

## FCC RADIO TEST REPORT FCC ID: 2ASO3TESLALTE64LUS

Product: Smartphone Trade Mark: TESLA Model No.: SMARTPHONE 6.4 LITE Family Model: N/A Report No.: S18121304106004 Issue Date: 18 Mar. 2019

## **Prepared for**

Tesla Electronics d.o.o. Beograd

Savski nasip 7, 11070 Belgrade, Yugoslavia

### Prepared by

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# NTEKJLW

#### **1 TEST RESULT CERTIFICATION**

Applicant's name:	Tesla Electronics d.o.o. Beograd		
Address	Savski nasip 7, 11070 Belgrade, Yugosl	lavia	
Manufacturer's Name	Tesla Electronics d.o.o. Beograd		
Address:	Savski nasip 7, 11070 Belgrade, Yugosl	lavia	
Product description			
Product name:	Smartphone		
Model and/or type reference:	SMARTPHONE 6.4 LITE		
Family Model	N/A		
Measurement Procedure Used:			
	APPLICABLE STANDARDS		
APPLICABLE STAND	ARD/ TEST PROCEDURE	TEST RESULT	
47 CFR Part 2, Part	t 22H, Part 24E, Part 27L		
ANSI/TI,	A-603-E-2016	Osmaliad	
FCC KDB 971168 D01 Power	Complied		

ANSI C63.26:2015

This device described above has been tested by Shenzhen NTEK Testing Technology Co., Ltd., and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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Date of Test	:	14 Dec. 2018 ~ 26 Dec. 2018
Testing Engineer	:	Eileen Wu.
		(Eileen Liu)
Technical Manager	:	Jason chen
Ű		(Jason Chen)
		Sam. Chen
Authorized Signatory	:	
		(Sam Chen)

### NTEK北测 ACCREDITED Certificate #4298.01

FCC Part22, Subpart H/ FCC Part24, Subpart E, FCC Part27, Subpart L, KDB 971168 D01 Power Meas License Digital Systems v03								
FCC Rule	Test Item	Verdict	Remark					
2.1046	Conducted Output Power	PASS						
24.232(d) KDB 971168 D01 Clause 5.7	Peak-to-Average Ratio	PASS						
2.1049 22.917(b) 24.238(b) KDB 971168 D01 Clause 4.2	Occupied Bandwidth	PASS						
2.1051 22.917(a) 24.238(a) KDB 971168 D01 Clause 6	Band Edge	PASS						
22.913(a)(2) KDB 971168 D01 Clause 5.6	Effective Radiated Power	PASS						
24.232(c) KDB 971168 D01 Clause 5.6	Equivalent Isotropic Radiated Power	PASS						
2.1053 22.917(a) 24.238(a) KDB 971168 D01 Clause 7	Field Strength of Spurious Radiation	PASS						
2.1055 22.355 24.235 KDB 971168 D01 Clause 9	Frequency Stability for Temperature & Voltage	PASS						
2.1051 22.917(a) 24.238(a) KDB 971168 D01 Clause 6	Conducted Emission	PASS						

 "N/A" denotes test is not applicable in this Test Report.
 All test items were verified and recorded according to the standards and without any deviation during the test.

3. No modifications are made to the EUT during all test items.



#### **3 FACILITIES AND ACCREDITATIONS**

#### 3.1 FACILITIES

All measurement facilities used to collect the measurement data are located at

1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R. China.

The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.10 and CISPR Publication 22.

#### 3.2 LABORATORY ACCREDITATIONS AND LISTINGS

Site Description CNAS-Lab.	: The Laboratory has been assessed and proved to be in compliance with CNAS-CL01:2006 (identical to ISO/IEC 17025:2005) The Certificate Registration Number is L5516.
IC-Registration	The Certificate Registration Number is 9270A-1.
FCC- Accredited	Test Firm Registration Number: 463705. Designation Number: CN1184
A2LA-Lab.	The Certificate Registration Number is 4298.01 This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated 8 January 2009).
Name of Firm Site Location	<ul> <li>Shenzhen NTEK Testing Technology Co., Ltd.</li> <li>1/F, Building E, Fenda Science Park, Sanwei Community, Xixiang Street, Bao'an District, Shenzhen 518126 P.R. China.</li> </ul>

#### 3.3 MEASUREMENT UNCERTAINTY

The reported uncertainty of measurement, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	Uncertainty
1	Measuring Uncertainty for a Level of Confidence of $95\%$ (U = $2Uc(y)$ )	2.5dB

# NTEKJLIN Repo

#### 4 GENERAL DESCRIPTION OF EUT

	Product Feature and Specification
Equipment	Smartphone
Trade Mark	TESLA
FCC ID	2ASO3TESLALTE64LUS
Model No.	SMARTPHONE 6.4 LITE
Family Model	N/A
Model Difference	N/A
Operating Frequency	GSM850: TX824.2MHz~848.8MHz /RX869.2MHz~893.8MHz;         UMTS FDD Band V: TX826.4MHz~846.6MHz /RX871.4MHz~891.6MHz;         PCS1900: TX1850.2MHz~1909.8MHz /RX1930.2MHz~1989.8MHz;         UMTS FDD Band II: TX1852.4MHz~1907.6MHz /RX1932.4MHz~1987.6MHz;         UMTS-FDD Band II: TX1710MHz~1755MHz /RX2110MHz~2155MHz
Modulation	GMSK for GSM/GPRS; BPSK for EGPRS; QPSK for UMTS bands;
GPRS Class	Multi-Class12 Only 4 timeslots are used for GPRS
SIM CARD	The Phone has two SIM Card sockets
Antenna Type	PIFA Antenna
Antenna Gain	GSM850: -0.54dBi; PCS1900: 1.08dBi; WCDMA B2: 0.52dBi; WCDMA B4: 0.21dBi; WCDMA B5: -0.82dBi
	DC supply: DC 3.8V/2700mAh from battery or DC 5V from USB Port.
Power supply	Adapter supply: Model: NB-0501000U Input: 100-240V~50/60Hz 0.2A Output: 5V1.0A
HW Version	5601_MB_V1.1
SW Version	S5613Tesla_US_2018-11-13-21-18
	plication, features, or specification exhibited in User's Manual, the EUT is considered

Note: Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual. The High Voltage 4.2V and Low Voltage 3.2V was declared by manufacturer, The EUT couldn't be operate normally with higher or lower voltage.



Revision History						
Report No.	Version	Description	Issued Date			
S18121304106004	Rev.01	Initial issue of report	Mar 18, 2019			
	•					





#### 5 DESCRIPTION OF TEST MODES

During the testing, the EUT was controlled via Rhode & Schwarz Digital Radio Communication Tester(CMU 200) to ensure max power transmission and proper modulation. Three channels (The low channel, the middle channel and the high channel) were chosen for testing on all frequency band.

Note: GSM/GPRS 850, GSM/GPRS 1900, HSDPA band II, HSUPA band II, HSDPA band V, HSUPA band V, HSDPA band IV, HSUPA band IV modes have been tested during the test. the worst condition (GSM850, GSM1900, RMC 12.2k) be recorded in the test report if no other modes test data.

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 Power Meas. License Digital Systems v03 with maximum output power.

Radiated measurements were performed with rotating EUT in different three orthogonal test planes to find the maximum emission.

Radiated emissions were investigated as following frequency range:

1. 30 MHz to 10th harmonic for GSM850/UMTS FDD Band V/ UMTS FDD Band IV.

2. 30 MHz to 10th harmonic for GSM1900/UMTS FDD Band II.

All modes and data rates and positions were investigated.

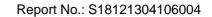
Test modes are chosen to be reported as the worst case configuration below:

	Test Modes			
Band	For Conducted Test Cases	For Radiated Test Cases		
GSM 850	GSM Link	GSM Link		
GSM 1900	GSM Link	GSM Link		
UMTS Band II	RMC 12.2Kbps Link	RMC 12.2Kbps Link		
UMTS Band V	RMC 12.2Kbps Link	RMC 12.2Kbps Link		
UMTS Band IV	RMC 12.2Kbps Link	RMC 12.2Kbps Link		

#### Test Frequency and Channels:

Frequency	🛛 G	SM 850	⊠GS	M 1900	🖂 UM	TS Band II	⊠UMT	S Band V
Band	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
CH_H	251	848.8	810	1909.8	9538	1907.6	4233	846.6
CH_M	190	836.4	661	1880.0	9400	1880.0	4183	836.4
CH_L	128	824.2	512	1850.2	9262	1852.4	4132	826.4

Frequency	UMTS Band IV			
Band	Channel	Frequency (MHz)		
CH_H	1513	1752.6		
CH_M	1412	1732.6		
CH_L	1312	1712.4		





#### 6 SETUP OF EQUIPMENT UNDER TEST

#### 6.1 BLOCK DIAGRAM CONFIGURATION OF TEST SYSTEM

For Radiated Test Ca	ases				
	EUT				
For Conducted Outp	ut Power				
Measurement		×4			
Instrument	Attenuator	EUT			
For Peak-to Average	Ratio, Occupied	Bandwidth, Condu	icted Band ec	lge and Con	ducted Spurious Err
System Simulato		C2			
Spectrum Analyz	Power Divider er	EUT			
For Frequency Stabil	ity				
Measurement	t Attenuator C	EUT	C4 DC Po	ower	
Instrument	Allendator	Thermal Chamber	Sourc	e	
			-		
		the hetter is full			
Note: EUT built-in b	attery-powered, 1	the dattery is fully	-cnarged.		



#### 6.2 SUPPORT EQUIPMENT

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Item	Equipment	Mfr/Brand	Model/Type No.	Series No.	Note

Item	Cable Type	Shielded Type	Ferrite Core	Length
C-1	RF Cable	YES	NO	0.1m
C-2	RF Cable	YES	NO	0.1m
C-3	RF Cable	YES	NO	0.1m
C-4	DC Cable	NO	NO	1.0m

#### Notes:

- (1) The support equipment was authorized by Declaration of Confirmation.
- (2) For detachable type I/O cable should be specified the length in cm in [Length] column.
- (3) "YES" is means "shielded" "with core"; "NO" is means "unshielded" "without core".

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#### 6.3 EQUIPMENTS LIST FOR ALL TEST ITEMS

6.3 EQUIPMENTS LIST FOR ALL TEST TIEMS										
Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until	Calibration period			
1	MXA Signal Analyzer	Agilent	N9020A	MY49100060	2018.10.08	2019.10.07	1 year			
2	Test Receiver	R&S	ESPI	101318	2018.05.19	2019.05.18	1 year			
3	Bilog Antenna	TESEQ	CBL6111D	31216	2018.04.09	2019.04.08	1 year			
4	50Ω Coaxial Switch	Anritsu	MP59B	6200983705	2018.05.19	2019.05.18	1 year			
5	Horn Antenna	EM	EM-AH-1018 0	2011071402	2018.05.19	2019.05.18	1 year			
6	Horn Ant	Schwarzbeck	BBHA 9170	9170-181	2018.04.09	2019.04.08	1 year			
7	Amplifier	EM	EM-30180	060538	2018.08.05	2019.08.04	1 year			
8	Loop Antenna	ARA	PLA-1030/B	1029	2018.05.19	2019.05.18	1 year			
9	Power Meter	R&S	NRVS	100696	2018.08.05	2019.08.04	1 year			
10	Power Sensor	R&S	URV5-Z4	0395.1619.0 5	2018.05.19	2019.05.18	1 year			
11	Test Cable	N/A	R-01	N/A	2017.04.21	2020.04.20	3 year			
12	Test Cable	N/A	R-02	N/A	2017.04.21	2020.04.20	3 year			
13	Test Cable	N/A	R-03	N/A	2017.04.21	2020.04.20	3 year			
14	Test Receiver	R&S	ESCI	101160	2018.05.19	2019.05.18	1 year			
15	LISN	R&S	ENV216	101313	2018.04.19	2019.04.18	1 year			
16	LISN	EMCO	3816/2	00042990	2018.05.19	2019.05.18	1 year			
17	50Ω Coaxial Switch	Anritsu	MP59B	6200264417	2018.05.19	2019.05.18	1 year			
18	Passive Voltage Probe	R&S	ESH2-Z3	100196	2017.04.21	2020.04.20	3 year			
19	Test Cable	N/A	C01	N/A	2017.04.21	2020.04.20	3 year			
20	Test Cable	N/A	C02	N/A	2017.04.21	2020.04.20	3 year			
21	Test Cable	N/A	C03	N/A	2018.04.19	2019.04.18	1 year			
22	Attenuator	MCE	24-10-34	BN9258	2018.04.10	2019.04.09	1 year			
23	Spectrum Analyzer	agilent	e4440a	us44300399	2018.05.19	2019.05.18	1 year			
24	test receiver	R&S	ESCI	a0304218	2018.05.19	2019.05.18	1 year			
25	Communication Tester	R&S	CMU200	A0304247	2018.08.05	2019.08.04	1 year			
26	Thermal Chamber	Ten Billion	TTC-B3C	TBN-960502	2018.05.19	2019.05.18	1 year			
27	DC Power Source Each piece of ec	N/A	PS-6005D	2017040292 3	2017.06.06	2020.06.05	3 year			

Note: Each piece of equipment is scheduled for calibration once a year except the Test Cable& DC Power Source which is scheduled for calibration every 3 years.



#### 7 TEST REQUIREMENTS

#### 7.1 FIELD STRENGTH OF SPURIOUS RADIATION

#### 7.1.1 Applicable Standard

According to FCC KDB 971168 D01 v03 Section 5.8 and ANSI/TIA-603-E-2016 Section 2.2.12

#### 7.1.2 Conformance Limit

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least  $43 + 10 \log (P) dB$ . The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

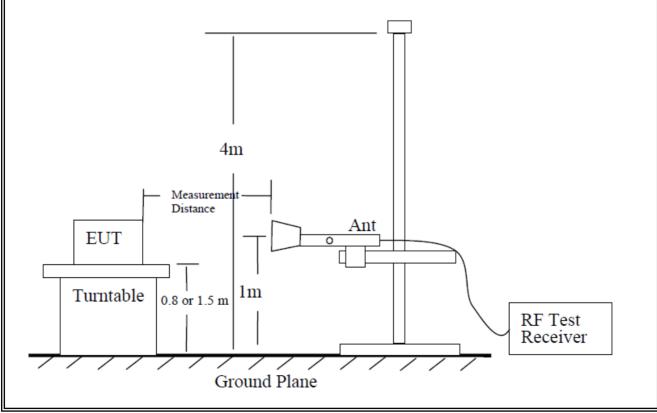
#### 7.1.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

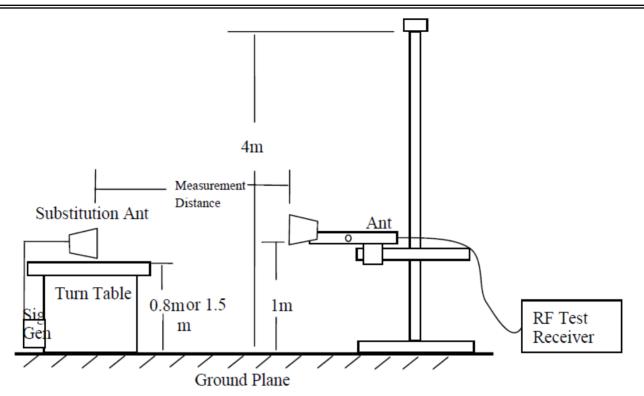
#### 7.1.4 Test Configuration

According to the ANSI/TIA-603-E-2016 test method, The Receiver or Spectrum was scanned from 9 KHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier that can be as high as 1910 MHz The resolution bandwidth is set as outlined in Part 24.238, Part 22.917. The spectrum is scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of WCDMA Band II / WCDMA Band V / WCDMA Band IV/ GSM 850/ GSM 1900.

#### **TEST CONFIGURATION**







Certificate #4298.01

#### 7.1.5 Test Procedure

- EUT was placed on a 0.8 meter(For frequency above 1G, EUT should be placed on 1.5m) high non-conductive stand at a 3 meter test distance from the receive antenna. A receiving antenna was placed on the antenna mast 3 meters from the EUT for emission measurements. The height of receiving antenna is 1.50 meter. Detected emissions were maximized at each frequency by rotating the EUT through 360° and adjusting the receiving antenna polarization. The radiated emission measurements of all transmit frequencies in three channels (High, Middle, Low) were measured with peak detector.
- 2. A log-periodic antenna or double-ridged waveguide horn antenna shall be substituted in place of the EUT. The log-periodic antenna will be driven by a signal generator and the level will be adjusted till the same power value on the spectrum analyzer or receiver. The level of the spurious emissions can be calculated through the level of the signal generator, cable loss, the gain of the substitution antenna and the reading of the spectrum analyzer or receiver.
- 3. The EUT is then put into continuously transmitting mode at its maximum power level during the test.Set Test Receiver or Spectrum RBW=1MHz,VBW=3MHz, And the maximum value of the receiver should be recorded as (P<sub>r</sub>).
- 4. The EUT shall be replaced by a substitution antenna. In the chamber, an substitution antenna for the frequency band of interest is placed at the reference point of the chamber. An RF Signal source for the frequency band of interest is connected to the substitution antenna with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A power (SG Level) is applied to the input of the substitution antenna, and adjust the level of the signal generator output until the value of the receiver reach the previously recorded (P<sub>r</sub>). The power of signal source (SG Level) is recorded. The test should be performed by rotating the test item and adjusting the receiving antenna polarization.

