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# RADIO TEST REPORT

Report No.: STS2009164W03

Issued for

XTR S.A.C.

Av. Camino Real 1225 Of 201-A San Isidro Lima, Peru

<b>Product Name:</b>	Tablet
<b>Brand Name:</b>	EKS
<b>Model Name:</b>	X7
<b>Series Model:</b>	N/A
<b>FCC ID:</b>	2AGAK-X7
<b>Test Standard:</b>	FCC Part 22H and 24E

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### TEST RESULT CERTIFICATION

Applicant's Name .....: XTR S.A.C.

Address .....: Av. Camino Real 1225 Of 201-A San Isidro Lima, Peru

Manufacturer's Name .....: ENCORP LIMITED

Address .....: Room 411.4th floor, Yonghe high R&D building, NO.25 Langshan road, xili street, Nanshan district Shenzhen, China

#### Product Description

Product Name .....: Tablet

Brand Name .....: EKS

Model Name .....: X7

Series Model .....: N/A

Test Standards .....: FCC Part 22H and 24E

Test Procedure .....: KDB 971168 D01 v03r01,ANSI C63.26( 2015)

This device described above has been tested by STS, 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**.....:


Date of receipt of test item.....: 02 Sept. 2020

Date (s) of performance of tests.: 02 Sept. 2020 ~ 17 Sept. 2020

Date of Issue .....: 17 Sept. 2020

Test Result .....: Pass

Testing Engineer :   
 \_\_\_\_\_  
 (Chris Chen)

Technical Manager :   
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 (Sean she)


Authorized Signatory :   
 \_\_\_\_\_  
 (Vita Li)





Table of Contents	Page
<b>1 INTRODUCTION</b>	<b>6</b>
1.1 TEST FACTORY	6
1.2 MEASUREMENT UNCERTAINTY	6
<b>2 PRODUCT INFORMATION</b>	<b>7</b>
<b>3 TEST CONFIGURATION OF EQUIPMENT UNDER TEST</b>	<b>9</b>
<b>4 MEASUREMENT INSTRUMENTS</b>	<b>10</b>
<b>5 TEST ITEMS</b>	<b>11</b>
5.1 CONDUCTED OUTPUT POWER	11
5.2 PEAK TO AVERAGE RATIO	12
5.3 TRANSMITTER RADIATED POWER (EIRP/ERP)	13
5.4 OCCUPIED BANDWIDTH	14
5.5 FREQUENCY STABILITY	15
5.6 SPURIOUS EMISSIONS AT ANTENNA TERMINALS	16
5.7 BAND EDGE	17
5.8 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT	18
<b>APPENDIX A.TESTRESULT</b>	<b>20</b>
A1. CONDUCTED OUTPUT POWER	20
A2. PEAK-TO-AVERAGE RADIO	24
A3. TRANSMITTER RADIATED POWER (EIRP/ERP)	33
A4. OCCUPIED BANDWIDTH (99% OCCUPIED BANDWIDTH/26DB BANDWIDTH)	35
A5. FREQUENCY STABILITY	44
A6. SPURIOUS EMISSIONS AT ANTENNA TERMINALS	48
A7. BAND EDGE	56
A8. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT	61
<b>APPENDIX-PHOTOS OF TEST SETUP</b>	<b>73</b>



**Revision History**

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	17 Sept. 2020	STS2009164W03	ALL	Initial Issue





## SUMMARY OF TEST RESULTS

Test procedures according to the technical standards:

The radiated emission testing was performed according to the procedures of KDB 971168 D01 v03r01 and ANSI C63.26( 2015)

FCC Rules	Test Description	Test Limit	Test Result	Reference
2.1046	Conducted Output Power	Reporting Only	PASS	
22.913d 24.232d	Peak-to-Average Ratio	< 13 dB	PASS	
2.1046 22.913 24.232	Effective Radiated Power/Equivalent Isotropic Radiated Power	< 7 Watts max. ERP(Part 22) < 2 Watts max. EIRP(Part 24)	PASS	
2.1049 22.917 24.238	Occupied Bandwidth	Reporting Only	PASS	
2.1055 22.355 24.235	Frequency Stability	< 2.5 ppm (Part 22) Emission must remain in band (Part 24)	PASS	
2.1051 22.917 24.238	Spurious Emission at Antenna Terminals	< 43+10log10(P[Watts])	PASS	
2.1053 22.917 24.238	Field Strength of Spurious Radiation	< 43+10log10(P[Watts])	PASS	
2.1051 22.917 24.238	Band Edge	< 43+10log10(P[Watts])	PASS	



## 1 INTRODUCTION

### 1.1 TEST FACTORY

SHENZHEN STS TEST SERVICES CO., LTD

Add. : A 1/F, Building B, Zhuoke Science Park, No.190 Chongqing Road, HepingShequ, Fuyong Sub-District, Bao'an District, Shenzhen, Guang Dong, China

FCC test Firm Registration Number: 625569

IC test Firm Registration Number: 12108A

A2LA Certificate No.: 4338.01

### 1.2 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of  $k = 2$  to indicate a 95% level of confidence. The measurement data shown herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

No.	Item	Uncertainty
1	RF output power, conducted	$\pm 0.68$ dB
2	Unwanted Emissions, conducted	$\pm 2.988$ dB
3	All emissions, radiated 30-1GHz	$\pm 5.6$ dB
4	All emissions, radiated 1G-6GHz	$\pm 5.5$ dB
5	All emissions, radiated >6G	$\pm 5.8$ dB
6	Conducted Emission (9KHz-150KHz)	$\pm 3.37$ dB
7	Conducted Emission (150KHz-30MHz)	$\pm 3.83$ dB



2 PRODUCT INFORMATION

Product Name	Tablet
Trade Name	EKS
Model Name	X7
Series Model	N/A
Model Difference	N/A
Tx Frequency:	GSM/GPRS/EDGE: 850: 824 MHz ~ 849MHz 1900: 1850 MHz ~ 1910MHz WCDMA: Band V: 824 MHz ~ 849 MHz Band II: 1850 MHz ~ 1910 MHz
Rx Frequency:	GSM/GPRS/EDGE: 850: 869 MHz ~ 894 MHz 1900: 1930 MHz ~ 1990MHz WCDMA: Band V: 869 MHz ~ 894 MHz Band II: 1930 MHz ~ 1990 MHz
Max RF Output Power:	GSM850:32.49dBm, PCS1900:27.46dBm GPRS850(1-Slot):32.29dBm, GPRS1900(1-Slot):27.03dBm GPRS850(2-Slot):31.86dBm, GPRS1900(2-Slot):26.56dBm GPRS850(3-Slot):31.39dBm, GPRS1900(3-Slot):26.13dBm GPRS850(4-Slot):30.98dBm, GPRS1900(4-Slot):25.68dBm EDGE 850(1-Slot):26.79dBm, EDGE 1900(1-Slot):27.50dBm EDGE 850(2-Slot):26.00dBm, EDGE 1900(2-Slot):26.79dBm EDGE 850(3-Slot):25.22dBm, EDGE 1900(3-Slot):26.05dBm EDGE 850(4-Slot):24.44dBm, EDGE 1900(4-Slot):25.30dBm WCDMA Band V:22.16dBm, WCDMA Band II:21.83dBm
Type of Emission:	GSM(850): 250KGXW; PCS(1900): 248KGXW GPRS(850): 245KGXW; GPRS(1900): 245KGXW EDGE(850): 249KG7W; EDGE(1900): 245KG7W WCDMA850: 4M16F9W WCDMA1900: 4M15F9W
Modulation Characteristics:	GMSK for GSM/GPRS; GMSK and 8PSK for EDGE WCDMA: QPSK; HSDPA:QPSK/16QAM; HSUPA:BPSK
SIM Card:	Only support single SIM Card.
Antenna:	PIFA
Antenna gain:	GSM 850/1900: -0.23dBi , WCDMA 850/1900: 1.89dBi
Battery parameter:	Rated Voltage: 3.7V Charge Limit: 4.2V Capacity: 3200mAh



Adapter:	Input: AC 100-240V 50/60HZ 0.3A Output: DC 5V,1.5A
GPRS/EDGE Class:	Multi-Class12
Extreme Vol. Limits:	DC 3.33V~ DC 4.07(Normal: DC 3.7V)
Extreme Temp. Tolerance:	-30°C to +50°C
Hardware version number:	S706-9863A-V1.0-200723-C
Software version number:	XTR_X7_PE_V01_20200916
<i>** Note: The High Voltage 3.33V and Low Voltage 4.07V was declared by manufacturer, The EUT couldn't be operate normally with higher or lower voltage.</i>	







### 3 TEST CONFIGURATION OF EQUIPMENT UNDER TEST

Antenna port conducted and radiated test items were performed according to KDB 971168 D01 and ANSI C63.26 2015 Power Meas. License Digital Systems 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 and WCDMA Band V.
2. 30 MHz to 10th harmonic for GSM1900 and WCDMA Band II.

All modes and data rates and positions were investigated.

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

BAND	TEST MODES	
	RADIATED TCS	CONDUCTED TCS
GSM 850	GSM LINK	GSM LINK
	GPRS/EDGE CLASS 12 LINK	GPRS/EDGE CLASS 12 LINK
GSM 1900	GSM LINK	GSM LINK
	GPRS/EDGE CLASS 12 LINK	GPRS/EDGE CLASS 12 LINK
WCDMA BAND V	RMC 12.2KBPS LINK	RMC 12.2KBPS LINK
WCDMA BAND II	RMC 12.2KBPS LINK	RMC 12.2KBPS LINK

RF Function	Band	Mode	Modulation	Power Class	Ant Gain(dBi)	Ant Type	SIM Card
GSM	850	GSM	GMSK	4(power control level 5)	-0.23	PIFA	1 SIM 1 is used to tested.
		GPRS (Class12)	GMSK	4			
		EDGE(Class12)	GMSK, 8PSK	E2			
	1900	GSM	GMSK	1(power control level 0)			
		GPRS (Class12)	GMSK	1			
		EDGE(Class12)	GMSK, 8PSK	E2			
RF Function	Band	Mode	Modulation	Power Class	Ant Gain(dBi)	Ant Type	SIM Card
		WCDMA	QPSK				



## 4 MEASUREMENT INSTRUMENTS

## Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2019.10.09	2020.10.08
Signal Analyzer	Agilent	N9020A	MY51110105	2020.03.05	2021.03.04
Wireless Communications Test Set	R&S	CMW 500	133884	2020.03.05	2021.03.04
Bilog Antenna	TESEQ	CBL6111D	34678	2017.11.02	2020.11.01
Horn Antenna	SCHWARZBECK	BBHA 9120D(1201)	9120D-1343	2018.10.19	2021.10.18
Bilog Antenna	TESEQ	CBL6111D	45873	2018.10.26	2021.10.25
Horn Antenna	SCHWARZBECK	BBHA 9120D(1201)	9120D-2014	2019.10.15	2022.10.14
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	J211020657	2018.03.11	2021.03.10
Pre-Amplifier (0.1M-3GHz)	EM	EM330	060665	2019.10.09	2020.10.08
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2019.10.12	2020.10.11
Pre-Amplifier (18G-40GHz)	SKET	LNPA-1840-50	SK2018101801	2019.10.12	2020.10.11
Turn table	EM	SC100_1	60531	N/A	N/A
Antenna mast	EM	SC100	N/A	N/A	N/A
Temperature & Humidity	HH660	Mieo	N/A	2019.10.17	2020.10.16
Test SW	BULUN	BL410-E/18.905			

## RF Connected Test

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Universal Radio communication tester	R&S	CMU200	119907	2020.10.11	2021.10.10
Wireless Communications Test Set	R&S	CMW 500	133884	2020.03.05	2021.03.04
Signal Analyzer	Agilent	N9020A	MY49100060	2019.10.09	2020.10.08
Temperature & Humidity	HH660	Mieo	N/A	2019.10.17	2020.10.16
Test SW	FARAD	LZ-RF /LzRf-3A3			

Equipment with a calibration date of "NCR" shown in this list was not used to make direct calibrated measurements.

## 5 TEST ITEMS

### 5.1 CONDUCTED OUTPUT POWER

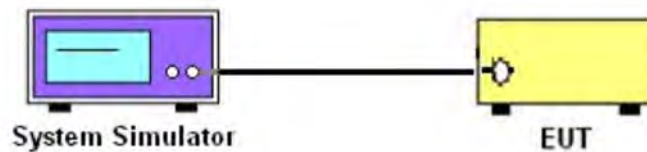
#### TEST OVERVIEW

A system simulator was used to establish communication with the EUT. Its parameters were set to enforce EUT transmitting at the maximum power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

#### TEST PROCEDURES

1. The transmitter output port was connected to the system simulator.
2. Set eut at maximum power through the system simulator.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.

#### TEST SETUP



#### TEST RESULT

Note: Test data See Appendix 1.

## 5.2 PEAK TO AVERAGE RATIO

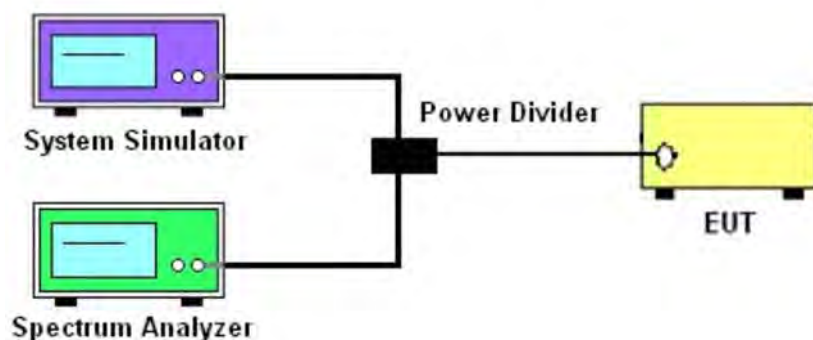
### TEST OVERVIEW

According to §24.232(d), power measurements for transmissions by stations authorized under this section may be made either in accordance with a commission-approved average power technique or in compliance with paragraph (e) of this section. In both instances, equipment employed must be authorized in accordance with the provisions of §24.51. In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 db.

### TEST PROCEDURES

1. The testing follows fcckdb 971168 v03r01 section.
2. The eut was connected to the spectrum analyzer and peak and av system simulator& spectrum analysis reads.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Set the test probe and measure average power of the spectrum analysis.

### TEST SETUP



### TEST RESULT

Note: Test data See Appendix 2.



### 5.3 TRANSMITTER RADIATED POWER (EIRP/ERP)

#### TEST OVERVIEW

Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI C63.26 2015 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at maximum power, and at the appropriate frequencies.

#### TEST PROCEDURE

1. The testing follows FCC KDB 971168 Section 5.8 and ANSI C63.26-2015 Section 5.2.
2. The transmitter was placed on a wooden turntable, and it was transmitting into a non-radiating load which was also placed on the turntable.
3. The measurement antenna was placed at a distance of 3 meters from the EUT. During the tests, the antenna height and polarization as well as EUT azimuth were varied in order to identify the maximum level of emissions from the EUT. The test was performed by placing the EUT on 3-orthogonal axis.
4. The frequency range up to tenth harmonic of the fundamental frequency was investigated.
5. Remove the EUT and replace it with substitution antenna. A signal generator was connected to the substitution antenna by a nonradiating cable. The absolute levels of the spurious emissions were measured by the substitution.
6. Effective Isotropic Radiated Power (EIRP) was measured by substitution method according to ANSI C63.26-2015. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna.  
 $EIRP = S.G \text{ Level} + \text{Gain} - \text{Cable loss}$ ;  $ERP = S.G \text{ Level} + \text{Gain} - \text{Cable loss} - 2.15$ .

#### TEST RESULT

Note: Test data See Appendix 3.

## 5.4 OCCUPIED BANDWIDTH

### TEST OVERVIEW

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

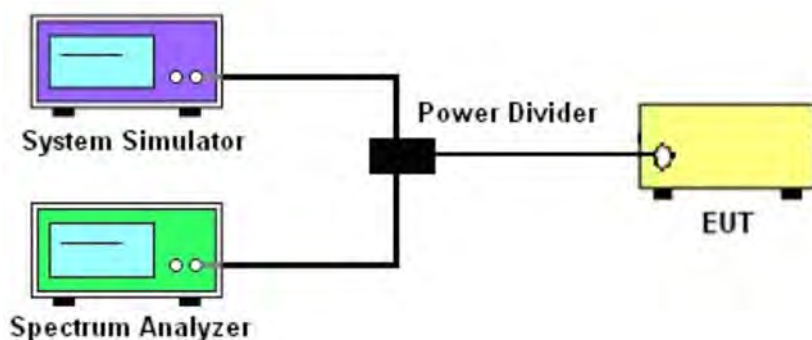
The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 Db below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth)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

All modes of operation were investigated and the worst case configuration results are reported in this section.

### TEST PROCEDURE

1. The signal analyzer's automatic bandwidth measurement capability was used to perform the 99% occupied bandwidth and the 26dB bandwidth. The bandwidth measurement was not influenced by any intermediate power nulls in the fundamental emission.
2. RBW = 1 – 5% of the expected OBW
3. VBW  $\geq 3 \times$  RBW
4. Detector = Peak
5. Trace mode = max hold
6. Sweep = auto couple
7. The trace was allowed to stabilize
8. If necessary, steps 2 – 7 were repeated after changing the RBW such that it would be within 1 – 5% of the 99% occupied bandwidth observed in Step 7

### TEST SETUP



### TEST RESULT

Note: Test data See Appendix 4.

## 5.5 FREQUENCY STABILITY

### TEST OVERVIEW

Frequency stability testing is performed in accordance with the guidelines of ANSI C63.26 2015. The frequency stability of the transmitter is measured by:

- a.) Temperature: The temperature is varied from  $-30^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  in  $10^{\circ}\text{C}$  increments using an environmental chamber.
- b.) Primary Supply Voltage: The primary supply voltage is varied from 85% to 115% of the nominal value for non hand-carried battery and AC powered equipment. For hand-carried, battery-powered equipment, primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacturer.

For Part 22, the frequency stability of the transmitter shall be maintained within  $\pm 0.00025\%$  ( $\pm 2.5$  ppm) of the center frequency. For Part 24 the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

### TEST PROCEDURE

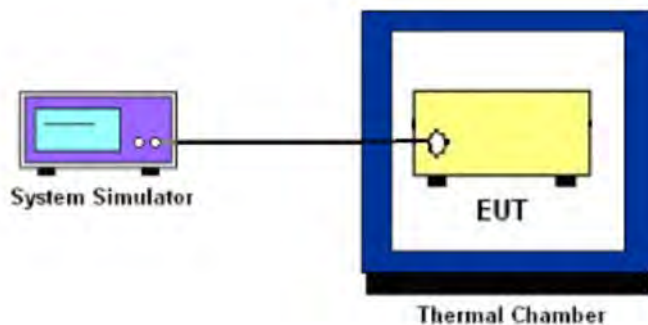
#### Temperature Variation

1. The testing follows fccdb 971168 D01 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  $-30^{\circ}\text{C}$  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  $10^{\circ}\text{C}$  steps up to  $50^{\circ}\text{C}$ . 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.

#### Voltage Variation

1. The testing follows FCC KDB 971168 D01 Section 9.0.
2. The EUT was placed in a temperature chamber at  $25\pm 5^{\circ}\text{C}$  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.

### TEST SETUP



### TEST RESULT

Note: Test data See Appendix 5.

## 5.6 SPURIOUS EMISSIONS AT ANTENNA TERMINALS

### TEST OVERVIEW

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.

### TEST PROCEDURE

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0 and ANSI C63.26-2015-Section 5.5.
2. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.
4. The middle channel for the highest RF power within the transmitting frequency was measured.
5. The conducted spurious emission for the whole frequency range was taken.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

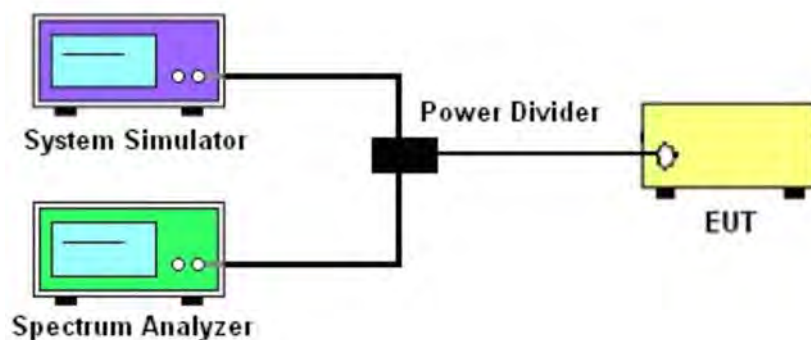
7. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)

$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$

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

$$= -13\text{dBm.}$$

### TEST SETUP



### TEST RESULT

Note: Test data See Appendix 6.



