RADIO TEST REPORT

Report No.: STS2203086W01

Issued for

Shenzhen Yibaifen Electronic Technology Co., Ltd.

Building e, Minle Science and Technology Park, Longhua district, Shenzhen, China

Product Name:	Smart phone
Brand Name:	Welcome
Model Name:	Note 10
Series Model:	MX4
FCC ID:	2A5MYNOTE10
Test Standard:	FCC Part 22H and 24E

Shenzhen STS Test Services Co., Ltd.
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TEST RESULT CERTIFICATION

Applicant's Name .....:	Shenzhen Yibaifen Electronic Technology Co., Ltd.
Address.....:	Building e, Minle Science and Technology Park, Longhua district, Shenzhen, China
Manufacturer's Name .....:	Shenzhen encyclopedia Innovation Technology Co., Ltd
Address.....:	Room 2718, block C, Huaqiang North Electronic Technology Building, Futian District, Shenzhen, China

Product Description

Product Name .....:	Smart phone
Brand Name .....:	Welcome
Model Name.....:	Note 10
Series Model .....:	MX4
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 .....:	11 Mar. 2022
Date (s) of performance of tests :	11 Mar. 2022 ~ 26 Apr. 2022
Date of Issue .....:	26 Apr. 2022
Test Result .....:	Pass

Testing Engineer : Chris Chen
(Chris Chen)

Technical Manager : Sean She
(Sean she)

Authorized Signatory : Bovey Yang
(Bovey Yang)

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Revision History

Rev.	Issue Date	Report NO.	Effect Page	Contents
00	26 Apr. 2022	STS2203086W01	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
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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 ofANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of k = 2 toindicate a 95% level of confidence. The measurement data shown herein meets or exceeds the UCISPRmeasurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly tospecified limits to determine compliance.

No.	Item	Uncertainty
1	RF output power, conducted	±0.87dB
2	Unwanted Emissions, conducted	±2.895dB
3	All emissions, radiated 9K-30MHz	±3.80dB
4	All emissions, radiated 30M-1GHz	±4.09dB
5	All emissions, radiated 1G-6GHz	±4.92dB
6	All emissions, radiated>6G	±5.49dB
7	Conducted Emission (9KHz-30MHz)	±2.73dB

2 PRODUCT INFORMATION

Product Name	Smart phone
Trade Name	Welcome
Model Name	Note 10
Series Model	MX4
Model Difference	Only different in model name.
Tx Frequency:	GSM/GPRS: 850: 824 MHz ~ 849MHz 1900: 1850 MHz ~ 1910MHz WCDMA: Band V: 824 MHz ~ 849 MHz
Rx Frequency:	GSM/GPRS: 850: 869 MHz ~ 894 MHz 1900: 1930 MHz ~ 1990MHz WCDMA: Band V: 869 MHz ~ 894 MHz
Max RF Output Power:	GSM850:31.27dBm, PCS1900:28.39dBm GPRS850(1-Slot):31.07dBm, GPRS1900(1-Slot):28.12dBm GPRS850(2-Slot):30.63dBm, GPRS1900(2-Slot):27.67dBm GPRS850(3-Slot):30.22dBm, GPRS1900(3-Slot):27.21dBm GPRS850(4-Slot):29.72dBm, GPRS1900(4-Slot):26.71dBm WCDMA Band V:22.80dBm
Type of Emission:	GSM(850): 249KGXW; PCS(1900): 244KGXW GPRS(850): 246KGXW; GPRS(1900): 246KGXW WCDMA850: 4M17F9W
Modulation Characteristics:	GMSK for GSM/GPRS WCDMA: QPSK; HSDPA:QPSK/16QAM; HSUPA:BPSK
SIM Card:	SIM 1 and SIM 2 is a chipset unit and tested as single chipset, SIM 1 is used to tested.
Antenna:	PIFA
Antenna gain:	GSM 850: -1dBi, PCS 1900: -1.1dBi WCDMA 850: --1dBi
Battery:	Rated Voltage:3.8V Charge Limit Voltage:4.35V Capacity:5000mAh
Adapter:	Input: 100-240V, 50/60Hz, 0.15A Output:5V=1000mA
GPRS Class:	Multi-Class12
Extreme Vol. Limits:	DC 3.65V~ DC 4.35V(Normal: DC 3.8V)
Extreme Temp. Tolerance:	-20℃ to +60℃
Hardware version number:	V213IM-1.0
Software version number:	LRX21M test-keys
*** Note: The High Voltage 4.35V and Low Voltage 3.65V was declared by manufacturer, The EUT couldn't be operate normally with higher or lower voltage.*	

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.

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	RADIATED TCS	CONDUCTED TCS
GSM 850	GSM LINK GPRS CLASS 12 LINK	GSM LINK GPRS CLASS 12 LINK
GSM 1900	GSM LINK GPRS CLASS 12 LINK	GSM LINK GPRS CLASS 12 LINK
WCDMA BAND V	RMC 12.2KBPS LINK	RMC 12.2KBPS LINK

4 MEASUREMENT INSTRUMENTS

Radiation Test equipment

Kind of Equipment	Manufacturer	Type No.	Serial No.	Last calibration	Calibrated until
Test Receiver	R&S	ESCI	101427	2021.09.30	2022.09.29
Signal Analyzer	R&S	FSV 40-N	101823	2021.09.30	2022.09.29
Signal Generator	Agilent	83752A	3610A02740	2021.09.30	2022.09.29
Wireless Communications Test Set	R&S	CMW 500	133884	2022.03.01	2023.02.28
Bilog Antenna	TESEQ	CBL6111D	34678	2020.10.12	2022.10.11
Horn Antenna	SCHWARZBECK	BBHA 9120D	02014	2021.10.11	2023.10.10
Bilog Antenna	TESEQ	CBL6111D	45873	2020.10.12	2022.10.11
Horn Antenna	SCHWARZBECK	BBHA 9120D	9120D-1343	2020.10.12	2022.10.11
SHF-EHF Horn Antenna (18G-40GHz)	A-INFO	LB-180400-KF	J211020657	2020.10.12	2022.10.11
Pre-Amplifier (0.1M-3GHz)	EM	EM330	060665	2021.10.08	2022.10.07
Pre-Amplifier (1G-18GHz)	SKET	LNPA-01018G-45	SK2018080901	2021.09.30	2022.09.29
Pre-Amplifier (18G-40GHz)	SKET	LNPA-1840-50	SK2018101801	2021.09.28	2022.09.27
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	2021.10.09	2022.10.08
Test SW	BALUN	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	2021.09.29	2022.09.28
Wireless Communications Test Set	R&S	CMW 500	133884	2022.03.01	2023.02.28
Signal Analyzer	Agilent	N9020A	MY52440124	2022.03.01	2023.02.28
Temperature& Humidity test chamber	Safety test	AG80L	171200018	2022.03.01	2023.02.28
Programmable power supply	Agilent	E3642A	MY40002025	2021.10.08	2022.10.07
Temperature & Humidity	SW-108	SuWei	N/A	2022.03.02	2023.03.01
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&TRANSMITTER RADIATED POWER