 A amplifier should be connected to the Signal Source output port. And the cable should be connect between the Amplifier and the Substitution Antenna. The cable loss (Cable Loss) ,the Substitution Antenna Gain should be recorded after test. The measurement results are obtained as described below: Power(EIRP)= SG Level- Cable Loss+ Antenna Gain

- 6. This value is EIRP since the measurement is calibrated using an antenna of known gain (2.15 dBi) and known input power.
- 7. ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP -2.15dBi.



#### 7.1.6 Test Results

EUT:	Smartphone	Model No.:	SMARTPHONE 6.4 LITE
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	GSM/GPRS 850/ GSM/GPRS 1900 UMTS band II/ UMTS band V/ UMTS band IV	Test By:	Eileen Liu

#### Radiated Spurious Emission

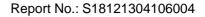
			GSN	1850								
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Over Limit	Polarity					
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)						
	Test Results for Channel 128/824.2 MHz											
1648.4	-53.62	2.80	27.50	-28.92	-13	-15.92	Vertical					
1648.4	-52.19	2.80	27.50	-27.49	-13	-14.49	Horizontal					
2472.6	-52.64	2.91	27.80	-27.75	-13	-14.75	Vertical					
2472.6	-52.98	2.91	27.80	-28.09	-13	-15.09	Horizontal					
3296.8	-54.47	4.02	29.87	-28.62	-13	-15.62	Vertical					
3296.8	-52.35	4.02	29.87	-26.50	-13	-13.50	Horizontal					
	Test Results for Channel 190/836.6 MHz											
1673.2	-54.44	2.80	27.48	-29.76	-13	-16.76	Vertical					
1673.2	-56.69	2.80	27.48	-32.01	-13	-19.01	Horizontal					
2509.8	-53.85	2.91	27.70	-29.06	-13	-16.06	Vertical					
2509.8	-54.18	2.91	27.70	-29.39	-13	-16.39	Horizontal					
3346.4	-53.27	4.02	29.82	-27.47	-13	-14.47	Vertical					
3346.4	-52.98	4.02	29.82	-27.18	-13	-14.18	Horizontal					
		Test Res	sults for Cha	nnel 251/848	8.8 MHz							
1697.6	-53.62	2.80	27.42	-29.00	-13	-16.00	Vertical					
1697.6	-53.98	2.80	27.42	-29.36	-13	-16.36	Horizontal					
2546.4	-53.66	2.91	27.68	-28.89	-13	-15.89	Vertical					
2546.4	-54.15	2.91	27.68	-29.38	-13	-16.38	Horizontal					
3395.2	-56.67	4.02	29.80	-30.89	-13	-17.89	Vertical					
3395.2	-53.62	4.02	29.80	-27.84	-13	-14.84	Horizontal					

#### Remark:

We were tested all Configuration refer 3GPP TS134 121.
 Absolute Level = SG Level- Cable Loss+ Antenna Gain

3. Over Limit= Absolute Level (dBm)-Limit(dBm)





			GPR	S 850						
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Over Limit	Polarity			
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)				
Test Results for Channel 128/824.2 MHz										
1648.4	-53.41	2.80	27.50	-28.71	-13	-15.71	Vertical			
1648.4	-54.66	2.80	27.50	-29.96	-13	-16.96	Horizontal			
2472.6	-53.92	2.91	27.80	-29.03	-13	-16.03	Vertical			
2472.6	-53.57	2.91	27.80	-28.68	-13	-15.68	Horizonta			
3296.8	-53.68	4.02	29.87	-27.83	-13	-14.83	Vertical			
3296.8	-54.44	4.02	29.87	-28.59	-13	-15.59	Horizonta			
	Test Results for Channel 190/836.6 MHz									
1673.2	-54.59	2.80	27.48	-29.91	-13	-16.91	Vertical			
1673.2	-53.67	2.80	27.48	-28.99	-13	-15.99	Horizontal			
2509.8	-52.68	2.91	27.70	-27.89	-13	-14.89	Vertical			
2509.8	-53.87	2.91	27.70	-29.08	-13	-16.08	Horizonta			
3346.4	-52.56	4.02	29.82	-26.76	-13	-13.76	Vertical			
3346.4	-54.13	4.02	29.82	-28.33	-13	-15.33	Horizonta			
		Test Res	sults for Cha	innel 251/848	8.8 MHz					
1697.6	-52.21	2.80	27.42	-27.59	-13	-14.59	Vertical			
1697.6	-51.96	2.80	27.42	-27.34	-13	-14.34	Horizontal			
2546.4	-55.56	2.91	27.68	-30.79	-13	-17.79	Vertical			
2546.4	-56.64	2.91	27.68	-31.87	-13	-18.87	Horizontal			
3395.2	-54.47	4.02	29.80	-28.69	-13	-15.69	Vertical			
3395.2	-51.85	4.02	29.80	-26.07	-13	-13.07	Horizonta			

Certificate #4298.01

Remark:

We were tested all Configuration refer 3GPP TS134 121.
 Absolute Level = SG Level- Cable Loss+ Antenna Gain
 Over Limit= Absolute Level (dBm)-Limit(dBm)





	<b>GSM</b> 1900										
Frequency	SG Level	Cable Loss	Antenna Factor	Absolute Level	Limit	Over Limit	Polarity				
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)					
Test Results for Channel 512/1850.2MHz											
3700.4	3700.4 -55.29 4.04 33.51 -25.82 -13 -12.82 Vertical										
3700.4	-56.63	4.04	33.51	-27.16	-13	-14.16	Horizontal				
5550.6	-55.57	5.24	35.84	-24.97	-13	-11.97	Vertical				
5550.6	-53.12	5.24	35.84	-22.52	-13	-9.52	Horizontal				
		Test Res	sults for Cha	nnel 661/188	30.0MHz						
3760	-54.74	4.04	33.56	-25.22	-13	-12.22	Vertical				
3760	-56.68	4.04	33.56	-27.16	-13	-14.16	Horizontal				
5640	-55.85	5.24	35.91	-25.18	-13	-12.18	Vertical				
5640	-55.29	5.24	35.91	-24.62	-13	-11.62	Horizontal				
		Test Res	sults for Cha	nnel 810/190	)9.8MHz						
3819.6	-54.16	4.04	34.00	-24.20	-13	-11.20	Vertical				
3819.6	-56.96	4.04	34.00	-27.00	-13	-14.00	Horizontal				
5729.4	-57.84	5.24	36.04	-27.04	-13	-14.04	Vertical				
5729.4	-54.23	5.24	36.04	-23.43	-13	-10.43	Horizontal				

Certificate #4298.01

Remark:

We were tested all Configuration refer 3GPP TS134 121.
 Absolute Level = SG Level- Cable Loss+ Antenna Gain

3. Over Limit= Absolute Level (dBm)-Limit(dBm)





			GPRS	S 1900						
Frequency	SG Level	Cable Loss	Antenna Factor	Absolute Level	Limit	Over Limit	Polarity			
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)				
Test Results for Channel 512/1850.2MHz										
3700.4	3700.4 -54.13 4.04 33.51 -24.66 -13 -11.66 Vertical									
3700.4	-56.69	4.04	33.51	-27.22	-13	-14.22	Horizontal			
5550.6	-57.49	5.24	35.84	-26.89	-13	-13.89	Vertical			
5550.6	-55.52	5.24	35.84	-24.92	-13	-11.92	Horizontal			
		Test Res	sults for Cha	nnel 661/188	30.0MHz					
3760	-53.96	4.04	33.56	-24.44	-13	-11.44	Vertical			
3760	-56.67	4.04	33.56	-27.15	-13	-14.15	Horizontal			
5640	-54.19	5.24	35.91	-23.52	-13	-10.52	Vertical			
5640	-56.85	5.24	35.91	-26.18	-13	-13.18	Horizontal			
		Test Res	sults for Cha	nnel 810/190	09.8MHz					
3819.6	-54.29	4.04	34.00	-24.33	-13	-11.33	Vertical			
3819.6	-55.85	4.04	34.00	-25.89	-13	-12.89	Horizontal			
5729.4	-56.61	5.24	36.04	-25.81	-13	-12.81	Vertical			
5729.4	-56.68	5.24	36.04	-25.88	-13	-12.88	Horizontal			

Certificate #4298.01

Remark:

1. We were tested all Configuration refer 3GPP TS134 121.

Absolute Level = SG Level- Cable Loss+ Antenna Gain
 Over Limit= Absolute Level (dBm)-Limit(dBm)

#### Report No.: S18121304106004



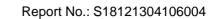
			WCDMA	Band II							
Frequency	SG Level	Cable Loss	Antenna Factor	Absolute Level	Limit	Over Limit	Polarity				
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)					
Test Results for Channel 9262/1852.4MHz											
3700.8	3700.8 -57.41 4.04 33.51 -27.94 -13 -14.94 Vertical										
3700.8	-58.95	4.04	33.51	-29.48	-13	-16.48	Horizontal				
5551.2	-56.92	5.24	35.84	-26.32	-13	-13.32	Vertical				
5551.2	-54.13	5.24	35.84	-23.53	-13	-10.53	Horizontal				
	Test Results for Channel 9400/1880MHz										
3760	-57.62	4.04	33.56	-28.10	-13	-15.10	Vertical				
3760	-55.85	4.04	33.56	-26.33	-13	-13.33	Horizontal				
5640	-56.61	5.24	35.91	-25.94	-13	-12.94	Vertical				
5640	-55.52	5.24	35.91	-24.85	-13	-11.85	Horizontal				
		Test Res	ults for Char	nel 9538/19	07.6MHz	-					
3819.2	-57.97	4.04	34.00	-28.01	-13	-15.01	Vertical				
3819.2	-56.62	4.04	34.00	-26.66	-13	-13.66	Horizontal				
5728.8	-57.41	5.24	36.04	-26.61	-13	-13.61	Vertical				
5728.8	-55.58	5.24	36.04	-24.78	-13	-11.78	Horizontal				

Remark:

1. We were tested all Configuration refer 3GPP TS134 121.

Absolute Level = SG Level- Cable Loss+ Antenna Gain
 Over Limit= Absolute Level (dBm)-Limit(dBm)

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			WCDMA	Band V						
Frequency	SG Level	Cable Loss	Antenna Gain	Absolute Level	Limit	Over Limit	Polarity			
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)				
Test Results for Channel 4233/846.6MHz										
1673.2	-54.41	2.80	27.50	-29.71	-13	-16.71	Vertical			
1673.2	-54.26	2.80	27.50	-29.56	-13	-16.56	Horizontal			
2509.8	-52.85	2.91	27.80	-27.96	-13	-14.96	Vertical			
2509.8	-53.96	2.91	27.80	-29.07	-13	-16.07	Horizontal			
3346.4	-54.38	4.02	29.87	-28.53	-13	-15.53	Vertical			
3346.4	-53.62	4.02	29.87	-27.77	-13	-14.77	Horizontal			
	Test Results for Channel 4182/836.4MHz									
1672.8	-48.98	2.80	27.48	-24.30	-13	-11.30	Vertical			
1672.8	-54.06	2.80	27.48	-29.38	-13	-16.38	Horizontal			
2509.2	-53.62	2.91	27.70	-28.83	-13	-15.83	Vertical			
2509.2	-54.11	2.91	27.70	-29.32	-13	-16.32	Horizontal			
3345.6	-54.41	4.02	29.82	-28.61	-13	-15.61	Vertical			
3345.6	-54.85	4.02	29.82	-29.05	-13	-16.05	Horizontal			
		Test Res	sults for Cha	nnel 4132/82	26.4MHz					
1652.8	-58.98	2.80	27.42	-34.36	-13	-21.36	Vertical			
1652.8	-53.62	2.80	27.42	-29.00	-13	-16.00	Horizontal			
2479.2	-54.47	2.91	27.68	-29.70	-13	-16.70	Vertical			
2479.2	-54.61	2.91	27.68	-29.84	-13	-16.84	Horizontal			
3305.6	-53.62	4.02	29.80	-27.84	-13	-14.84	Vertical			
3305.6	-54.11	4.02	29.80	-28.33	-13	-15.33	Horizontal			

ACCREDITED

Certificate #4298.01

Remark:

We were tested all Configuration refer 3GPP TS134 121.
 Absolute Level = SG Level- Cable Loss+ Antenna Gain

3. Over Limit= Absolute Level (dBm)-Limit(dBm)



#### Report No.: S18121304106004

			WCDMA	Band IV						
Frequency	SG Level	Cable Loss	Antenna Factor	Absolute Level	Limit	Over Limit	Polarity			
(MHz)	(dBm)	(dB)	(dB)	(dBm)	(dBm)	(dBm)				
Test Results for Channel 1312/1712.4MHz										
3424.8	3424.8 -56.94 4.02 29.80 -31.16 -13 -18.16 Vertical									
3424.8	-55.19	4.02	29.80	-29.41	-13	-16.41	Horizontal			
5137.2	-57.65	5.24	35.84	-27.05	-13	-14.05	Vertical			
5137.2	-54.81	5.24	35.84	-24.21	-13	-11.21	Horizontal			
		Test Res	ults for Char	nel 1412/17	32.4MHz					
3464.8	-54.48	4.03	30.00	-28.51	-13	-15.51	Vertical			
3464.8	-56.22	4.03	30.00	-30.25	-13	-17.25	Horizontal			
5197.2	-57.95	5.25	35.86	-27.34	-13	-14.34	Vertical			
5197.2	-55.53	5.25	35.86	-24.92	-13	-11.92	Horizontal			
		Test Res	ults for Char	nel 1513/17	52.6MHz					
3505.2	-54.16	2.91	27.68	-29.39	-13	-16.39	Vertical			
3505.2	-55.92	2.91	27.68	-31.15	-13	-18.15	Horizontal			
5257.8	-57.27	5.26	35.86	-26.67	-13	-13.67	Vertical			
5257.8	-54.46	5.26	35.86	-23.86	-13	-10.86	Horizontal			

Remark:

We were tested all Configuration refer 3GPP TS134 121.
 Absolute Level = SG Level- Cable Loss+ Antenna Gain

3. Over Limit= Absolute Level (dBm)-Limit(dBm)



#### 7.2 EFFECTIVE RADIATED POWER AND EFFECTIVE ISOTROPIC RADIATED POWER

#### 7.2.1 Applicable Standard

According to FCC KDB 971168 D01 v03 Section 5.2.1/ Section 5.2.2.2 and ANSI/TIA-603-E-2016 Section 2.2.17

#### 7.2.2 Conformance Limit

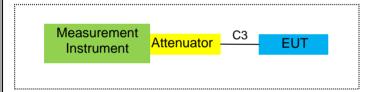
The substitution method, in ANSI/TIA-603-E-2016, was used for ERP/EIRP measurement, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v03. The ERP of mobile transmitters must not exceed 7 Watts (Cellular Band) and the EIRP of mobile transmitters are limited to 2 Watts (PCS Band).

#### 7.2.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

#### 7.2.4 Test Configuration

#### (a) For E.R.P and E.I.R.P Measurements



#### 7.2.5 Test Procedure

The measurements procedures specified in ANSI/TIA-603-E-2016 were applied.

In an anechoic antenna test chamber, a half-wave dipole antenna for the frequency band of interest is placed at the reference centre of the chamber. An RF Signal source for the frequency band of interest is connected to the dipole with a cable that has been constructed to not interfere with the radiation pattern of the antenna. A known (measured) power (Pin) is applied to the input of the dipole, and the power received (Pr) at the chamber's probe antenna is recorded.

The relevant equation for determining the ERP or EIRP from the conducted RF output power measured using the guidance provided above is:

ERP/EIRP = SGLevel -Pcl +Ga

where:

ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as SGLevel, typically dBW or dBm);

SGLevel = Signal generator output power or PSD, in dBm or dBW;

Ga = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

Pcl = signal attenuation in the connecting cable between the transmitter and antenna, in dB.<sup>2</sup>

The EUT is substituted for the dipole at the reference centre of the chamber and a scan is performed to obtain the radiation pattern.

From the radiation pattern, the co-ordinates where the maximum antenna gain occurs are identified.

The EUT is then put into continuously transmitting mode at its maximum power level.



Power mode measurements are performed with the receiving antenna placed at the coordinates determined in Step 3 to determine the output power as defined in Rule 24.232 (b) and (c). The "reference path loss" from Step1 is added to this result.

This value is EIRP since the measurement is calibrated using a half-wave dipole antenna of known gain (2.15 dBi) and known input power (Pin).

ERP can be calculated from EIRP by subtracting the gain of the dipole, ERP = EIRP -2.15dBi.

Both horizontal and vertical antenna polarities were tested and performed pretest to three orthogonal axis. The worst case emissions were reported.