## 5.7 BAND EDGE

### TEST OVERVIEW

All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated and the worst case configuration results are reported in this section.

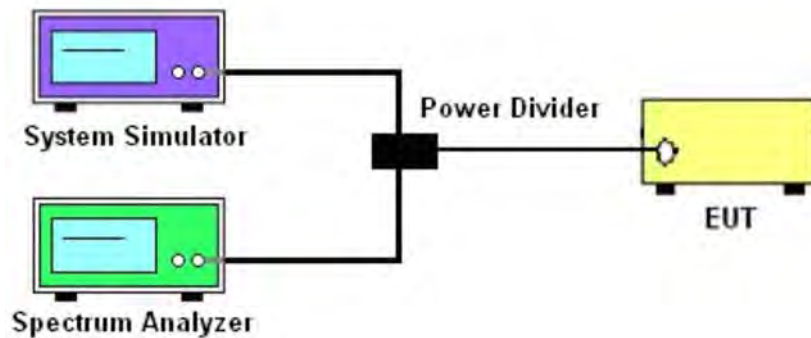
The minimum permissible attenuation level of any spurious emission is  $43 + \log_{10}(P[\text{Watts}])$ , where P is the transmitter power in Watts.

### TEST PROCEDURE

1. The testing FCC KDB 971168 D01 v03r01 Section 6.0 and ANSI C63.26-2015-Section 5.7.
2. Start and stop frequency were set such that the band edge would be placed in the center of the Plot.
3. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
4. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated to the results for each measurement.
5. The band edges of low and high channels for the highest RF powers were measured.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

7. The limit line is derived from  $43 + 10\log(P)$  dB below the transmitter power P(Watts)  
 $= P(\text{W}) - [43 + 10\log(P)] (\text{dB})$   
 $= [30 + 10\log(P)] (\text{dBm}) - [43 + 10\log(P)] (\text{dB})$   
 $= -13\text{dBm}.$

### TEST SETUP



### TEST RESULT

Note: Test data See Appendix 7.



## 5.8 FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

### TEST OVERVIEW

Radiated spurious emissions measurements are performed using the substitution method described in ANSI C63.26-2015 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using horizontally and vertically polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized horn antennas. All measurements are performed as peak measurements while the EUT is operating at maximum power and at the appropriate frequencies.

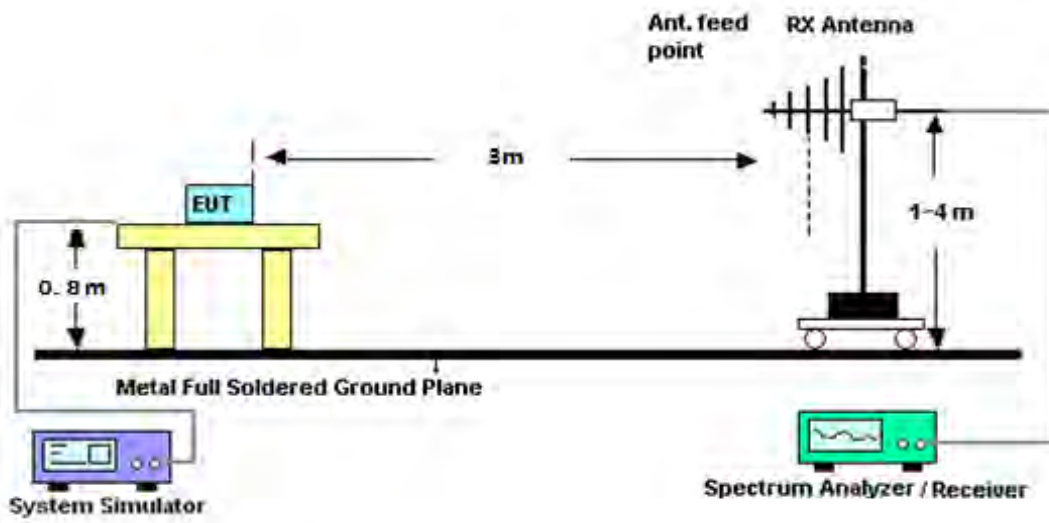
It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

### TEST PROCEDURE

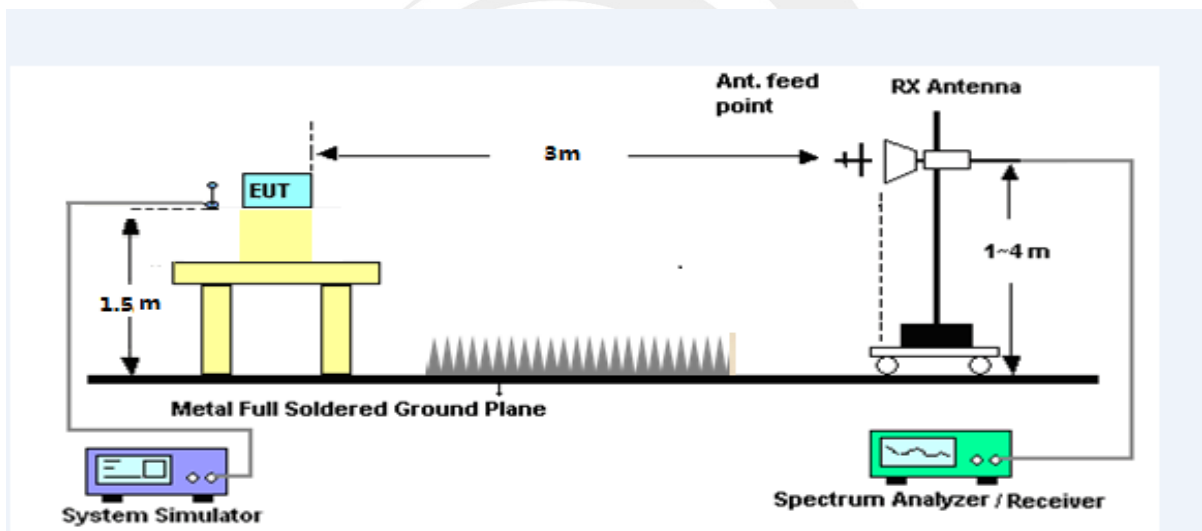
1. The testing FCC KDB 971168 D01 Section 5.8 and ANSI C63.26-2015-Section 5.5.
2. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
3. VBW  $\geq 3 \times$  RBW
4. Span = 1.5 times the OBW
5. No. of sweep points  $> 2 \times$  span/RBW
6. Detector = Peak
7. Trace mode = max hold
8. The trace was allowed to stabilize
9. Effective Isotropic Spurious Radiation was measured by substitution method according to TIA/EIA-603-E. The EUT was replaced by the substitution antenna at same location, and then a known power from S.G. was applied into the dipole antenna through a Tx cable, and then recorded the maximum Analyzer reading through raised and lowered the test antenna.  
 $P_{Mea} = S.G \text{ Level} + \text{Ant-Cable loss}$ ;  $\text{Margin} = P_{Mea} - \text{Limit}$ .

**TEST SETUP**

For radiated test from 30MHz to 1GHz



For radiated test from above 1GHz



**TEST RESULT**

Note: Test data See Appendix 8.



APPENDIX A.TESTRESULT  
A1. CONDUCTED OUTPUT POWER

GSM 850:

GSM 850		
Mode	Frequency (MHz)	AVG Power(dBm)
GSM (GMSK,1-Slot)	824.2	31.64
	836.6	32.18
	848.8	32.49
GPRS (GMSK,1-Slot)	824.2	31.89
	836.6	32.02
	848.8	32.29
GPRS (GMSK,2-Slot)	824.2	31.45
	836.6	31.58
	848.8	31.86
GPRS (GMSK,3-Slot)	824.2	30.96
	836.6	31.13
	848.8	31.39
GPRS (GMSK,4-Slot)	824.2	30.51
	836.6	30.63
	848.8	30.98
EGPRS (8PSK,1-Slot)	824.2	26.17
	836.6	26.55
	848.8	26.79
EGPRS (8PSK,2-Slot)	824.2	25.47
	836.6	25.85
	848.8	26.00
EGPRS (8PSK,3-Slot)	824.2	24.68
	836.6	25.05
	848.8	25.22
EGPRS (8PSK,4-Slot)	824.2	23.97
	836.6	24.35
	848.8	24.44



PCS 1900:

PCS 1900		
Mode	Frequency (MHz)	AVG Power(dBm)
GSM (GMSK,1-Slot)	1850.2	27.40
	1880.0	27.46
	1909.8	27.40
GPRS (GMSK,1-Slot)	1850.2	27.03
	1880.0	26.82
	1909.8	27.02
GPRS (GMSK,2-Slot)	1850.2	26.56
	1880.0	26.38
	1909.8	26.56
GPRS (GMSK,3-Slot)	1850.2	26.09
	1880.0	25.95
	1909.8	26.13
GPRS (GMSK,4-Slot)	1850.2	25.59
	1880.0	25.47
	1909.8	25.68
EGPRS (8PSK,1-Slot)	1850.2	27.50
	1880.0	26.81
	1909.8	26.68
EGPRS (8PSK,2-Slot)	1850.2	26.79
	1880.0	26.04
	1909.8	25.90
EGPRS (8PSK,3-Slot)	1850.2	26.05
	1880.0	25.25
	1909.8	25.18
EGPRS (8PSK,4-Slot)	1850.2	25.30
	1880.0	24.45
	1909.8	24.41



## UMTS BAND V

UMTS BAND V		
Mode	Frequency(MHz)	AVG Power
WCDMA 850 RMC	826.4	22.04
	836.6	22.16
	846.6	21.63
HSDPA Subtest 1	826.4	21.40
	836.6	20.57
	846.6	21.46
HSDPA Subtest 2	826.4	20.97
	836.6	20.16
	846.6	21.01
HSDPA Subtest 3	826.4	20.48
	836.6	19.68
	846.6	20.67
HSDPA Subtest 4	826.4	20.15
	836.6	19.36
	846.6	20.25
HSUPA Subtest 1	826.4	20.88
	836.6	21.78
	846.6	21.64
HSUPA Subtest 2	826.4	20.08
	836.6	20.84
	846.6	20.70
HSUPA Subtest 3	826.4	19.92
	836.6	20.35
	846.6	20.29
HSUPA Subtest 4	826.4	19.55
	836.6	19.89
	846.6	19.82
HSUPA Subtest 5	826.4	18.05
	836.6	18.45
	846.6	18.33



## UMTS BAND II

UMTS BAND II		
Mode	Frequency(MHz)	AVG Power
WCDMA 1900 RMC	1852.4	21.76
	1880	21.52
	1907.6	21.83
HSDPA Subtest 1	1852.4	20.50
	1880	20.87
	1907.6	20.84
HSDPA Subtest 2	1852.4	20.09
	1880	20.40
	1907.6	20.40
HSDPA Subtest 3	1852.4	19.71
	1880	19.99
	1907.6	19.93
HSDPA Subtest 4	1852.4	19.25
	1880	19.52
	1907.6	19.62
HSUPA Subtest 1	1852.4	21.54
	1880	21.81
	1907.6	21.63
HSUPA Subtest 2	1852.4	20.62
	1880	20.91
	1907.6	20.65
HSUPA Subtest 3	1852.4	20.47
	1880	20.49
	1907.6	20.19
HSUPA Subtest 4	1852.4	19.98
	1880	20.06
	1907.6	19.79
HSUPA Subtest 5	1852.4	18.57
	1880	18.60
	1907.6	18.36



## A2. PEAK-TO-AVERAGE RADIO

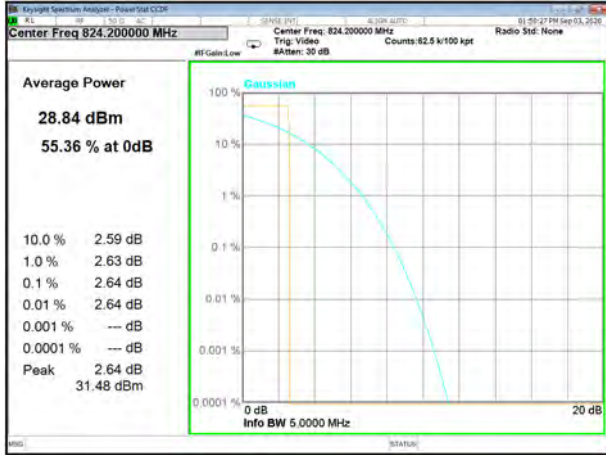
GSM 850		
Mode	Frequency (MHz)	PAR
GSM 850	824.2	2.64
	836.6	2.64
	848.8	2.63
GPRS 850	824.2	2.70
	836.6	2.64
	848.8	2.62
EGPRS 850	824.2	2.61
	836.6	2.61
	848.8	2.60

PCS 1900		
Mode	Frequency (MHz)	PAR
PCS1900	1850.2	2.62
	1880	2.63
	1909.8	2.61
GPRS1900	1850.2	2.62
	1880	3.21
	1909.8	2.62
EGPRS1900	1850.2	2.62
	1880	2.61
	1909.8	2.59

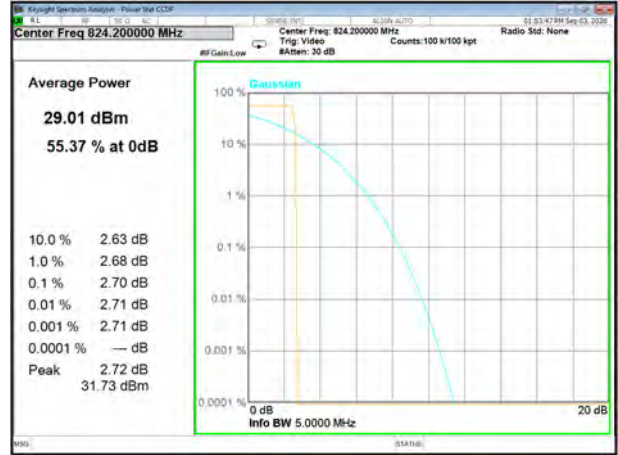
UMTS Band II		
Mode	Frequency (MHz)	PAR
WCDMA 1900 RMC	1852.4	2.90
	1880	2.96
	1907.6	2.94
HSDPA 1900	1852.4	3.18
	1880	3.23
	1907.6	3.21
HSUPA 1900	1852.4	3.09
	1880	3.13
	1907.6	3.04

UMTS Band V		
Mode	Frequency (MHz)	PAR
WCDMA 850 RMC	826.4	3.08
	836.6	2.89
	846.6	3.05
HSDPA 850	826.4	3.28
	836.6	3.07
	846.6	3.18
HSUPA 850	826.4	3.22
	836.6	3.16
	846.6	3.19

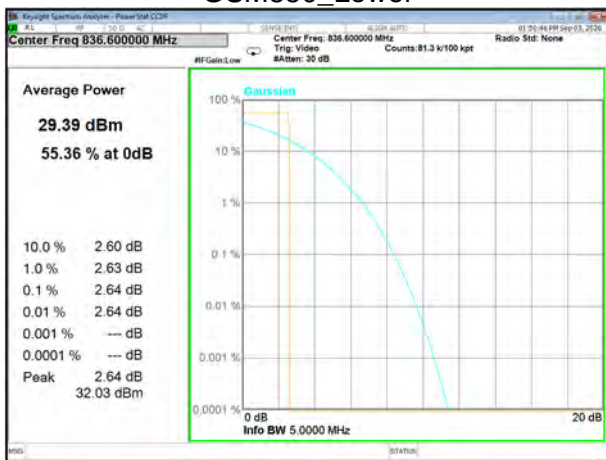




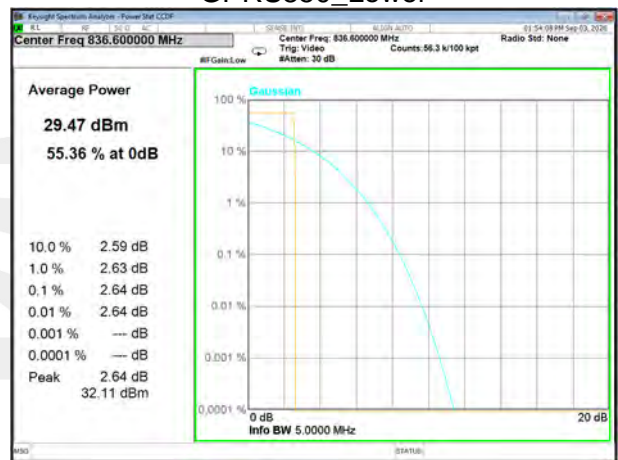
GSM850\_Lower



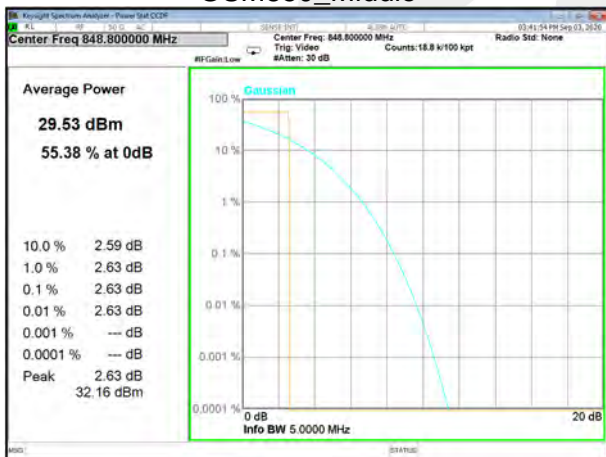
GPRS850\_Lower



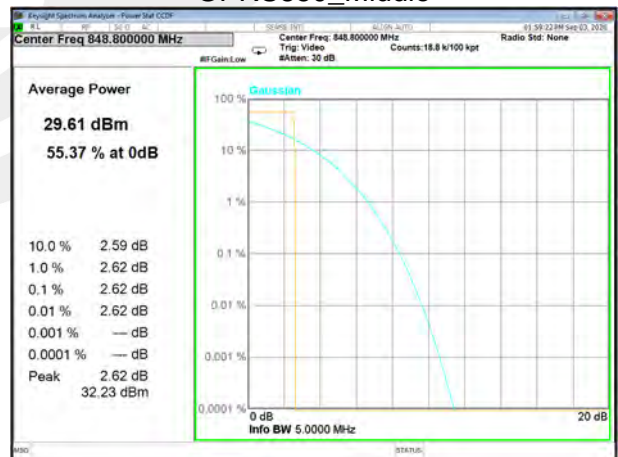
GSM850\_Middle



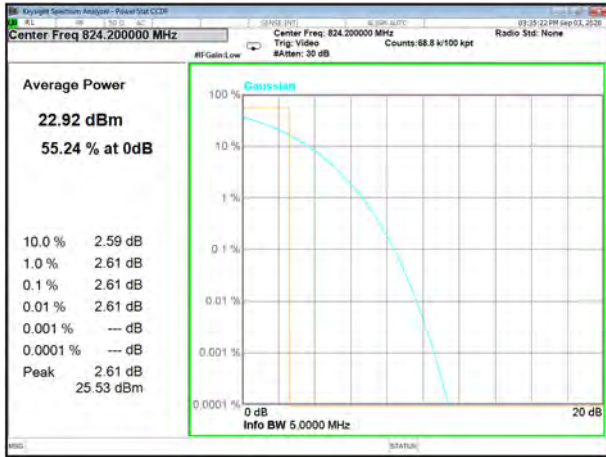
GPRS850\_Middle



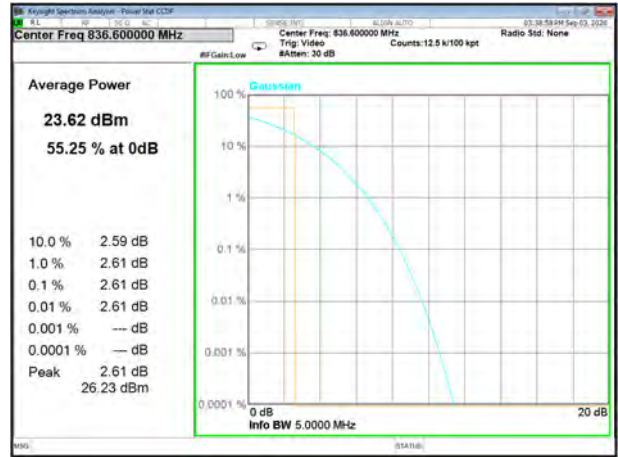
GSM850\_Higher



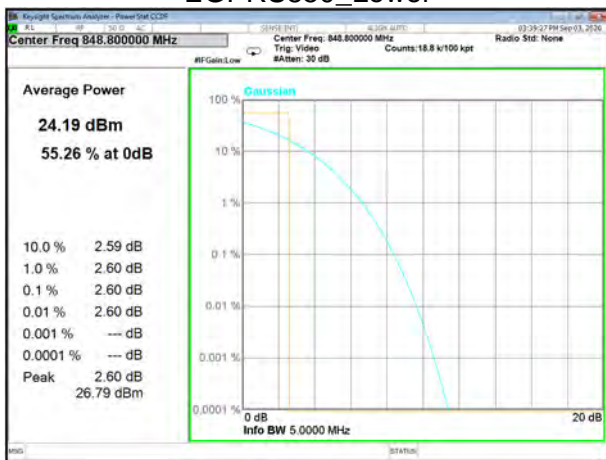
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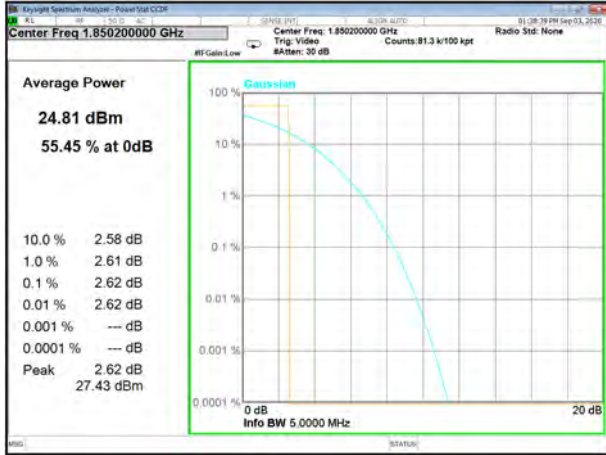
EGPRS850\_Lower