TEST OVERVIEW

CONDUCTED OUTPUT POWER:
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.
TRANSMITTER RADIATED POWER (EIRP/ERP)
Determining ERP and/or EIRP from conducted RF output power measurements according to ANSI C63.26 2015 Section 5.2.5.5.
In many cases, RF output power limits are specified in terms of the ERP or the EIRP. Typically, ERP is specified when the operating frequency is less than or equal to 1 GHz and EIRP is specified when the operating frequency is greater than 1 GHz. Both are defined as the product of the power supplied to the antenna and its gain (relative to a dipole antenna in the case of ERP, and relative to an isotropic antenna in the case of EIRP); however, when working in decibels (i.e., logarithmic scale), the ERP and EIRP represent the sum of the transmit antenna gain (in dBd or dBi, respectively) and the conducted RF output power (expressed in dB relative to watts or milliwatts).
The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation (1) as follows:
(1) ERP or EIRP = PMeas + GT
ERP= EIRP-2.15
where
ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as PMeas, e.g., dBm or dBW)
PMeas measured transmitter output power or PSD, in dBm or dBW
GT gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)
For devices utilizing multiple antennas, see 6.4 for guidance with respect to determining the effective array transmit antenna gain term to be used in the above equation.
The following equations demonstrate the mathematical relationship between ERP and EIRP:
a) ERP = EIRP − 2.15, where ERP and EIRP are expressed in consistent units.
b) EIRP = ERP + 2.15, where ERP and EIRP are expressed in consistent units.

TEST PROCEDURES

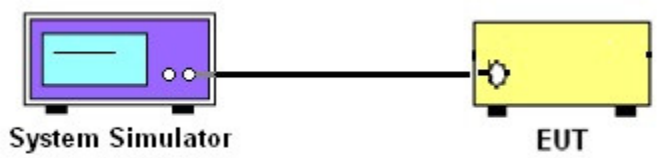
1. The transmitter output port was connected to the system simulator.

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

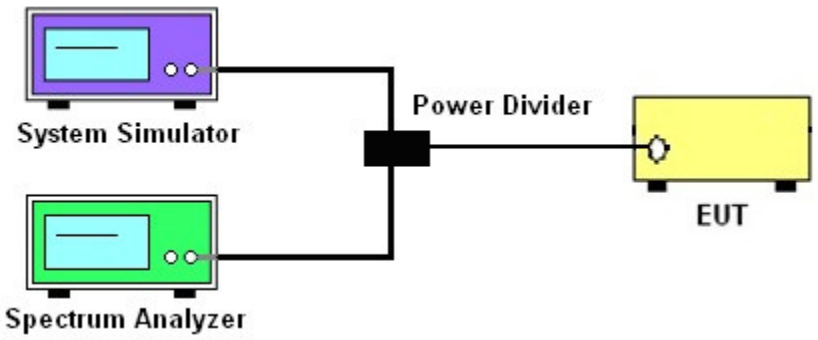
1. The testing follows FCCKDB 971168 v03r01 section.

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 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.

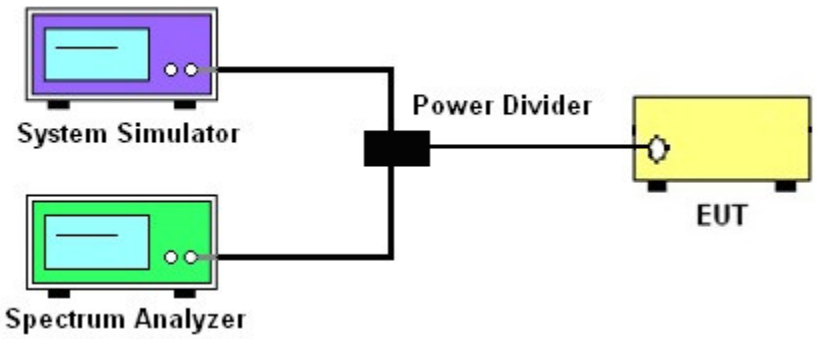
The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 Db below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) 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 ≥ 3 x 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 3.

5.4 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°C to +50°C in 10°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 ±0.00025% (±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

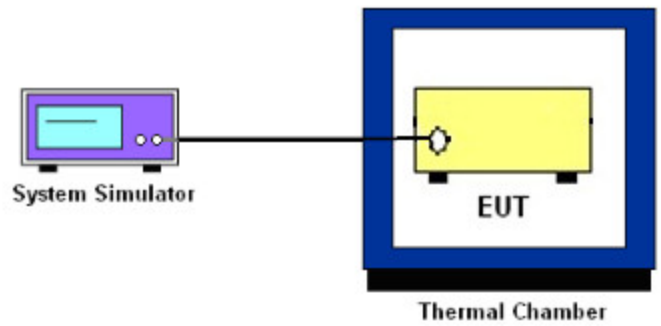
Temperature Variation

1. The testing follows FCC KDB 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°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.

Voltage Variation

1. The testing follows FCC KDB 971168 D01 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.

TEST SETUP



TEST RESULT

Note: Test data See Appendix 4.

5.5 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

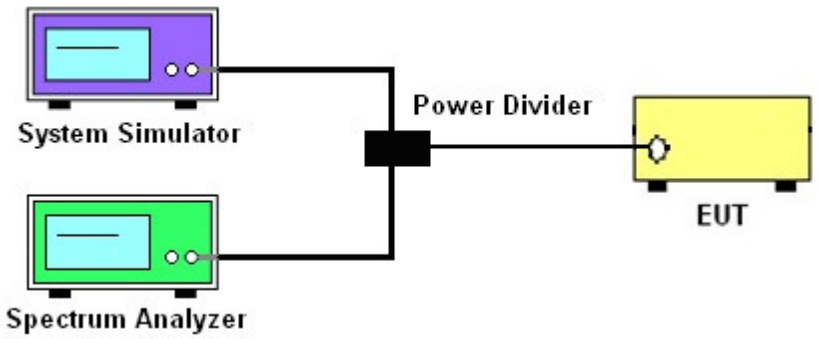
1. The testing FCC KDB 971168 D01 v03r01 Section 6.0 and ANSI C63.26-2015-Section 5.5.
2. The EUT was connected to the spectrum analyzer and system simulator via a power divider.
3. The RF output of EUT was connected to the spectrum analyzer by an RF cable and attenuator. The path loss was compensated 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 + 10log(P) dB below the transmitter power P(Watts)

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

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

= -13dBm.

TEST SETUP



TEST RESULT

Note: Test data See Appendix 5.