Substitution antenna and Receiving Antenna:

Item	Kind of Equipment	Manufacturer	Type No.	Serial No.	Character	Note
1	Bilog Antenna	TESEQ	CBL6111D	31216	30MHz~2GHz	Receiving Antenna
2	Horn Antenna	EM	EM-AH-10180	2011071402	1GHz~18GHz	Receiving Antenna
3	Bilog Antenna	TESEQ	CBL6111D	31216	30MHz~2GHz	Substitution antenna
4	Horn Antenna	EM	EM-AH-10180	2011071402	1GHz~18GHz	Substitution antenna

Use the following spectrum analyzer settings:

	GSM/GPRS	UMTS band
Span	500KHz	10MHz
RBW	10KHz	300KHz
VBW	30KHz	1MHz
Detector	RMS	RMS
Trace	Average	Average
Average Type	Power	Power
Sweep Count	100	100



#### 7.2.6 Test Results

EUT:	Smartphone	Model No.:	SMARTPHONE 6.4 LITE
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	GSM/GPRS 850/ GSM/GPRS 1900 UMTS band II/ UMTS band V/ UMTS band IV	Test By:	Eileen Liu

#### Effective Radiated Power

	Radiated Power (ERP) for GSM850						
Frequency	Polarization	SG Level	Pcl	Ga Antenna Gain	Correction	ERP	ERP
(MHz)		(dBm)	(dB)	(dB)	(dB)	(dBm)	(W)
824.2	Н	11.45	2.11	23.84	2.15	31.03	1.26765
836.6	Н	11.95	2.13	23.15	2.15	30.82	1.20781
848.8	Н	12.25	2.13	23.06	2.15	31.03	1.26765
824.2	V	12.34	2.11	23.11	2.15	31.19	1.31522
836.6	V	12.96	2.13	23.07	2.15	31.75	1.49624
848.8	V	12.07	2.13	23.25	2.15	31.04	1.27057

	Radiated Power (ERP) for GPRS850						
Frequency	Polarization	SG Level	Pcl	Ga Antenna Gain	Correction	ERP	ERP
(MHz)		(dBm)	(dB)	(dB)	(dB)	(dBm)	(W)
824.2	Н	11.86	2.11	23.84	2.15	31.44	1.39316
836.6	Н	11.64	2.13	23.15	2.15	30.51	1.12460
848.8	Н	11.79	2.13	23.06	2.15	30.57	1.14025
824.2	V	12.03	2.11	23.11	2.15	30.88	1.22462
836.6	V	12.25	2.13	23.07	2.15	31.04	1.27057
848.8	V	12.09	2.13	23.25	2.15	31.06	1.27644



		Radiated I	Power (ER	P) for UMTS	band V		
Frequency	Polarization	SG Level	Pcl	Ga Antenna	Correction	ERP	ERP
	FUIAIIZALIUIT			Gain			
(MHz)		(dBm)	(dB)	(dB)	(dB)	(dBm)	(W)
826.4	Н	1.98	2.11	23.84	2.15	21.56	0.14322
835	Н	1.85	2.13	23.15	2.15	20.72	0.11803
846.6	Н	2.06	2.13	23.06	2.15	20.84	0.12134
826.4	V	2.47	2.11	23.11	2.15	21.32	0.13552
835	V	1.92	2.13	23.07	2.15	20.71	0.11776
846.6	V	1.98	2.13	23.25	2.15	20.95	0.12445

Note:

SG Level= Signal generator output Pcl= cable loss Ga= Antenna Gain Peak EIRP(dBm)= SGLevel -Pcl +Ga ERP(dBm)=EIRP-2.15



#### Effective Isotropic Radiated Power

	Radiated Power (E.I.R.P) for GSM1900					
Frequency	Polarization	SG Level	Pcl	Ga Antenna Gain	EIRP	EIRP
(MHz)		(dBm)	(dB)	(dB)	(dBm)	(W)
1850.2	Н	4.49	3.76	28.24	28.97	0.78886
1880	Н	4.66	3.91	28.22	28.97	0.78886
1909.8	Н	4.41	3.93	28.20	28.68	0.73790
1850.2	V	5.11	3.76	27.32	28.67	0.73621
1880	V	5.39	3.91	27.33	28.81	0.76033
1909.8	V	5.58	3.93	27.31	28.96	0.78705

	Radiated Power (E.I.R.P) for GPRS1900					
Frequency	Polarization	SG Level	Pcl	Ga Antenna Gain	EIRP	EIRP
(MHz)		(dBm)	(dB)	(dB)	(dBm)	(W)
1850.2	Н	4.59	3.76	28.24	29.07	0.80724
1880	Н	4.67	3.91	28.22	28.98	0.79068
1909.8	Н	4.44	3.93	28.20	28.71	0.74302
1850.2	V	4.52	3.76	27.32	28.08	0.64269
1880	V	4.92	3.91	27.33	28.34	0.68234
1909.8	V	5.02	3.93	27.31	28.40	0.69183



	Radiated Power (E.I.R.P) for UMTS band II					
Frequency	Polarization	SG Level	Pcl	Ga Antenna Gain	EIRP	EIRP
(MHz)		(dBm)	(dB)	(dB)	(dBm)	(W)
1852.4	Н	-2.26	3.76	28.24	22.22	0.16672
1880	Н	-2.37	3.91	28.22	21.94	0.15631
1907.6	Н	-2.13	3.93	28.20	22.14	0.16368
1852.4	V	-1.84	3.76	27.32	21.72	0.14859
1880	V	-1.66	3.91	27.33	21.76	0.14997
1907.6	V	-1.59	3.93	27.31	21.79	0.15101

	Radiated Power (E.I.R.P) for UMTS band ${ m IV}$					
Frequency	Polarization	SG Level	Pcl	Ga Antenna Gain	EIRP	EIRP
(MHz)		(dBm)	(dB)	(dB)	(dBm)	(W)
1712.4	Н	-2.17	3.13	27.63	22.33	0.17100
1732.4	Н	-2.18	3.27	27.61	22.16	0.16444
1752.6	Н	-2.09	3.30	27.60	22.21	0.16634
1712.4	V	-2.85	3.13	27.63	21.65	0.14622
1732.4	V	-2.63	3.27	27.61	21.71	0.14825
1752.6	V	-2.18	3.30	27.60	22.12	0.16293

Note:

SG Level= Signal generator output Pcl= cable loss Ga= Antenna Gain Peak EIRP(dBm)= SGLevel –Pcl+Ga.

#### 7.3 CONDUCTED OUTPUT POWER

#### 7.3.1 Applicable Standard

According to FCC Part 2.1046 and FCC Part 22.913(a)(2) and FCC Part 24.232(c) and FCC KDB 971168 D01 v03 Section 5.2

#### 7.3.2 Conformance Limit

Extend coverage on a secondary basis into cellular unserved areas, as those areas are defined in §22.949, the ERP of base transmitters and cellular repeaters of such systems must not exceed 1000 Watts. The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts(38.5dBm).

Mobile and portable stations are limited to 2 watts (33dBm)EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

#### 7.3.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

#### 7.3.4 Test Setup

Please refer to Section 6.1 of this test report.

#### 7.3.5 Test Procedure

Connect the EUT to Universal Radio Communication Tester CMU200 or CMU500 via the antenna connector. A call is set up by the SS according to the generic call set up procedure on a channel with ARFCN in the ARFCN range, power control level set to Max power. The frequency band is set as selected frequency, The RF output of the transmitter was connected to base station simulator.

Set EUT at maximum average power by base station simulator.

Set RBW = 1-5% of the OBW, not to exceed 1 MHz.

Set VBW ≥ 3 × RBW.

Number of points in sweep  $\geq$  2 × span / RBW. (This gives bin-to-bin spacing  $\leq$  RBW/2, so that narrowband signals are not lost between frequency bins.)

Sweep time = auto.

Detector = RMS (power averaging).

Set sweep trigger to "free run".

Trace average at least 100 traces in power averaging (i.e., RMS) mode; however, the number of traces to be averaged shall be increased above 100 as needed such that the average accurately represents the true average over the on and off periods of the transmitter.

Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function with band limits set equal to the OBW band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

Add 10 log (1/x), where x is the duty cycle, to the measured power in order to compute the average power during the actual transmission times (because the measurement represents an average over both the on and off times of the transmission). For example, add 10 log (1/0.25) = 6 dB if the duty cycle is a constant 25%.

Measure lowest, middle, and highest channels for each bandwidth and different modulation. Measure and record the results in the test report.



#### 7.3.6 Test Results

EUT:	Smartphone	Model No.:	SMARTPHONE 6.4 LITE
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
Test Mode:	GSM/GPRS 850/ GSM/GPRS 1900 UMTS band II/ UMTS band V/ UMTS band IV	Test By:	Eileen Liu

#### Output Power for GSM850

Mode	Frequency	Maximum Burst-Average Output Power
	(MHz)	
	824.2	31.98
GSM850	836.6	32.18
	848.8	32.13
GPRS850	824.2	31.97
(1 Slot)	836.6	32.07
	848.8	32.14
GPRS850	824.2	31.21
(2 Slot)	836.6	31.30
	848.8	31.40
GPRS850	824.2	29.45
(3 Slot)	836.6	29.50
	848.8	29.42
GPRS850	824.2	28.31
(4 Slot)	836.6	28.48
	848.8	28.49

N/A: Not Applicable



#### Output Power for PCS1900

	Frequency	Maximum Burst-Average			
Mode	(MHz)	Output Power			
	1850.2	29.13			
GSM1900	1880	29.07			
	1909.8	29.09			
GPRS1900	1850.2	29.13			
(1 Slot)	1880	29.08			
	1909.8	29.07			
GPRS1900	1850.2	28.31			
(2 Slot)	1880	28.31			
	1909.8	28.36			
GPRS1900	1850.2	26.48			
(3 Slot)	1880	26.48			
	1909.8	26.49			
GPRS1900	1850.2	25.49			
(4 Slot)	1880	25.49			
Ē	1909.8	25.48			

N/A: Not Applicable



#### Output Power for UMTS BAND II Mode Frequency(MHz) Maximum Burst-Average Output Power 1852.4 22.25 WCDMA 1900 22.38 1880 RMC 1907.6 22.31 1852.4 22.19 WCDMA 1900 22.35 1880 AMR 22.36 1907.6 HSDPA 1852.4 21.32 21.17 1880 Subtest 1 1907.6 21.13 20.73 1852.4 HSDPA 1880 20.57 Subtest 2 1907.6 20.52 1852.4 20.75 HSDPA 1880 20.51 Subtest 3 1907.6 20.51 1852.4 20.74 HSDPA 20.49 1880 Subtest 4 1907.6 20.48 1852.4 20.61 **HSUPA** 1880 20.41 Subtest 1 1907.6 20.48 1852.4 20.58 HSUPA 1880 20.61 Subtest 2 1907.6 20.41 20.49 1852.4 HSUPA 20.58 1880 Subtest 3 1907.6 20.18 1852.4 20.49 HSUPA 1880 20.64 Subtest 4 20.51 1907.6 1852.4 21.30 HSUPA 1880 21.20 Subtest 5 1907.6 21.15



#### Output Power for UMTS BAND V Mode Frequency(MHz) Maximum Burst-Average Output Power 826.4 22.44 **WCDMA 850** 22.46 835 RMC 846.6 22.48 826.4 22.47 **WCDMA 850** 835 22.41 AMR 846.6 22.43 826.4 21.45 HSDPA 21.46 835 Subtest 1 846.6 21.47 826.4 20.98 HSDPA 835 20.96 Subtest 2 846.6 20.99 826.4 20.95 **HSDPA** 21.10 835 Subtest 3 846.6 20.98 826.4 21.02 HSDPA 835 21.06 Subtest 4 846.6 20.89 826.4 21.03 HSUPA 835 20.99 Subtest 1 846.6 21.09 HSUPA 826.4 21.02 Subtest 2 835 20.89 846.6 21.02 826.4 20.99 HSUPA 835 20.95 Subtest 3 846.6 20.95 826.4 21.01 HSUPA 835 20.99 Subtest 4 20.92 846.6 826.4 21.48 HSUPA 21.46 835 Subtest 5 846.6 21.49



#### Output Power for UMTS BAND IV Mode Frequency(MHz) Maximum Burst-Average Output Power 1712.4 22.22 WCDMA Band IV 22.33 1732.4 RMC 1752.6 22.35 1712.4 22.16 WCDMA Band IV 1732.4 22.34 AMR 1752.6 22.30 1712.4 21.31 HSDPA 1732.4 21.38 Subtest 1 1752.6 21.43 1712.4 20.72 HSDPA 1732.4 20.76 Subtest 2 1752.6 20.82 1712.4 20.59 HSDPA 1732.4 20.68 Subtest 3 1752.6 20.79 1712.4 20.66 HSDPA 1732.4 20.69 Subtest 4 1752.6 20.81 1712.4 20.79 HSUPA 1732.4 20.76 Subtest 1 1752.6 20.85 1712.4 HSUPA 20.75 1732.4 20.75 Subtest 2 1752.6 20.81 1712.4 20.76 HSUPA 1732.4 20.75 Subtest 3 1752.6 20.85 1712.4 20.77 HSUPA 1732.4 20.69 Subtest 4 1752.6 20.79 1712.4 21.28 HSUPA 1732.4 21.35 Subtest 5 1752.6 21.38



#### 7.4 FREQUENCY STABILITY

#### 7.4.1 Applicable Standard

According to FCC Part 2.1055 and FCC Part 22.355 and FCC Part 24.235 and FCC KDB 971168 D01 Section 9.0

#### 7.4.2 Conformance Limit

The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within  $\pm 0.00025\%$  ( $\pm 2.5$ ppm) of the center frequency.

#### 7.4.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

#### 7.4.4 Test Setup

Please refer to Section 6.1 of this test report.

#### 7.4.5 Test Procedure

Connect the EUT to Universal Radio Communication Tester CMU200 or CMU500 via the antenna connector. A call is set up by the SS according to the generic call set up procedure on a channel with ARFCN in the ARFCN range, power control level set to Max power. MS TXPWR\_MAX\_CCH is set to the maximum value supported by the Power Class of the Mobile under test.

EUT was placed at temperature chamber and connected to an external power supply.

Temperature and voltage condition shall be tested to confirm frequency stability.

For Temperature Variation

- 1. The testing follows FCC KDB 971168 D01 v03 Section 9.0.
- 2. The EUT was set up in the thermal chamber and connected with the system simulator.
- 3. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
- 4. With power OFF, the temperature was raised in 10°C steps up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.

For Voltage Variation

- 1. The testing follows FCC KDB 971168 D01 v03 Section 9.0.
- 2. The EUT was placed in a temperature chamber at 25±5° C and connected with the system simulator.
- 3. The power supply voltage to the EUT was varied from 85% to 115% of the nominal value measured at the input to the EUT.
- 4. The variation in frequency was measured for the worst case.

#### 7.4.6 Test Results

EUT:	Smartphone	Model No.:	SMARTPHONE 6.4 LITE
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
	GSM/GPRS 850/ GSM/GPRS 1900 UMTS band II/ UMTS band V/ UMTS band IV	Test By:	Eileen Liu
Results: PASS			



Frequency Error Against Voltage for GSM 850 band		
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.2	18	0.0215
3.8	11	0.0131
4.2	8	0.0096

Frequency Error Against Temperature for GSM 850 band		
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	21	0.0251
-20	14	0.0167
-10	17	0.0203
0	11	0.0131
10	13	0.0155
20	8	0.0096
30	9	0.0108
40	10	0.0120
50	16	0.0191

Frequency Error Against Voltage for GPRS850 band			
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)	
3.2	7	0.0084	
3.8	15	0.0179	
4.2	12	0.0143	

Frequency Error Against Temperature for GPRS850 band		
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	19	0.0227
-20	13	0.0155
-10	15	0.0179
0	11	0.0131
10	10	0.0120
20	9	0.0108
30	8	0.0096
40	13	0.0155
50	14	0.0167

Note:

- Normal Voltage = 3.8V; Battery End Point (BEP) = 3.2V; Maximum Voltage =4.2V
   The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Frequency Error Against Voltage for PCS 1900 band		
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.2	13	0.0069
3.8	11	0.0059
4.2	14	0.0074

Frequency Error Against Temperature for PCS 1900 band		
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	16	0.0085
-20	15	0.0080
-10	14	0.0074
0	17	0.0090
10	11	0.0059
20	13	0.0069
30	12	0.0064
40	9	0.0048
50	5	0.0027

Frequency Error Against Voltage for GPRS1900 band		
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.2	6	0.0032
3.8	11	0.0059
4.2	8	0.0043

Frequency Error Against Temperature for GPRS1900 band		
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	13	0.0069
-20	16	0.0085
-10	11	0.0059
0	18	0.0096
10	12	0.0064
20	10	0.0053
30	7	0.0037
40	9	0.0048
50	8	0.0043

Note:

Normal Voltage = 3.8V; Battery End Point (BEP) = 3.2V; Maximum Voltage =4.2V
 The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



Frequency Error Against Voltage for UMTS band II		
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.2	11	0.0059
3.8	15	0.0080
4.2	16	0.0085

Frequency Error Against Temperature for UMTS band II		
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	20	0.0106
-20	14	0.0074
-10	18	0.0096
0	13	0.0069
10	16	0.0085
20	17	0.0090
30	21	0.0112
40	15	0.0080
50	13	0.0069

Frequency Error Against Voltage for UMTS band V			
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)	
3.2	8	0.0096	
3.8	16	0.0191	
4.2	9	0.0108	

Frequency Error Against Temperature for UMTS band V		
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	17	0.0203
-20	11	0.0131
-10	13	0.0155
0	12	0.0143
10	10	0.0120
20	8	0.0096
30	9	0.0108
40	10	0.0120
50	13	0.0155



F	requency Error Against Voltage fo	r UMTS band IV
Voltage (V)	Frequency Error (Hz)	Frequency Error (ppm)
3.2	10	0.0058
3.8	8	0.0046
4.2	15	0.0087

Fre	quency Error Against Temperature	for UMTS band IV
Temperature (°C)	Frequency Error (Hz)	Frequency Error (ppm)
-30	14	0.0081
-20	11	0.0063
-10	10	0.0058
0	13	0.0075
10	12	0.0069
20	9	0.0052
30	12	0.0069
40	16	0.0092
50	11	0.0063

#### Note:

- Normal Voltage = 3.8V; Battery End Point (BEP) = 3.2V; Maximum Voltage =4.2V
   The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



# 7.5 PEAK-TO-AVERAGE RATIO

## 7.5.1 Applicable Standard

According to FCC 22.913 and FCC 24.232(d) and FCC KDB 971168 D01 Section 5.7.1

### 7.5.2 Conformance Limit

The peak-to-average power ratio (PAPR) of the transmitter output power must not exceed 13 dB. The PAPR measurements should be made using either an instrument with complementary cumulative distribution function (CCDF) capabilities to determine that PAPR will not exceed 13 dB for more than 0.1 percent of the time or other Commission approved procedure. The measurement must be performed using a signal corresponding to the highest PAPR expected during periods of continuous transmission.

