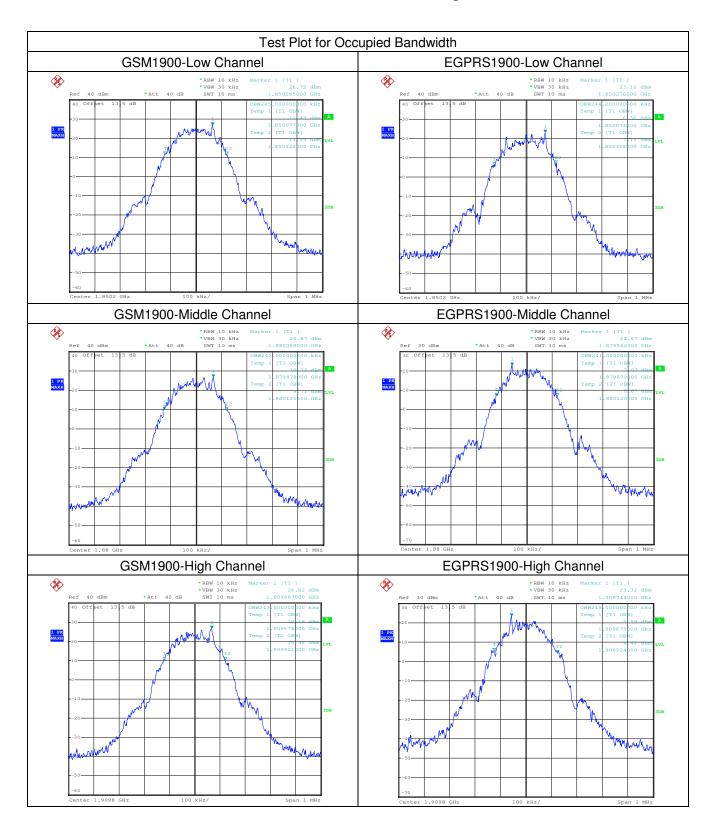
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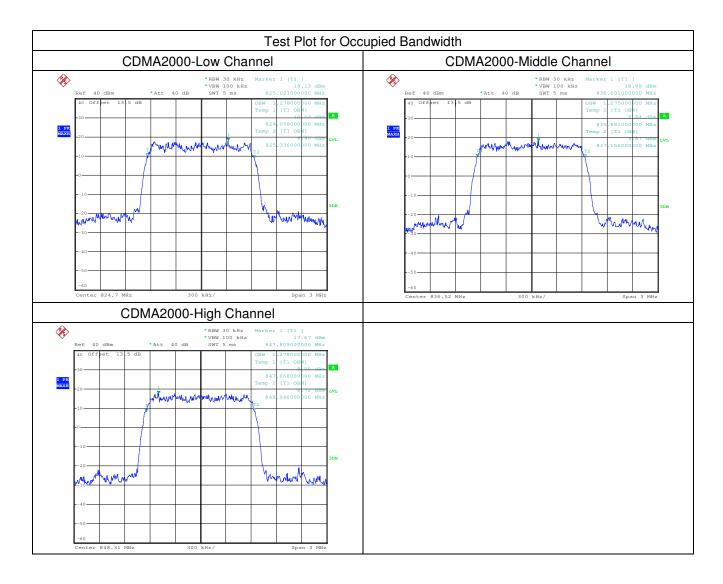
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### 6.4 Band Edge Compliance

Test Requirement: §2.1051, §22.917, §24.238

Test Method: ANSI C63.26, KDB 971168 D01 v03

Limit: ≤ -13dBm/1%\*EBW, in 1 MHz bands immediately outside and adjacent to

the frequency block.

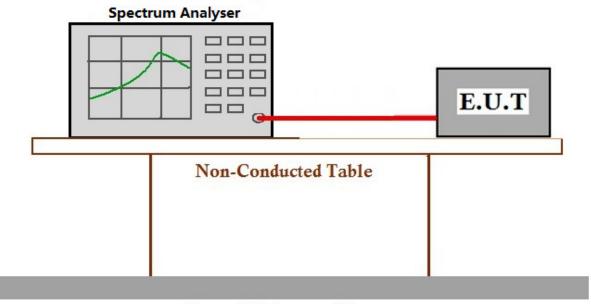
### 6.4.1 E.U.T. Operation

Operating Environment:

Temperature: 18.6 °C Humidity: 29.1 % RH Atmospheric Pressure: 1025 mbar

Test mode a: Tx mode, Keep the EUT in transmitting mode.