5.6 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 + log10(P[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.

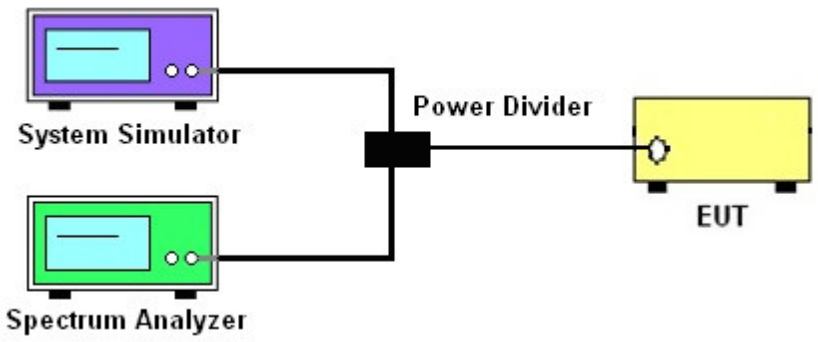
5. The band edges of low and high channels for the highest RF powers were measured.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. The limit line is derived from 43 + 10log(P) dB below the transmitter power P(Watts)

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

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

= -13dBm.

TEST SETUP



TEST RESULT

Note: Test data See Appendix 6.

5.7 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 signalsoperating below 1GHz are performed using horizontally and vertically polarized tuned dipole antennas.Measurements on signals operating above 1GHz are performed using vertically and horizontally polarizedhorn antennas. All measurements are performed as peak measurements while the EUT isoperating at maximum power and at the appropriate frequencies.

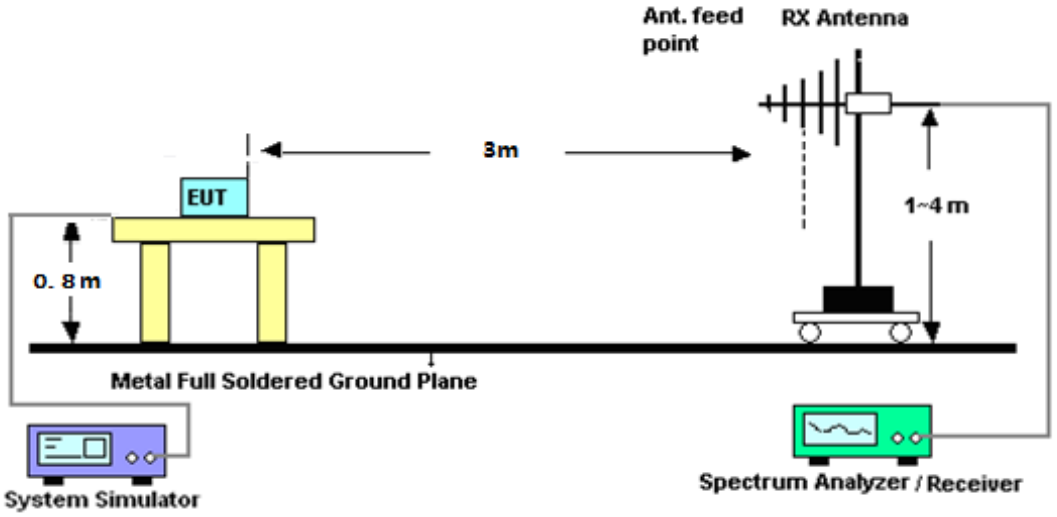
It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

TEST PROCEDURE

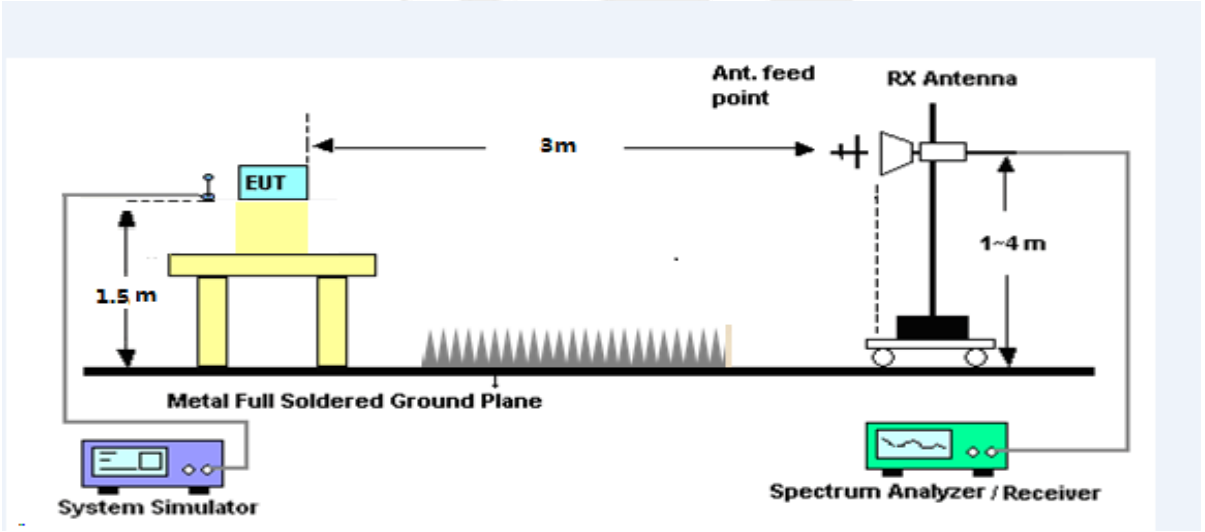
1. The testing FCC KDB 971168 D01 Section 5.8 and ANSI C63.26-2015-Section 5.5.
2. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
3. VBW ≥ 3 x RBW
4. Span = 1.5 times the OBW
5.No. of sweep points > 2 x span/RBW
6. Detector = Peak
7. Trace mode = max hold
8. The trace was allowed 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.
PMea=S.G Level+ Ant-Cable loss; Margin=PMea-Limit.

TEST SETUP

For radiated test from 30MHz to 1GHz



For radiated test from above 1GHz



TEST RESULT

Note: Test data See Appendix 7.