#### 7.5.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

### 7.5.4 Test Setup

Please refer to Section 6.1 of this test report.

#### 7.5.5 Test Procedure

The EUT was connected to Spectrum Analyzer and Base Station via power divider.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

Set the number of counts to a value that stabilizes the measured CCDF curve.

Set the measurement interval to 1 ms.

Record the maximum PAPR level associated with a probability of 0.1%.

a) Refer to instrument's analyzer instruction manual for details on how to use the power statistics/CCDF function;

b) Set resolution/measurement bandwidth ≥ signal's occupied bandwidth;

c) Set the number of counts to a value that stabilizes the measured CCDF curve;

d) Set the measurement interval as follows:

1) for continuous transmissions, set to 1 ms,

2) for burst transmissions, employ an external trigger that is synchronized with the EUT burst timing sequence, or use the internal burst trigger with a trigger level that allows the burst to stabilize and set the measurement interval to a time that is less than or equal to the burst duration.

e) Record the maximum PAPR level associated with a probability of 0.1%.

### 7.5.6 Test Results

EUT:	Smartphone	Model No.:	SMARTPHONE 6.4 LITE
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
Teet Meder	GSM/GPRS 850/ GSM/GPRS 1900 /UMTS band II/ UMTS band V/ UMTS band IV	Test By:	Eileen Liu
Results: PASS			



### Report No.: S18121304106004

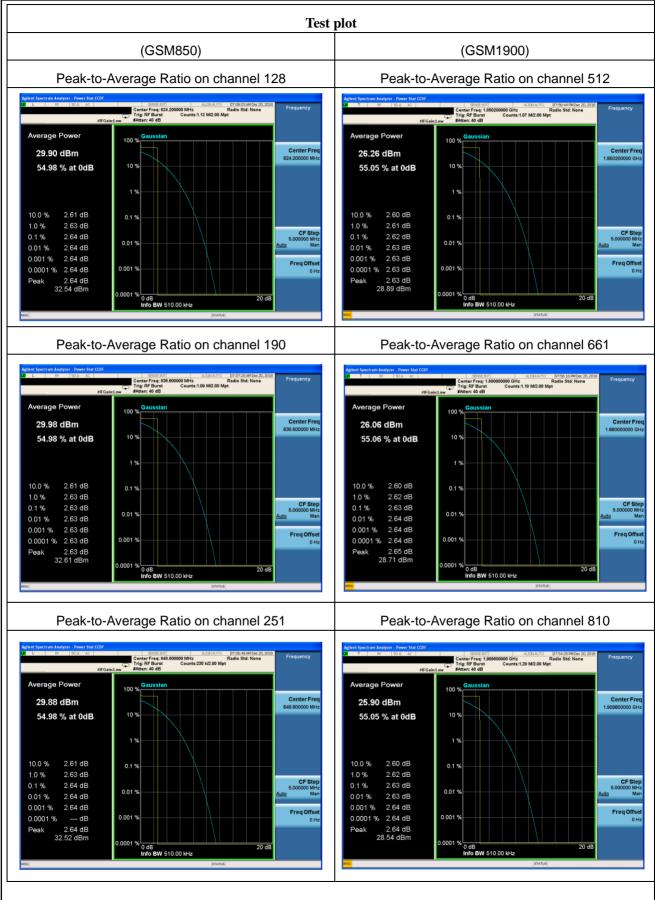
		Ce	ellular Band			
Modes		GSM850			GSM1900	
Channel	128 (Low)	190 (Mid)	251 (High)	512 (Low)	661 (Mid)	810 (High)
Frequency(MHz)	824.2	836.6	848.8	1850.2	1880	1909.8
Peak-to-Average Ratio (dB)	2.64	2.63	2.64	2.62	2.63	2.63

		Ce	ellular Band			
Modes		GPRS850	)		GPRS1900	
Channel	128 (Low)	190 (Mid)	251 (High)	512 (Low)	661 (Mid)	810 (High)
Frequency(MHz)	824.2	836.6	848.8	1850.2	1880	1909.8
Peak-to-Average Ratio (dB)	2.93	2.63	2.63	2.62	2.62	2.63

		U	MTS Band			
Modes		WCDMA Bar (RMC 12.2Kb			VCDMA Band RMC 12.2Kbp	
Channel	9262 (Low)	9400 (Mid)	9538 (High)	4132 (Low)	4175 (Mid)	4233 (High)
Frequency(MHz)	1852.4	1880	1907.6	826.4	836.6	846.6
Peak-to-Average Ratio (dB)	2.67	2.84	2.61	2.94	2.94	3.07

Modes		NCDMA Ban (RMC 12.2Kb	
Channel	1312 (Low)	1412 (Mid)	1513 (High)
Frequency(MHz)	1712.4	1732.6	1752.6
Peak-to-Average Ratio (dB)	2.49	3.00	2.71

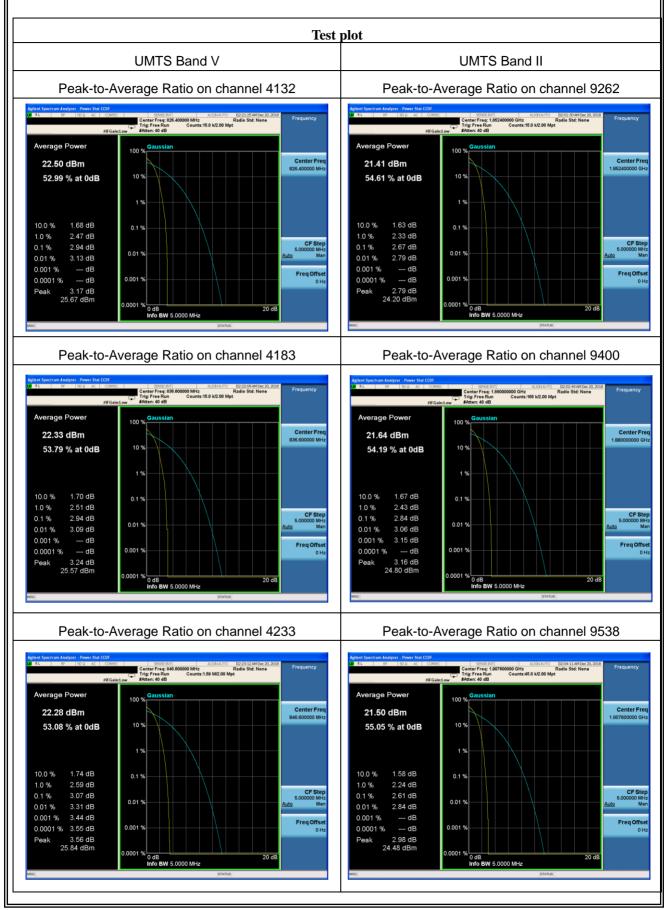




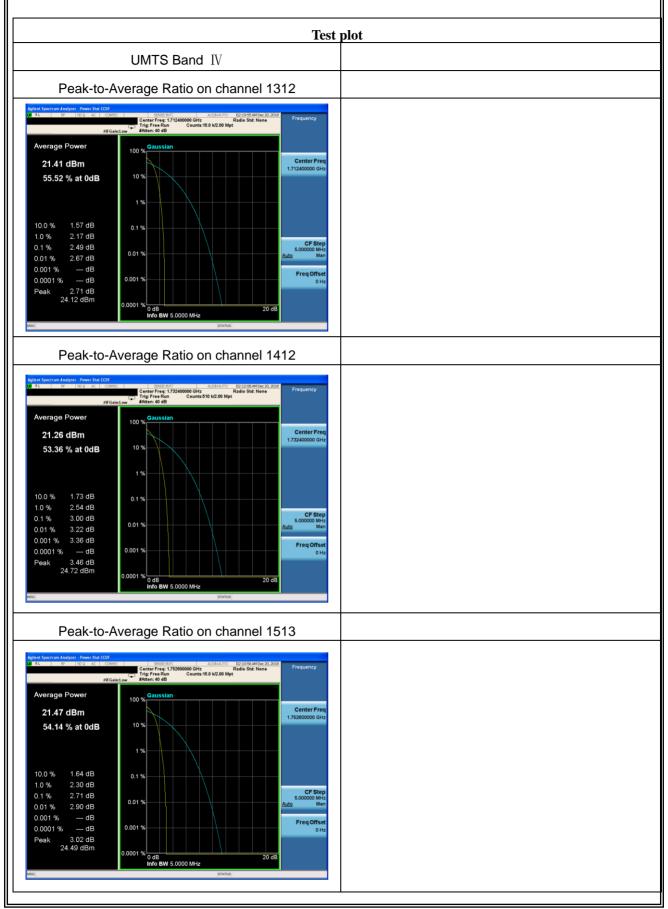














# 7.6 26DB BANDWIDTH AND 99% OCCUPIED BANDWIDTH

### 7.6.1 Applicable Standard

According to FCC Part 2.1049 and FCC Part 22H and FCC Part 24E and FCC KDB 971168 D01 Section 4.0

## 7.6.2 Conformance Limit

The occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

### 7.6.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

### 7.6.4 Test Setup

Please refer to Section 6.1 of this test report.

### 7.6.5 Test Procedure

The testing follows FCC KDB 971168 v03 Section 4.0.

The EUT was connected to Spectrum Analyzer and Base Station via power divider.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the spectrum analyzer shall be between two and five times the anticipated OBW.

The nominal resolution bandwidth (RBW) shall be in the range of 1 to 5 % of the anticipated OBW, and the VBW shall be at least 3 times the RBW.

Set the detection mode to peak, and the trace mode to max hold.

Determine the reference value: Set the EUT to transmit a modulated signal. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace.

(this is the reference value)

Determine the "-26 dB down amplitude" as equal to (Reference Value – X).

Place two markers, one at the lowest and the other at the highest frequency of the envelope of the spectral display such that each marker is at or slightly below the "–X dB down amplitude" determined in step 6. If a marker is below this "-X dB down amplitude" value it shall be placed as close as possible to this value. The OBW is the positive frequency difference between the two markers.

Use the 99 % power bandwidth function of the spectrum analyzer and report the measured bandwidth.

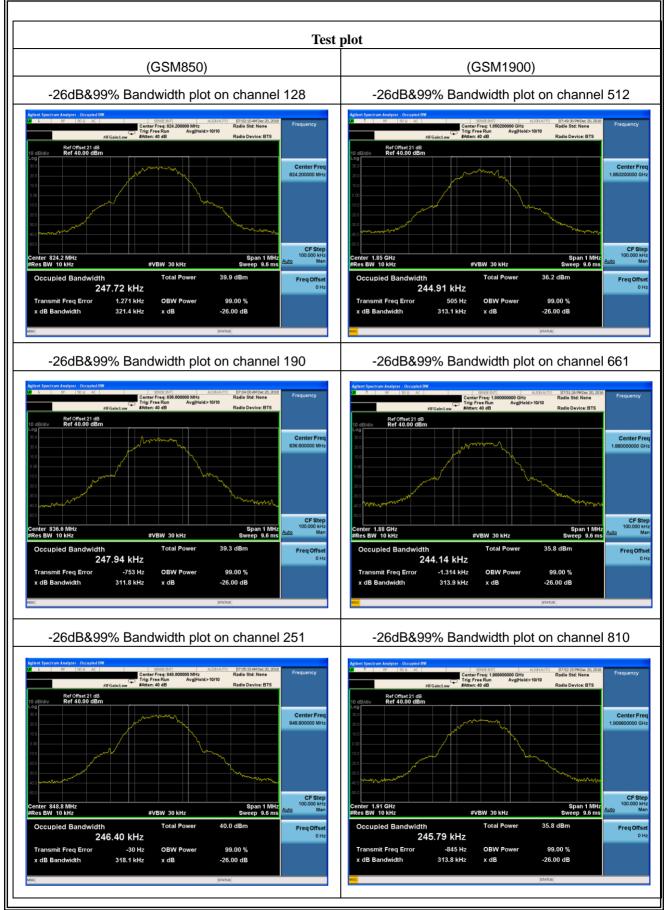


# 7.6.6 Test Results

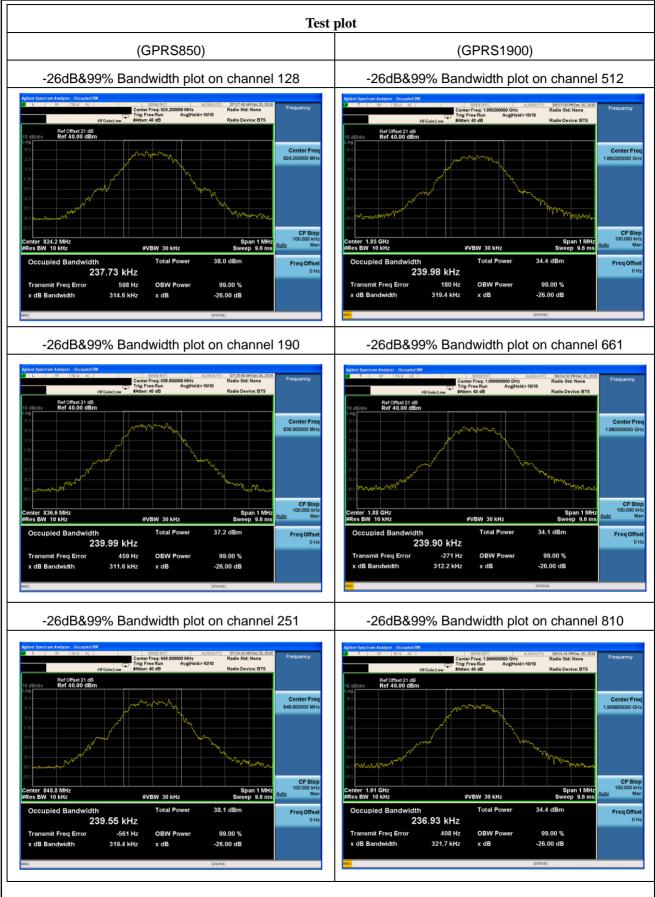
EUT:	Smartphone	Model No.:	SMARTPHONE 6.4 LITE
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
Test Mode:	GSM/GPRS 850/ GSM/GPRS 1900 /UMTS band II/ UMTS band V/ UMTS band IV	Test By:	Eileen Liu
Results: PASS			

				99%		
Operation Mode	Channel Number	Channel Frequency (MHz)	26dB Bandwidth (kHz)	Occupied Bandwidth (kHz)	Limit (kHz)	Verdict
	128	824.2	321.4	247.72	N/A	PASS
GSM850	190	836.4	311.8	247.94	N/A	PASS
	251	848.8	318.1	246.40	N/A	PASS
	512	1850.2	313.1	244.91	N/A	PASS
GSM1900	661	1880.0	313.9	244.14	N/A	PASS
	810	1909.8	313.8	245.79	N/A	PASS
	128	824.2	314.6	237.73	N/A	PASS
GPRS850	190	836.4	311.6	239.99	N/A	PASS
	251	848.8	319.4	239.55	N/A	PASS
	512	1850.2	319.4	239.98	N/A	PASS
GPRS1900	661	1880.0	312.2	239.90	N/A	PASS
	810	1909.8	321.7	236.93	N/A	PASS
	4132	826.4	4712	4165.3	N/A	PASS
UMTS Band V	4183	836.4	4705	4168.7	N/A	PASS
V	4233	846.6	4714	4167.6	N/A	PASS
	9262	1852.4	4703	4180.8	N/A	PASS
UMTS Band	9400	1880.0	4714	4178.0	N/A	PASS
	9538	1907.6	4739	4177.0	N/A	PASS
UMTS Band	1312	1712.4	4757	4175.5	N/A	PASS
IV IV	1412	1732.6	4701	4163.6	N/A	PASS
1V	1513	1752.6	4701	4167.9	N/A	PASS