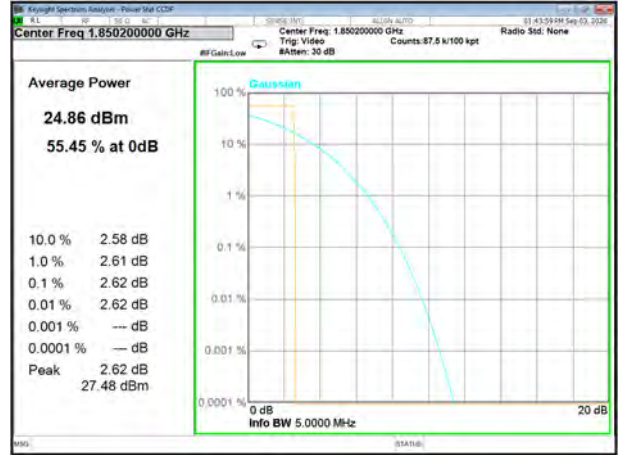
EGPRS850\_Middle



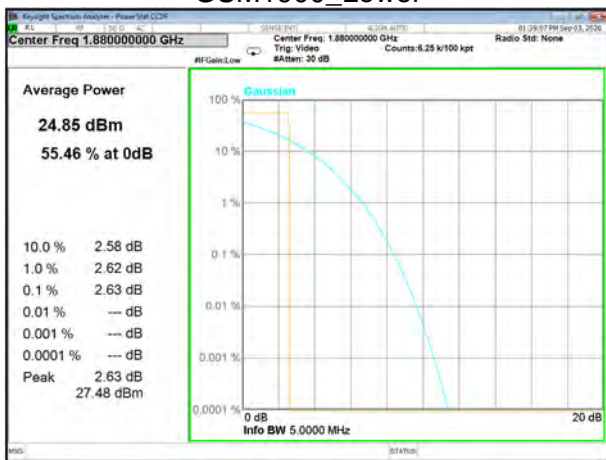
EGPRS850\_Higher



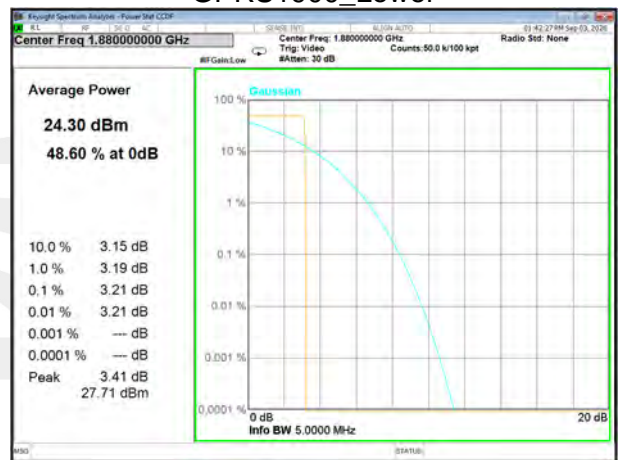
GSM1900\_Lower



GPRS1900\_Lower



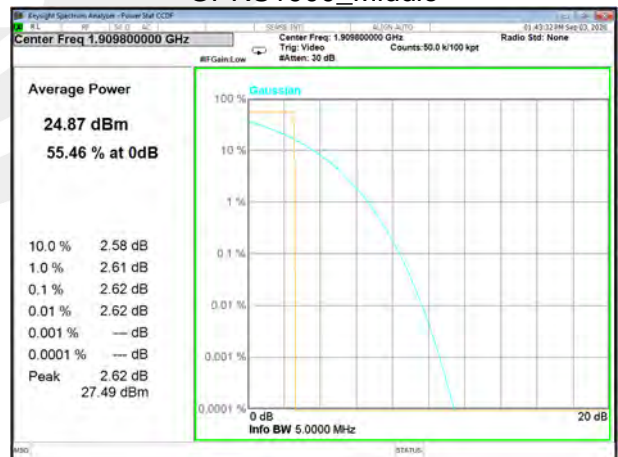
GSM1900\_Middle



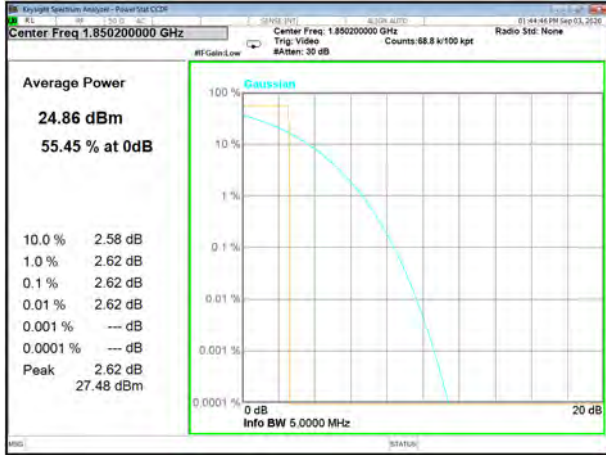
GPRS1900\_Middle



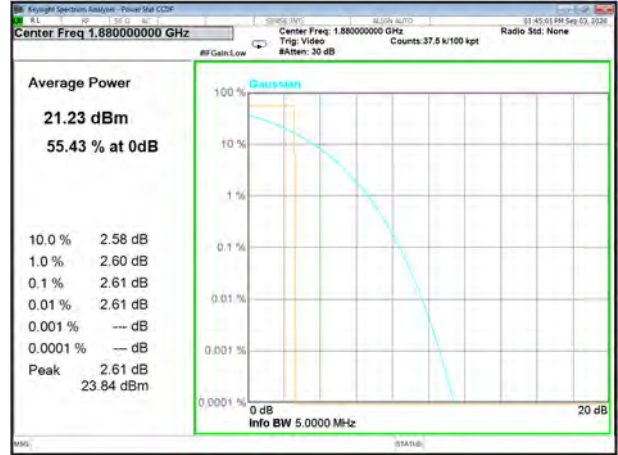
GSM1900\_Higher



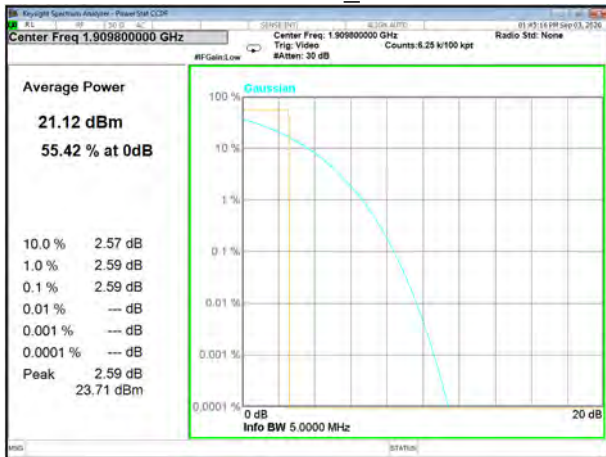
GPRS1900\_Higher



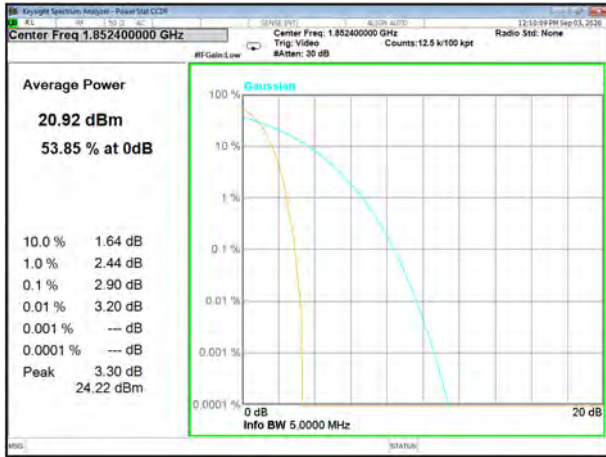
EGPRS1900\_Lower



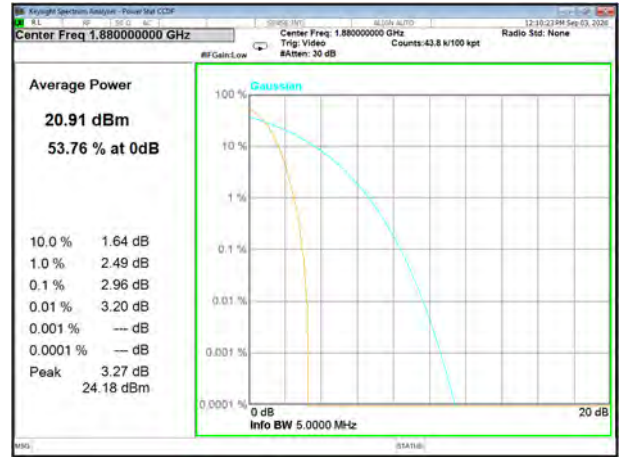
EGPRS1900\_Middle



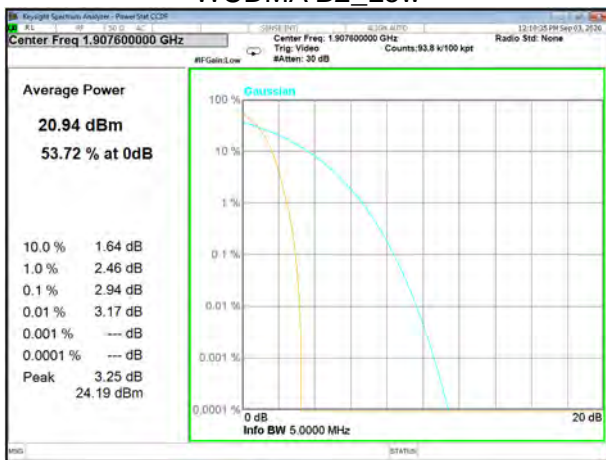
EGPRS1900\_Higher



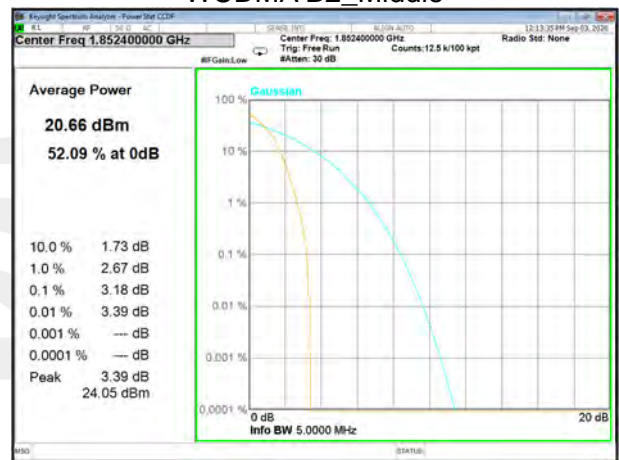
WCDMA B2\_Low



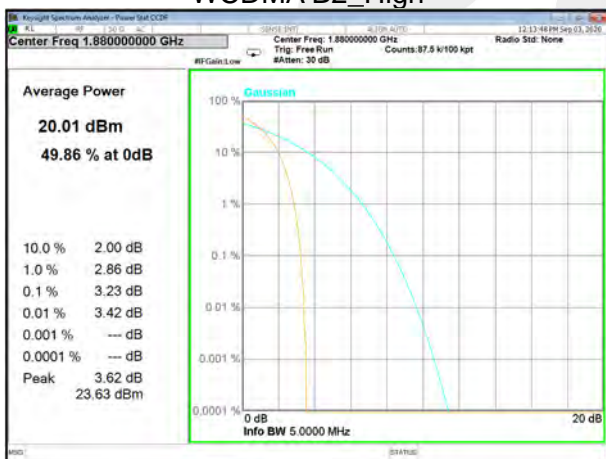
WCDMA B2\_Middle



WCDMA B2\_High



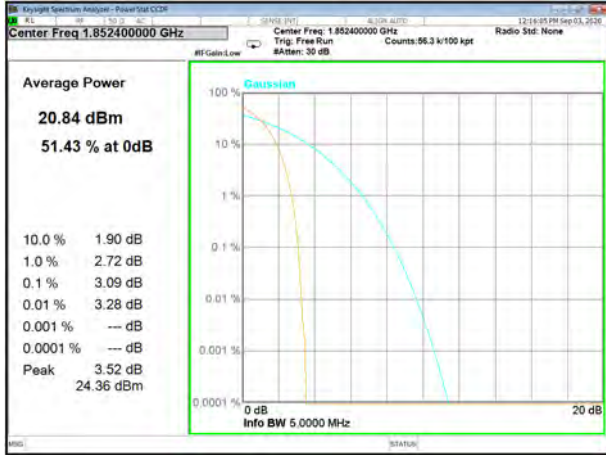
HSDPA B2\_Low



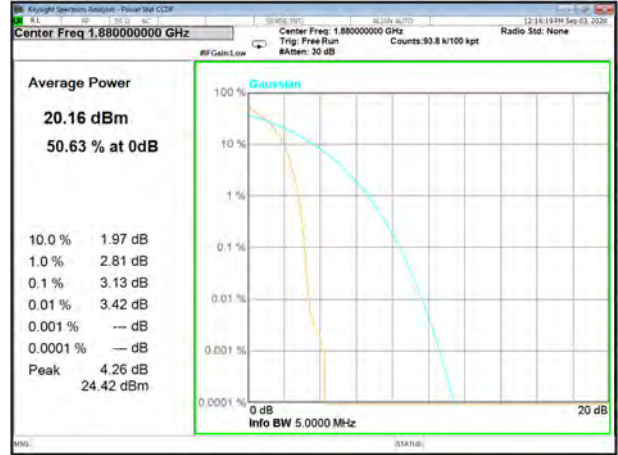
HSDPA B2\_Middle



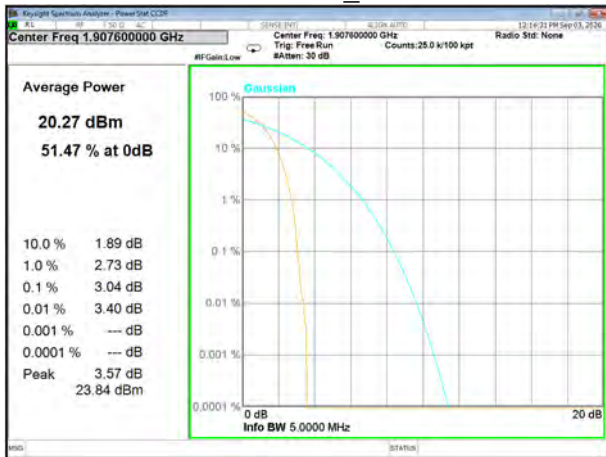
HSDPA B2\_High



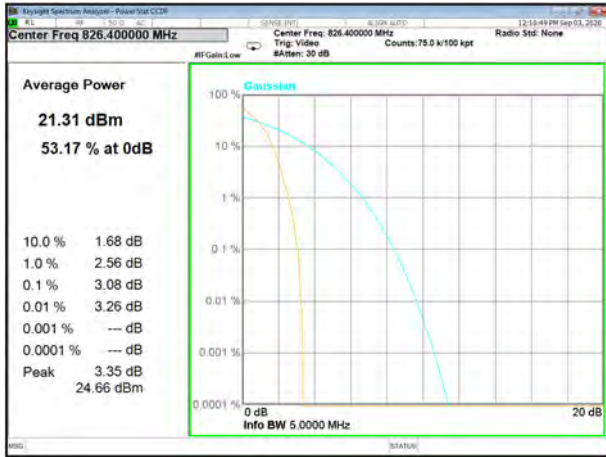
HSPA B2\_Low



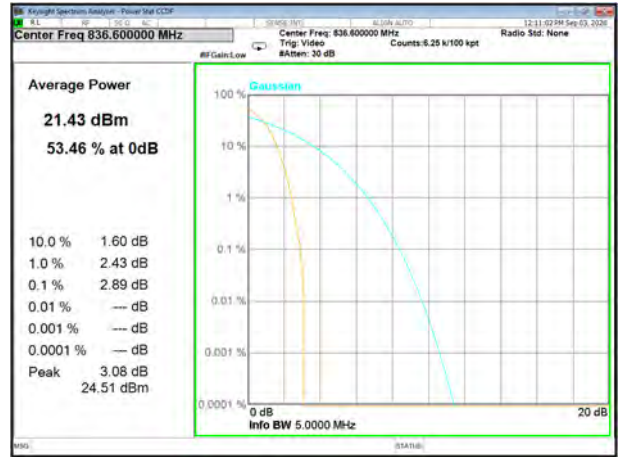
HSPA B2\_Middle



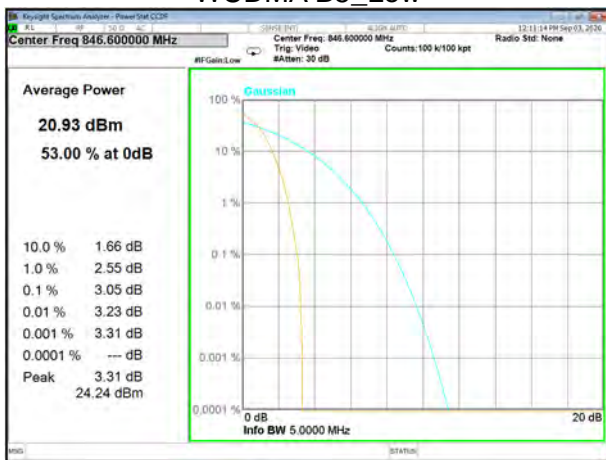
HSPA B2\_High



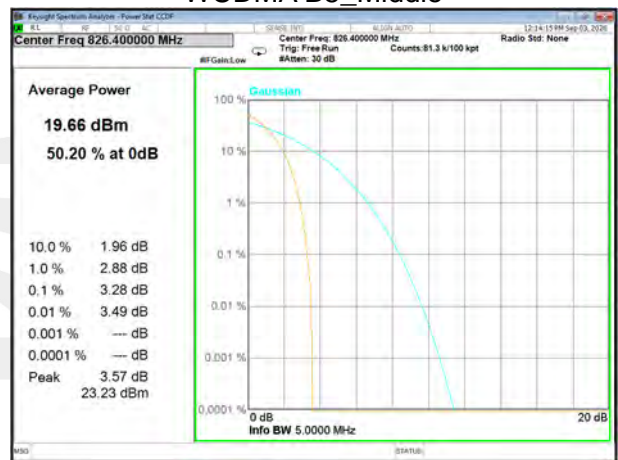
WCDMA B5\_Low



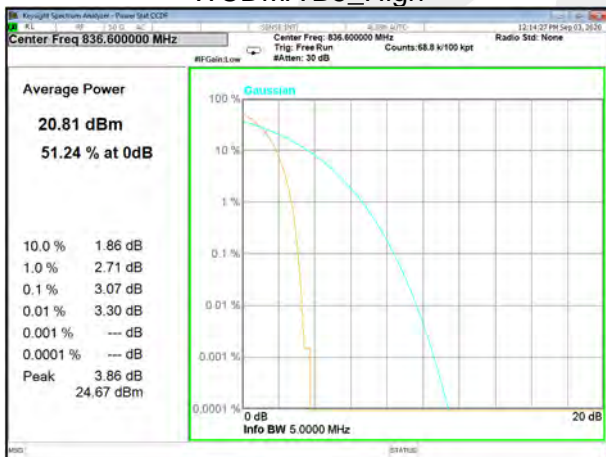
WCDMA B5\_Middle



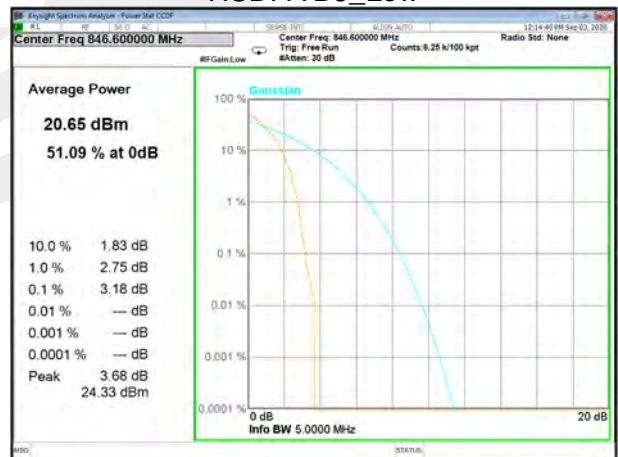
WCDMA B5\_High



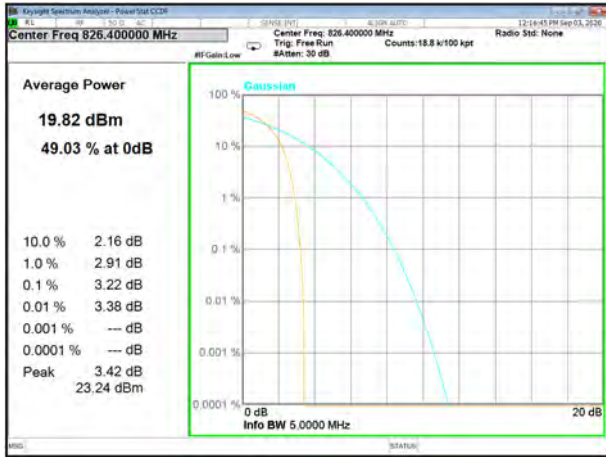
HSDPA B5\_Low



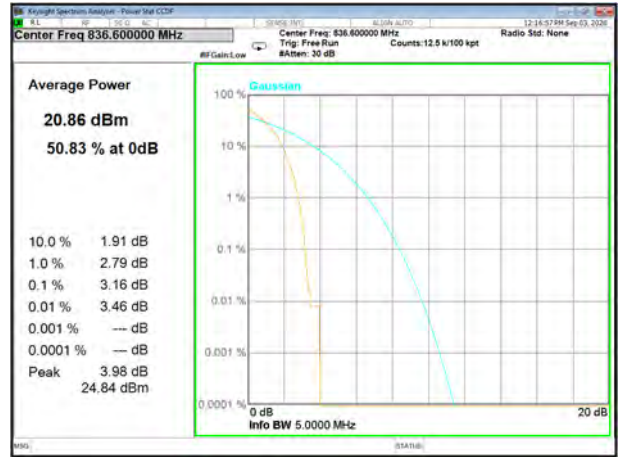
HSDPA B5\_Middle



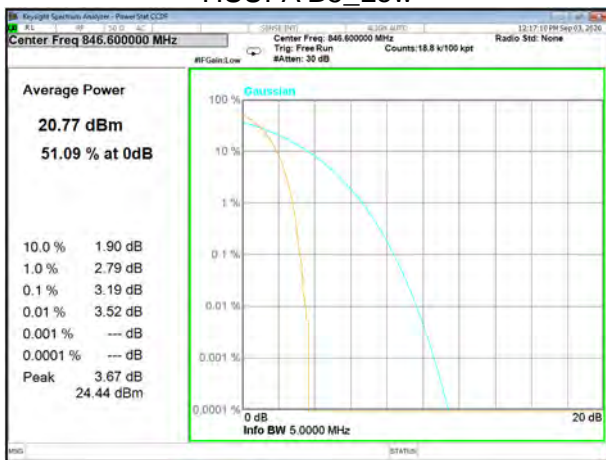
HSDPA B5\_High



HSPA B5\_Low



HSPA B5\_Middle



HSPA B5\_High





A3. TRANSMITTER RADIATED POWER (EIRP/ERP)

Note: Test is divided into three directions, X/Y/Z. X pattern for the worst

Radiated Power (ERP) for GSM 850 MHZ								
Mode	Frequency	Result						Conclusion
		S G.Level (dBm)	Cable loss	Gain(dBi)	correction factor(dB)	PMeas E.R.P(dBm)	Polarization Of Max. ERP	
GSM850	824.2	25.35	0.44	6.5	2.15	29.26	Horizontal	Pass
	824.2	27.20	0.44	6.5	2.15	31.11	Vertical	Pass
	836.6	25.59	0.45	6.5	2.15	29.49	Horizontal	Pass
	836.6	27.45	0.45	6.5	2.15	31.35	Vertical	Pass
	848.8	26.19	0.46	6.5	2.15	30.08	Horizontal	Pass
	848.8	28.06	0.46	6.5	2.15	31.95	Vertical	Pass
GPRS850	824.2	24.72	0.44	6.5	2.15	28.63	Horizontal	Pass
	824.2	27.20	0.44	6.5	2.15	31.11	Vertical	Pass
	836.6	25.27	0.45	6.5	2.15	29.17	Horizontal	Pass
	836.6	27.33	0.45	6.5	2.15	31.23	Vertical	Pass
	848.8	25.25	0.46	6.5	2.15	29.14	Horizontal	Pass
	848.8	27.68	0.46	6.5	2.15	31.57	Vertical	Pass
EGPRS850	824.2	19.70	0.44	6.5	2.15	23.61	Horizontal	Pass
	824.2	21.73	0.44	6.5	2.15	25.64	Vertical	Pass
	836.6	19.77	0.45	6.5	2.15	23.67	Horizontal	Pass
	836.6	22.02	0.45	6.5	2.15	25.92	Vertical	Pass
	848.8	19.97	0.46	6.5	2.15	23.86	Horizontal	Pass
	848.8	22.36	0.46	6.5	2.15	26.25	Vertical	Pass
Limit	ERP<7W=38.45dBm							

Radiated Power (EIRP) for PCS 1900 MHZ							
Mode	Frequency	Result					Conclusion
		S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.I.R.P.(dBm)	Polarization Of Max. EIRP	
PCS1900	1850.2	16.8	2.41	10.35	24.74	Horizontal	Pass
	1850.2	18.75	2.41	10.35	26.69	Vertical	Pass
	1880	16.92	2.42	10.35	24.85	Horizontal	Pass
	1880	18.65	2.42	10.35	26.58	Vertical	Pass
	1909.8	17.08	2.43	10.35	25.00	Horizontal	Pass
	1909.8	18.88	2.43	10.35	26.80	Vertical	Pass
GPRS1900	1850.2	15.41	2.41	10.35	23.35	Horizontal	Pass
	1850.2	17.91	2.41	10.35	25.85	Vertical	Pass
	1880	15.47	2.42	10.35	23.40	Horizontal	Pass
	1880	17.89	2.42	10.35	25.82	Vertical	Pass
	1909.8	15.54	2.43	10.35	23.46	Horizontal	Pass
	1909.8	17.96	2.43	10.35	25.88	Vertical	Pass
EGPRS1900	1850.2	16.76	2.41	10.35	24.70	Horizontal	Pass