APPENDIX A.TESTRESULT

A1. CONDUCTED OUTPUT POWER&TRANSMITTER RADIATED POWER

GSM 850							
Mode	Frequency (MHz)	Conduction AVG Power(dBm)	Ant Gain（dBi）	ERP (dBm)	ERP Limit (W)	ERP Limit (dBm)	Conclusion
GSM (GMSK,1-Slot)	824.2	31.08	-1.00	27.93	7.00	38.45	PASS
	836.6	31.27	-1.00	28.12	7.00	38.45	PASS
	848.8	31.15	-1.00	28.00	7.00	38.45	PASS
GPRS (GMSK,1-Slot)	824.2	30.84	-1.00	27.69	7.00	38.45	PASS
	836.6	31.07	-1.00	27.92	7.00	38.45	PASS
	848.8	31.02	-1.00	27.87	7.00	38.45	PASS
GPRS (GMSK,2-Slot)	824.2	30.36	-1.00	27.21	7.00	38.45	PASS
	836.6	30.63	-1.00	27.48	7.00	38.45	PASS
	848.8	30.56	-1.00	27.41	7.00	38.45	PASS
GPRS (GMSK,3-Slot)	824.2	29.90	-1.00	26.75	7.00	38.45	PASS
	836.6	30.22	-1.00	27.07	7.00	38.45	PASS
	848.8	30.09	-1.00	26.94	7.00	38.45	PASS
GPRS (GMSK,4-Slot)	824.2	29.47	-1.00	26.32	7.00	38.45	PASS
	836.6	29.72	-1.00	26.57	7.00	38.45	PASS
	848.8	29.65	-1.00	26.50	7.00	38.45	PASS

PCS 1900							
Mode	Frequency (MHz)	Conduction AVG Power(dBm)	Ant Gain（dBi）	EIRP (dBm)	EIRP Limit (W)	EIRP Limit (dBm)	Conclusion
GSM (GMSK,1-Slot)	1850.2	28.14	-1.10	27.04	2.00	33.01	PASS
	1880.0	28.39	-1.10	27.29	2.00	33.01	PASS
	1909.8	28.25	-1.10	27.15	2.00	33.01	PASS
GPRS (GMSK,1-Slot)	1850.2	28.12	-1.10	27.02	2.00	33.01	PASS
	1880.0	27.81	-1.10	26.71	2.00	33.01	PASS
	1909.8	27.63	-1.10	26.53	2.00	33.01	PASS
GPRS (GMSK,2-Slot)	1850.2	27.67	-1.10	26.57	2.00	33.01	PASS
	1880.0	27.38	-1.10	26.28	2.00	33.01	PASS
	1909.8	27.16	-1.10	26.06	2.00	33.01	PASS
GPRS (GMSK,3-Slot)	1850.2	27.21	-1.10	26.11	2.00	33.01	PASS
	1880.0	26.92	-1.10	25.82	2.00	33.01	PASS
	1909.8	26.73	-1.10	25.63	2.00	33.01	PASS
GPRS (GMSK,4-Slot)	1850.2	26.71	-1.10	25.61	2.00	33.01	PASS
	1880.0	26.44	-1.10	25.34	2.00	33.01	PASS
	1909.8	26.25	-1.10	25.15	2.00	33.01	PASS

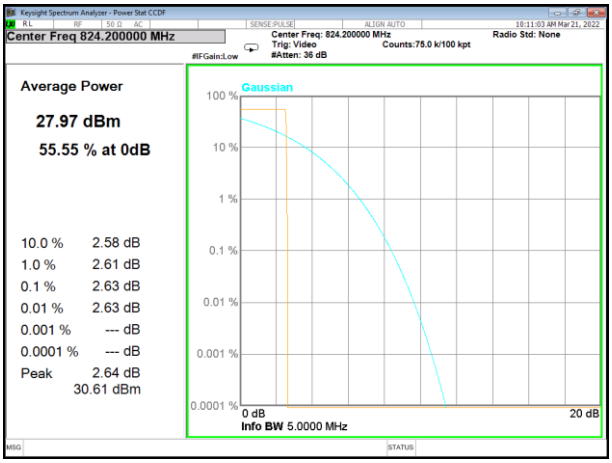
Radiated Power (ERP) for WCDMA Band 5							
Mode	Frequency (MHz)	Conduction AVG Power(dBm)	Ant Gain （dBi）	ERP (dBm)	ERP Limit(W)	ERP Limit (dBm)	Conclusion
WCDMA	826.40	22.80	-1.00	19.65	7.00	38.45	PASS
	836.60	22.48	-1.00	19.33	7.00	38.45	PASS
	846.40	22.03	-1.00	18.88	7.00	38.45	PASS
HSDPA Subtest 1	826.40	21.74	-1.00	18.59	7.00	38.45	PASS
	836.60	22.35	-1.00	19.20	7.00	38.45	PASS
	846.40	22.60	-1.00	19.45	7.00	38.45	PASS
HSDPA Subtest 2	826.40	21.30	-1.00	18.15	7.00	38.45	PASS
	836.60	21.86	-1.00	18.71	7.00	38.45	PASS
	846.40	22.19	-1.00	19.04	7.00	38.45	PASS
HSDPA Subtest 3	826.40	20.94	-1.00	17.79	7.00	38.45	PASS
	836.60	21.40	-1.00	18.25	7.00	38.45	PASS
	846.40	21.83	-1.00	18.68	7.00	38.45	PASS
HSDPA Subtest 4	826.40	20.48	-1.00	17.33	7.00	38.45	PASS
	836.60	21.00	-1.00	17.85	7.00	38.45	PASS
	846.40	21.46	-1.00	18.31	7.00	38.45	PASS
HSUPA Subtest 1	826.40	21.68	-1.00	18.53	7.00	38.45	PASS
	836.60	22.41	-1.00	19.26	7.00	38.45	PASS
	846.40	22.36	-1.00	19.21	7.00	38.45	PASS
HSUPA Subtest 2	826.40	20.73	-1.00	17.58	7.00	38.45	PASS
	836.60	21.50	-1.00	18.35	7.00	38.45	PASS
	846.40	21.37	-1.00	18.22	7.00	38.45	PASS
HSUPA Subtest 3	826.40	20.59	-1.00	17.44	7.00	38.45	PASS
	836.60	21.01	-1.00	17.86	7.00	38.45	PASS
	846.40	20.99	-1.00	17.84	7.00	38.45	PASS
HSUPA Subtest 4	826.40	20.24	-1.00	17.09	7.00	38.45	PASS
	836.60	20.51	-1.00	17.36	7.00	38.45	PASS
	846.40	20.64	-1.00	17.49	7.00	38.45	PASS
HSUPA Subtest 5	826.40	18.78	-1.00	15.63	7.00	38.45	PASS
	836.60	19.01	-1.00	15.86	7.00	38.45	PASS
	846.40	19.19	-1.00	16.04	7.00	38.45	PASS