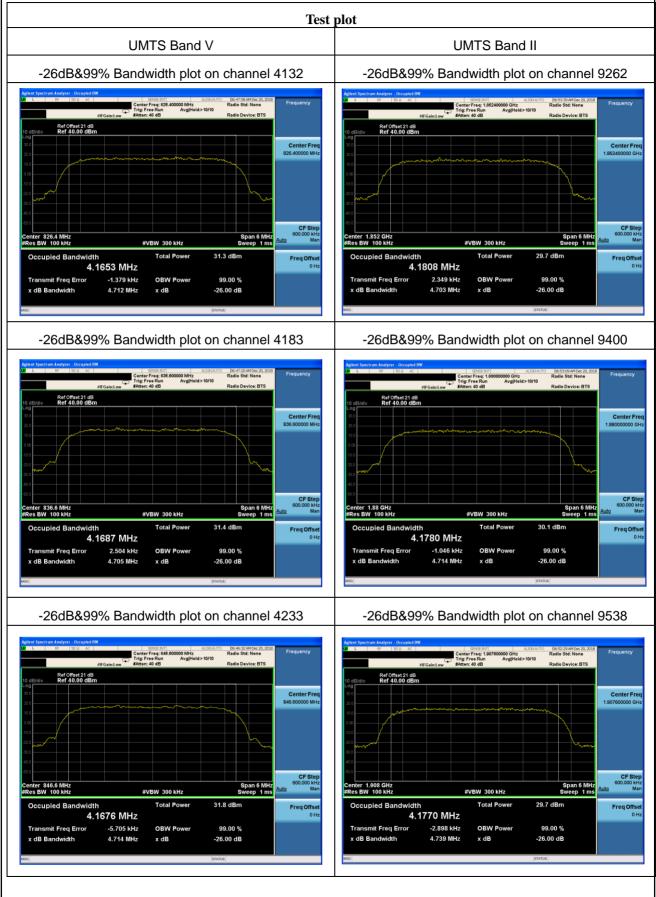




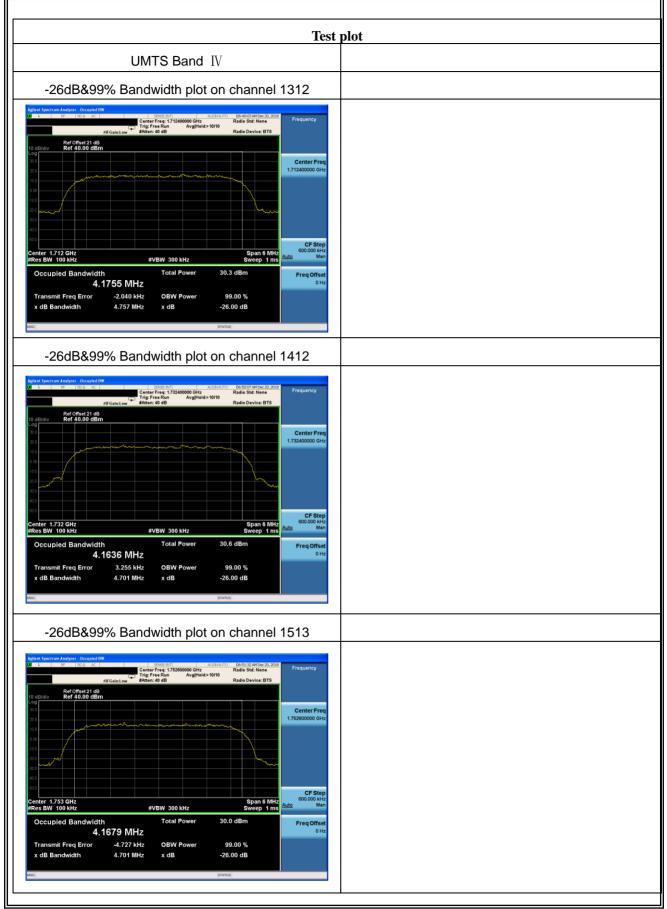












# 7.7 CONDUCTED BAND EDGE

## 7.7.1 Applicable Standard

According to FCC Part 2.1051 and FCC Part 22.917(a) and 24.238(a) and FCC KDB 971168 D01 Section6.0

### 7.7.2 Conformance Limit

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least  $43 + 10 \log (P) dB$ .

### 7.7.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

### 7.7.4 Test Setup

Please refer to Section 6.1 of this test report.

# 7.7.5 Test Procedure

The testing follows FCC KDB 971168 v03 Section 6.0.

The EUT was connected to Spectrum Analyzer and Base Station via power divider.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.

The path loss was compensated to the results for each measurement.

The band edges of low and high channels for the highest RF powers were measured.

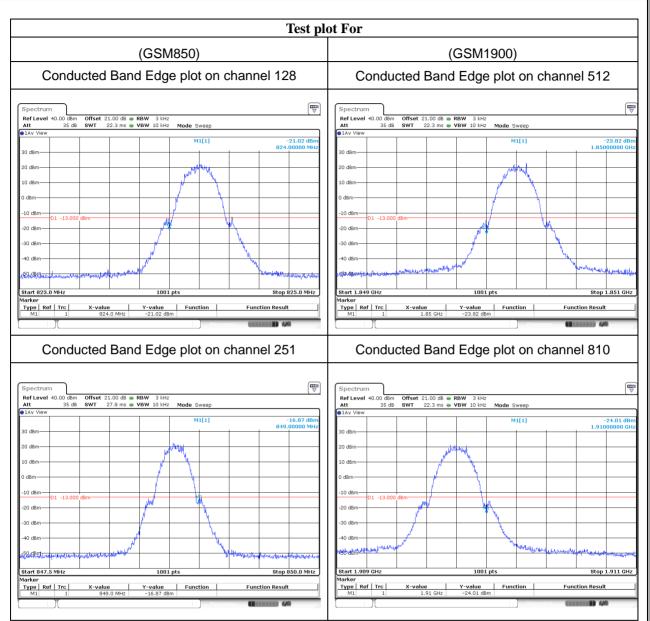
The RF fundamental frequency should be excluded against the limit line in the operating frequency band. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

- = P(W) [43 + 10log(P)] (dB)
- $= [30 + 10\log(P)] (dBm) [43 + 10\log(P)] (dB)$
- = -13dBm.

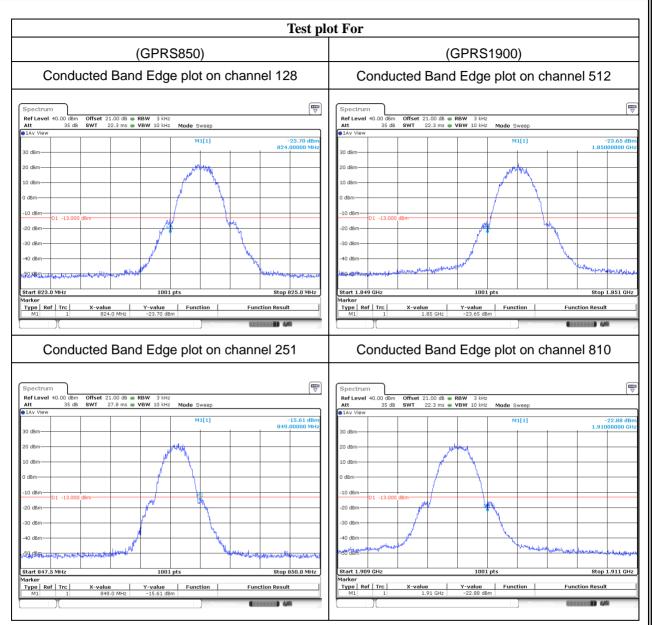
### 7.7.6 Test Results

EUT:	Smartphone	Model No.:	SMARTPHONE 6.4 LITE
Temperature:	<b>20</b> ℃	Relative Humidity:	48%
Test Mode:	GSM/GPRS 850/ GSM/GPRS 1900/ UMTS band II/ UMTS band V/ UMTS band IV	Test By:	Eileen Liu
Results: PASS			











		Test pl	ot For		
	UMTS Band V			UMTS Band II	
Conducted	Band Edge plot on ch	nannel 4132	Conducted B	and Edge plot or	n channel 9262
ectrum	01 00 lb - 00 ll 100 ll		Spectrum	00 I0 - <b>DDW</b> 100 IV	
f Level         40.00         dBm         Offset           t         35 dB         SWT	1 ms - VBW 100 kHz Mode Sweep		Ref Level 40.00 dBm Offset 21 Att 35 dB SWT	1 ms - VBW 100 kHz Mode Swee	вр
	M1[1]	-13.44 dBm 823.996500 MHz		M1[1]	-13 1.84999
dBm			30 dBm		
dBm			20 dBm		
dBm			10 dBm		
Bm			0 dBm		
dBmD1 -13,000 dBm			-10 dBm D113,000 dBm		
dBm		with the second second second second	-20 dBm		
dBm-	man and a second and		-30 dBm	mannaman	man Martin Martin "
dBm-			-40 dBm		
dam					
dBm			-50 dBm		
rt 823.0 MHz	Band Edge plot on ch	Stop 824.0 MHz	Start 1.848 GHz	and Edge plot or	stop 1. Color 44 n channel 9538
cctrum	Band Edge plot on ch	ng (*******) 🚺 🚧	Spectrum	and Edge plot or	Measuring (111111) 4/9
ectrum t tevel 40.00 dbm offset s 35 db swr	Measurin	nannel 4233	Spectrum Ref Level 40.00 dbm Offset 21 Att 35 dB SWT		thannel 9538
ectrum	Band Edge plot on ch	nannel 4233	Stort 1.848 GHz Conducted B	and Edge plot or	en channel 9538
ectrum t tevel 40.00 dbm offset s 35 db swr	21.00 dB • RBW 100 kHz 1 ms • VBW 100 kHz Mode Sweep	nannel 4233	Spectrum Ref Level 40.00 dbm Offset 21 Att 35 dB SWT	and Edge plot or	n channel 9538
ectrum fLevel 40.00 dbm Offset s5 db swr	21.00 dB • RBW 100 kHz 1 ms • VBW 100 kHz Mode Sweep	nannel 4233	Spectrum Ref Level 40.00 dBm Offset 21 Att 35 dB SWT	and Edge plot or	en channel 9538
ectrum Stave 40.00 dbm offset tevel 40.00 dbm offset s db swr w View	21.00 dB • RBW 100 kHz 1 ms • VBW 100 kHz Mode Sweep	nannel 4233	Spectrum Ref Level 40.00 dbm Offset 21 Att 35 dB SWT 91AV View 30 dBm	and Edge plot or	en channel 9538
ectrum st 823.0 MHz Conducted ectrum f Level 40.00 d8m Offset st 8 SWT v View d8m	21.00 dB • RBW 100 kHz 1 ms • VBW 100 kHz Mode Sweep	nannel 4233	Spectrum Ref Level 40.00 dbm Offset 21 Att 35 dB SWT 91Av View 30 dBm 20 dBm	and Edge plot or	en channel 9538
ectrum Conducted ectrum f Level 40.00 dbm Offset s J db SWT v View dbm dbm	21.00 dB • RBW 100 kHz 1 ms • VBW 100 kHz Mode Sweep	nannel 4233	Spectrum Ref Level 40.00 dbm 0 dbm 20 dbm 0 dbm	and Edge plot or	en channel 9538
ectrum t teel 40.00 dBm Offset 35 dB SWT v View dBm dBm dBm	21.00 dB • RBW 100 kHz 1 ms • VBW 100 kHz Mode Sweep	nannel 4233	Stort 1.848 GHz           Conducted B           Spectrum           Ref Level 40.00 dbm           Offset 21           Att 35 db SWT           @1AV View         30 dbm           20 dbm         0           10 dbm         0           -10 dbm         01 -13.000 dbm	and Edge plot or	Channel 9538     -14     1.91000     -14     1.91000     -14     1.91000     -14     1.91000     -14     1.91000     -14     1
ectrum  t tevel 40.00 dbm Offset Ss db SWT  v View  dbm  dbm  D1 -13.000 dbm	21.00 dB • RBW 100 kHz 1 ms • VBW 100 kHz Mode Sweep	nannel 4233	Spectrum           Ref Level 40.00 dbm Offset 21           Att         35 db SWT           9 1Av View         30 dbm           20 dbm         0           10 dbm         01 -13.000 dbm	and Edge plot or	channel 9538     -14
ectrum t 823.0 MHz Conducted ectrum t Level 40.00 dBm Offset 25 dB SWT v View dBm 01 -13.000 dBm dBm 01 -13.000 dBm	21.00 dB • RBW 100 kHz 1 ms • VBW 100 kHz Mode Sweep M1[1]	nannel 4233	Stort 1.848 GHz           Conducted B           Spectrum           Ref Level 40.00 dBm           Offset 21           Att 35 dB SWT           10 View           30 dBm           10 dBm           01 -13.000 dBm           -30 dBm	and Edge plot or	۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰
ectrum  Conducted  ectrum  t Level 40.00 dbm  offset  35 db  swr  dbm  dbm  01 -13.000 dbm  offset  dbm  dbm	21.00 dB • RBW 100 kHz 1 ms • VBW 100 kHz Mode Sweep M1[1]	nannel 4233	Stort 1.848 GHz           Conducted B           Spectrum         Ref Level 40.00 dbm         Offset 21           Att         35 db         SWT           9 1Av View         30 dbm         0           20 dbm         10 dbm         0           10 dbm         01 -13.000 dbm         0           -30 dbm         -30 dbm         -40 dbm	and Edge plot or	۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰
ectrum t b23.0 MHz Conducted ectrum t Level 40.00 dBm Offset 25 dB SWT v View dBm 01 -13.000 dBm dBm 01 -13.000 dBm	21.00 dB • RBW 100 kHz 1 ms • VBW 100 kHz Mode Sweep M1[1]	nannel 4233	Stort 1.848 GHz           Conducted B           Spectrum           Ref Level 40.00 dBm           Offset 21           Att 35 dB SWT           10 View           30 dBm           10 dBm           01 -13.000 dBm           -30 dBm	and Edge plot or	۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰
ectrum  Conducted  ectrum  t uvel 40.00 dbm  offset  35 db  swr  dbm  dbm  01 -13.000 dbm  offset  dbm  dbm  dbm  dbm  dbm  dbm  dbm  db	21.00 dB • RBW 100 kHz 1 ms • VBW 100 kHz Mode Sweep M1[1]	nannel 4233	Stort 1.848 GHz           Conducted B           Spectrum         Ref Level 40.00 dbm         Offset 21           Att         35 db         SWT           9 1Av View         30 dbm         0           20 dbm         10 dbm         0           10 dbm         01 -13.000 dbm         0           -30 dbm         -30 dbm         -40 dbm	and Edge plot or	۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰۰ ۲۰۰



		T4
		Test
	UMTS Band IV	
Conducted Ba	nd Edge plot on c	hannel 1312
Spectrum Ref Level 40.00 dBm Offset 21.00 d	#B <b>⊕ RBW</b> 100 kHz	(q
Att 35 dB SWT 1 m 1Av View	ns 🖶 VBW 100 kHz Mode Sweep	-13.63 dB
30 dBm	M1[1]	-13.63 dB 1.70999700 GF
20 dBm		
10 dBm		
D dBm		
-10 dBmD1 -13.000 dBm		+
-20 dBm	- Marine Manual Marine	man man man that
-30 dBm		
-40 dBm		
-50 dBm		
Start 1.708 GHz	1001 pts	Stop 1.71 GH
Conducted De		
	nd Edge plot on c	
Spectrum		q
Ref Level 40.00 dBm Offset 21.00 d	d8 <b>● RBW</b> 100 kHz ns <b>● VBW</b> 100 kHz <b>Mode</b> Sweep	
		-13.46 dB
●1Av View	M1[1]	4 75500400.01
1Av View     30 dBm	M1[1]	1.75500100 GF
1Av View     30 dBm     20 dBm	M1[1]	1.75500100 G
1Av View     30 dBm     20 dBm     10 dBm		1.75500100 G
1Av View     30 d8m     20 d8m     10 d8m     0 d8m		
1AV View     30 d8m     20 d8m     10 d8m     10 d8m     01 -13.000 d8m		
1Av View     30 dBm     20 dBm     10 dBm     10 dBm     10 dBm     21 -13.000 dBm     20 gBm		1.75500100 G
1Av View     30 dBm     20 dBm     10 d		1.75500100 GH
1Av View     30 dBm     20 dBm     10 dBm     10 dBm     10 dBm     21 -13.000 dBm     20,gBm		1.75500100 GH
Av View     30 dBm     20 dBm     20 dBm     10 dBm		1.75500100 GH
Av View     30 dBm     20 dBm     20 dBm     10 dBm     10 dBm     0 1 -13.000 dBm		1.75500100 GH



### 7.8 CONDUCTED SPURIOUS EMISSION AT ANTENNA TERMINAL

### 7.8.1 Applicable Standard

According to FCC Part 2.1051 and FCC Part 22.917(a) and Part 24.238(a) and FCC KDB 971168 D01 Section6.0

#### 7.8.2 Conformance Limit

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least  $43 + 10 \log (P) dB$ .