	1850.2	18.99	2.41	10.35	26.93	Vertical	Pass
	1880	15.58	2.42	10.35	23.51	Horizontal	Pass
	1880	18.08	2.42	10.35	26.01	Vertical	Pass
	1909.8	16.05	2.43	10.35	23.97	Horizontal	Pass
	1909.8	18.12	2.43	10.35	26.04	Vertical	Pass
Limit	EIRP<2W=33dBm						



Radiated Power (EIRP) for WCDMA Band II								
Mode	Frequency	Result					Polarization Of Max. EIRP	Conclusion
		S G.Level (dBm)	Cable loss	Gain (dBi)	PMeas E.I.R.P.(dBm)			
WCDMA	1852.4	11.34	2.41	10.35	19.28	Horizontal	Pass	
	1852.4	13.3	2.41	10.35	21.24	Vertical	Pass	
	1880	11.17	2.42	10.35	19.10	Horizontal	Pass	
	1880	13.09	2.42	10.35	21.02	Vertical	Pass	
	1907.4	11.22	2.43	10.35	19.14	Horizontal	Pass	
	1907.4	13.09	2.43	10.35	21.01	Vertical	Pass	
HSUPA	1852.4	9.8	2.41	10.35	17.74	Horizontal	Pass	
	1852.4	11.77	2.41	10.35	19.71	Vertical	Pass	
	1880	10.27	2.42	10.35	18.20	Horizontal	Pass	
	1880	12.21	2.42	10.35	20.14	Vertical	Pass	
	1907.4	10.49	2.43	10.35	18.41	Horizontal	Pass	
	1907.4	12.31	2.43	10.35	20.23	Vertical	Pass	
HSDPA	1852.4	11.04	2.41	10.35	18.98	Horizontal	Pass	
	1852.4	12.99	2.41	10.35	20.93	Vertical	Pass	
	1880	11.41	2.42	10.35	19.34	Horizontal	Pass	
	1880	13.22	2.42	10.35	21.15	Vertical	Pass	
	1907.4	11.29	2.43	10.35	19.21	Horizontal	Pass	
	1907.4	13.07	2.43	10.35	20.99	Vertical	Pass	
Limit	EIRP<2W=33dBm							

Radiated Power (ERP) for WCDMA Band V								
Mode	Frequency	Result					Polarization Of Max. ERP	Conclusion
		S G.Level (dBm)	Cable loss	Gain (dBi)	correction factor(dB)	PMeas E.R.P.(dBm)		
WCDMA	826.4	15.69	0.44	6.5	2.15	19.60	Horizontal	Pass
	826.4	17.51	0.44	6.5	2.15	21.42	Vertical	Pass
	836.6	15.78	0.45	6.5	2.15	19.68	Horizontal	Pass
	836.6	17.74	0.45	6.5	2.15	21.64	Vertical	Pass
	846.4	15.15	0.46	6.5	2.15	19.04	Horizontal	Pass
	846.4	17.10	0.46	6.5	2.15	20.99	Vertical	Pass
HSUPA	826.4	14.91	0.44	6.5	2.15	18.82	Horizontal	Pass
	826.4	16.83	0.44	6.5	2.15	20.74	Vertical	Pass
	836.6	14.20	0.45	6.5	2.15	18.10	Horizontal	Pass
	836.6	15.90	0.45	6.5	2.15	19.80	Vertical	Pass
	846.4	15.29	0.46	6.5	2.15	19.18	Horizontal	Pass
	846.4	17.07	0.46	6.5	2.15	20.96	Vertical	Pass
HSDPA	826.4	14.35	0.44	6.5	2.15	18.26	Horizontal	Pass
	826.4	16.24	0.44	6.5	2.15	20.15	Vertical	Pass
	836.6	15.27	0.45	6.5	2.15	19.17	Horizontal	Pass
	836.6	17.24	0.45	6.5	2.15	21.14	Vertical	Pass
	846.4	15.32	0.46	6.5	2.15	19.21	Horizontal	Pass
	846.4	17.16	0.46	6.5	2.15	21.05	Vertical	Pass
Limit	ERP<7W=38.45dBm							



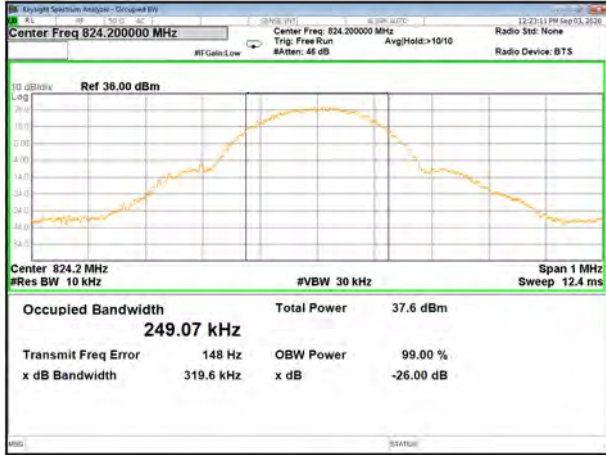
A4. OCCUPIED BANDWIDTH (99% OCCUPIED BANDWIDTH/26dB BANDWIDTH)

GSM Bandwidth [KHz]						
Mode	Lowest		Middle		Highest	
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
GSM850	249.07	319.6	249.76	317.4	246.66	317.2
GPRS850	244.68	316.3	242.39	315.4	241.51	312
EGPRS850	248.67	317.7	245.03	309.9	244.36	322.2

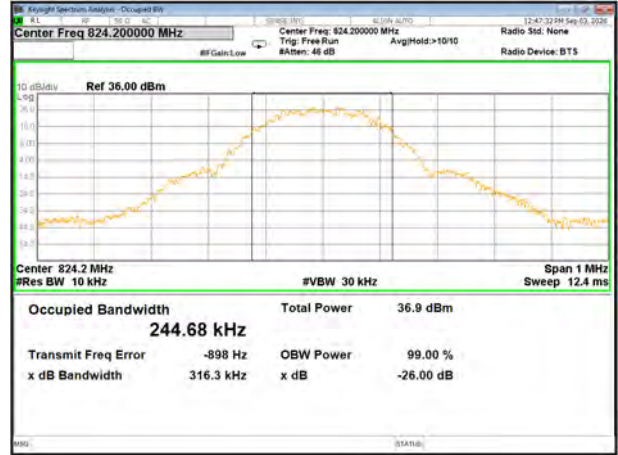
GSM Bandwidth [KHz]						
Mode	Lowest		Middle		Highest	
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
GSM1900	247.77	315.6	245.98	311.6	244.63	317.2
GPRS1900	245.41	327	241.62	315.7	243.62	308.4
EGPRS1900	244.69	312.4	243.2	310.1	239.65	313.2

WCDMA Bandwidth [MHz]						
Mode	Lowest		Middle		Highest	
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
WCDMA II	4.135	4.645	4.145	4.639	4.15	4.647
HSDPA II	4.137	4.643	4.144	4.644	4.15	4.645
HSUPA II	4.154	4.634	4.151	4.639	4.155	4.645

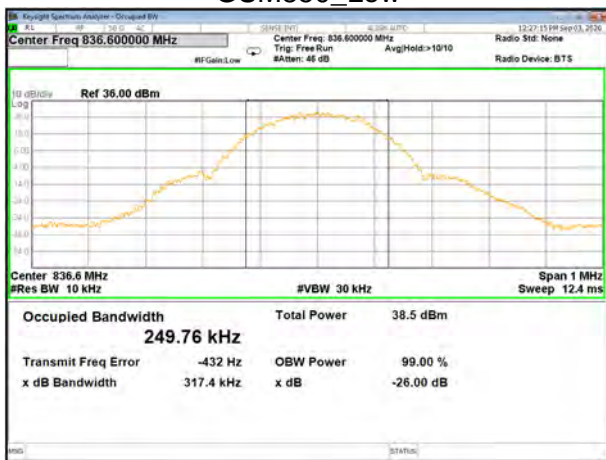
WCDMA Bandwidth [MHz]						
Mode	Lowest		Middle		Highest	
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
WCDMA V	4.15	4.653	4.135	4.641	4.145	4.646
HSDPA V	4.157	4.65	4.136	4.65	4.1311	4.63
HSUPA V	4.159	4.642	4.136	4.645	4.137	4.633