A2. PEAK-TO-AVERAGE RADIO

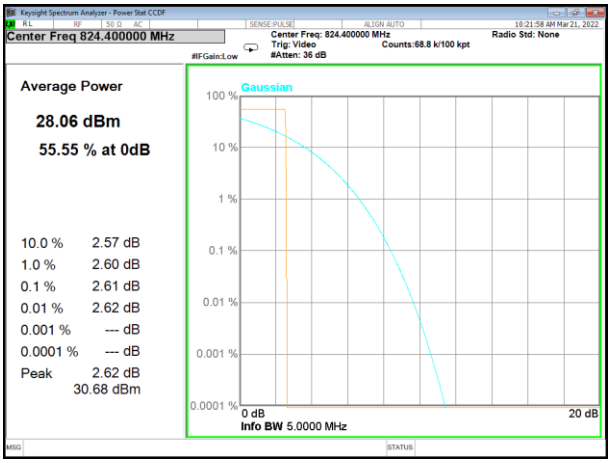
GSM 850		
Mode	Frequency (MHz)	PAR
GSM 850	824.2	2.63
	836.6	2.62
	848.8	2.63
GPRS 850	824.2	2.61
	836.6	2.62
	848.8	2.62

PCS 1900		
Mode	Frequency (MHz)	PAR
PCS1900	1850.2	2.64
	1880	2.64
	1909.8	2.64
GPRS1900	1850.2	2.66
	1880	2.65
	1909.8	2.64

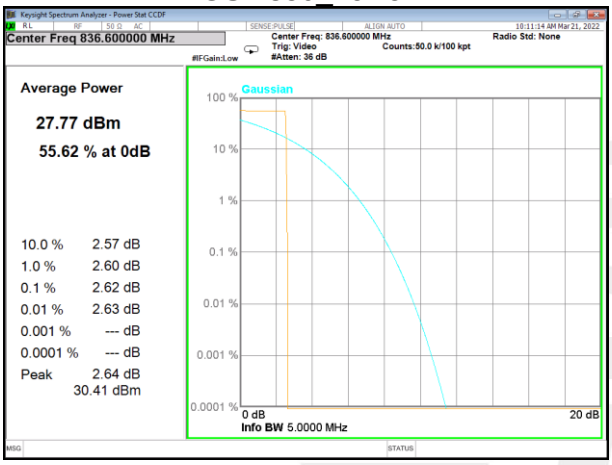
UMTS Band 5		
Mode	Frequency (MHz)	PAR
WCDMA 850 RMC	826.4	3.07
	836.6	2.98
	846.6	2.99
HSDPA 850	826.4	3.49
	836.6	3.41
	846.6	3.37
HSUPA 850	826.4	3.43
	836.6	3.48
	846.6	3.29



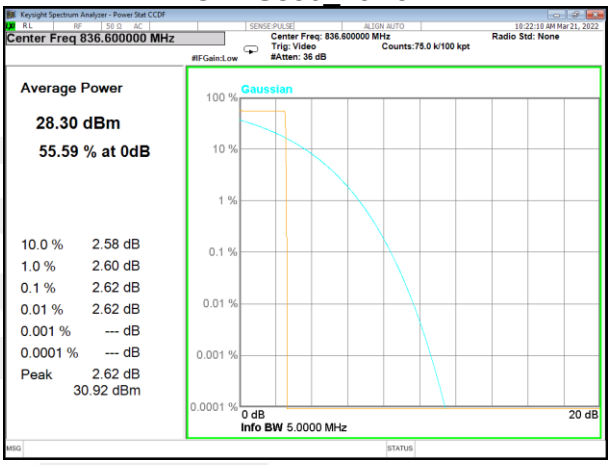
GSM850_Lower



GPRS850_Lower



GSM850_Middle



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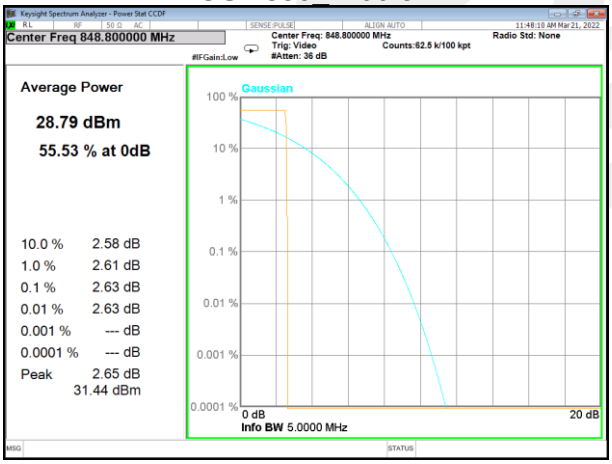
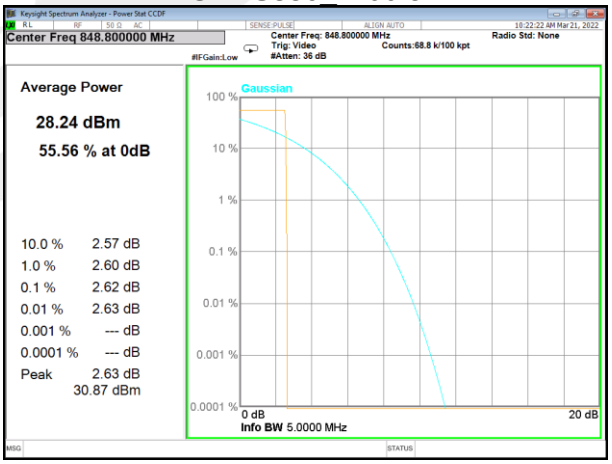


GSM850_Higher



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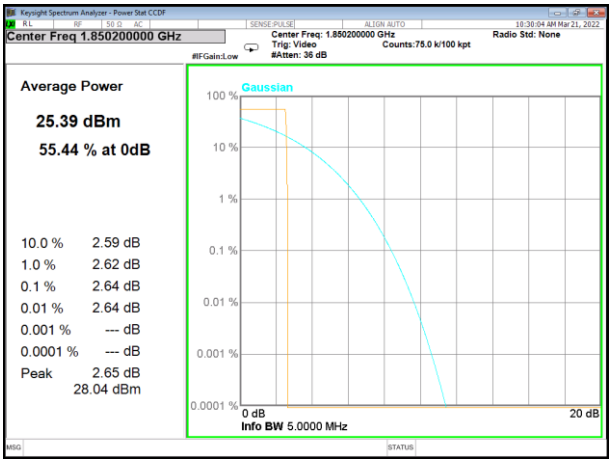
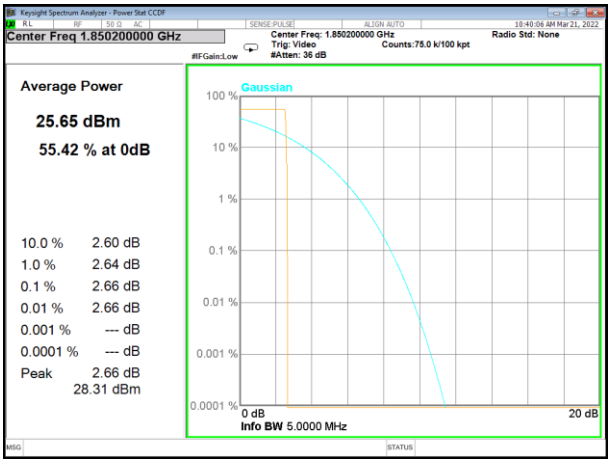