#### 6.4.2 Test Setup Diagram



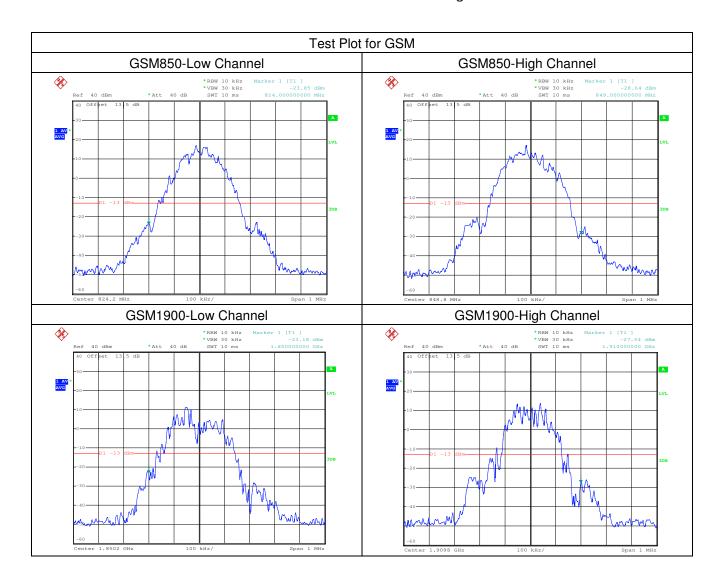
Ground Reference Plane

#### 6.4.3 Measurement Data



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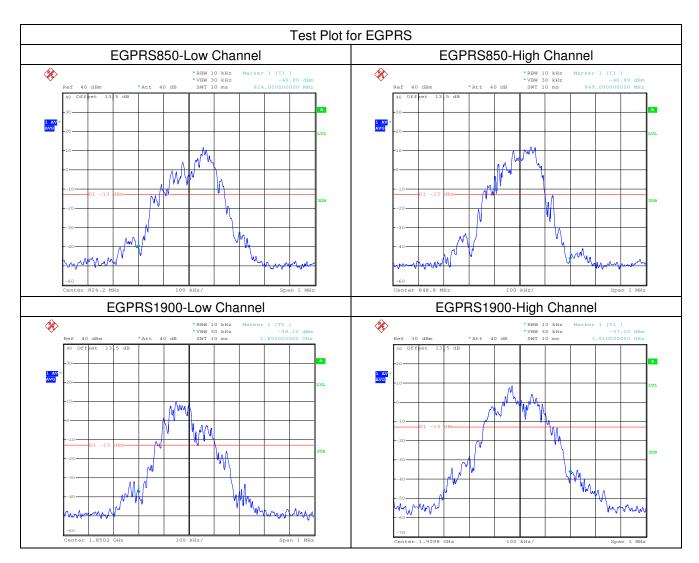
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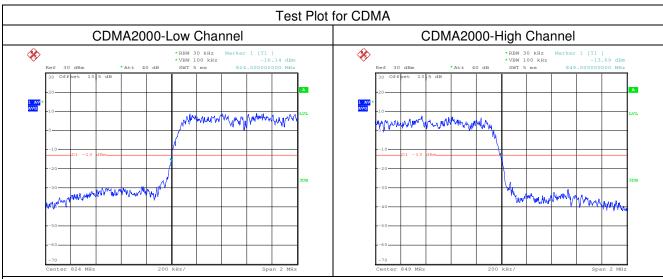




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record the worst test result.

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

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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: ≤ -13dBm

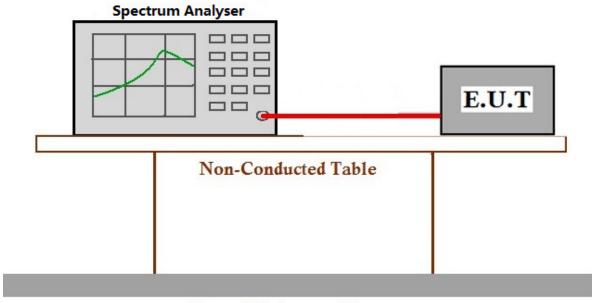
#### 6.5.1 E.U.T. Operation

Operating Environment:

Temperature: 18.6 °C Humidity: 29.1 % RH Atmospheric Pressure: 1025 mbar

Test mode a: Tx mode, Keep the EUT in transmitting mode.