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

#### 7.8.3 Measuring Instruments

The Measuring equipment is listed in the section 6.3 of this test report.

### 7.8.4 Test Setup

Please refer to Section 6.1 of this test report.

### 7.8.5 Test Procedure

The testing follows FCC KDB 971168 v03 Section 6.0.

The EUT was connected to Spectrum Analyzer and Base Station via power divider.

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.

The path loss was compensated to the results for each measurement.

The middle channel for the highest RF power within the transmitting frequency was measured.

The conducted spurious emission for the whole frequency range was taken.

The RF fundamental frequency should be excluded against the limit line in the operating frequency band. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

= P(W) - [43 + 10log(P)] (dB)

 $= [30 + 10\log(P)] (dBm) - [43 + 10\log(P)] (dB)$ 

= -13dBm.

### 7.8.6 Test Results

EUT:	Smartphone	Model No.:	SMARTPHONE 6.4 LITE
Temperature:	20 °C	Relative Humidity:	48%
Test Mode:	GSM/GPRS 850/ GSM/GPRS 1900/ UMTS band II/ UMTS band V/ UMTS Band IV	Test By:	Eileen Liu
Results: PASS			



Tes	Plot				
GSM850	GSM850				
Conducted Emission Transmitting Mode CH 128 30MHz – 5GHz	Conducted Emission Transmitting Mode CH 190 30MHz – 5GHz				
Spectrum (₩) Ref Level 40.00 dBm Offset 21.00 dB ⊕ RBW 1 MHz	Spectrum         [TTD]           Ref Level 40.00 dBm         Offset 21.00 dB ● RBW 1 MHz				
Att 35 dB SWT 32 ms • VBW 3 MHz Mode Sweep	Att         35 dB         SWT         32 ms         ♥ WBW 3 MHz         Mode Sweep           ●1Av View				
4.163720 GHz	30 dBm 4.101910 GHz				
20 d8m	20 dBm				
D d8m-	0 dBm				
10 dBm 01 - 13,000 dBm 01	-10 dBm				
20 dBm M1	-20 dBm M1				
40 dbm					
40 dbm	-40 dBm				
Start 30.0 MHz 32000 pts Stop 5.0 GHz	Start 30.0 MHz         32000 pts         Stop 5.0 GHz				
Conducted Emission Transmitting Mode CH 128 5GHz – 10GHz	Conducted Emission Transmitting Mode CH 190 5GHz – 10GHz				
Spectrum 🕎	Spectrum 🕎				
Ref Level         40.00         dBm         Offset         21.00         dB         RBW         1 MHz           Att         35 dB         SWT         32 ms         SWB         3 MHz         Mode         Sweep	Ref Level         40.00         dBm         Offset         21.00         dB         RBW         1 MHz           Att         35 dB         SWT         32 ms         SWH 3 MHz         Mode         Sweep				
11Av View M1[1] -19.38 dBm 6.965550 GHz	Av View     M1[1] -18.92 dBm     6.666020 GHz				
20 dBm	30 d8m 20 d8m20 d8m				
10 d8m	10 dBm				
10 d8m	10 dBm				
10 dBm	10 dBm				
10 dBm	10 dBm				
10 dBm	10 dBm- 0 dBm- -10 dBm- -10 dBm- -10 dBm- -20 dBm- -20 dBm- -20 dBm- -30 dBm- -30 dBm- -30 dBm- -30 dBm- -10 dBm-				
10 dBm	10 dBm				



CSM850     CSM1900       Conducted Emission Transmitting Mode CH 251 30MHz – 5GHz     Conducted Emission Transmitting Mode CH 512 30MHz – 10GHz       Image: State Stat	Test	Plot		
Conducted Emission Transmitting Mode CH 251 30MHz – 5GHz Sometice Sector WH 200 B WH 200 Sector	GSM850	GSM1900		
Ref Level 30 Mar       Offert 1: 00 Mar       Note 1: 100 Mar       Other 1: 100 Mar		Conducted Emission Transmitting Mode CH 512		
30 db       9111       92000 db       9111       92000 db       91000 db </td <td>Ref Level         40.00 dBm         Offset         21.00 dB         RBW         1 MHz           Att         35 dB         SWT         32 ms         VBW         3 MHz         Mode         Sweep</td> <td>Ref Level         40.00 dBm         Offset         21.00 dB         RBW         1 MHz           Att         35 dB         SWT         39.9 ms         ● VBW 3 MHz         Mode         Sweep</td>	Ref Level         40.00 dBm         Offset         21.00 dB         RBW         1 MHz           Att         35 dB         SWT         32 ms         VBW         3 MHz         Mode         Sweep	Ref Level         40.00 dBm         Offset         21.00 dB         RBW         1 MHz           Att         35 dB         SWT         39.9 ms         ● VBW 3 MHz         Mode         Sweep		
add       bit 1300 der       bit 1300	30 dem         M1[1]         -21.78 dem           20 dem         4.289830 GHz           10 dem         10 dem	30 dBm         M1[1]         -19.71 dBm           20 dBm         6.992020 GHz         6.992020 GHz           10 dBm         10 dBm         10 dBm         10 dBm		
Start 30.0 MHz       32000 pts       Stop 5.0 GHz         Conducted Emission Transmitting Mode CH 251 5GHz - 10GHz       Conducted Emission Transmitting Mode CH 512 10GHz - 20GHz         Spectrum       Image: Spectrum       Image: Spectrum       Image: Spectrum         Spectrum       Image: Spectrum       Image: Spectrum       Image: Spectrum       Image: Spectrum         Spectrum       Image: Spectrum	D1 -13,000 dBm M1 20 dBm M1 July drug status 10 M1 M2 July drug status 10 M1	-20 dBm		
Spectrum     Employee       Spectrum     S	Start 30.0 MHz 32000 pts Stop 5.0 GHz	Start 30.0 MHz 32000 pts Stop 10.0 GHz		
Ref Level 40.00 dbm       Offset 21.00 db       RBW 1 MHz         35 db       SWT       32 mb       YBW 3 MHz       Mode Sweep         11A V Vew       M1[1]       -18.85 dbm       6.879920 GHz         30 dbm       0.879920 GHz       30 dbm       M1[1]       -23.10 dbm         0.0 dbm       0.113.000 dbm       M1[1]       -18.95 dbm         0.0 dbm       0.113.000 dbm       M1[1]       -23.10 dbm         0.0 dbm       0.01 mb       0.01 mb       0.01 mb         0.0 dbm       0.01 mb       0.01 mb       0.01 mb       0.01 mb         0 dbm       0.01 mb       0.01 mb       0.01 mb       0.01 mb       0.01 mb         0 dbm       0.01 mb       0.01 mb       0.01 mb       0.01 mb       0.01 mb       0.01 mb         0 dbm       0.01 mb	5GHz – 10GHz	10GHz – 20GHz		
00 d8m       M1[1]       -18.85 d8m       M1[1]       -22.16 d8m         00 d8m       0.0 d8m	Ref Level 40.00 dBm Offset 21.00 dB	Ref Level         40.00 dBm         Offset         21.00 dB         RBW         1 MHz           Att         35 dB         SWT         40 ms         ●         VBW 3 MHz         Mode         Sweep		
30 dBm	30 dBm	30 dBm     -10 dBm		
Start 5.0 GHz         32000 pts         Stop 10.0 GHz         Stop 20.0 GHz         32000 pts         Stop 20.0 GHz	10 mm	-40 dBm		
· · · · · · · · · · · · · · · · · · ·		Start 10.0 GHz         32000 pts         Stop 20.0 GHz		



Test Plot					
GSM1900	GSM1900				
Conducted Emission Transmitting Mode CH 661 30MHz – 10GHz	Conducted Emission Transmitting Mode CH 810 30MHz – 10GHz				
Spectrum         Image: Spectrum           RefLevel 40.00 dBm         Offset 21.00 dB • RBW 1 MHz           Att         35.48 SWT         39.9 ms • VBW 3 MHz	RefLevel 40.00 dBm         Offset 21.00 dB         RBW 1 MHz         T           Att         35 dB         SWT         39.9 ms         VBW 3 MHz         Mode Sweep				
1Av View M1[1] -19.80 dBm	●1Av View M1[1] -20.38 dBm				
0 dBm 6.791060 GHz	30 dBm				
20 dBm	20 dBm				
0 d8m-	10 dBm-				
10 dBm	0 dBm-				
D1 -13,000 dBm M1	01 -13.000 dBm				
40 dBm	-40 dBm				
50 d8m	-50 dBm-				
start 30.0 MHz 32000 pts Stop 10.0 GHz	Start 30.0 MHz 32000 pts Stap 10.0 GHz				
Pendusted Emission Transmitting Mode CU CC1	Conducted Emission Transmitting Made OL 010				
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz				
Spectrum					
RefLevel 40.00.dBm Offset 21.00.dB ⊕ RBW 1.MH: Att 35 dB SWT 40 ms ⊕ VBW 3.MHz Mode Sweep 1.4v View	RefLevel         40.00         dBm         Offset         21.00         dB         RBW         1 MHz           Att         35 dB         SWT         40 ms         VBW 3 MHz         Mode         Sweep           ●LAV View				
Ref Level 40.00 dBm         Offset 21.00 dB         ■ RBW 1 MHz           Att         35 dB         SWT         40 ms         ● VBW 3 MHz         Mode Sweep           1Av View         M1[1]         -22.84 dBm         18.432030 GHz	RefLevel 40.00 dBm Offset 21.00 dB ● RBW 1 MHz Att 35 dB SWT 40 ms ● VBW 3 MHz Mode Sweep				
Ref Level         40.00 dBm         Offset         21.00 dB         RBW         1 MHz           Att         35 dB         SWT         40 ms         ♥ VBW         3 MHz         Mode         Sweep           11Av View	RefLevel 40,00 dbm         Offset 21.00 db         ● RBW 1 MHz           Att         35 db         SWT         40 ms         ¥ WBW 3 MHz           ●14v View         M1[1]         -22.54 dBm           17.763590 GHz         17.763590 GHz				
Ref Level 40.00 dbm         Offset 21.00 db         RBW 1 MHz           Att         35 db         SWT         40 ms         VBW 3 MHz           Mode         Sweep	Ref Level 40.00 dbm         Offset 21.00 db         RBW 1 MHz           Att         35 db         SWT         40 ms         Wode Sweep           ●1Av View         -22.54 dBm         M1(1)         -22.54 dBm           30 dBm         0 dbm         -10.763590 GHz         -22.54 dBm				
Mathematical State         Mathema	RefLevel         40.00         dim         Offset         21.00         dis         RBW 1         1MHz           Att         35 dB         SWT         40 ms         VBW 3         Mode         Sweep           ●1AV View         M1[1]         -22.54 dBm         17.763590 GHz           30 dBm         17.763590 GHz         10         10				
Mit         35 ds         Offset 21.00 db @ RBW 1 MHz           Att         35 ds         SWT         40 ms @ VBW 3 MHz         Mode Sweep           11Av View         M1[1]         -22.04 dbm         18.432030 GHz           00 dbm         0 dbm         0 dbm         0 dbm         0 dbm           00 dbm         0 dbm         0 dbm         0 dbm         0 dbm	Ref Level 40.00 dbm         Offset 21.00 db         PBW 1 MHz           Att         35 db         SWT         40 ms         WbW 3 MHz           Mode Sweep         0 ms         VBW 3 MHz         Mode Sweep           10 dbm         17.763590 GHz         17.763590 GHz				
Mathematical and the second	Ref Level 40.00 dBm         Offset 21.00 dB         RBW 1 MH2           Att         35 dB         SWT         40 ms         VBW 3 MH2           ●1Av View         M1[1]         -22.54 dBm         -22.54 dBm           30 dBm         10.763590 GH2         0         0           10 dBm         0         0         0         0				
Ref Level 40.00 dbm         Offset 21.00 db         @ RBW 1 MHz           35 db         SWT         40 ms         VBW 3 MHz         Mode Sweep           11Av View         M1[1]         -22.04 dbm         -22.04 dbm           100 dbm         18.432030 GHz         18.432030 GHz         -22.04 dbm           00 dbm         18.432030 GHz         -22.04 dbm         -22.04 dbm           10 dbm         18.432030 GHz         -20.04 dbm         -20.04 dbm           10 dbm         -         -         -         -           0 dbm         -         -         -         -         -           0 dbm         -         -         -         -         -         -           0 dbm         -         -         -         -         -         -         -           0 dbm         -	Ref Level 40.00 dbm         Offset 21.00 db         R BW 1 MH2           Att         35 db         SWT         40 ms         VBW 3 MH2           Mode Sweep         914 V View         11[1]         -22.54 dbm           30 dbm         10 dbm         17.763590 GH2         11           10 dbm         10 dbm         10 dbm         11         11           -20 dbm         10 dbm         11         11         11         11           -20 dbm         10 dbm         11				
Net Level 40.00 dbm         Offset 21.00 db         RBW 1 MHz RW         Mode Sweep           1Av View         35 db         SWT         40 ms         VBW         3 Miz           1Av View         M1[1]         -22.04 dbm         -22.04 dbm           10 dbm         18.432030 GHz         -20.04 dbm         -20.04 dbm           10 dbm	Ref Level 40.00 dbm         Offset 21.00 db         R BW 1 MHz           Att         35 db         SWT         40 ms         VBW 3 MHz           Mode Sweep         *14 v Vew         *22.54 dbm         *11(1)         *22.54 dbm           30 dbm         10 dbm         10 dbm         10 dbm         10 dbm         10 dbm				
Net Level 40.00 dbm         Offset 21.00 db         @ RBW 1 MHz A0 ms         W VBW 3 MHz Wode Sweep           12AV View         M1[1]         -22.04 dbm           100 dbm         18.432030 GHz           10 dbm         10.4300 dbm           10 dbm         10.00 dbm           10 dbm         10.13.000 dbm           10 dbm         11.13.000 dbm	Ref Level 40.00 dbm         Offset 21.00 db         ● RBW 1 MHz           Att         35 db         SWT         40 ms         ¥ VBW 3 MHz         Mode Sweep           ●14 v View         N1[1]         -22.54 dBm         17.763390 GHz           30 dBm         0         10 dBm         10 dBm         10 dBm           -10 dBm         0         10 dBm         10 dBm         10 dBm           -20 dBm         0         10 dBm         10 dBm         10 dBm           -20 dBm         0         10 dBm         10 dBm         10 dBm           -10 dBm         0         10 dBm         10 dBm         10 dBm           -20 dBm         0         10 dBm         10 dBm         10 dBm           -20 dBm         0         10 dBm         10 dBm         10 dBm           -20 dBm         0         10 dBm         10 dBm         10 dBm           -20 dBm         0         10 dBm         10 dBm         10 dBm           -20 dBm         0         10 dBm         10 dBm         10 dBm           -20 dBm         0         10 dBm         10 dBm         10 dBm           -50 dBm         0         10 dBm         10 dBm         10 dBm				
Ref Level 40.00 dbm         Offset 21.00 db         @ RBW 1 MHz           35 db         SWT         40 ms         VBW 3 MHz         Mode Sweep           11Av View         M1[1]         -22.04 dbm         -22.04 dbm           100 dbm         18.432030 GHz         18.432030 GHz         -22.04 dbm           00 dbm         18.432030 GHz         -22.04 dbm         -22.04 dbm           10 dbm         18.432030 GHz         -20.04 dbm         -20.04 dbm           10 dbm         -         -         -         -           0 dbm         -         -         -         -         -           0 dbm         -         -         -         -         -         -           0 dbm         -         -         -         -         -         -         -           0 dbm         -	Ref Level 40.00 dbm         Offset 21.00 db         PRW 1 MHz           Att         35 db         SWT         40 ms         VBW 3 MHz         Mode Sweep           ●14 v View         0 dbm         0 dbm         17.763590 GHz         17.763590 GHz           30 dbm         0 dbm         0 dbm         0 dbm         10 dbm         10 dbm           -10 dbm         0 1 -13.000 dbm         0 dbm         741         10 dbm         10 dbm				