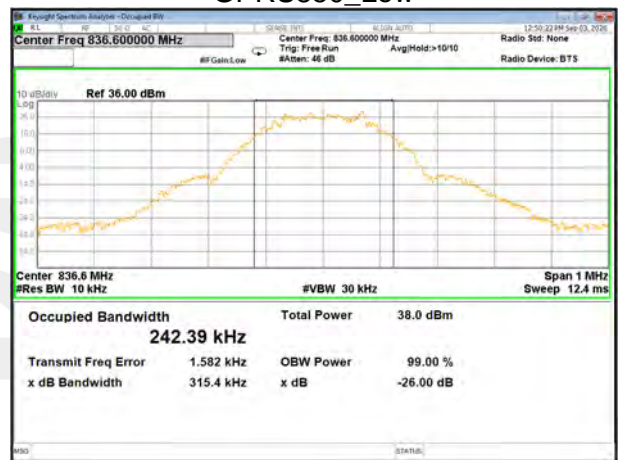
GSM850\_Low



GPRS850\_Low



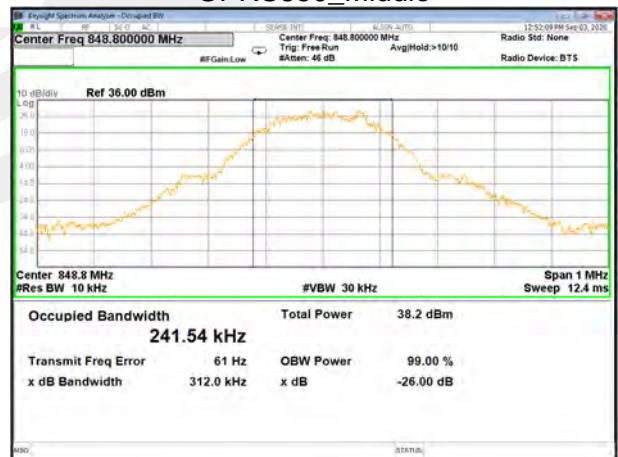
GSM850\_Middle



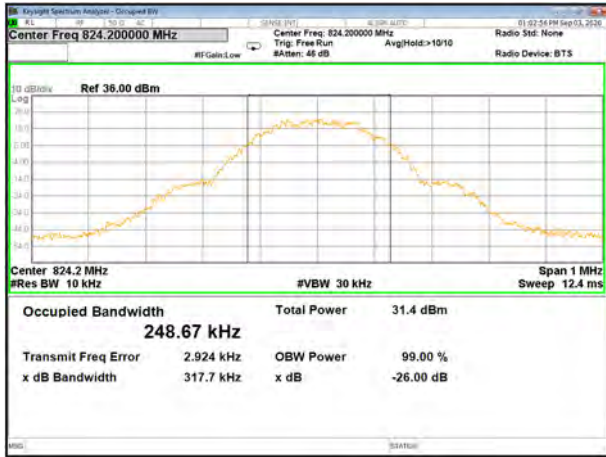
GPRS850\_Middle



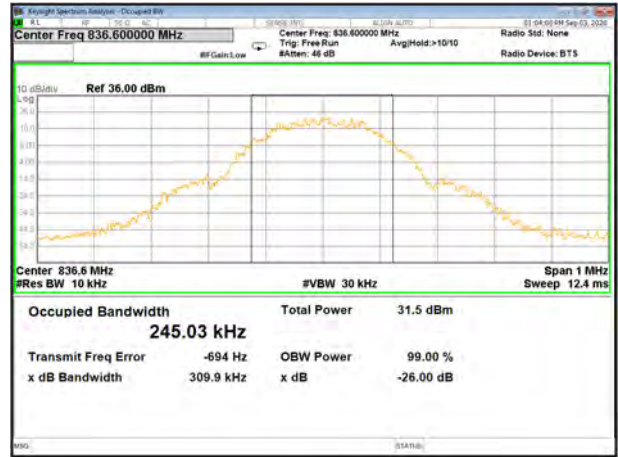
GSM850\_High



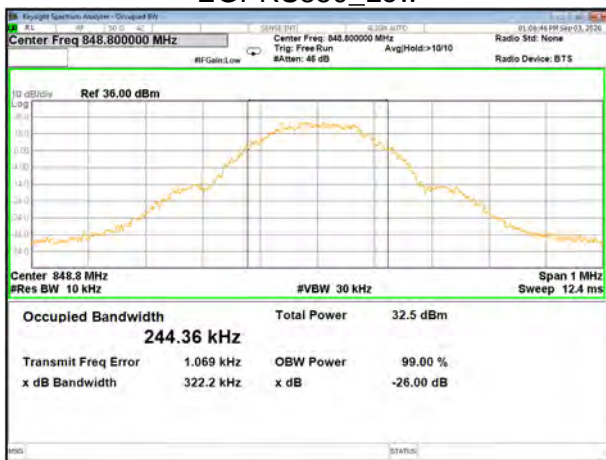
GPRS850\_High



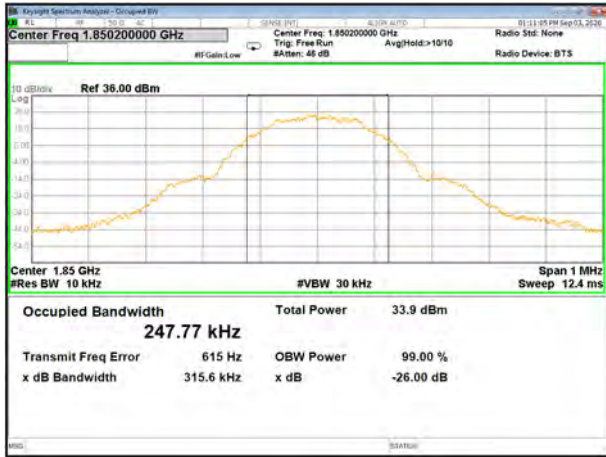
EGPRS850\_Low



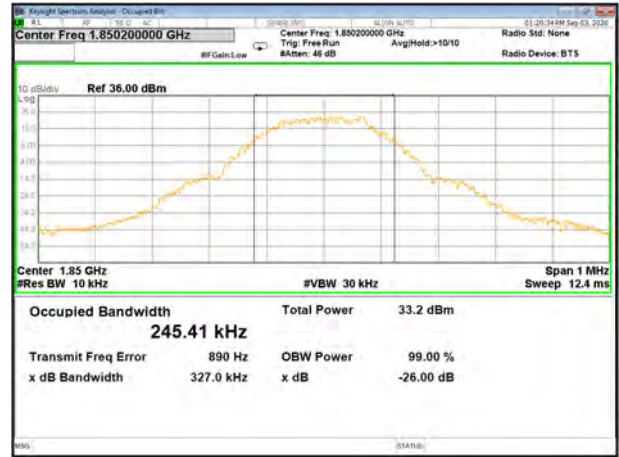
EGPRS850\_Middle



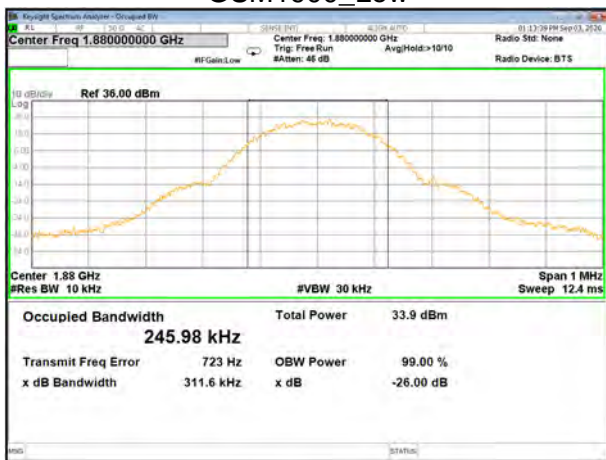
EGPRS850\_High



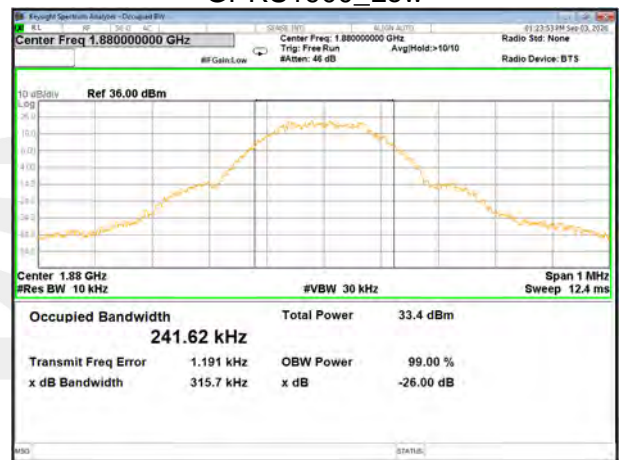
GSM1900\_Low



GPRS1900\_Low



GSM1900\_Middle



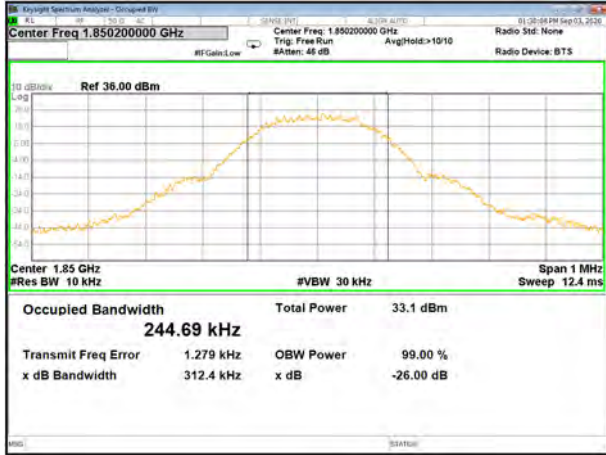
GPRS1900\_Middle



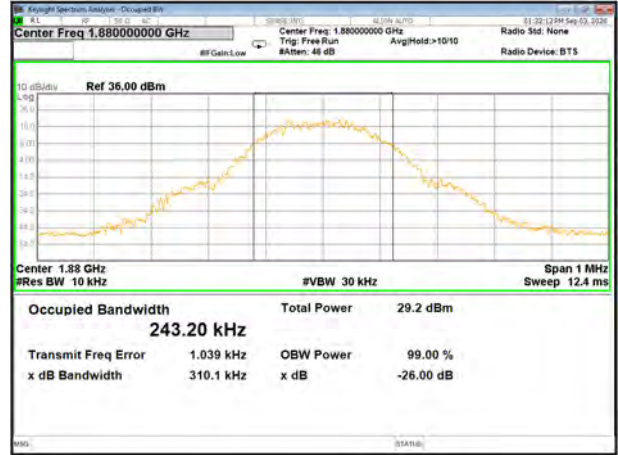
GSM1900\_High



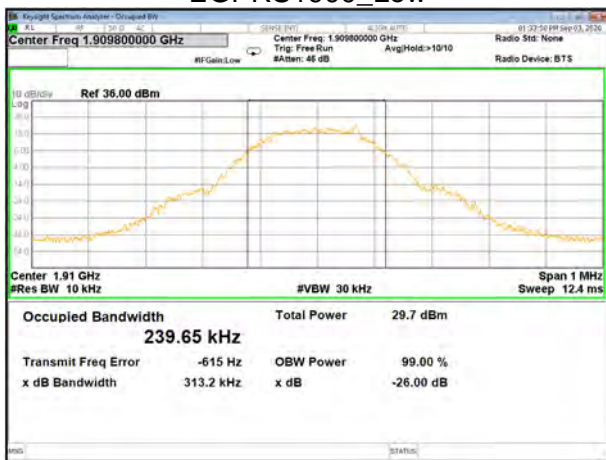
GPRS1900\_High



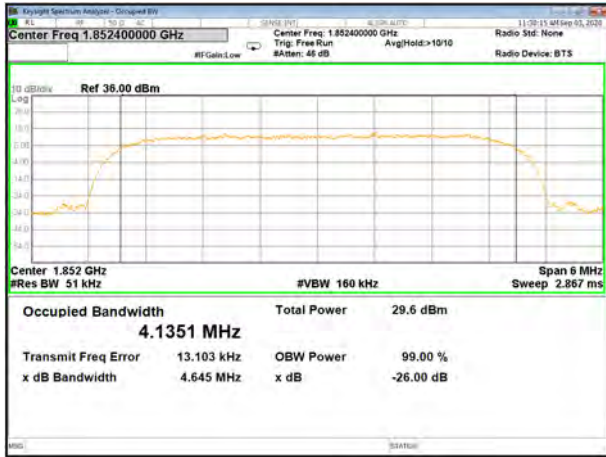
EGPRS1900\_Low



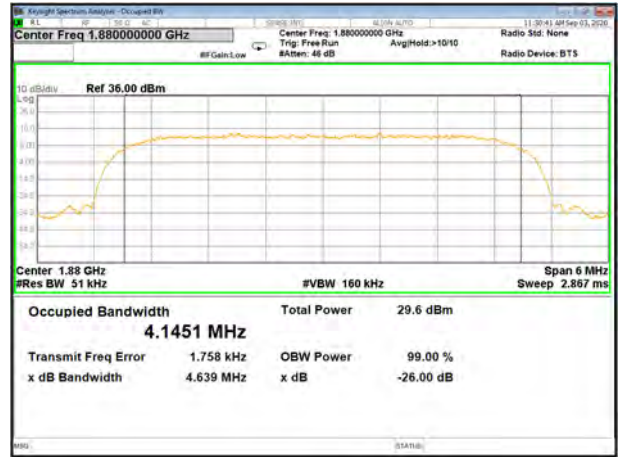
EGPRS1900\_Middle



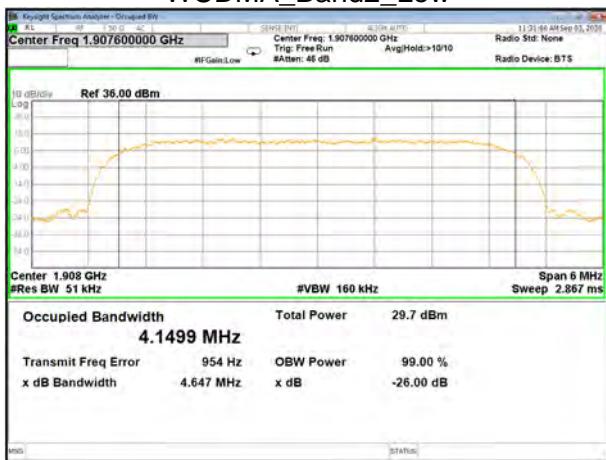
EGPRS1900\_High



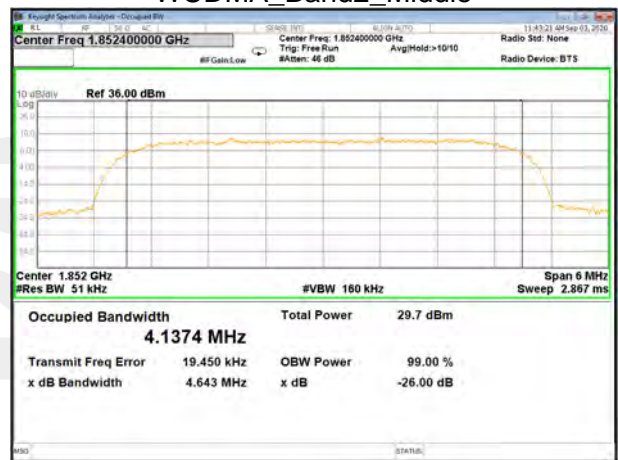
WCDMA\_Band2\_Low



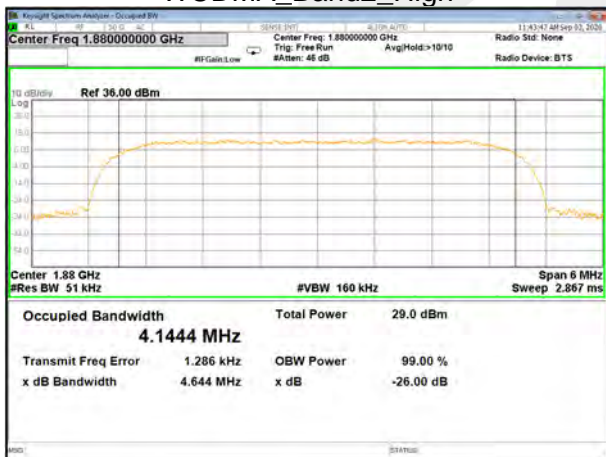
WCDMA\_Band2\_Middle



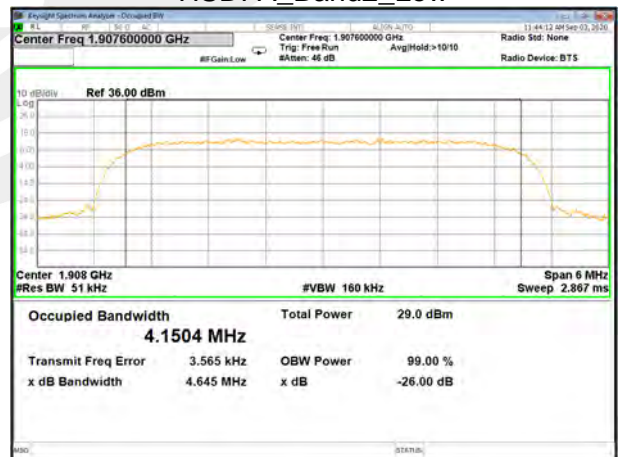
WCDMA\_Band2\_High



HSDPA\_Band2\_Low

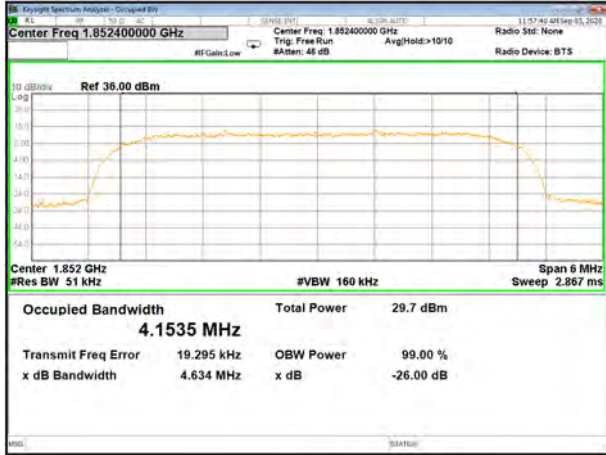


HSDPA\_Band2\_Middle

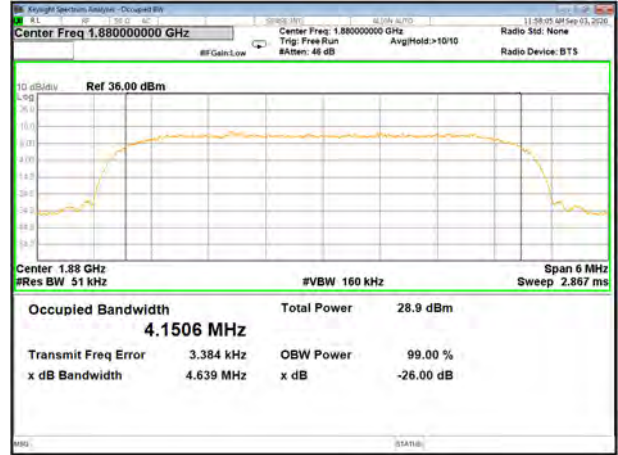


HSDPA\_Band2\_High

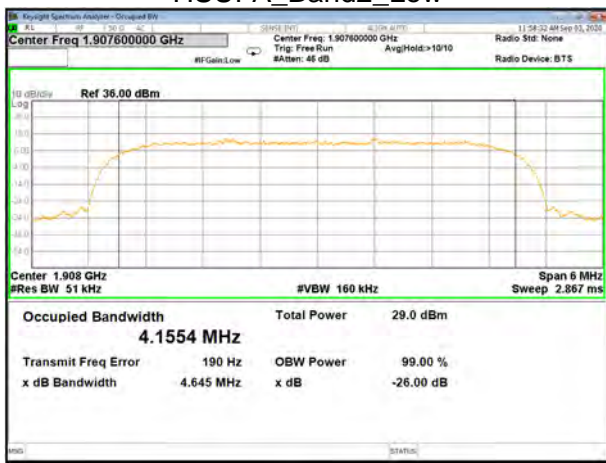




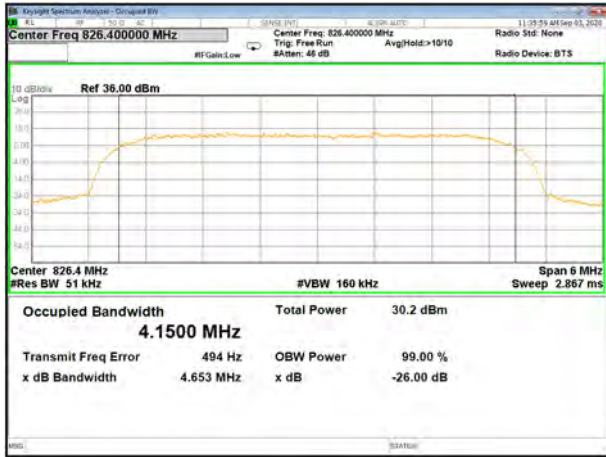
HSUPA\_Band2\_Low



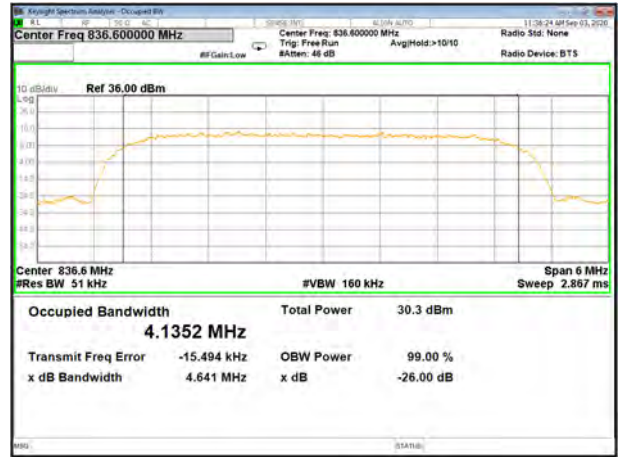
HSUPA\_Band2\_Middle



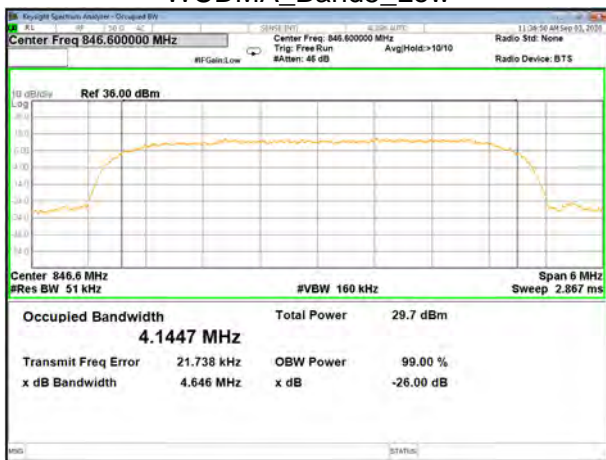
HSUPA\_Band2\_High



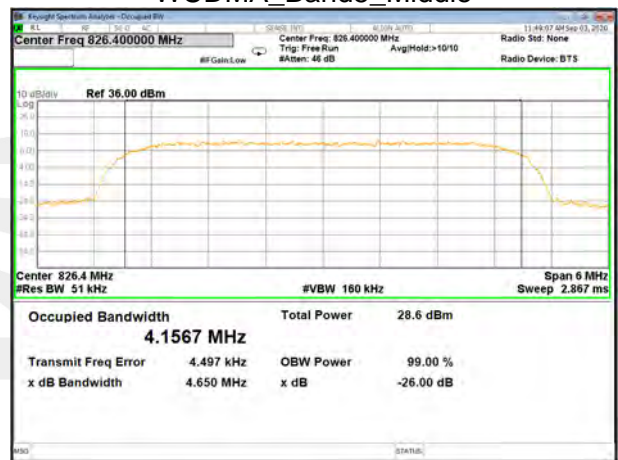
WCDMA\_Band5\_Low



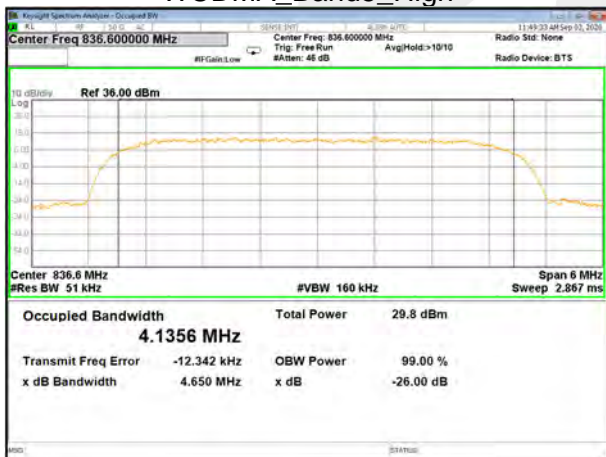
WCDMA\_Band5\_Middle



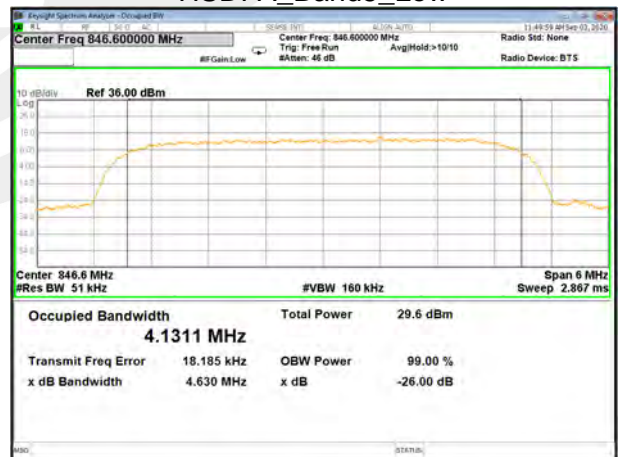
WCDMA\_Band5\_High



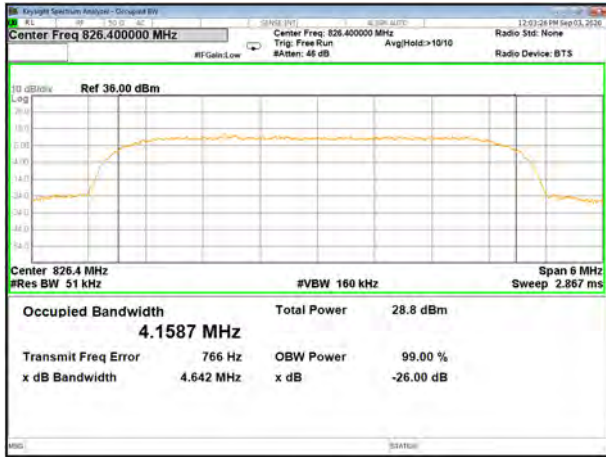
HSDPA\_Band5\_Low



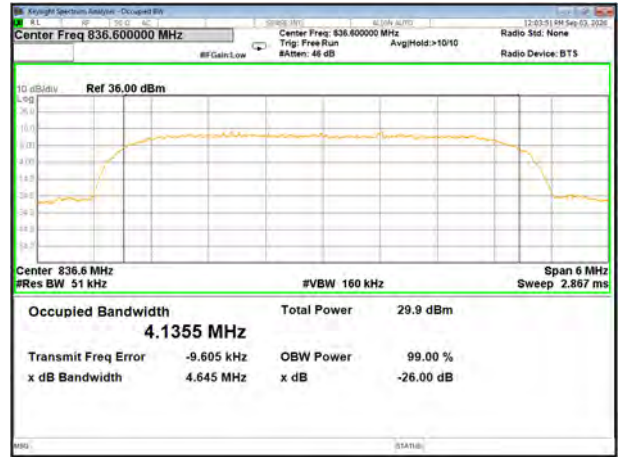
HSDPA\_Band5\_Middle



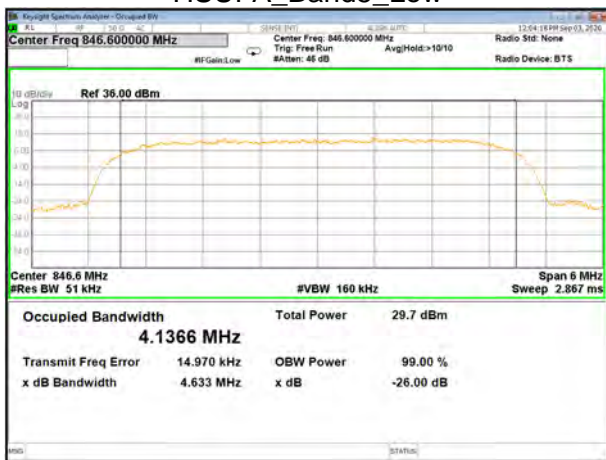
HSDPA\_Band5\_High



HSUPA\_Band5\_Low



HSUPA\_Band5\_Middle



HSUPA\_Band5\_High



**A5. FREQUENCY STABILITY**

Normal Voltage = 3.7V; Battery End Point (BEP) = 4.07V; Maximum Voltage =3.33V

GSM 850 /836.6MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	19.43	0.023	2.5ppm	PASS
40		24.00	0.029		
30		29.70	0.036		
20		17.89	0.021		
10		31.77	0.038		
0		31.99	0.038		
-10		31.95	0.038		
-20		31.15	0.037		
-30		18.99	0.023		
20		Maximum Voltage	16.93		
20	BEP	35.56	0.043		

GPRS 850 /836.6MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	20.18	0.024	2.5ppm	PASS
40		25.95	0.031		
30		24.28	0.029		
20		17.13	0.020		
10		25.77	0.031		
0		24.77	0.030		
-10		36.38	0.043		
-20		32.21	0.039		
-30		15.16	0.018		
20		Maximum Voltage	14.62		
20	BEP	19.89	0.024		

EGPRS 850 /836.6MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	33.52	0.040	2.5ppm	PASS
40		17.68	0.021		
30		29.89	0.036		
20		34.09	0.041		
10		34.51	0.041		
0		26.28	0.031		
-10		26.65	0.032		
-20		21.50	0.026		
-30		21.11	0.025		
20		Maximum Voltage	23.63		
20	BEP	33.03	0.039		