#### 6.5.2 Test Setup Diagram



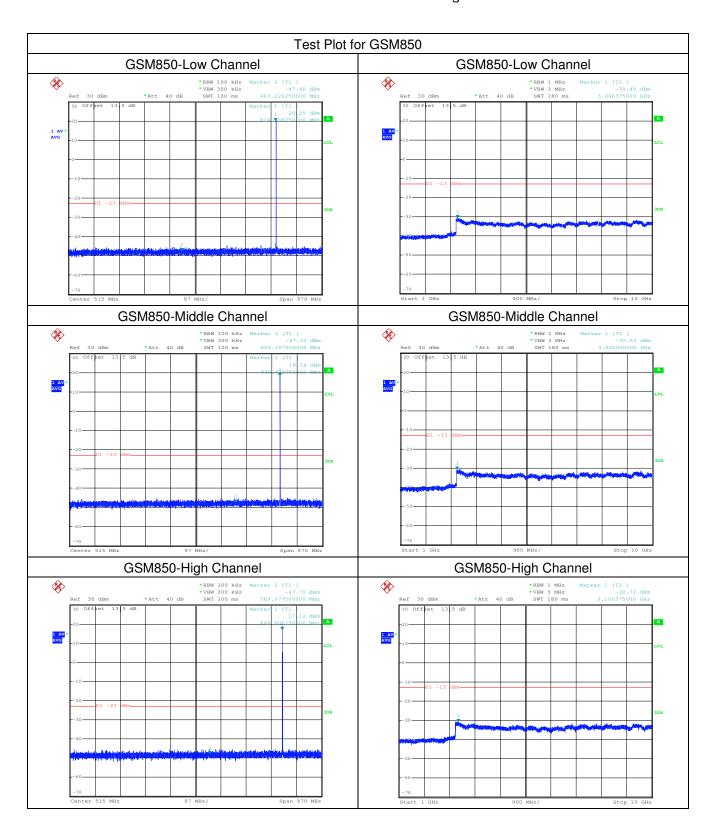
### Ground Reference Plane

#### 6.5.3 Measurement Data



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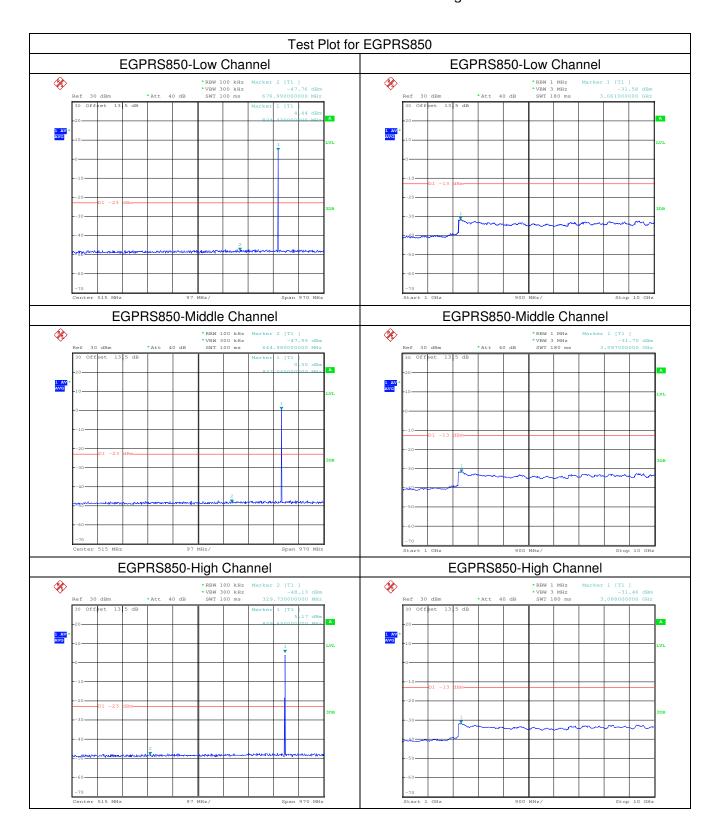
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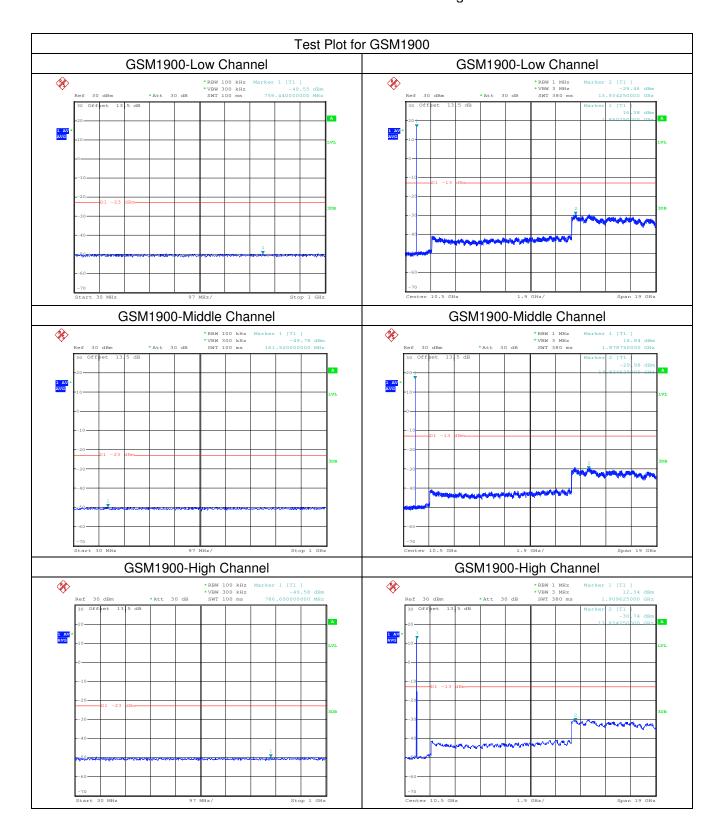
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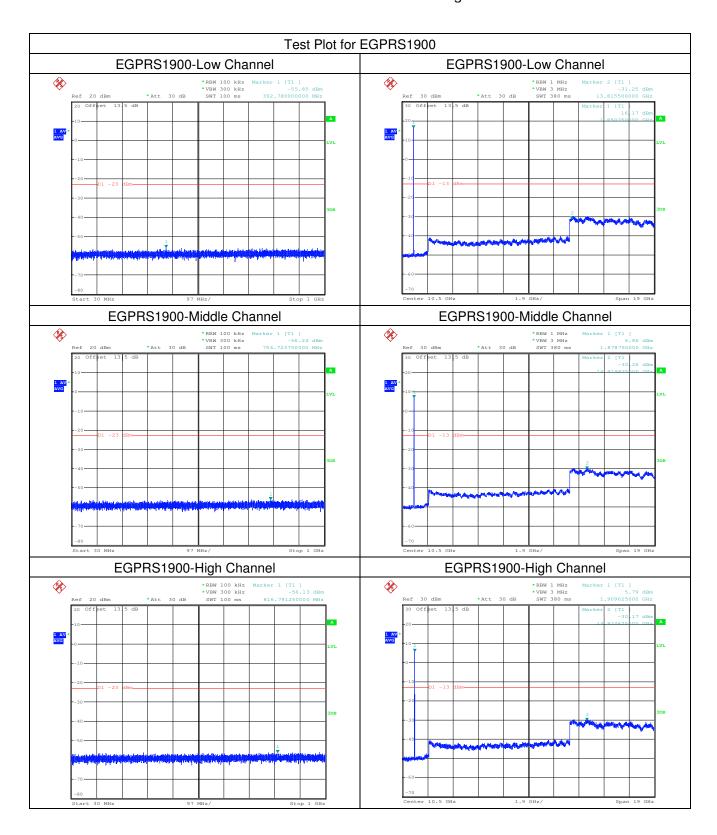
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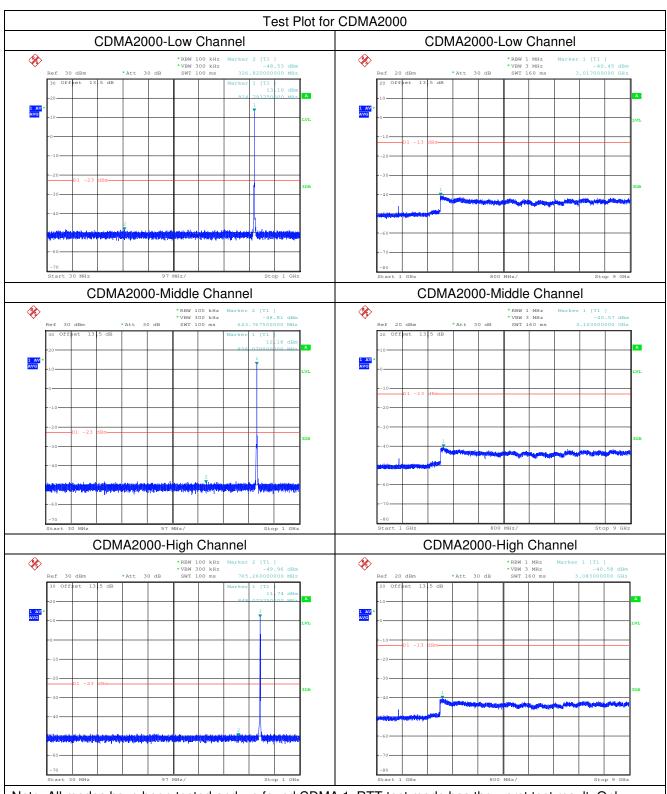
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Note: All modes have been tested and we found CDMA 1xRTT test mode has the worst test result. Only record the worst test result.