GSM1900_Lower



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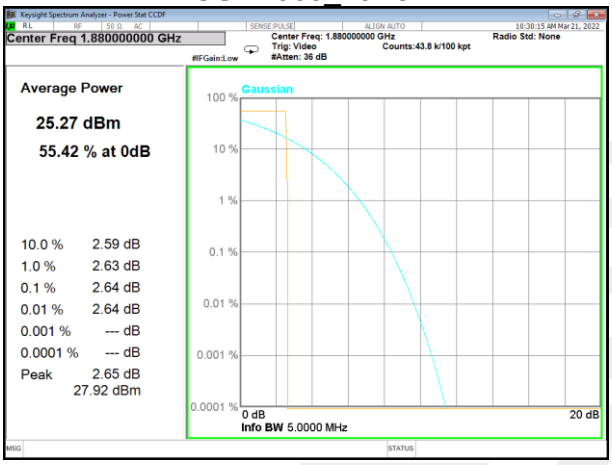

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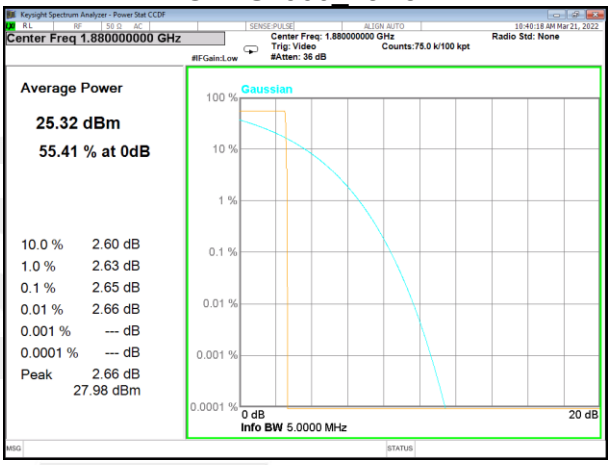
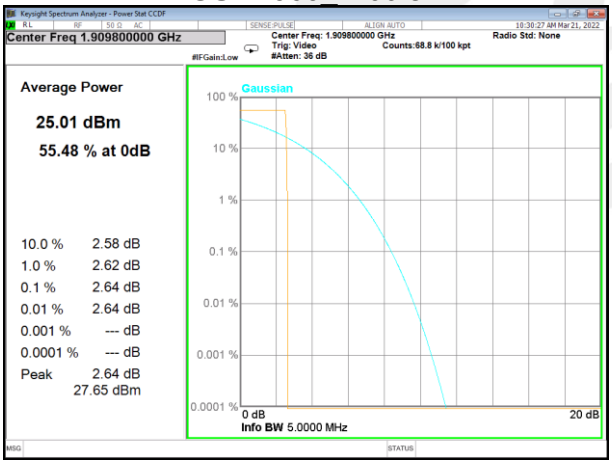
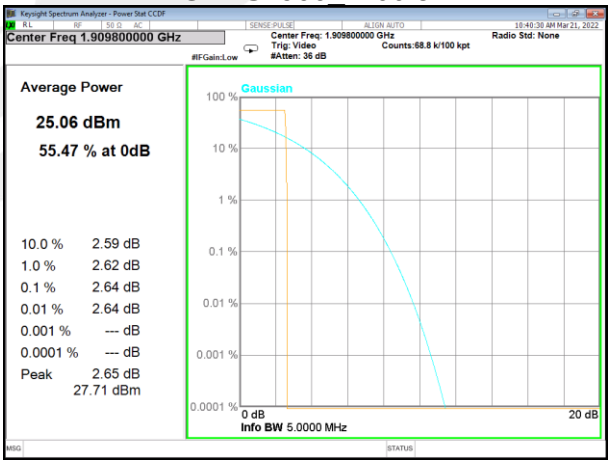