GSM 1900 / 1880MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	26.34	0.014	Within Authorized Band	PASS
40		18.27	0.010		
30		35.42	0.019		
20		21.45	0.011		
10		30.85	0.016		
0		19.07	0.010		
-10		13.87	0.007		
-20		27.44	0.015		
-30		31.63	0.017		
20		Maximum Voltage	34.30		
20	BEP	12.80	0.007		

GPRS 1900 / 1880MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	31.07	0.017	Within Authorized Band	PASS
40		20.22	0.011		
30		29.41	0.016		
20		33.79	0.018		
10		27.90	0.015		
0		20.63	0.011		
-10		27.89	0.015		
-20		16.90	0.009		
-30		16.88	0.009		
20		Maximum Voltage	18.99		
20	BEP	18.62	0.010		

EGPRS 1900 / 1880MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	32.62	0.017	Within Authorized Band	PASS
40		17.02	0.009		
30		32.53	0.017		
20		21.81	0.012		
10		17.71	0.009		
0		29.32	0.016		
-10		16.15	0.009		
-20		34.29	0.018		
-30		28.37	0.015		
20		Maximum Voltage	22.33		
20	BEP	28.95	0.015		



UMTS Band II /1880MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	34.84	0.019	Within Authorized Band	PASS
40		34.60	0.018		
30		20.25	0.011		
20		19.84	0.011		
10		31.03	0.017		
0		28.15	0.015		
-10		15.94	0.008		
-20		20.19	0.011		
-30		19.32	0.010		
20		Maximum Voltage	29.86		
20	BEP	20.77	0.011		

HSDPA Band II /1880MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	13.91	0.007	Within Authorized Band	PASS
40		19.96	0.011		
30		25.35	0.013		
20		11.59	0.006		
10		16.52	0.009		
0		14.41	0.008		
-10		28.64	0.015		
-20		20.07	0.011		
-30		19.38	0.010		
20		Maximum Voltage	23.75		
20	BEP	22.69	0.012		

HSUPA Band II /1880MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	11.99	0.006	Within Authorized Band	PASS
40		22.34	0.012		
30		22.26	0.012		
20		16.82	0.009		
10		11.69	0.006		
0		25.03	0.013		
-10		33.05	0.018		
-20		13.20	0.007		
-30		12.51	0.007		
20		Maximum Voltage	17.55		
20	BEP	26.37	0.014		



UMTS Band V / 836.6MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	29.82	0.036	2.5ppm	PASS
40		23.33	0.028		
30		13.06	0.016		
20		34.51	0.041		
10		28.96	0.035		
0		18.24	0.022		
-10		27.57	0.033		
-20		25.96	0.031		
-30		20.49	0.024		
20		Maximum Voltage	22.54		
20	BEP	26.86	0.032		

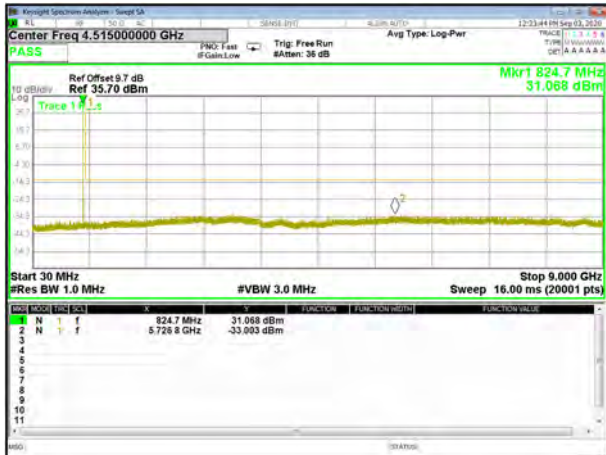
HSDPA Band V / 836.6MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	11.94	0.014	2.5ppm	PASS
40		19.13	0.023		
30		17.79	0.021		
20		33.16	0.040		
10		12.81	0.015		
0		26.44	0.032		
-10		12.10	0.014		
-20		16.07	0.019		
-30		25.96	0.031		
20		Maximum Voltage	21.08		
20	BEP	19.20	0.023		

HSUPA Band V / 836.6MHz					
Temperature (°C)	Voltage	Freq. Dev.	Freq. Dev.	Limit	Result
	(Volt)	(Hz)	(ppm)		
50	Normal Voltage	17.86	0.021	2.5ppm	PASS
40		15.00	0.018		
30		20.06	0.024		
20		18.04	0.022		
10		24.86	0.030		
0		19.73	0.024		
-10		30.38	0.036		
-20		28.23	0.034		
-30		27.19	0.033		
20		Maximum Voltage	26.69		
20	BEP	23.74	0.028		

1. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



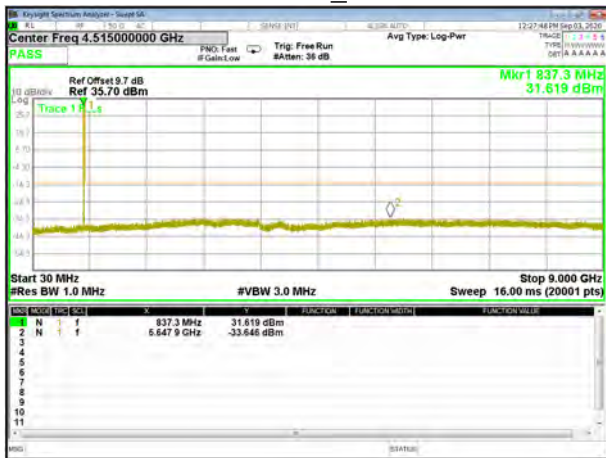
A6. SPURIOUS EMISSIONS AT ANTENNA TERMINALS