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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: ≤ -13dBm

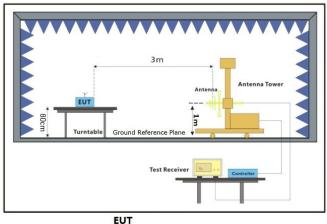
#### 6.6.1 E.U.T. Operation

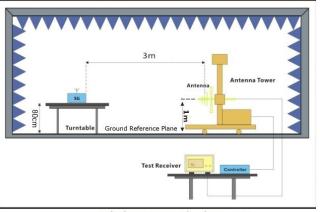
Operating Environment:

Temperature: 18.6 °C Humidity: 29.1 % RH Atmospheric Pressure: 1025 mbar

Test mode a: Tx mode, Keep the EUT in transmitting mode.

#### 6.6.2 Test Setup Diagram





Substitue Antenna+Signal Generator



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#### 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 than 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				
1648.40	-53.78	0.52	6	-50.45	-13.00	-37.45	Horizontal	Pass				
2472.60	-50.78	0.53	5.8	-47.66	-13.00	-34.66	Horizontal	Pass				
3296.80	-52.12	0.65	6.2	-48.72	-13.00	-35.72	Horizontal	Pass				
4121.00	-48.63	0.7	8.5	-42.98	-13.00	-29.98	Horizontal	Pass				
4945.20	-57.58	0.76	9.7	-50.79	-13.00	-37.79	Horizontal	Pass				
5769.40	-55.61	0.85	10.3	-48.31	-13.00	-35.31	Horizontal	Pass				
1648.40	-53.47	0.52	6	-50.14	-13.00	-37.14	Vertical	Pass				
2472.60	-55.58	0.53	5.8	-52.46	-13.00	-39.46	Vertical	Pass				
3296.80	-43.56	0.65	6.2	-40.16	-13.00	-27.16	Vertical	Pass				
4121.00	-55.59	0.7	8.5	-49.94	-13.00	-36.94	Vertical	Pass				
4945.20	-55.64	0.76	9.7	-48.85	-13.00	-35.85	Vertical	Pass				
5769.40	-54.82	0.85	10.3	-47.52	-13.00	-34.52	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			
1673.20	-54.34	0.52	6	-51.01	-13.00	-38.01	Horizontal	Pass			
2509.80	-52.91	0.59	5.3	-50.35	-13.00	-37.35	Horizontal	Pass			
3346.40	-43.55	0.65	6.2	-40.15	-13.00	-27.15	Horizontal	Pass			
4183.00	-56.74	0.7	8.5	-51.09	-13.00	-38.09	Horizontal	Pass			
5019.60	-56.25	0.82	9.6	-49.62	-13.00	-36.62	Horizontal	Pass			
5856.20	-54.26	0.85	10.3	-46.96	-13.00	-33.96	Horizontal	Pass			
1673.20	-55.62	0.52	6	-52.29	-13.00	-39.29	Vertical	Pass			
2509.80	-51.72	0.59	5.3	-49.16	-13.00	-36.16	Vertical	Pass			
3346.40	-45.65	0.65	6.2	-42.25	-13.00	-29.25	Vertical	Pass			
4183.00	-55.78	0.7	8.5	-50.13	-13.00	-37.13	Vertical	Pass			
5019.60	-54.85	0.82	9.6	-48.22	-13.00	-35.22	Vertical	Pass			
5856.20	-53.52	0.85	10.3	-46.22	-13.00	-33.22	Vertical	Pass			



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			GSM8	50-High ch	nannel			
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1697.60	-55.54	0.52	6	-52.21	-13.00	-39.21	Horizontal	Pass
2546.40	-52.35	0.59	5.3	-49.79	-13.00	-36.79	Horizontal	Pass
3395.20	-43.66	0.65	6.2	-40.26	-13.00	-27.26	Horizontal	Pass
4244.00	-55.6	0.7	8.5	-49.95	-13.00	-36.95	Horizontal	Pass
5092.80	-54.42	0.82	9.6	-47.79	-13.00	-34.79	Horizontal	Pass
5941.60	-54.26	0.85	10.3	-46.96	-13.00	-33.96	Horizontal	Pass
1697.60	-62.09	0.52	6	-58.76	-13.00	-45.76	Vertical	Pass
2546.40	-54.13	0.59	5.3	-51.57	-13.00	-38.57	Vertical	Pass
3395.20	-52.34	0.65	6.2	-48.94	-13.00	-35.94	Vertical	Pass
4244.00	-55.43	0.7	8.5	-49.78	-13.00	-36.78	Vertical	Pass
5092.80	-55.18	0.82	9.6	-48.55	-13.00	-35.55	Vertical	Pass
5941.60	-54.54	0.85	10.3	-47.24	-13.00	-34.24	Vertical	Pass