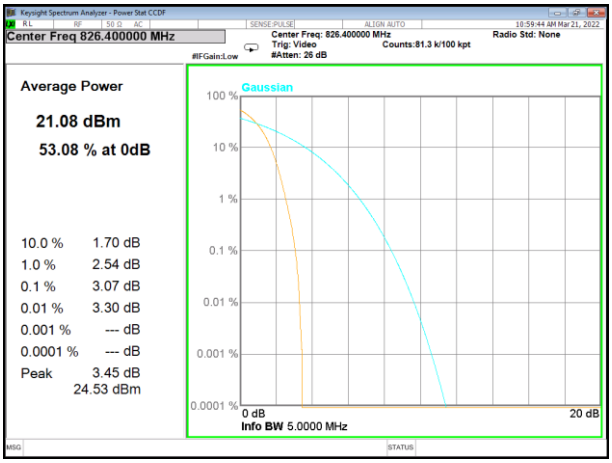
GPRS1900_Middle



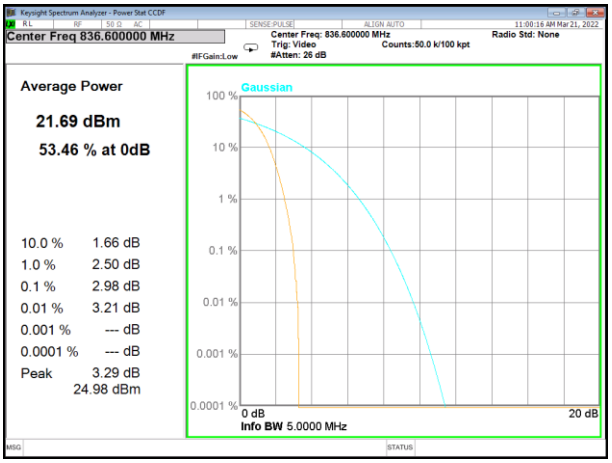
GSM1900_Higher



GPRS1900_Higher



WCDMA Band 5_Low



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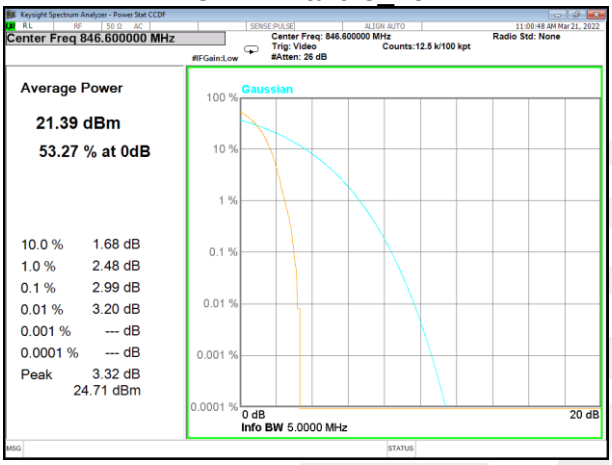
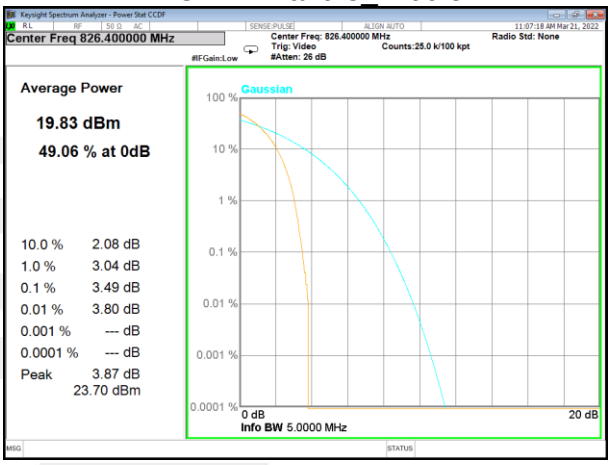
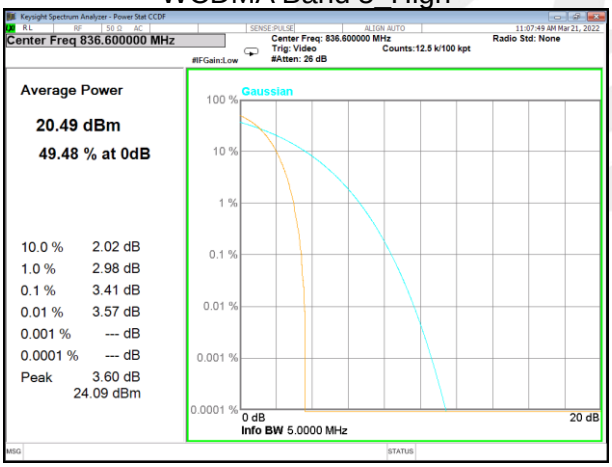


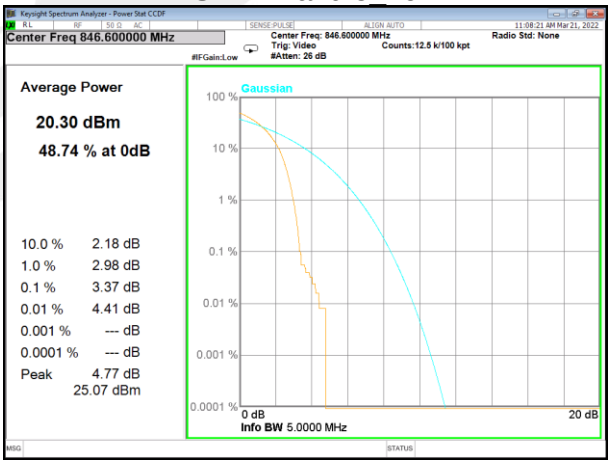
WCDMA Band 5_High



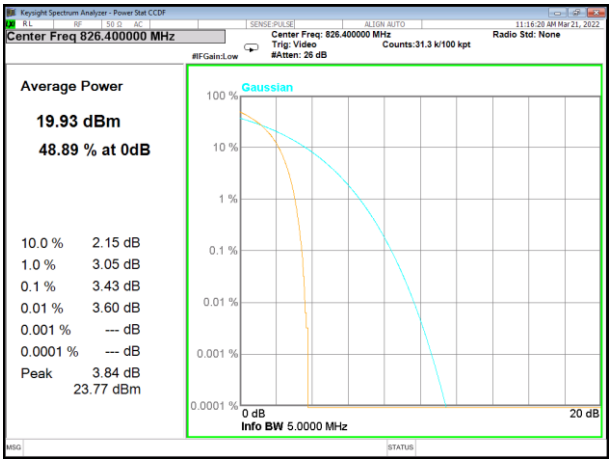
HSDPA Band 5_Low



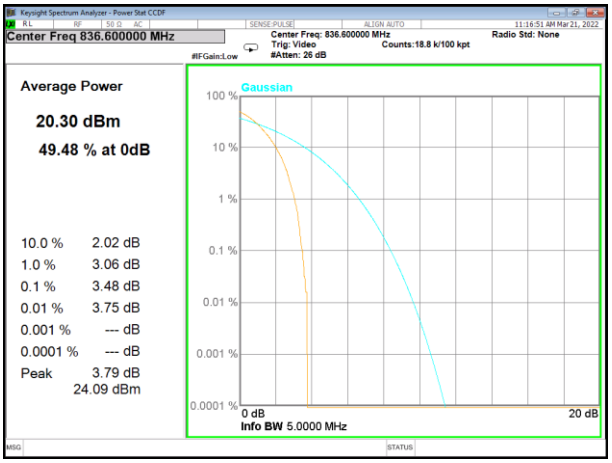
HSDPA Band 5_Middle



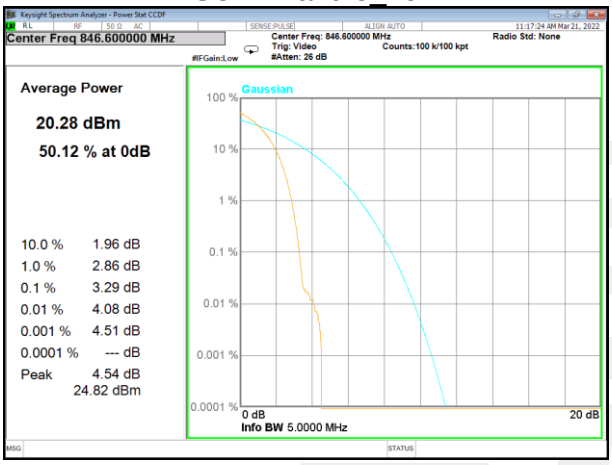
HSDPA Band 5_High



HSUPA Band 5_Low



HSUPA Band 5_Middle



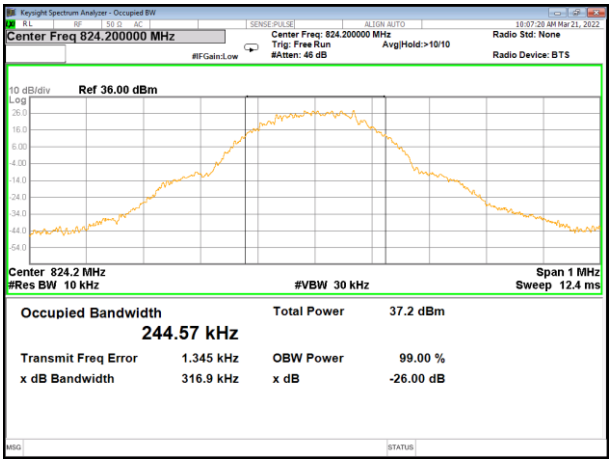
HSUPA Band 5_High

A3. OCCUPIED BANDWIDTH (99% OCCUPIED BANDWIDTH/26dB BANDWIDTH)