GSM850\_Low



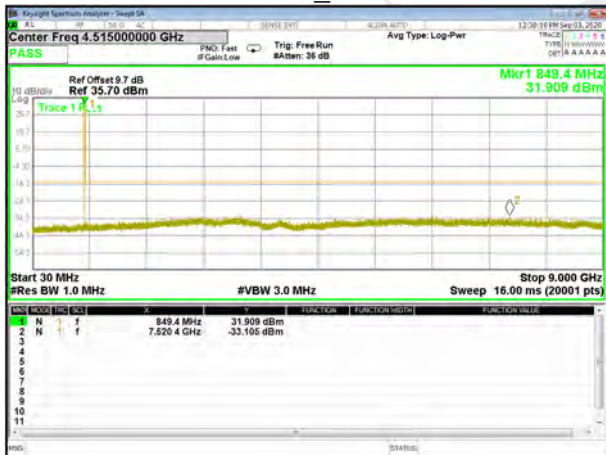
GPRS850\_Low



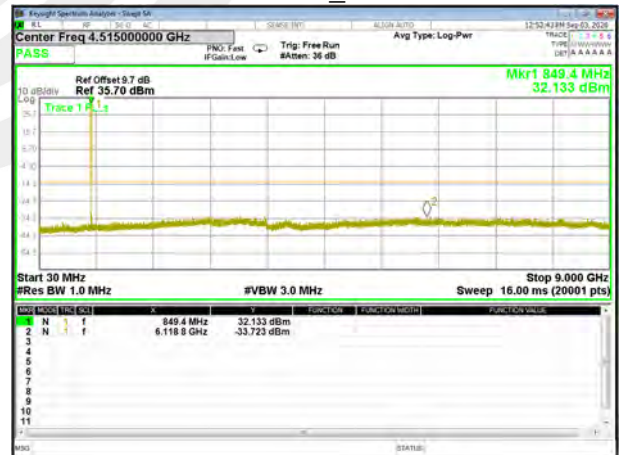
GSM850\_Middle



GPRS850\_Middle

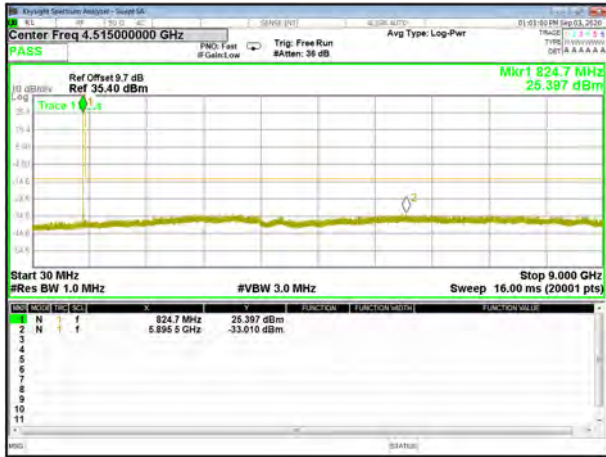


GSM850\_High

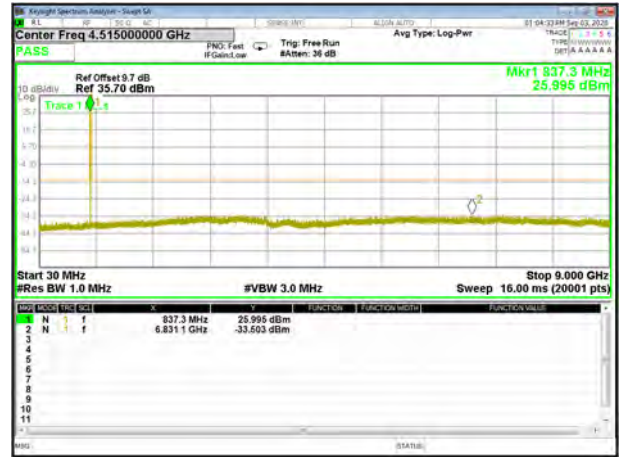


GPRS850\_High





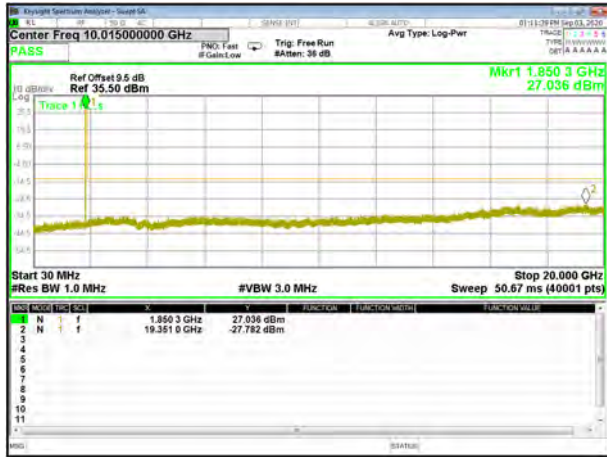
EGPRS850\_Low



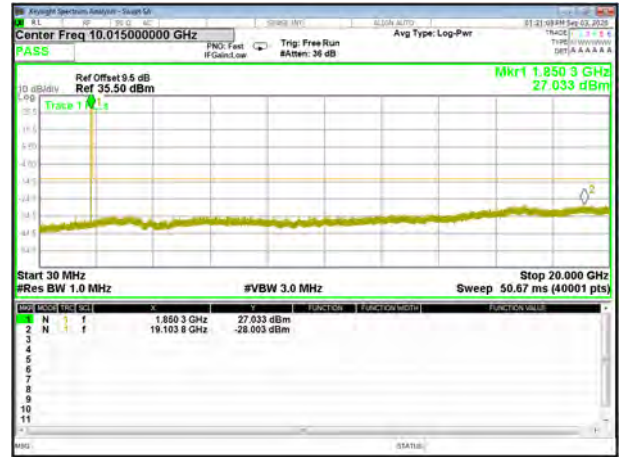
EGPRS850\_Middle



EGPRS850\_High



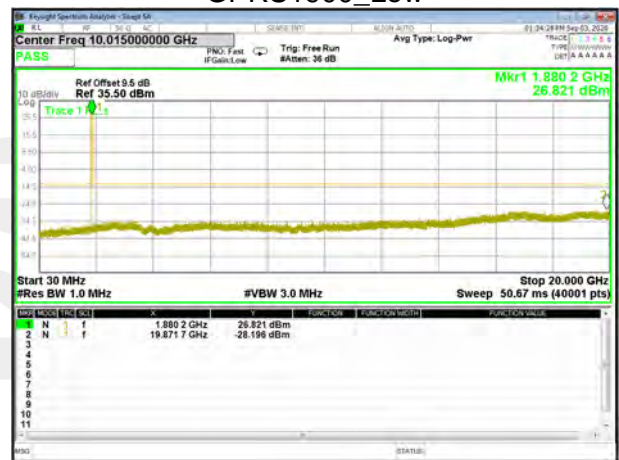
GSM1900\_Low



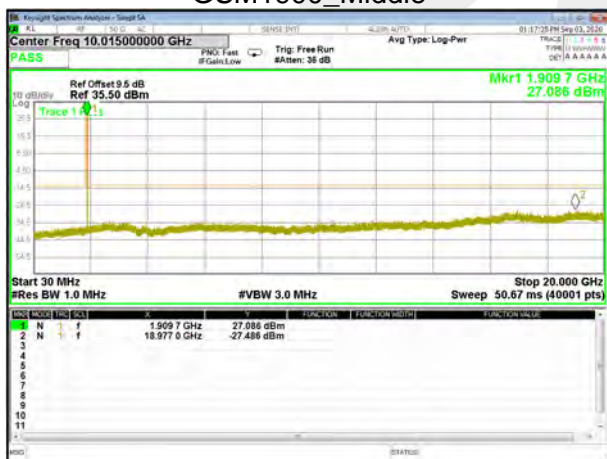
GPRS1900\_Low



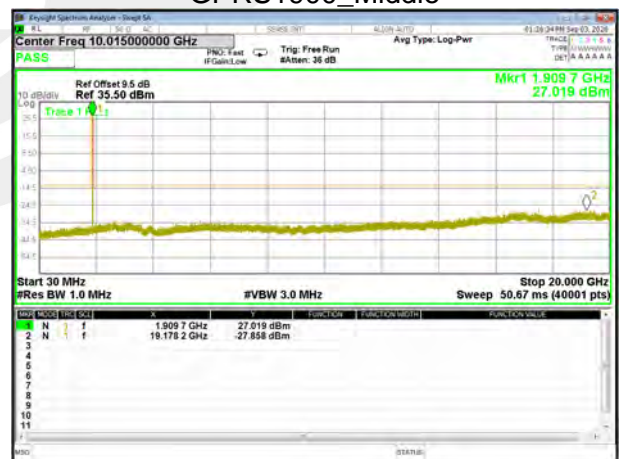
GSM1900\_Middle



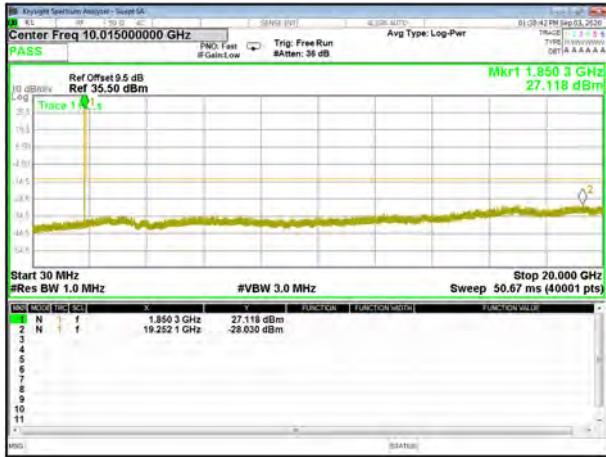
GPRS1900\_Middle



GSM1900\_High



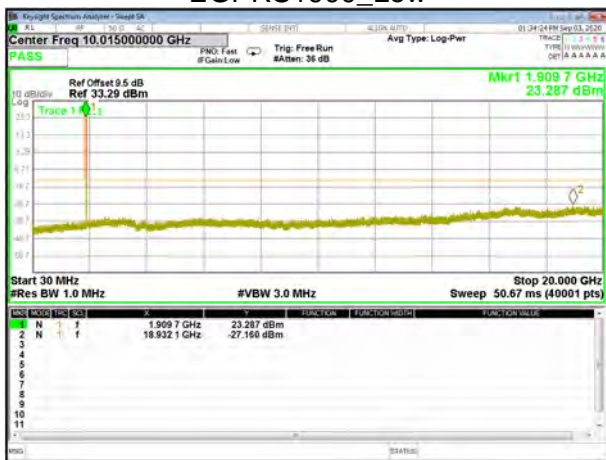
GPRS1900\_High



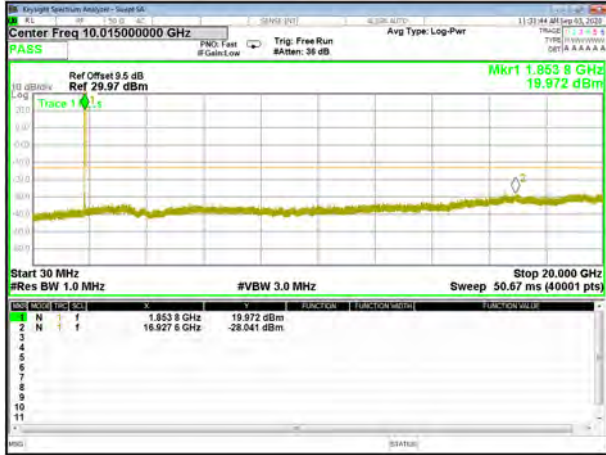
EGPRS1900\_Low



EGPRS1900\_Middle



EGPRS1900\_High



WCDMA\_Band2\_Low



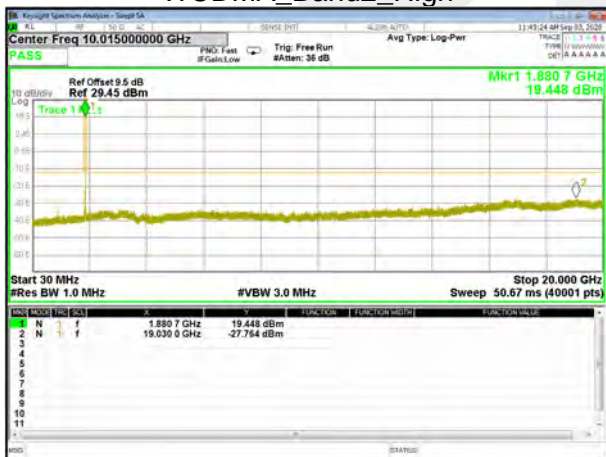
WCDMA\_Band2\_Middle



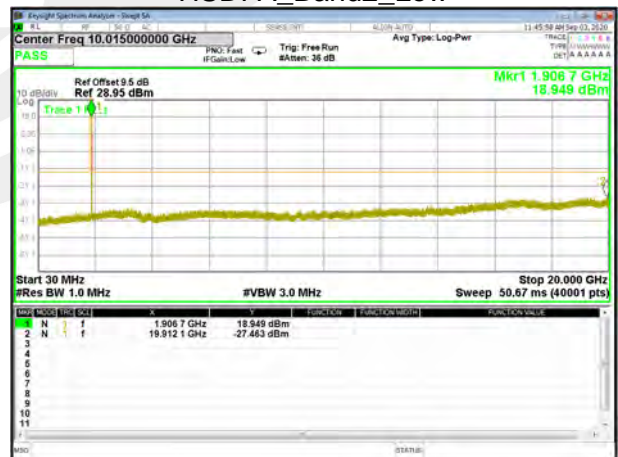
WCDMA\_Band2\_High



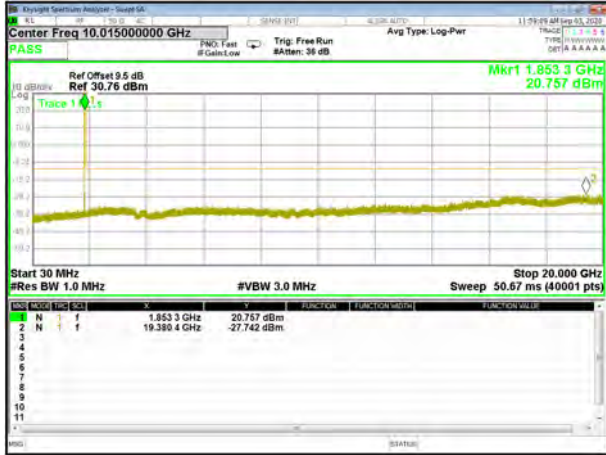
HSDPA\_Band2\_Low



HSDPA\_Band2\_Middle



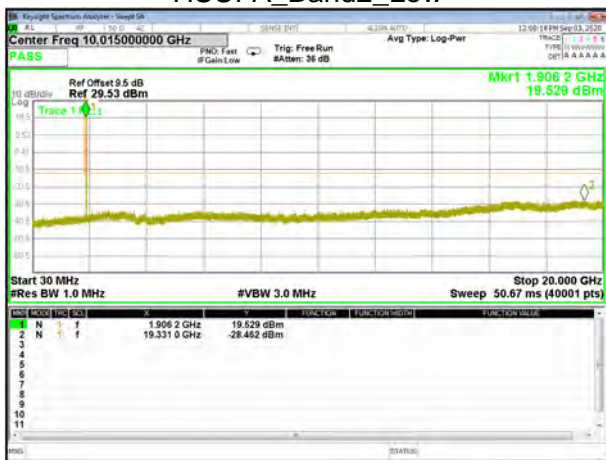
HSDPA\_Band2\_High



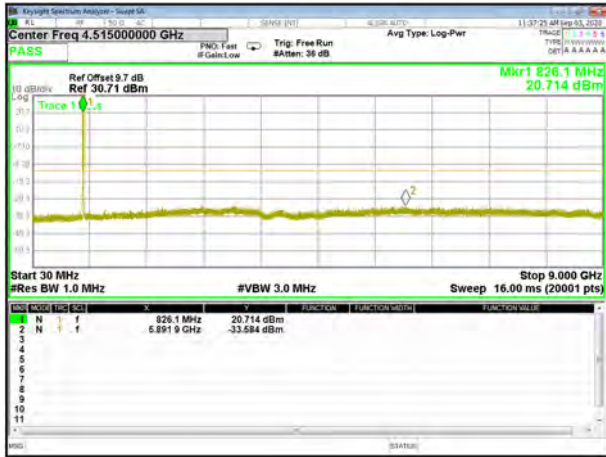
HSUPA\_Band2\_Low



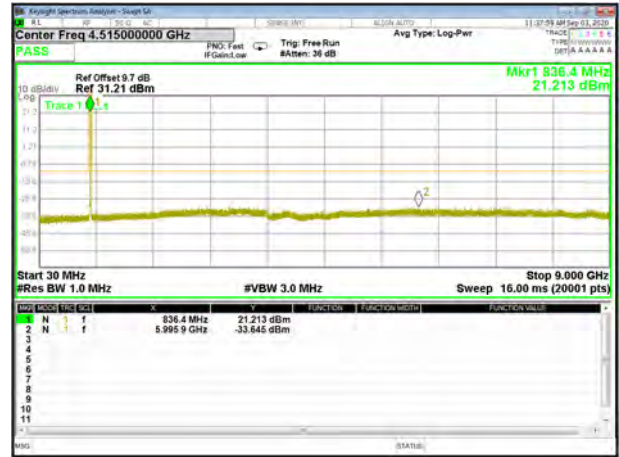
HSUPA\_Band2\_Middle



HSUPA\_Band2\_High



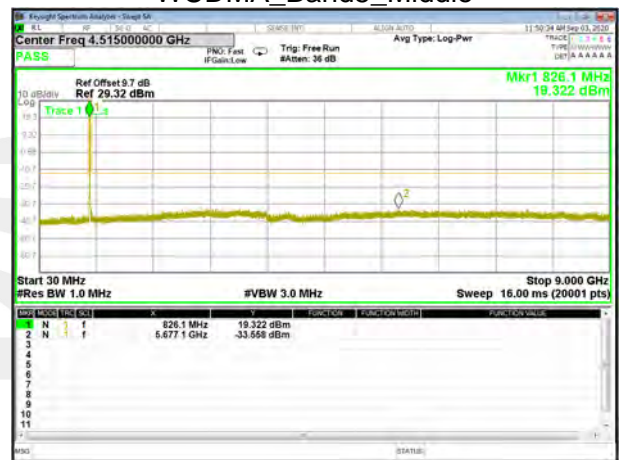
WCDMA\_Band5\_Low



WCDMA\_Band5\_Middle



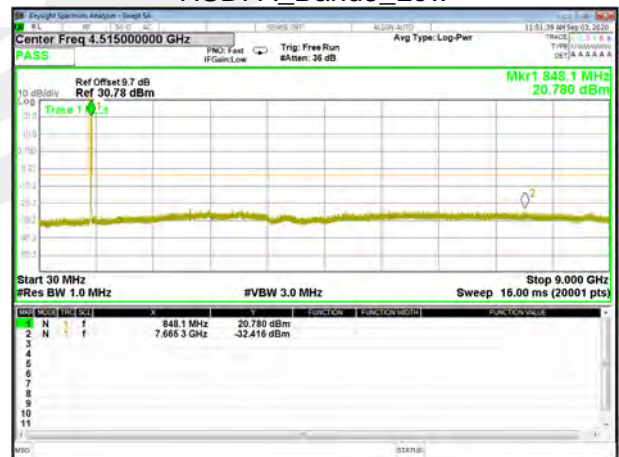
WCDMA\_Band5\_High



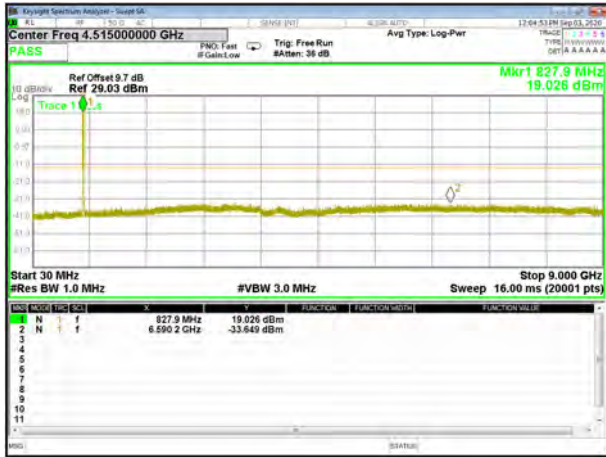
HSDPA\_Band5\_Low



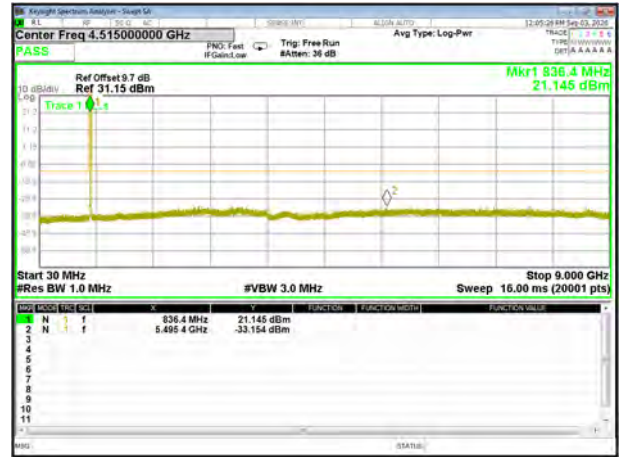
HSDPA\_Band5\_Middle



HSDPA\_Band5\_High



HSUPA\_Band5\_Low



HSUPA\_Band5\_Middle



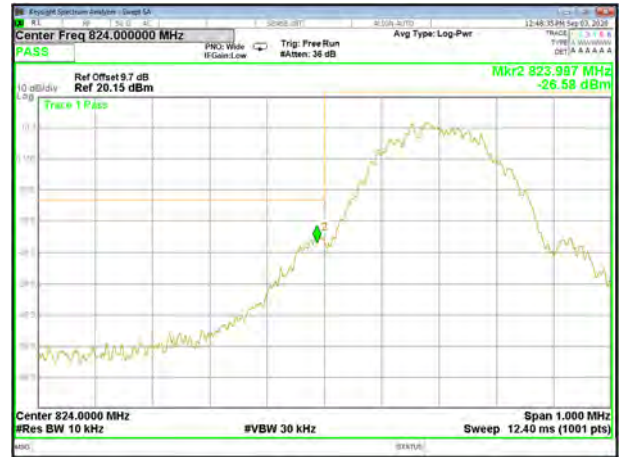
HSUPA\_Band5\_High



### A7. BAND EDGE



GSM850\_Low



GPRS850\_Low



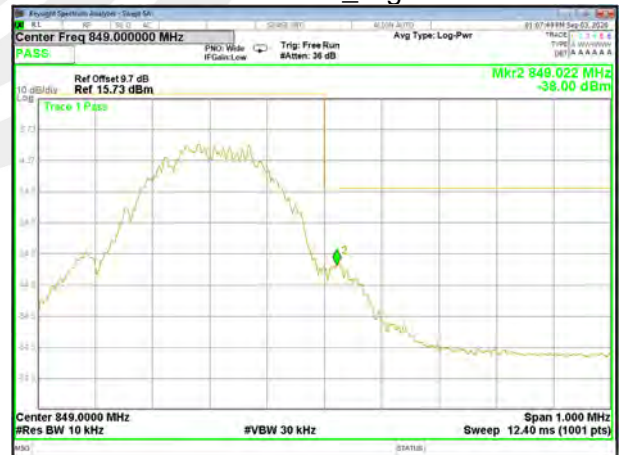
GSM850\_High



GPRS850\_High



EGPRS850\_Low



EGPRS850\_High





GSM1900\_Low



GPRS1900\_Low



GSM1900\_High



GPRS1900\_High



EGPRS1900\_Low



EGPRS1900\_High



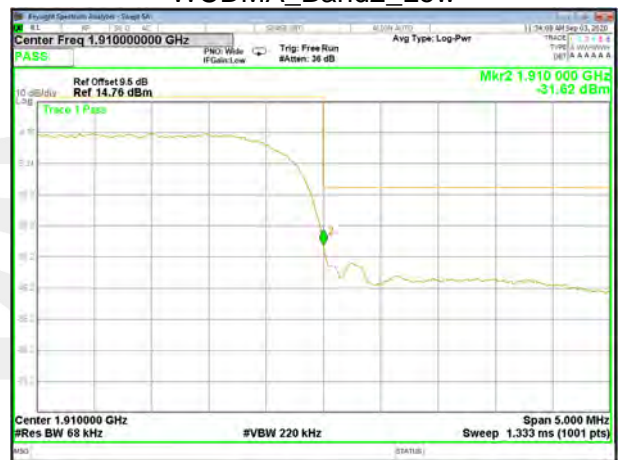
WCDMA\_Band2\_Low



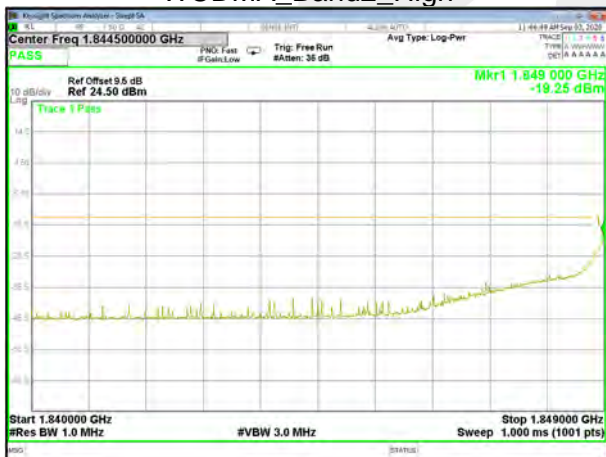
WCDMA\_Band2\_Low



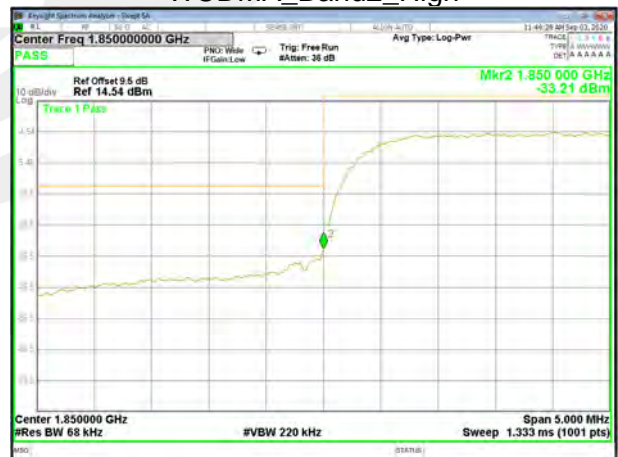
WCDMA\_Band2\_High



WCDMA\_Band2\_High



HSDPA\_Band2\_Low



HSDPA\_Band2\_Low



HSDPA\_Band2\_High



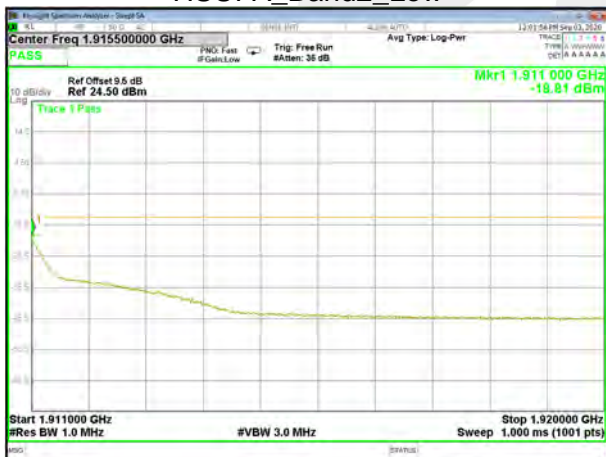
HSDPA\_Band2\_High



HSUPA\_Band2\_Low



HSUPA\_Band2\_Low



HSUPA\_Band2\_High



HSUPA\_Band2\_High



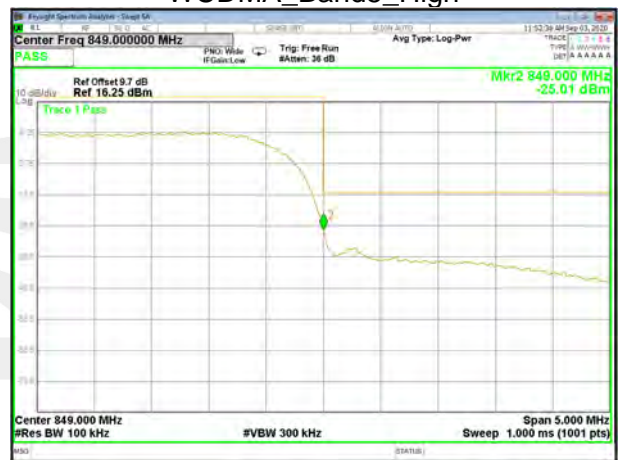
WCDMA\_Band5\_Low



WCDMA\_Band5\_High



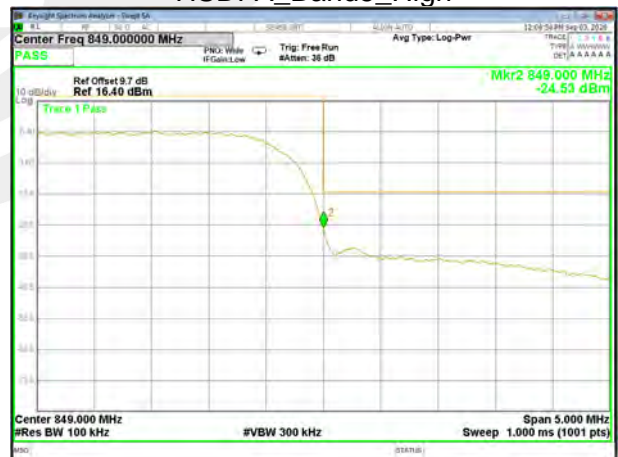
HSDPA\_Band5\_Low



HSDPA\_Band5\_High



HSUPA\_Band5\_Low



HSUPA\_Band5\_High



A8. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

**Note:** (1) Spurious emissions which are attenuated by more than 20dB below the permissible value for frequency below 1000MHz.

(2) Above 3.5GHz amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value

(3) Test is divided into three directions, X/Y/Z. X pattern for the worst.