			GSM19	000-Low ch	nannel			
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3700.40	-58.88	0.71	7.6	-51.99	-13.00	-38.99	Horizontal	Pass
5550.60	-60.31	0.85	10.3	-50.86	-13.00	-37.86	Horizontal	Pass
7400.80	-54.16	1	12.9	-42.26	-13.00	-29.26	Horizontal	Pass
9251.00	-60.98	1.23	12.4	-49.81	-13.00	-36.81	Horizontal	Pass
11101.20	-59.44	1.59	13.6	-47.43	-13.00	-34.43	Horizontal	Pass
12951.40	-59.21	1.75	13.4	-47.56	-13.00	-34.56	Horizontal	Pass
3700.40	-58.11	0.71	7.6	-51.22	-13.00	-38.22	Vertical	Pass
5550.60	-60.29	0.85	10.3	-50.84	-13.00	-37.84	Vertical	Pass
7400.80	-54.07	1	12.9	-42.17	-13.00	-29.17	Vertical	Pass
9251.00	-60.87	1.23	12.4	-49.70	-13.00	-36.7	Vertical	Pass
11101.20	-60.09	1.59	13.6	-48.08	-13.00	-35.08	Vertical	Pass
12951.40	-58.11	1.75	13.4	-46.46	-13.00	-33.46	Vertical	Pass



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			GSM190	00-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
3760.00	-64.71	0.71	7.6	-57.82	-13.00	-44.82	Horizontal	Pass
5640.00	-61.62	0.85	10.3	-52.17	-13.00	-39.17	Horizontal	Pass
7520.00	-63.08	0.99	13.2	-50.87	-13.00	-37.87	Horizontal	Pass
9400.00	-52.98	1.23	12.4	-41.81	-13.00	-28.81	Horizontal	Pass
11280.00	-61.83	1.59	13.6	-49.82	-13.00	-36.82	Horizontal	Pass
13160.00	-60.37	1.8	13.2	-48.97	-13.00	-35.97	Horizontal	Pass
3760.00	-60.59	0.71	7.6	-53.70	-13.00	-40.7	Vertical	Pass
5640.00	-60.71	0.85	10.3	-51.26	-13.00	-38.26	Vertical	Pass
7520.00	-62.47	0.99	13.2	-50.26	-13.00	-37.26	Vertical	Pass
9400.00	-60.54	1.23	12.4	-49.37	-13.00	-36.37	Vertical	Pass
11280.00	-60.51	1.59	13.6	-48.50	-13.00	-35.5	Vertical	Pass
13160.00	-58.24	1.8	13.2	-46.84	-13.00	-33.84	Vertical	Pass

			GSM19	00-High cl	nannel			
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
3819.60	-58.08	0.71	7.6	-51.19	-13.00	-38.19	Horizontal	Pass
5729.40	-58.14	0.85	10.3	-48.69	-13.00	-35.69	Horizontal	Pass
7639.20	-54.38	0.99	13.2	-42.17	-13.00	-29.17	Horizontal	Pass
9549.00	-61.94	1.27	13	-50.21	-13.00	-37.21	Horizontal	Pass
11458.80	-60.96	1.59	13.6	-48.95	-13.00	-35.95	Horizontal	Pass
13368.60	-58.6	1.8	13.2	-47.20	-13.00	-34.2	Horizontal	Pass
3819.60	-61.82	0.71	7.6	-54.93	-13.00	-41.93	Vertical	Pass
5729.40	-62.97	0.85	10.3	-53.52	-13.00	-40.52	Vertical	Pass
7639.20	-51.54	0.99	13.2	-39.33	-13.00	-26.33	Vertical	Pass
9549.00	-61.87	1.27	13	-50.14	-13.00	-37.14	Vertical	Pass
11458.80	-60.67	1.59	13.6	-48.66	-13.00	-35.66	Vertical	Pass
13368.60	-58.57	1.8	13.2	-47.17	-13.00	-34.17	Vertical	Pass



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			CDMA2	000-Low c	hannel			
Frequency (MHz)	S.G. Power (dBm)	Cable loss (dB)	Antenna Gain (dBi)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	Polarization (H/V)	Result
1649.40	-55.42	0.52	6	-49.94	-13.00	-36.94	Horizontal	Pass
2474.10	-53.96	0.53	5.8	-48.69	-13.00	-35.69	Horizontal	Pass
3298.80	-50.51	0.65	6.2	-44.96	-13.00	-31.96	Horizontal	Pass
4123.50	-61.69	0.7	8.5	-53.89	-13.00	-40.89	Horizontal	Pass
4948.20	-61.62	0.76	9.7	-52.68	-13.00	-39.68	Horizontal	Pass
5772.90	-60.28	0.85	10.3	-50.83	-13.00	-37.83	Horizontal	Pass
1649.40	-79.83	0.52	6	-74.35	-13.00	-61.35	Vertical	Pass
2474.10	-54.2	0.53	5.8	-48.93	-13.00	-35.93	Vertical	Pass
3298.80	-49.33	0.65	6.2	-43.78	-13.00	-30.78	Vertical	Pass
4123.50	-62.74	0.7	8.5	-54.94	-13.00	-41.94	Vertical	Pass
4948.20	-62.84	0.76	9.7	-53.90	-13.00	-40.9	Vertical	Pass
5772.90	-61.27	0.85	10.3	-51.82	-13.00	-38.82	Vertical	Pass

			CDMA20	00-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	-55.36	0.52	6	-49.88	-13.00	-36.88	Horizontal	Pass
2509.56	-52.3	0.59	5.3	-47.59	-13.00	-34.59	Horizontal	Pass
3346.08	-49.85	0.65	6.2	-44.30	-13.00	-31.3	Horizontal	Pass
4182.60	-62.3	0.7	8.5	-54.50	-13.00	-41.5	Horizontal	Pass
5019.12	-61.2	0.82	9.6	-52.42	-13.00	-39.42	Horizontal	Pass
5855.64	-61.34	0.85	10.3	-51.89	-13.00	-38.89	Horizontal	Pass
1649.40	-54.51	0.52	6	-49.03	-13.00	-36.03	Vertical	Pass
2474.10	-52.77	0.53	5.8	-47.50	-13.00	-34.5	Vertical	Pass
3298.80	-50.25	0.65	6.2	-44.70	-13.00	-31.7	Vertical	Pass
4123.50	-63.3	0.7	8.5	-55.50	-13.00	-42.5	Vertical	Pass
4948.20	-60.8	0.76	9.7	-51.86	-13.00	-38.86	Vertical	Pass
5772.90	-61.56	0.85	10.3	-52.11	-13.00	-39.11	Vertical	Pass