F

165	t Plot		
GPRS850	GPRS850		
Conducted Emission Transmitting Mode CH 128 30MHz – 5GHz			
pectrum 🕎	Spectrum		
efLevel 40,00 dBm Offset 21.00 dB @ RBW 1 MHz tt 35 dB SWT 32 ms @ VBW 3 MHz Mode Sweep	RefLevel         40:00 dbm         Offset         21:00 db         ● RBW         1 MHz           Att         35 dB         SWT         32 ms         • VBW 3 MHz         Mode Sweep           ● IAV View		
) dBm / 22,11 dBm 4.375570 GHz	30 dBm		
1 d8m	20 dBm		
d8m	0 dBm		
0 d8m	-10 dBm		
0 1 - 13,000 dBm- N1	-20 dBm		
0 dBm	-40 d8m		
0 dBm	-50 dBm		
art 30.0 MHz 32000 pts Stop 5.0 GHz	Start 30.0 MHz 32000 pts Stop 5.0 GH:		
Conducted Emission Transmitting Mode CH 128	Conducted Emission Transmitting Mode CH 190		
5GHz – 10GHz	5GHz – 10GHz		
pectrum 🕎	Spectrum		
efLevel 40.00 dBm Offset 21.00 dB ⊕ RBW 1 MHz tt 35 dB SWT 32 ms ⊕ VBW 3 MHz Mode Sweep	Ref Level         40.00         dBm         Offset         21.00         dB         ● RBW         1 MHz           Att         35 dB         SWT         32 ms         > VBW         3 MHz         Mode         Sweep		
LAV View	elav View		
M1[1] -18.71 dBm 6.979770 GHz	M1[1] -19.48 dB 6.690230 G		
1 dBm	30 d8m		
) dBm (dBm ) dBm (dBm) dBm (dBm) dBm (dBm ) dBm (dBm) dBm (dBm	30 dBm		
d8m         6.979770 CH2           d8m         1           d8m         1           d8m         1           d8m         1	30 dBm         6.690230 Gł           20 dBm         10 dBm		
d8m	30 dBm         6.690230 GH           20 dBm         10 dBm           0 dBm         10 dBm		
d8m	30 dBm         6.690230 GH           20 dBm         9           10 dBm         9           -10 dBm         9           01 -13.000 dBm         M1		
dBm	30 dBm         6.690230 Gl           20 dBm         10 dBm           10 dBm         10 dBm           -10 dBm         11 -13.000 dBm		
d8m	30 dBm         6.690230 Gl           20 dBm         1           10 dBm         1           0 dBm         1           10 dBm         1 </td		
dBm         6.979770 GHz           i dBm         9           i	30 dBm         6.690230 GB           20 dBm         10 dBm           10 dBm         10 dBm           -10 dBm         10 dBm           -20 dBm         10 dBm           -30 dBm         10 dBm           -30 dBm         10 dBm           -30 dBm         10 dBm           -30 dBm         10 dBm           -20 dBm         10 dBm           -30 dBm         10 dBm		
dBm         6.979770 GHz           i dBm         9           i	30 dBm         6.690230 GB           20 dBm         10 dBm           10 dBm         10 dBm           -10 dBm         10 dBm           -20 dBm         10 dBm           -30 dBm         10 dBm           -30 dBm         10 dBm           -30 dBm         10 dBm           -30 dBm         10 dBm           -20 dBm         10 dBm           -30 dBm         10 dBm		



	Test	t Plot			
GPRS850	GPRS1900				
Conducted Emission Transmittin 30MHz – 5GHz					
Spectrum RefLevel 40.00 dBm Offset 21.00 dB ● RBW 1 MHz	Spectrum Ref Level 40.00 dBm Offs	set 21.00 dB 👄 <b>RBW</b> 1 MHz			
RefLevel 40.00 dBm Offset 21.00 dB ● RBW 1 MHz Att 35 dB SWT 32 ms ● VBW 3 MHz Mode Sweep ∋lav View		Att 35 dB SW		e Sweep	
30 dBm	-21.97 dBm 4.965750 GHz	30 dBm-		M1[1]	-19.80 dBn 6.797600 GH
20 dBm		20 dBm			
10 dBm-		10 dBm			
) dBm		0 dBm			
10 dBm D1 -13,000 dBm		-10 dBm-D1 -13.000 dBm-		M1	
	Manager and the first of the first start of the start of	-20 dBm	No. 1997 International Action of the Action		
			descention of the second se		
40 dBm		-40 dBm			
50 dBm		-50 dBm			
Start 30.0 MHz 32000 pts	Stop 5.0 GHz	Start 30.0 MHz	32000 pts	Measuring	Stop 10.0 GHz
Conducted Emission Transmittin 5GHz – 10GHz	g Mode CH 251	Conducted I	Emission Trans 10GHz – 20		ode CH 512
Spectrum RefLevel 40.00 dBm Offset 21.00 dB ● RBW 1 MHz Att 35 dB SWT 32 ms ● VBW 3 MHz Mode Sweep		Spectrum Ref Level 40.00 dBm Offs Att 35 dB SW	set 21.00 dB ● RBW 1 MHz T 40 ms ● VBW 3 MHz Mod	le Sweep	(m V
1Av View M1[1]	-19.09 dBm	●1Av View		M1[1]	-22.67 dBn
30 dBm	6.895550 GHz	30 dBm			19.899220 GH
20 dBm		20 dBm			
10 dBm		20 dBm			
10 dBm		20 dBm			
10 dBm		20 dBm			
10 d8m		20 dBm			
10 d6m		20 dBm			
20 dBm	Image: state	20 dBm			Stop 20.0 GHz



Test	t Plot		
GPRS1900	GPRS1900		
Conducted Emission Transmitting Mode CH 661 30MHz – 10GHz	Conducted Emission Transmitting Mode CH 810 30MHz – 10GHz		
Spectrum III	Spectrum		
Spectrum         Image: Constraint of the second secon	Spectrum         T           Ref Level 40.00 dB         Offset 21.00 dB         RBW 1 MHz           Att         35 dB         SWT         39.9 ms         VBW 3 MHz		
114V View M1[1] -19.58 dBm	1/2 03 00 044 05/5 mis 044 0 mit 1 mode sweep     1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2		
6.999190 GH2	6.998250 Gł		
20 d8m	20 dBm-		
LO dBm	10 dBm		
D dBm	0 dBm		
10 dBm	-10 dBm		
D1 -13.000 dBm M1	D1 -13.000 dBm M1		
40 dBm	-40 dBm		
50 dBm	-50 dBm		
	Start 30.0 MHz 32000 pts Stop 10.0 GH:		
Start 30.0 MHz 32000 pts Stop 10.0 GHz			
Messuring.	Measuring (Extended) 44		
Messuring			
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz		
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz		
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz		
Spectrum         Image: Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum         Image: Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum         Image: Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum         Image: Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum         Image: Conducted Emission Transmitting Mode Sweep           Material State         Mode Sweep           Material State         Material State	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz           Spectrum           Ref Level 40:00 dbm Offset 21:00 db @ RBW 1 MHz 35 db SWT 40 ms @ VBW 3 MHz Mode Sweep           ©1Av View		
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz           Spectrum           Ref Level 40.00 dBm Offset 21.00 dB + RBW 1 MHz Att 35 dB SWT 40 ms + VBW 3 MHz Mode Sweep           MI[1] 20 dB + RBW 1 MHz Att 35 dB SWT 40 ms + VBW 3 MHz Mode Sweep           0 dBm Offset 21.00 dB + RBW 1 MHz Att 35 dB SWT 40 ms + VBW 3 MHz Mode Sweep           20 dBm         MI[1] 10.00500 GH 10.100500 GH		
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum           Ref Level 40.00 dBm Offset 21.00 dB • RBW 1 MHz 35 dB SWT 40 ms • VBW 3 MHz Mode Sweep           Mili1 19.748500 GHz           1Avv View           0 dBm           10 dB • RBW 1 MHz           Mode Sweep           14 v View           0 dBm           10 dBm           0 dBm           0 dBm           0 dBm	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz           Spectrum           Ref Level 40.00 dBm         Offset 21.00 dB @ RBW 1 MHz 35 dB SWT         MHz           Mode Sweep           10 dBm         -22.77 dB 10 dBm           10 dBm         MI[1]           10 dBm         Image: Spectrum		
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum           Spectrum           Spectrum         Spectrum           35 dB         Offset 21.00 dB         RBW 1 MH2 40 ms         Mode Sweep           30 dBm         M1[1]         -22.01 dBm 19.748590 CHz           30 dBm         M1[1]         -22.01 dBm 19.748590 CHz           30 dBm         M1[1]         -22.01 dBm 19.748590 CHz	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz           Spectrum           Ref Level 40.00 dbm Offset 21.00 db @ RBW 1 MHz 35 db SWT 40 ms @ VBW 3 MHz Mode Sweep           M1(1)           0 dbm         -22.77 db 16.183590 ch           30 dbm         -22.77 db 16.183590 ch           0 dbm         -22.77 db 10 dbm		
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz           Spectrum           Ref Level 40:00 dBm         Offset 21:00 dB @ RBW 1 MHz At 35 dB         MI 10 dB @ RBW 1 MHz At 35 dB         MI 11 10 dBm           30 dBm         M1(1)         -22:77 dB 16.103590 CH         -10.08m         -10.08m         -10.08m         -10.08m         -10.08m         -10.000 dBm         -10.08m         -10.08m </td		
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz           Spectrum           Ref Level 40.00 dBm         Offset 21.00 dB @ RBW 1 MHz At 35 dB         Switt 40 ms @ VBW 3 MHz Mode Sweep           0 dBm         0 dBm         16.103590 CH         16.103590 CH           10 dBm         0 dBm         10 dBm         10 dBm		
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum           Spectrum           Spectrum           Spectrum         Image: State Sta	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz           Spectrum           Ref Level 40.00 dbm         Offset 21.00 db @ RBW 1 MHz 20 dbm           MI[1]         -22.77 db 10.103590 cF           20 dbm         10.103590 cF         10.103590 cF           20 dbm         10.103590 cF         10.103590 cF           10 dbm         10.103590 cF         10.103590 cF           20 dbm         10.103590 cF         10.103590 cF           10 dbm         10.103590 cF         10.103590 cF           20 dbm         10.103590 cF         10.103590 cF           10 dbm         11.1000 dBm         11.1000 dBm           -20 dbm         11.1000 dBm         11.1000 dBm		
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz           Spectrum           Ref Level 40:00 dBm         Offset 21:00 dB @ RBW 1 MHz At 35 dB         MI 10 dB @ RBW 1 MHz At 35 dB         MI 11 10 dBm           30 dBm         M1(1)         -22:77 dB 16.103590 CH         -10.08m         -10.08m         -10.08m         -10.08m         -10.08m         -10.000 dBm         -10.08m         -10.08m </td		
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum           Spectrum           Spectrum           Spectrum         Image: State Sta	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz           Spectrum           Ref Level 40.00 dbm         Offset 21.00 db @ RBW 1 MHz 20 dbm           MI[1]         -22.77 db 10.103590 cF           20 dbm         10.103590 cF         10.103590 cF           20 dbm         10.103590 cF         10.103590 cF           10 dbm         10.103590 cF         10.103590 cF           20 dbm         10.103590 cF         10.103590 cF           10 dbm         10.103590 cF         10.103590 cF           20 dbm         10.103590 cF         10.103590 cF           10 dbm         11.1000 dBm         11.1000 dBm           -20 dbm         11.1000 dBm         11.1000 dBm		
Conducted Emission Transmitting Mode CH 661 10GHz – 20GHz           Spectrum           Spectrum           Spectrum           Spectrum         Image: State Sta	Conducted Emission Transmitting Mode CH 810 10GHz – 20GHz           Spectrum           Ref Level 40.00 dbm         Offset 21.00 db @ RBW 1 MHz 20 dbm           MI[1]         -22.77 db 10.103590 cF           20 dbm         10.103590 cF         10.103590 cF           20 dbm         10.103590 cF         10.103590 cF           10 dbm         10.103590 cF         10.103590 cF           20 dbm         10.103590 cF         10.103590 cF           10 dbm         10.103590 cF         10.103590 cF           20 dbm         10.103590 cF         10.103590 cF           10 dbm         11.1000 dBm         11.1000 dBm           -20 dbm         11.1000 dBm         11.1000 dBm		



Test	t Plot		
UMTS band V	UMTS band V		
Conducted Emission Transmitting Mode CH 4132 30MHz – 5GHz	Conducted Emission Transmitting Mode CH 4183 30MHz – 5GHz		
Spectrum Transform Street 21.00 dB • RBW 1 MHz	Spectrum         Image: Spectrum<		
Att 35 dB SWT 32 ms ⊕ VBW 3 MHz Mode Sweep 1Av View	Att         35 dB         SWT         32 ms         ♥ VBW 3 MHz         Mode Sweep           ●1Av View            M1(1)         -21.66 dBm		
0 d8m	30 dBm		
0.dam	20 dBm-		
0 d8m	10 d8m		
10 dBm	-10 dBm-		
01 -13.000 d8m ///////////////////////////////////	-20 dBm		
40 dBm	-40 dBm		
50 dBm	-50 dBm-		
	Start 30.0 MHz 32000 pts Stop 5.0 GHz		
ttart 30.0 MHz 32000 pts Stop 5.0 GHz	Measuring (Interest)		
Conducted Emission Transmitting Mode CH	Conducted Emission Transmitting Mode CH 4183		
Mexeniep. (Manada) 40			
Conducted Emission Transmitting Mode CH	Conducted Emission Transmitting Mode CH 4183 5GHz – 10GHz		
Conducted Emission Transmitting Mode CH 4132 5GHz – 10GHz	Conducted Emission Transmitting Mode CH 4183 5GHz – 10GHz		
Conducted Emission Transmitting Mode CH 4132 5GHz – 10GHz	Spectrum       Ref Level 40.00 dbm     Offset 21.00 db @ RBW 1 MHz       Att     35 db     WBW 3 MHz       Multin     -18.69 dbm       @1Av View     MIL[1]     -18.69 dbm		
Conducted Emission Transmitting Mode CH 4132 5GHz – 10GHz	Conducted Emission Transmitting Mode CH 4183 5GHz – 10GHz		
Conducted Emission Transmitting Mode CH 4132 5GHz – 10GHz           Spectrum           Spectrum         Image: Colspan="2">Image: Colspan="2" Image: Col	Spectrum         Ref Level 40.00 dbm Offset 21.00 db @ RBW 1 MHz         Att       35 db SWT       32 ms @ VBW 3 MHz       Mode Sweep         @1AV View		
Conducted Emission Transmitting Mode CH 4132 5GHz – 10GHz           Spectrum           MSW 1 MHz           Mode Sweep           18.74 dBm           0 dBm           MILIN           O dBm	Spectrum         Ref Level 40.00 dbm         Offset 21.00 db @ RBW 1 MH2         Made Sweep         @1Av View       ***********************************		
Conducted Emission Transmitting Mode CH 4132 5GHz – 10GHz           Spectrum           Ref Level 40.00 dbm Offset 21.00 db • RBW 1 MHz 35 db SWT 32 ms • VBW 3 MHz Mode Sweep           1AV View           MI[1]           0 dbm           0 dbm           0 dbm           0 dbm	Spectrum           Ref Level 40.00 dbm         Offset 21.00 db @ RBW 1 MHz           Mode Sweep           @1AV View         M1[1]         -18.69 dbm           20 dbm         10 dbm         10 dbm         10 dbm		
Conducted Emission Transmitting Mode CH 4132 5GHz – 10GHz           Spectrum           Spectrum         Image: Colspan="2">Image: Colspan="2" Image: Col	Spectrum           Ref Level 40.00 dbm         Offset 21.00 db @ RBW 1 MHz           Att 35 db SWT 32 ms @ VBW 3 MHz           Mode Sweep           @1AV View         M1[1]         6-997270 GHz           20 dbm         0         0         0           10 dbm         0         0         0         0           -10 dbm         0         0         0         0		
Conducted Emission Transmitting Mode CH 4132 5GHz – 10GHz           Spectrum           Spectrum           Spectrum         Spectrum           0 dBm         0 dBm	Spectrum           Ref Level 40.00 dbm         Offset 21.00 db @ RBW 1 MHZ           Att 30 db @ RBW 1 MHZ           Mode Sweep           @1Av View         M1[1]         6.997270 GHZ           20 dbm         0 dbm         0 dbm         0 dbm           10 dbm         0 dbm         M1         0 dbm         0 dbm           -20 dbm         0 1 -13.000 dbm         M1         0 dbm         0 dbm         0 dbm		
Conducted Emission Transmitting Mode CH 4132 5GHz – 10GHz           Spectrum           Spectrum         Image: Colspan="2">Image: Colspan="2" Image: Col	Spectrum           Ref Level 40.00 dbm         Offset 21.00 db @ RBW 1 MHz           Att 35 db SWT 32 ms @ VBW 3 MHz           Mode Sweep           @1AV View         M1[1]         6-997270 GHz           20 dbm         0         0         0           10 dbm         0         0         0         0           -10 dbm         0         0         0         0		
Conducted Emission Transmitting Mode CH 4132 5GHz – 10GHz           Spectrum           Spectrum           Spectrum         Spectrum           0 dBm         0 dBm	Spectrum           Ref Level 40.00 dBm         Offset 21.00 dB @ RBW 1 MHZ           Att 30 dB         WBW 3 MHZ           Mode Sweep           @1Av View         M1[1]         6.397270 GHz           20 dBm         0         0         0           10 dBm         0         0         0           -10 dBm         0         0         0           -20 dBm         0         0         0		