GSM 850: (30-9000)MHz							
The Worst Test Results Channel 128/824.2 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1648.32	-41.38	9.40	4.75	-36.73	-13.00	-23.73	H
2472.47	-40.61	10.60	8.39	-38.40	-13.00	-25.40	H
3296.61	-32.26	12.00	11.79	-32.05	-13.00	-19.05	H
1648.27	-44.56	9.40	4.75	-39.91	-13.00	-26.91	V
2472.46	-44.65	10.60	8.39	-42.44	-13.00	-29.44	V
3296.54	-43.41	12.00	11.79	-43.20	-13.00	-30.20	V
The Worst Test Results Channel 190/836.6 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1673.14	-40.88	9.50	4.76	-36.14	-13.00	-23.14	H
2509.72	-39.53	10.70	8.40	-37.23	-13.00	-24.23	H
3346.40	-31.94	12.20	11.80	-31.54	-13.00	-18.54	H
1672.92	-43.72	9.40	4.75	-39.07	-13.00	-26.07	V
2509.50	-45.01	10.60	8.39	-42.80	-13.00	-29.80	V
3345.98	-42.78	12.20	11.82	-42.40	-13.00	-29.40	V
The Worst Test Results Channel 251/848.8 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1697.32	-40.60	9.60	4.77	-35.77	-13.00	-22.77	H
2546.32	-39.99	10.80	8.50	-37.69	-13.00	-24.69	H
3395.10	-31.25	12.50	11.90	-30.65	-13.00	-17.65	H
1697.44	-43.75	9.60	4.77	-38.92	-13.00	-25.92	V
2546.47	-44.60	10.80	8.50	-42.30	-13.00	-29.30	V
3395.09	-43.32	12.50	11.90	-42.72	-13.00	-29.72	V



GPRS 850: (30-9000)MHz							
The Worst Test Results Channel 128/824.2 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1648.43	-41.22	9.40	4.75	-36.57	-13.00	-23.57	H
2472.69	-39.99	10.60	8.39	-37.78	-13.00	-24.78	H
3296.78	-31.82	12.00	11.79	-31.61	-13.00	-18.61	H
1648.10	-44.61	9.40	4.75	-39.96	-13.00	-26.96	V
2472.60	-45.09	10.60	8.39	-42.88	-13.00	-29.88	V
3296.43	-42.60	12.00	11.79	-42.39	-13.00	-29.39	V
The Worst Test Results Channel 190/836.6 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1673.15	-40.63	9.50	4.76	-35.89	-13.00	-22.89	H
2509.83	-39.17	10.70	8.40	-36.87	-13.00	-23.87	H
3346.40	-32.02	12.20	11.80	-31.62	-13.00	-18.62	H
1672.90	-44.16	9.40	4.75	-39.51	-13.00	-26.51	V
2509.55	-44.13	10.60	8.39	-41.92	-13.00	-28.92	V
3346.22	-43.33	12.20	11.82	-42.95	-13.00	-29.95	V
The Worst Test Results Channel 251/848.8 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1697.44	-40.88	9.60	4.77	-36.05	-13.00	-23.05	H
2546.12	-39.66	10.80	8.50	-37.36	-13.00	-24.36	H
3395.22	-31.46	12.50	11.90	-30.86	-13.00	-17.86	H
1697.68	-43.55	9.60	4.77	-38.72	-13.00	-25.72	V
2546.28	-45.40	10.80	8.50	-43.10	-13.00	-30.10	V
3395.28	-43.83	12.50	11.90	-43.23	-13.00	-30.23	V



EGPRS 850: (30-9000)MHz							
The Worst Test Results Channel 128/824.2 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1648.06	-41.17	9.40	4.75	-36.52	-13.00	-23.52	H
2472.64	-39.85	10.60	8.39	-37.64	-13.00	-24.64	H
3296.56	-32.18	12.00	11.79	-31.97	-13.00	-18.97	H
1648.04	-44.43	9.40	4.75	-39.78	-13.00	-26.78	V
2472.53	-45.09	10.60	8.39	-42.88	-13.00	-29.88	V
3296.73	-43.59	12.00	11.79	-43.38	-13.00	-30.38	V
The Worst Test Results Channel 190/836.6 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1673.11	-40.40	9.50	4.76	-35.66	-13.00	-22.66	H
2509.61	-39.62	10.70	8.40	-37.32	-13.00	-24.32	H
3346.38	-31.12	12.20	11.80	-30.72	-13.00	-17.72	H
1673.15	-44.37	9.40	4.75	-39.72	-13.00	-26.72	V
2509.68	-44.56	10.60	8.39	-42.35	-13.00	-29.35	V
3346.22	-42.71	12.20	11.82	-42.33	-13.00	-29.33	V
The Worst Test Results Channel 251/848.8 MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1697.61	-40.70	9.60	4.77	-35.87	-13.00	-22.87	H
2546.16	-40.40	10.80	8.50	-38.10	-13.00	-25.10	H
3395.33	-32.14	12.50	11.90	-31.54	-13.00	-18.54	H
1697.29	-43.71	9.60	4.77	-38.88	-13.00	-25.88	V
2546.42	-45.20	10.80	8.50	-42.90	-13.00	-29.90	V
3395.01	-42.77	12.50	11.90	-42.17	-13.00	-29.17	V



DCS 1900: (30-20000)MHz							
The Worst Test Results for Channel 512/1850.2MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3700.42	-34.04	12.60	12.93	-34.37	-13.00	-21.37	H
5550.39	-34.33	13.10	17.11	-38.34	-13.00	-25.34	H
7400.56	-32.88	11.50	22.20	-43.58	-13.00	-30.58	H
3700.47	-34.84	12.60	12.93	-35.17	-13.00	-22.17	V
5550.46	-33.88	13.10	17.11	-37.89	-13.00	-24.89	V
7400.91	-32.53	11.50	22.20	-43.23	-13.00	-30.23	V
The Worst Test Results for Channel 661/1880.0MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.01	-34.10	12.60	12.93	-34.43	-13.00	-21.43	H
5640.23	-34.06	13.10	17.11	-38.07	-13.00	-25.07	H
7519.81	-33.26	11.50	22.20	-43.96	-13.00	-30.96	H
3760.28	-35.59	12.60	12.93	-35.92	-13.00	-22.92	V
5640.22	-35.17	13.10	17.11	-39.18	-13.00	-26.18	V
7519.93	-31.89	11.50	22.20	-42.59	-13.00	-29.59	V
The Worst Test Results for Channel 810/1909.8MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3819.66	-34.59	12.60	12.93	-34.92	-13.00	-21.92	H
5729.07	-34.34	13.10	17.11	-38.35	-13.00	-25.35	H
7639.22	-33.59	11.50	22.20	-44.29	-13.00	-31.29	H
3819.71	-36.01	12.60	12.93	-36.34	-13.00	-23.34	V
5729.14	-34.65	13.10	17.11	-38.66	-13.00	-25.66	V
7639.08	-32.60	11.50	22.20	-43.30	-13.00	-30.30	V





GPRS1900: (30-20000)MHz							
The Worst Test Results for Channel 512/1850.2MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3700.34	-33.87	12.60	12.93	-34.20	-13.00	-21.20	H
5550.56	-34.08	13.10	17.11	-38.09	-13.00	-25.09	H
7400.94	-33.04	11.50	22.20	-43.74	-13.00	-30.74	H
3700.44	-35.10	12.60	12.93	-35.43	-13.00	-22.43	V
5550.58	-34.53	13.10	17.11	-38.54	-13.00	-25.54	V
7400.56	-32.91	11.50	22.20	-43.61	-13.00	-30.61	V
The Worst Test Results for Channel 661/1880.0MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.13	-33.78	12.60	12.93	-34.11	-13.00	-21.11	H
5639.97	-34.07	13.10	17.11	-38.08	-13.00	-25.08	H
7520.24	-32.98	11.50	22.20	-43.68	-13.00	-30.68	H
3760.33	-35.92	12.60	12.93	-36.25	-13.00	-23.25	V
5640.08	-34.70	13.10	17.11	-38.71	-13.00	-25.71	V
7519.90	-32.96	11.50	22.20	-43.66	-13.00	-30.66	V
The Worst Test Results for Channel 810/1909.8MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3819.26	-34.58	12.60	12.93	-34.91	-13.00	-21.91	H
5729.51	-34.57	13.10	17.11	-38.58	-13.00	-25.58	H
7639.32	-32.78	11.50	22.20	-43.48	-13.00	-30.48	H
3819.40	-35.66	12.60	12.93	-35.99	-13.00	-22.99	V
5729.22	-34.64	13.10	17.11	-38.65	-13.00	-25.65	V
7639.37	-31.75	11.50	22.20	-42.45	-13.00	-29.45	V



EGPRS 1900: (30-20000)MHz							
The Worst Test Results for Channel 512/1850.2MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3700.23	-34.07	12.60	12.93	-34.40	-13.00	-21.40	H
5550.53	-34.51	13.10	17.11	-38.52	-13.00	-25.52	H
7400.85	-33.11	11.50	22.20	-43.81	-13.00	-30.81	H
3700.18	-35.67	12.60	12.93	-36.00	-13.00	-23.00	V
5550.51	-34.81	13.10	17.11	-38.82	-13.00	-25.82	V
7400.96	-32.67	11.50	22.20	-43.37	-13.00	-30.37	V
The Worst Test Results for Channel 661/1880.0MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3759.97	-33.79	12.60	12.93	-34.12	-13.00	-21.12	H
5640.29	-34.33	13.10	17.11	-38.34	-13.00	-25.34	H
7520.02	-32.34	11.50	22.20	-43.04	-13.00	-30.04	H
3760.21	-34.59	12.60	12.93	-34.92	-13.00	-21.92	V
5640.02	-34.72	13.10	17.11	-38.73	-13.00	-25.73	V
7519.93	-32.12	11.50	22.20	-42.82	-13.00	-29.82	V
The Worst Test Results for Channel 810/1909.8MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3819.63	-33.67	12.60	12.93	-34.00	-13.00	-21.00	H
5729.34	-35.01	13.10	17.11	-39.02	-13.00	-26.02	H
7639.08	-32.49	11.50	22.20	-43.19	-13.00	-30.19	H
3819.44	-35.93	12.60	12.93	-36.26	-13.00	-23.26	V
5729.49	-34.08	13.10	17.11	-38.09	-13.00	-25.09	V
7639.10	-31.85	11.50	22.20	-42.55	-13.00	-29.55	V



WCDMA Band V: (30-9000)MHz							
The most testresults channel 4132/826.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1652.14	-41.57	9.40	4.75	-36.92	-13.00	-23.92	H
2479.24	-39.46	10.60	8.39	-37.25	-13.00	-24.25	H
3305.45	-31.79	12.00	11.79	-31.58	-13.00	-18.58	H
1652.43	-44.01	9.40	4.75	-39.36	-13.00	-26.36	V
2479.38	-45.08	10.60	8.39	-42.87	-13.00	-29.87	V
3305.87	-43.90	12.00	11.79	-43.69	-13.00	-30.69	V
The Worst Test Results Channel 4183/836.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1673.14	-40.22	9.40	4.75	-35.57	-13.00	-22.57	H
2509.89	-39.60	10.60	8.39	-37.39	-13.00	-24.39	H
3346.34	-30.86	12.00	11.79	-30.65	-13.00	-17.65	H
1673.09	-43.88	9.40	4.75	-39.23	-13.00	-26.23	V
2509.45	-44.12	10.60	8.39	-41.91	-13.00	-28.91	V
3346.03	-43.45	12.00	11.79	-43.24	-13.00	-30.24	V
The Worst Test Results Channel 4233/846.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1693.38	-40.98	9.40	4.75	-36.33	-13.00	-23.33	H
2539.08	-39.22	10.60	8.39	-37.01	-13.00	-24.01	H
3385.85	-31.94	12.00	11.79	-31.73	-13.00	-18.73	H
1693.28	-44.57	9.40	4.75	-39.92	-13.00	-26.92	V
2539.40	-44.49	10.60	8.39	-42.28	-13.00	-29.28	V
3386.15	-43.16	12.00	11.79	-42.95	-13.00	-29.95	V



HSUPA Band V: (30-9000)MHz							
The most testresults channel 4132/826.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1652.29	-40.71	9.40	4.75	-36.06	-13.00	-23.06	H
2479.46	-40.59	10.60	8.39	-38.38	-13.00	-25.38	H
3305.91	-31.02	12.00	11.79	-30.81	-13.00	-17.81	H
1652.24	-44.15	9.40	4.75	-39.50	-13.00	-26.50	V
2479.63	-44.08	10.60	8.39	-41.87	-13.00	-28.87	V
3305.91	-42.61	12.00	11.79	-42.40	-13.00	-29.40	V
The Worst Test Results Channel 4183/836.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1673.27	-41.29	9.40	4.75	-36.64	-13.00	-23.64	H
2509.69	-39.42	10.60	8.39	-37.21	-13.00	-24.21	H
3346.02	-31.00	12.00	11.79	-30.79	-13.00	-17.79	H
1672.79	-44.41	9.40	4.75	-39.76	-13.00	-26.76	V
2509.52	-44.66	10.60	8.39	-42.45	-13.00	-29.45	V
3346.24	-43.36	12.00	11.79	-43.15	-13.00	-30.15	V
The Worst Test Results Channel 4233/846.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1693.41	-40.36	9.40	4.75	-35.71	-13.00	-22.71	H
2539.53	-40.30	10.60	8.39	-38.09	-13.00	-25.09	H
3386.25	-31.77	12.00	11.79	-31.56	-13.00	-18.56	H
1693.21	-44.16	9.40	4.75	-39.51	-13.00	-26.51	V
2539.35	-44.23	10.60	8.39	-42.02	-13.00	-29.02	V
3386.11	-42.54	12.00	11.79	-42.33	-13.00	-29.33	V



HSDPA Band V: (30-9000)MHz							
The most testresults channel 4132/826.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1652.14	-41.50	9.40	4.75	-36.85	-13.00	-23.85	H
2479.32	-39.40	10.60	8.39	-37.19	-13.00	-24.19	H
3305.59	-31.60	12.00	11.79	-31.39	-13.00	-18.39	H
1652.41	-43.91	9.40	4.75	-39.26	-13.00	-26.26	V
2479.27	-44.94	10.60	8.39	-42.73	-13.00	-29.73	V
3305.71	-42.77	12.00	11.79	-42.56	-13.00	-29.56	V
The Worst Test Results Channel 4183/836.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1673.11	-40.38	9.40	4.75	-35.73	-13.00	-22.73	H
2509.64	-40.37	10.60	8.39	-38.16	-13.00	-25.16	H
3346.24	-32.33	12.00	11.79	-32.12	-13.00	-19.12	H
1673.19	-44.00	9.40	4.75	-39.35	-13.00	-26.35	V
2509.89	-45.02	10.60	8.39	-42.81	-13.00	-29.81	V
3346.20	-43.94	12.00	11.79	-43.73	-13.00	-30.73	V
The Worst Test Results Channel 4233/846.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
1693.47	-41.07	9.40	4.75	-36.42	-13.00	-23.42	H
2539.22	-40.09	10.60	8.39	-37.88	-13.00	-24.88	H
3385.95	-31.94	12.00	11.79	-31.73	-13.00	-18.73	H
1693.35	-44.57	9.40	4.75	-39.92	-13.00	-26.92	V
2539.29	-44.00	10.60	8.39	-41.79	-13.00	-28.79	V
3385.92	-43.29	12.00	11.79	-43.08	-13.00	-30.08	V



WCDMA Band II: (30-20000)MHz							
The Worst Test Results for Channel 9262/1852.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3704.29	-33.52	12.60	12.93	-33.85	-13.00	-20.85	H
5557.49	-35.28	13.10	17.11	-39.29	-13.00	-26.29	H
7409.57	-32.23	11.50	22.20	-42.93	-13.00	-29.93	H
3704.18	-34.97	12.60	12.93	-35.30	-13.00	-22.30	V
5557.52	-34.66	13.10	17.11	-38.67	-13.00	-25.67	V
7409.70	-32.65	11.50	22.20	-43.35	-13.00	-30.35	V
The Worst Test Results for Channel 9400/1880MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.01	-34.11	12.60	12.93	-34.44	-13.00	-21.44	H
5640.08	-34.59	13.10	17.11	-38.60	-13.00	-25.60	H
7520.07	-33.09	11.50	22.20	-43.79	-13.00	-30.79	H
3760.04	-35.46	12.60	12.93	-35.79	-13.00	-22.79	V
5640.08	-34.36	13.10	17.11	-38.37	-13.00	-25.37	V
7519.95	-32.45	11.50	22.20	-43.15	-13.00	-30.15	V
The Worst Test Results for Channel 9538/1907.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3815.37	-34.76	12.60	12.93	-35.09	-13.00	-22.09	H
5722.33	-35.11	13.10	17.11	-39.12	-13.00	-26.12	H
7630.29	-33.30	11.50	22.20	-44.00	-13.00	-31.00	H
3815.30	-35.93	12.60	12.93	-36.26	-13.00	-23.26	V
5722.19	-35.19	13.10	17.11	-39.20	-13.00	-26.20	V
7629.87	-31.99	11.50	22.20	-42.69	-13.00	-29.69	V



HSUPA Band II: (30-20000)MHz							
The Worst Test Results for Channel 9262/1852.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3704.34	-33.47	12.60	12.93	-33.80	-13.00	-20.80	H
5557.19	-34.99	13.10	17.11	-39.00	-13.00	-26.00	H
7409.80	-33.01	11.50	22.20	-43.71	-13.00	-30.71	H
3704.04	-35.06	12.60	12.93	-35.39	-13.00	-22.39	V
5557.38	-34.75	13.10	17.11	-38.76	-13.00	-25.76	V
7409.92	-33.17	11.50	22.20	-43.87	-13.00	-30.87	V
The Worst Test Results for Channel 9400/1880MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.06	-34.36	12.60	12.93	-34.69	-13.00	-21.69	H
5640.24	-35.37	13.10	17.11	-39.38	-13.00	-26.38	H
7520.11	-32.64	11.50	22.20	-43.34	-13.00	-30.34	H
3760.27	-34.88	12.60	12.93	-35.21	-13.00	-22.21	V
5640.08	-34.56	13.10	17.11	-38.57	-13.00	-25.57	V
7520.22	-32.38	11.50	22.20	-43.08	-13.00	-30.08	V
The Worst Test Results for Channel 9538/1907.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3815.44	-33.45	12.60	12.93	-33.78	-13.00	-20.78	H
5722.01	-34.34	13.10	17.11	-38.35	-13.00	-25.35	H
7630.08	-32.37	11.50	22.20	-43.07	-13.00	-30.07	H
3815.63	-35.58	12.60	12.93	-35.91	-13.00	-22.91	V
5722.51	-34.58	13.10	17.11	-38.59	-13.00	-25.59	V
7630.11	-32.94	11.50	22.20	-43.64	-13.00	-30.64	V



HSDPA Band II: (30-20000)MHz							
The Worst Test Results for Channel 9262/1852.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3704.29	-34.22	12.60	12.93	-34.55	-13.00	-21.55	H
5557.28	-35.31	13.10	17.11	-39.32	-13.00	-26.32	H
7409.80	-33.17	11.50	22.20	-43.87	-13.00	-30.87	H
3704.24	-34.89	12.60	12.93	-35.22	-13.00	-22.22	V
5557.42	-35.16	13.10	17.11	-39.17	-13.00	-26.17	V
7409.68	-32.77	11.50	22.20	-43.47	-13.00	-30.47	V
The Worst Test Results for Channel 9400/1880MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3760.14	-34.43	12.60	12.93	-34.76	-13.00	-21.76	H
5640.08	-34.86	13.10	17.11	-38.87	-13.00	-25.87	H
7520.30	-33.08	11.50	22.20	-43.78	-13.00	-30.78	H
3760.18	-35.17	12.60	12.93	-35.50	-13.00	-22.50	V
5639.98	-34.43	13.10	17.11	-38.44	-13.00	-25.44	V
7519.86	-31.90	11.50	22.20	-42.60	-13.00	-29.60	V
The Worst Test Results for Channel 9538/1907.6MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit (dBm)	Margin (dBm)	Polarity
3815.69	-33.89	12.60	12.93	-34.22	-13.00	-21.22	H
5722.05	-34.11	13.10	17.11	-38.12	-13.00	-25.12	H
7629.88	-32.89	11.50	22.20	-43.59	-13.00	-30.59	H
3815.46	-35.08	12.60	12.93	-35.41	-13.00	-22.41	V
5722.03	-34.86	13.10	17.11	-38.87	-13.00	-25.87	V
7630.04	-33.09	11.50	22.20	-43.79	-13.00	-30.79	V





#### APPENDIX-PHOTOS OF TEST SETUP

Note: See test photos in setup photo document for the actual connections between Product and support equipment.

\*\*\*\*\*END OF THE REPORT\*\*\*\*\*