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			CDMA2	000-High o	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	-54.99	0.52	6	-49.51	-13.00	-36.51	Horizontal	Pass
2544.93	-50.17	0.59	5.3	-45.46	-13.00	-32.46	Horizontal	Pass
3393.24	-60.91	0.65	6.2	-55.36	-13.00	-42.36	Horizontal	Pass
4241.55	-62.41	0.7	8.5	-54.61	-13.00	-41.61	Horizontal	Pass
5089.86	-60.51	0.82	9.6	-51.73	-13.00	-38.73	Horizontal	Pass
5938.17	-60.94	0.85	10.3	-51.49	-13.00	-38.49	Horizontal	Pass
1696.62	-54.86	0.52	6	-49.38	-13.00	-36.38	Vertical	Pass
2544.93	-51.8	0.59	5.3	-47.09	-13.00	-34.09	Vertical	Pass
3393.24	-51.26	0.65	6.2	-45.71	-13.00	-32.71	Vertical	Pass
4241.55	-61.92	0.7	8.5	-54.12	-13.00	-41.12	Vertical	Pass
5089.86	-62.66	0.82	9.6	-53.88	-13.00	-40.88	Vertical	Pass
5938.17	-60.3	0.85	10.3	-50.85	-13.00	-37.85	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:  $\leq \pm 2.5$ ppm.

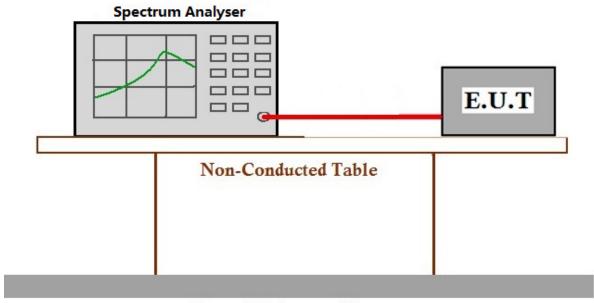
### 6.7.1 E.U.T. Operation

Operating Environment:

Temperature: 18.6 °C Humidity: 29.1 % RH Atmospheric Pressure: 1025 mbar

Test mode a: Tx mode, Keep the EUT in transmitting mode.

### 6.7.2 Test Setup Diagram



### Ground Reference Plane

### 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
				VL	2.61	0.00317	PASS
		LCH	TN	VN	1.53	0.00186	PASS
				VH	-3.55	-0.00431	PASS
				VL	-2.17	-0.00259	PASS
	GSM	MCH	TN	VN	-1.53	-0.00183	PASS
				VH	-4.22	-0.00504	PASS
		HCH		VL	3.78	0.00445	PASS
CCM			TN	VN	-1.06	-0.00125	PASS
GSM 850				VH	-2.41	-0.00284	PASS
650			TN	VL	-3.85	-0.00467	PASS
		LCH		VN	1.22	0.00148	PASS
				VH	-2.72	-0.00330	PASS
				VL	3.56	0.00426	PASS
	EGPRS	MCH	TN	VN	2.28	0.00273	PASS
				VH	-4.72	-0.00564	PASS
			TN	VL	0.85	0.00100	PASS
		HCH		VN	-3.46	-0.00408	PASS
				VH	2.22	0.00262	PASS



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Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
				VL	-4.62	-0.00250	PASS
		LCH	TN	VN	2.31	0.00125	PASS
				VH	1.74	0.00094	PASS
				VL	1.23	0.00065	PASS
	GSM	MCH	TN	VN	-2.67	-0.00142	PASS
				VH	3.39	0.00180	PASS
				VL	-2.64	-0.00138	PASS
		HCH	TN	VN	2.31	0.00121	PASS
GSM				VH	-4.26	-0.00223	PASS
1900			TN	VL	1.26	0.00068	PASS
		LCH		VN	-3.88	-0.00210	PASS
				VH	2.79	0.00151	PASS
				VL	-4.25	-0.00226	PASS
	EGPRS	MCH	TN	VN	1.82	0.00097	PASS
				VH	0.87	0.00046	PASS
				VL	-2.36	-0.00124	PASS
		НСН	TN	VN	3.88	0.00203	PASS
				VH	-4.86	-0.00254	PASS

Test Band	Test Mode	Test Channel	Test Temp.	Test Volt.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			TN	VL	-4.65	-0.00564	PASS
		LCH		VN	2.37	0.00287	PASS
				VH	1.78	0.00216	PASS
ODMA		CDMA 1xRTT MCH	TN	VL	1.24	0.00148	PASS
CDMA				VN	-2.66	-0.00318	PASS
2000	IXITI			VH	3.36	0.00402	PASS
				VL	-2.64	-0.00311	PASS
			TN	VN	2.32	0.00273	PASS
					VH	-4.26	-0.00502

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
			VN	-30	1.66	0.00201	PASS
		LCH		-20	1.58	0.00192	PASS
				-10	1.87	0.00227	PASS
				0	-2.45	-0.00297	PASS
				10	0.86	0.00104	PASS
				20	-4.93	-0.00598	PASS
				30	1.52	0.00184	PASS
	GSM			40	-0.81	-0.00098	PASS
				50	-3.73	-0.00453	PASS
		МСН	VN	-30	-2.29	-0.00274	PASS
				-20	-2.36	-0.00282	PASS
				-10	-0.77	-0.00092	PASS
CSM				0	-3.26	-0.00390	PASS
GSM 850				10	1.76	0.00210	PASS
				20	2.57	0.00307	PASS
				30	1.43	0.00171	PASS
				40	0.82	0.00098	PASS
				50	-4.38	-0.00524	PASS
		НСН	VN	-30	3.70	0.00436	PASS
				-20	3.72	0.00438	PASS
				-10	3.51	0.00414	PASS
				0	-5.45	-0.00642	PASS
				10	1.52	0.00179	PASS
				20	-2.21	-0.00260	PASS
				30	3.54	0.00417	PASS
				40	-0.31	-0.00037	PASS
				50	-4.25	-0.00501	PASS