4233 30MHz – 5GHz	UMTS band II		
4233 30MHz – 5GHz			
Ref Level 40.00 dBm Offset 21.00 dB   RBW 1 MHz	Conducted Emission Transmitting Mode CH 926 30MHz – 10GHz		
tef Level 40.00 dBm Offset 21.00 dB   RBW 1 MHz  Ref Level 40.0			
Att 35 dB SWT 32 ms  VBW 3 MHz Mode Sweep Att			
1Av View 014v View 014v View	M1[1] -19.25 dBi		
0 dBm	6.991090 GH		
) d8m			
) dBm			
d8m0 d8m0 d8m			
0 dBm10 dBm -			
01 -13.000 dBm 01 -20 dBm	-13,000 dBm M1		
0 dBm			
0 d8m			
art 30.0 MHz 32000 pts Stop 5.0 GHz Stort 30.0 MHz	z 32000 pts Stop 10.0 GHz		
efLevel 40.00 dBm Offset 21.00 dB ● RBW 1 MHz tt 35 dB SWT 32 ms ● VBW 3 MHz Mode Sweep Av View ● 1Av View			
eft Level 40.00 dbm         Offset 21.00 db         RBW 1 MHz         Ref Level 40.0         Att           std         35 db         SWT         32 ms         VBW 3 MHz         Nade Sweep         Att           Lav View         MI[1]         -18.56 dBm         6.954770 GHz         6.954770 GHz         Figure 4.00	00 dBm Offset 21.00 dB  RBW 1 MHz		
cef Level 40.00 dbm         Offset 21.00 db         RBW 1 MHz         Aft           135 dB         SWT         32 ms         VBW 3 MHz         Aft           LAV View         -10.56 dbm         -10.56 dbm         Aft           0 d8m         -10.56 dbm         -10.56 dbm         30 dBm	00 dBm Offset 21.00 dB ● RBW 1 MHz 35 dB SWT 40 ms ● VBW 3 MHz Mode Sweep N1[1] -22.77 dB		
lef Level 40.00 dbm         Offset 21.00 db         B RBW 1 MMz         Mode Sweep         Att         Att <td>00 dBm Offset 21.00 dB ● RBW 1 MHz 35 dB SWT 40 ms ● VBW 3 MHz Mode Sweep N1[1] -22.77 dB</td>	00 dBm Offset 21.00 dB ● RBW 1 MHz 35 dB SWT 40 ms ● VBW 3 MHz Mode Sweep N1[1] -22.77 dB		
eff Level 40.00 dbm         Offset 21.00 db         PBW 1 MHz         Att           35 db         SWT         32 ms         VBW         Made Sweep           Lav View	00 dBm Offset 21.00 dB ● RBW 1 MHz 35 dB SWT 40 ms ● VBW 3 MHz Mode Sweep N1[1] -22.77 dB		
of Level 40.00 dbm         Offset 21.00 db         PBW 1 MHz         Att           35 db         SWT         32 ms         VBW 3 MHz         Nade Sweep           Jav View         -18.56 dBm         -18.56 dBm         -18.56 dBm           J dbm         -18.56 dBm         -10 dBm         -10 dBm	00 dBm Offset 21.00 dB ● RBW 1 MHz 35 dB SWT 40 ms ● VBW 3 MHz Mode Sweep M1[1] -22.77 dBi 18.105780 GH		
ieft Level 40.00 dbm         Offset 21.00 db         RBW 1 MHz         Art           35 dB         SWT         32 ms         VBW 3 MHz         Mode Sweep           LAV View         -10.05 dbm         -10.05 dbm         Art           0 dbm         -10.05 dbm         -0.05 4770 GHz         30 dbm           0 dbm         -10.05 dbm         -0.05 4770 GHz         30 dbm           0 dbm         -0.05 4770 GHz         -0.05 4070 GHz         -0.05 4070 GHz           0 dbm         -0.05 4070 GHz         -0.05 4070 GHz         -0.05 4070 GHz           0 dbm         -0.05 4070 GHz         -0.05 4070 GHz         -0.05 4070 GHz           0 dbm         -0.05 4070 GHz         -0.05 4070 GHz         -0.05 4070 GHz           0 dbm         -0.05 4070 GHz         -0.05 4070 GHz         -0.05 4070 GHz           0 dbm         -0.05 4070 GHz         -0.05 4070 GHz         -0.05 4070 GHz           0 dbm         -0.05 4070 GHz         -0.05 4070 GHz         -0.05 4070 GHz           0 dbm         -0.05 4070 GHz         -0.05 4070 GHz         -0.05 4070 GHz           0 dbm         -0.05 4070 GHz         -0.05 4070 GHz         -0.05 4070 GHz	00 dBm Offset 21.00 dB ● RBW 1 MHz 35 dB SWT 40 ms ● VBW 3 MHz Mode Sweep N1[1] -22.77 dB		
eft Level 40,00 dbm         Offset 21:00 db         e RBW 1 MHz	00 dBm Offset 21.00 dB ● RBW 1 MHz 35 dB SWT 40 ms ● VBW 3 MHz Mode Sweep M1[1] -22.77 dBi 18.105780 GH		
off Level 40.00 dbm         Offset 21.00 db         PRE Level 40.0           135 db         SWT         32 ms         VBW           14V View         -18.36 dbm         -18.36 dbm           14V View         -18.36 dbm         -18.36 dbm           14V View         -18.36 dbm         -19.36 dbm           14W View         -18.36 dbm         -19.36 dbm           14W View         -19.36 dbm         -19.36 dbm           0 dbm         -19.300 dbm         -19.36 dbm           0 dbm         -19.300 dbm         -10.300 dbm           0 dbm         -10.300 dbm         -10.300 dbm           0 dbm         -10.300 dbm         -10.300 dbm           0 dbm         -10.300 dbm         -20.30m           10 dbm         -20.30m         -20.30m	00 dBm Offset 21.00 dB ● RBW 1 MHz 35 dB SWT 40 ms ● VBW 3 MHz Mode Sweep M1[1] -22.77 dBi 18.105780 GH		
off Lovel 40.00 dbm         Offset 21.00 db         8 BW 1 MHz         Mode Sweep           1AV View         35 db         SWT         32 ms         VBW 3 MHz         Mode Sweep           1AV View         0 48m         0.954770 GHz         0.954770 GHz         30 dBm           0 dBm         0 48m         0.01         0.954770 GHz         30 dBm         0 dBm           0 dBm         0 dBm         0.01         0.00 dBm         0	00 dBm Offset 21.00 dB ● RBW 1 MHz 35 dB SWT 40 ms ● VBW 3 MHz Mode Sweep M1[1] -22.77 dBi 18.105780 GH		
off Level 40.00 dbm         Offset 21.00 db         PBW 1 MHz         Mode Sweep           14x         35 db         SWT         32 ms         VBW 3 MHz         Mode Sweep           14x         View         -18.56 dBm         -0.55 770 GHz         -0.05 770 GHz           0 dBm         -19.56 dBm         -0.05 770 GHz         -0.05 770 GHz         -0.05 8770 GHz           0 dBm         -10 dBm         -10 dBm         -0.05 8770 GHz         -0.05 8770 GHz         -0.05 8770 GHz           0 dBm         -0.05 9770 GHz         -0.05	00 dBm Offset 21.00 dB • RBW 1 MHz 35 dB SWT 40 ms • VBW 3 MHz Mode Sweep M1[1] -22.77 dB 18.165780 CH 18.165780 CH -13.000 dBm -13.000 dBm		



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		Tes	t Plot			
	UMTS band II			UMTS	S band II	
Conducted Emission Transmitting Mode CH 9400 30MHz – 10GHz			Conducted Emission Transmitting Mode CH 9538			
94	00 30MHz – 10GHz	30MHz – 10GHz				
Spectrum Ref Level 40.00 dBm Offset 21.	00 dB 👄 RBW 1 MHz		Spectrum Ref Level 40.00 dBm Offs	cat 21.00 d0 ⇒ PDW 1.0	6.4L/a	T T
	9 ms 🖶 VBW 3 MHz 🛛 Mode Sweep	]	Att 35 dB SW		MHz Mode Sweep	
0 dBm	M1[1]	-19.18 dBm 6.959930 GHz	30 dBm		M1[1]	-18.96 dBi 6.992950 GF
0 dBm			20 dBm			
0 dBm			10 dBm			
dBm			0 dBm			
10 dBm D1 -13.000 dBm	MI		-10 dBmD1 -13.000 dBm		ME	
20 dBm		man rate paralle and a second rate of the second	-20 dBm	and an and the state		ulitant de ches o concentrations o
40 dBm				and the second		
40 dBm			-40 dBm			
			oo dom			
	00000 sta	9tm 10.0 0Um	Object 20, 0 Millio		2000 at a	Otan 10 0 0U
	32000 pts	Stop 10.0 GHz	Start 30.0 MHz	3:	2000 pts Measuring.	Stop 10.0 GHz
Start 30.0 MHz Conducted E	mission Transmitting	Mode CH	Start 30.0 MHz Conducted E	Emission Tr	ransmitting M	<b>(</b> )
Start 30.0 MHz Conducted E	Measuring	Mode CH		Emission Tr	Measuring.	<b>(</b> )
Conducted E	mission Transmitting	y Mode CH	Conducted E	Emission Tr	ransmitting M	lode CH 953
Spectrum Ref Level 40.00 dBm Offset 21.	mission Transmitting 00 10GHz – 20GHz	Mode CH	Conducted E	Emission Tr 10GHz	ransmitting M z – 20GHz	<b>(</b> )
Spectrum Ref Level 40.00 dBm Offset 21. Att 25 dB SWT	mission Transmitting 00 10GHz – 20GHz	Mode CH	Conducted E	Emission Tr 10GHz	ransmitting M z – 20GHz	(1000 CH 953
Spectrum Ref Level 40.00 dBm Offset 21. Att 35 dB SWT	mission Transmitting 00 10GHz – 20GHz 10 db • RBW 1 MHz 10 ms • VBW 3 MHz Mode Sweep	g Mode CH	Conducted E	Emission Tr 10GHz	ransmitting M z – 20GHz	Iode CH 953
tart 30.0 MHz Conducted E 94 Spectrum Ref Level 40.00 dBm 0 dBm 0 dBm 0 dBm	mission Transmitting 00 10GHz – 20GHz 10 db • RBW 1 MHz 10 ms • VBW 3 MHz Mode Sweep	Mode CH	Conducted E	Emission Tr 10GHz	ransmitting M z – 20GHz	(1000 CH 953
Spectrum Ref Level 40.00 dBm IIAV View I0 dBm IIA View IIIA View IIIA View IIIIA View IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	mission Transmitting 00 10GHz – 20GHz 10 db • RBW 1 MHz 10 ms • VBW 3 MHz Mode Sweep	Mode CH	Conducted E Conducted E Spectrum Ref Level 40.00 dBm Offi Att 35 dB SW Att 35 dB SW Att 30 dBm 20 dBm 10 dBm	Emission Tr 10GHz	ransmitting M z – 20GHz	(1000 CH 953
Spectrum Spectrum Spectrum Solution Stav View Solution Stav View Solution Stav View Solution	mission Transmitting 00 10GHz – 20GHz 10 db • RBW 1 MHz 10 ms • VBW 3 MHz Mode Sweep	Mode CH	Conducted E	Emission Tr 10GHz	ransmitting M z – 20GHz	(1000 CH 953
Spectrum         Spectrum           Ref Level 40.00 dBm         Offset 21.           35 dB         SWT           114V View         State           10 dBm         01           10 dBm         01	mission Transmitting 00 10GHz – 20GHz 10 db • RBW 1 MHz 10 ms • VBW 3 MHz Mode Sweep	Mode CH	Conducted E Spectrum Ref Level 40.00 dBm Off Att 35 dB SW Atv View 30 dBm 20 dBm 10 dBm 0 dBm 0 dBm 0 1 -13.000 dBm	Emission Tr 10GHz	ransmitting M z – 20GHz	(1000 CH 953
Spectrum         Spectrum           Ref Level 40.00 dBm         Offset 21.           35 dB         SWT           114V View         State           10 dBm         01           10 dBm         01	mission Transmitting 00 10GHz – 20GHz 10 db • RBW 1 MHz 10 ms • VBW 3 MHz Mode Sweep	Mode CH	Spectrum Ref Level 40.00 dBm Offi Att 35 dB SW 1AV View 30 dBm 20 dBm 10 dBm -10 dBm	Emission Tr 10GHz	ransmitting M z – 20GHz	(1000 CH 953
stort 30.0 MHz Conducted E 94 Spectrum Ref Level 40.00 dBm Offset 21. Att 35 dB SWT 11AV View 10 dBm 10 dBm 01 -13.000 dBm 20 dBm 01 -13.000 dBm 20 dBm	mission Transmitting 00 10GHz – 20GHz 10 db • RBW 1 MHz 10 ms • VBW 3 MHz Mode Sweep	Mode CH	Conducted E Spectrum Ref Level 40.00 dBm Off Att 35 dB SW Atv View 30 dBm 20 dBm 10 dBm 0 dBm 0 dBm 0 1 -13.000 dBm	Emission Tr 10GHz	ransmitting M z – 20GHz	(1000 CH 953
94	mission Transmitting 00 10GHz – 20GHz 10 db • RBW 1 MHz 10 ms • VBW 3 MHz Mode Sweep	Mode CH	Conducted E Spectrum Ref Level 40.00 dBm Off Att Sd B SW EIAV View 30 dBm 20 dBm 10 dBm 10 dBm -10 dBm 01 -13.000 dBm -20 dBm	Emission Tr 10GHz	ransmitting M z – 20GHz	(1000 CH 953
Stort 30.0 MHz           Conducted E           94           Spectrum           Ref Level 40.00 dBm           134 View           30 dBm           10 dBm           10 dBm           01 -13.000 dBm	mission Transmitting 00 10GHz – 20GHz 10 db • RBW 1 MHz 10 ms • VBW 3 MHz Mode Sweep	Mode CH	Conducted E Spectrum Ref Level 40.00 dBm Off Att Sd B SW EIAV View 30 dBm 20 dBm 10 dBm 10 dBm -10 dBm 01 -13.000 dBm -20 dBm	Set 21.00 dB = RBW 11 t 40 ms = VBW 31	ransmitting M z – 20GHz	(1000 CH 953



	t Plot		
UMTS band IV	UMTS band IV		
Conducted Emission Transmitting Mode CH	Conducted Emission Transmitting Mode CH 1412		
1312 30MHz – 10GHz	30MHz – 10GHz		
pectrum (₩	Spectrum T		
efLevel 40.00 dbm Offset 21.00 db ⊕ RBW 1 MH: tt 35 db SWT 39.9 ms ⊕ VBW 3 MHz Mode Sweep LXV View	RefLevel         40.00 dBm         Offset         21.00 dB         ■ RBW 1         MH:           Att         33 dB         SWT         39.9 ms         ♥ BW 3 MHz         Mode Sweep           ● IAV View		
M1[1] -18.80 dBm 6.843090 GHz	M1[1] -20.30 dBm 6.992950 GHz		
) d8m-	20 dBm		
0.08m-	10 dBm		
d8m			
0 dBm	-10 dBm-		
D1 - 13.000 dBm M1	-20 dBm		
0 dBm	-40 dBm		
0 dBm	-50 dBm		
tart 30.0 MHz 32000 pts Stop 10.0 GHz	Start 30.0 MHz         32000 pts         Stop 10.0 GHz		
Conducted Emission Transmitting Mode CH 1312 10GHz – 20GHz	Conducted Emission Transmitting Mode CH 1412 10GHz – 20GHz		
pectrum  ef Level 40.00 dBm Offset 21.00 dB • RBW 1 MHz	Spectrum RefLevel 40.00 dBm Offset 21.00 dB  RBW 1 MHz		
tt 35 d8 SWT 40 ms ● VBW 3 MHz Mode Sweep LAV View	Att         35 dB         SWT         40 ms         ∨ UBW         3 MHz         Mode         Sweep           ●1Av View		
) dBm	M1[1]22.55 dBm 18.439280 GHz 30 d8m		
nd8m	20 dBm		
0 dBm	10 d8m-		
dBm	0 dBm		
0 dBm	0 dBm		
0 dBm	-10 dBm		
0 dBm 01 -13.000 dBm	-10 dBm 01 -13.000 dBm		
0 dBm- 01 -13.000 dBm-	-10 dBm 01 -13.000 dBm		
0 dBm 01 -13.000 dBm	-10 dBm 01 -13.000 dBm		



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Toot Plot				
Tes	t Plot			
UMTS band IV				
Conducted Emission Transmitting Mode CH 1513 30MHz – 10GHz				
Spectrum         Imp           RefLevel 40.00 dBm         Offset 21.00 dB = RBW 1 MHz           Att         35 dB           SWT         39.9 ms           WEW 3 MHz				
1AV View     11     19.98 dBm     6.900420 GHz				
30 dBm				
10 d8m				
0 d8m				
-10 dBm				
-40 d8m				
-50 d8m				
Stort 30.0 MHz 32000 pts Stop 10.0 GHz				
Conducted Emission Transmitting Mode CH 1513 10GHz – 20GHz				
Spectrum RefLevel 40.00 dBm Offset 21.00 dB @ RBW 1 MHz				
Att         35 dB         SWT         40 ms ⊕         VBW 3 MHz         Mode         Sweep           ●1Av View				
30 d8m				
20 dBm				
0 d8m				
-10 dBm 01 -13.000 dBm				
-40 dbm				
-50 dBm				
Stort 10.0 GHz 32000 pts Stor 20.0 GHz				
L	<u> </u>			
END OF F	PEPORT			