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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		LCH	VN	-30	-2.11	-0.00256	PASS
				-20	-2.15	-0.00261	PASS
				-10	2.46	0.00298	PASS
				0	-3.84	-0.00466	PASS
				10	1.77	0.00215	PASS
				20	-3.69	-0.00448	PASS
				30	-4.43	-0.00537	PASS
				40	-4.25	-0.00516	PASS
				50	-3.67	-0.00445	PASS
			VN	-30	-2.15	-0.00257	PASS
ı	EGPRS	MCH		-20	-2.18	-0.00261	PASS
				-10	3.73	0.00446	PASS
GSM				0	-4.96	-0.00593	PASS
850				10	1.95	0.00233	PASS
650				20	-3.77	-0.00451	PASS
				30	-3.51	-0.00420	PASS
				40	-2.43	-0.00290	PASS
				50	-3.66	-0.00437	PASS
		НСН	VN	-30	-3.77	-0.00444	PASS
				-20	-3.72	-0.00438	PASS
				-10	-2.66	-0.00313	PASS
				0	-2.36	-0.00278	PASS
				10	-2.65	-0.00312	PASS
				20	1.32	0.00156	PASS
				30	-4.66	-0.00549	PASS
				40	-3.48	-0.00410	PASS
				50	-2.92	-0.00344	PASS



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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
			VN	-30	-3.25	-0.00176	PASS
		LCH		-20	-3.26	-0.00176	PASS
				-10	-4.43	-0.00239	PASS
				0	2.55	0.00138	PASS
				10	-3.71	-0.00201	PASS
				20	-0.64	-0.00035	PASS
				30	1.46	0.00079	PASS
				40	-3.34	-0.00181	PASS
	GSM			50	-2.73	-0.00148	PASS
		МСН	VN	-30	-4.45	-0.00237	PASS
				-20	-4.46	-0.00237	PASS
				-10	1.24	0.00066	PASS
GSM				0	-2.63	-0.00140	PASS
1900				10	4.28	0.00228	PASS
1900				20	-3.93	-0.00209	PASS
				30	-2.06	-0.00110	PASS
				40	-3.99	-0.00212	PASS
				50	-4.77	-0.00254	PASS
		НСН	VN	-30	-3.34	-0.00175	PASS
				-20	-3.35	-0.00175	PASS
				-10	3.22	0.00169	PASS
				0	1.54	0.00081	PASS
				10	-0.65	-0.00034	PASS
				20	-3.55	-0.00186	PASS
				30	-4.42	-0.00231	PASS
				40	1.35	0.00071	PASS
				50	-3.25	-0.00170	PASS



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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		LCH	VN	-30	-2.86	-0.00155	PASS
				-20	-2.87	-0.00155	PASS
				-10	-4.74	-0.00256	PASS
				0	1.66	0.00090	PASS
				10	-2.54	-0.00137	PASS
				20	-2.23	-0.00121	PASS
				30	-4.52	-0.00244	PASS
				40	1.65	0.00089	PASS
				50	-3.77	-0.00204	PASS
	EGPRS	MCH	VN	-30	-3.45	-0.00183	PASS
				-20	-3.44	-0.00183	PASS
				-10	-2.62	-0.00139	PASS
GSM				0	-4.26	-0.00227	PASS
1900				10	1.44	0.00077	PASS
1900				20	-3.24	-0.00172	PASS
				30	-2.12	-0.00113	PASS
				40	-3.74	-0.00199	PASS
				50	0.83	0.00044	PASS
		НСН	VN	-30	-3.04	-0.00160	PASS
				-20	-3.05	-0.00160	PASS
				-10	2.93	0.00153	PASS
				0	1.77	0.00093	PASS
				10	-3.43	-0.00180	PASS
				20	-4.75	-0.00249	PASS
				30	-3.85	-0.00202	PASS
				40	-2.64	-0.00138	PASS
				50	-2.33	-0.00122	PASS



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Test Band	Test Mode	Test Channel	Test Volt.	Test Temp.	Freq. Error [Hz]	Freq. vs. rated [ppm]	Verdict
		LCH	VN	-30	-2.80	-0.00341	PASS
				-20	-2.81	-0.00341	PASS
				-10	-4.75	-0.00576	PASS
				0	1.64	0.00199	PASS
				10	-2.52	-0.00306	PASS
				20	-2.22	-0.00269	PASS
				30	-4.51	-0.00547	PASS
				40	1.65	0.00200	PASS
				50	-3.76	-0.00456	PASS
CDMA 2000	CDMA 1xRTT	MCH	VN	-30	-1.47	-0.00177	PASS
				-20	-1.48	-0.00177	PASS
				-10	-2.63	-0.00314	PASS
				0	-4.25	-0.00508	PASS
				10	1.48	0.00177	PASS
				20	-3.23	-0.00386	PASS
				30	-2.18	-0.00261	PASS
				40	-3.74	-0.00447	PASS
				50	0.82	0.00098	PASS
		нсн	VN	-30	-3.02	-0.00357	PASS
				-20	-3.03	-0.00357	PASS
				-10	2.94	0.00347	PASS
				0	1.78	0.00210	PASS
				10	-2.44	-0.00288	PASS
				20	-1.72	-0.00203	PASS
				30	-3.84	-0.00453	PASS
				40	-2.65	-0.00312	PASS
				50	-2.32	-0.00273	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

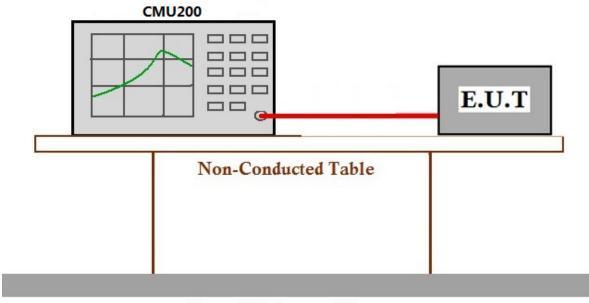
### 6.8.1 E.U.T. Operation

Operating Environment:

Temperature: 18.6 °C Humidity: 29.1 % RH Atmospheric Pressure: 1025 mbar

Test mode a: Tx mode, Keep the EUT in transmitting mode.

### 6.8.2 Test Setup Diagram



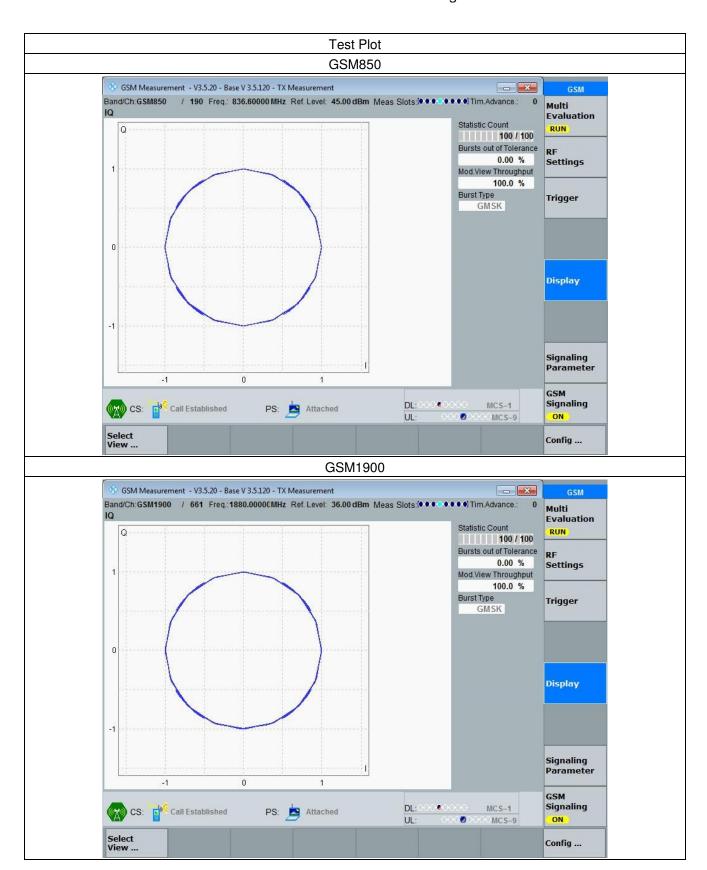
Ground Reference Plane

### 6.8.3 Measurement Data



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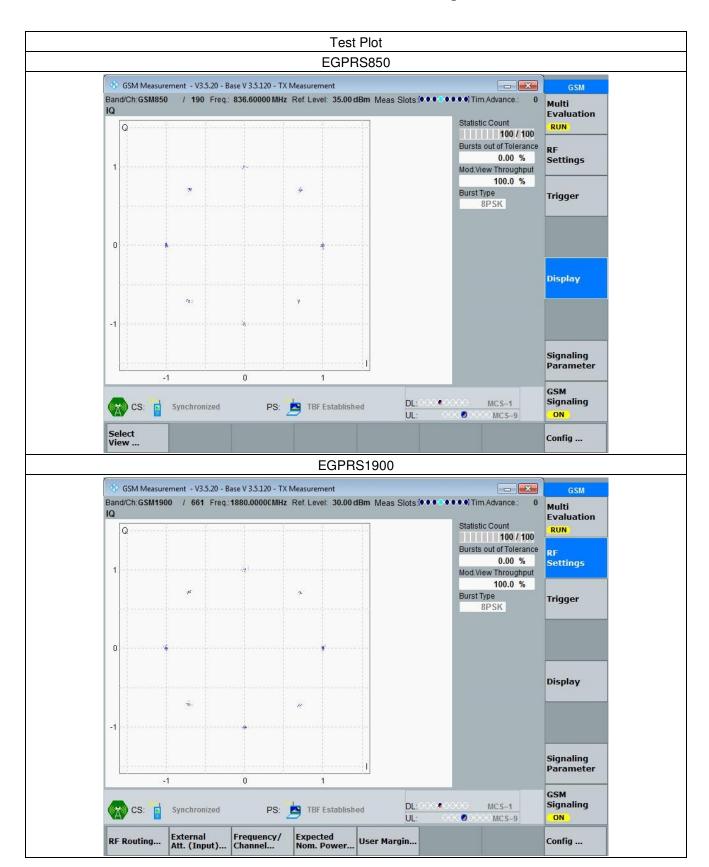
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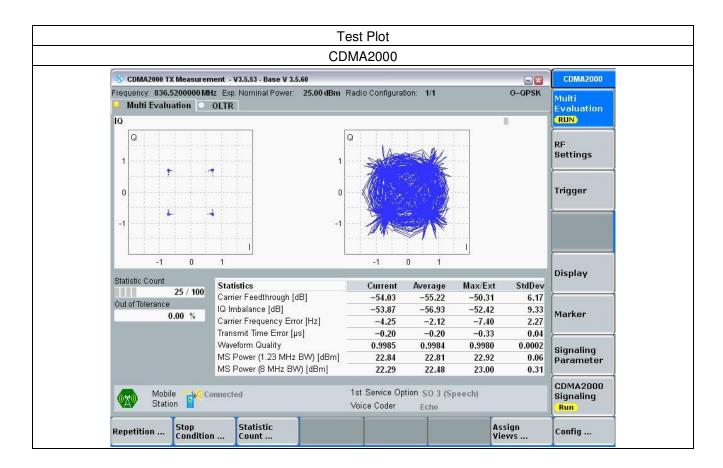
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