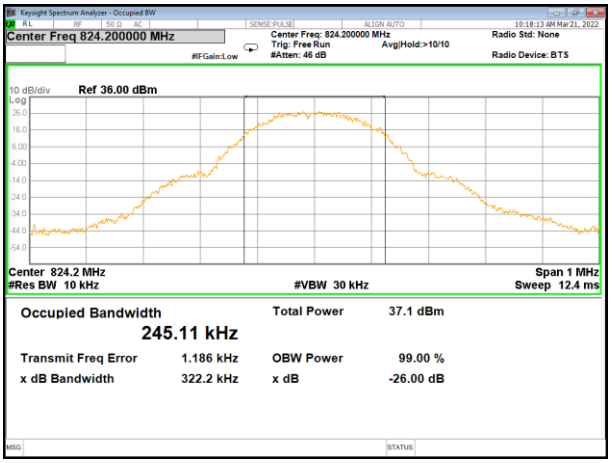
GSM Bandwidth [KHz]						
Mode	Lowest		Middle		Highest	
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
GSM850	244.57	316.9	249.05	316.1	247.64	319.3
GPRS850	245.11	322.2	245.54	321.1	244.07	322.5

GSM Bandwidth [KHz]						
Mode	Lowest		Middle		Highest	
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
GSM1900	243.39	312.8	240.39	310.9	243.82	314.7
GPRS1900	246.32	318.9	243.67	308.1	244.92	317.9

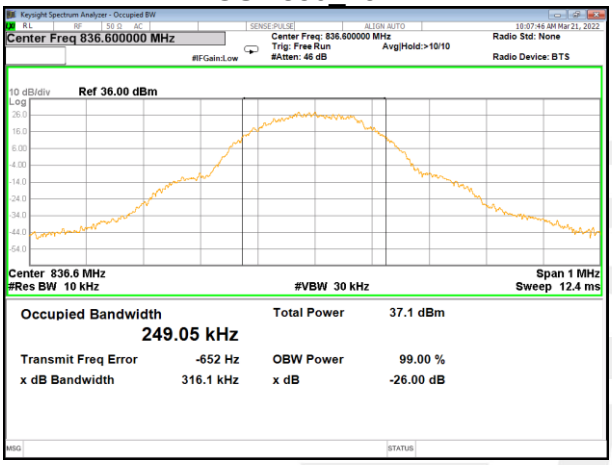
WCDMA Bandwidth [MHz]						
Mode	Lowest		Middle		Highest	
	99% BW	26dB BW	99% BW	26dB BW	99% BW	26dB BW
WCDMA 5	4.158	4.658	4.142	4.664	4.169	4.667
HSDPA 5	4.16	4.656	4.142	4.652	4.165	4.666
HSUPA 5	4.162	4.671	4.142	4.654	4.166	4.662



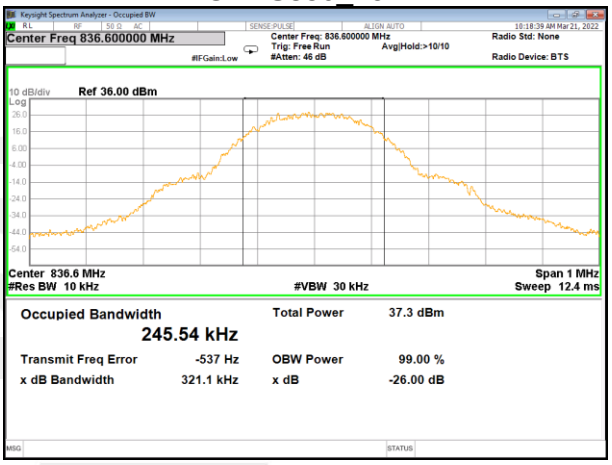
GSM850_Low



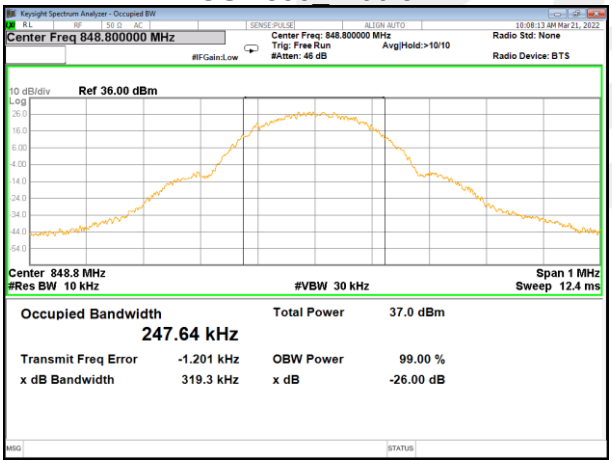
GPRS850_Low



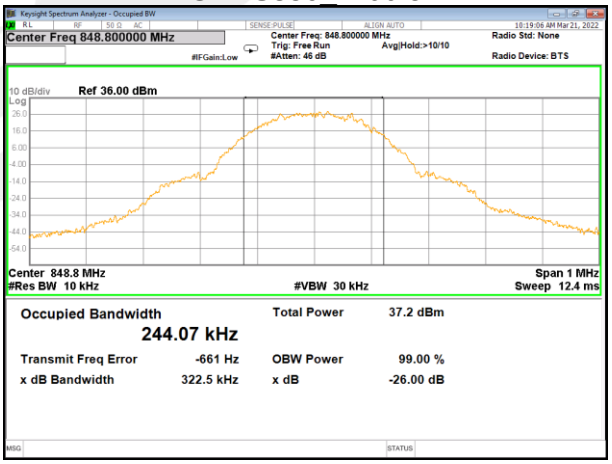
GSM850_Middle



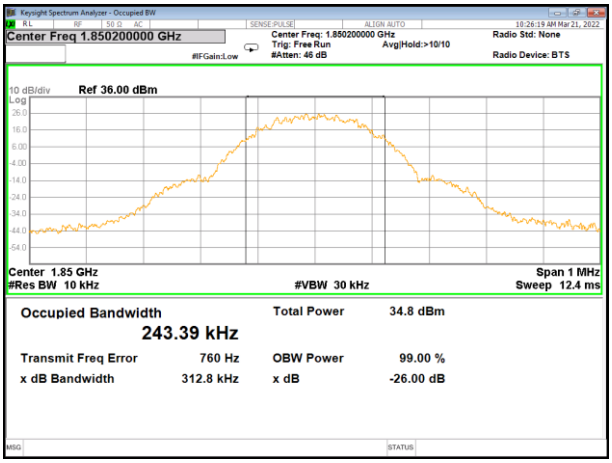
GPRS850_Middle



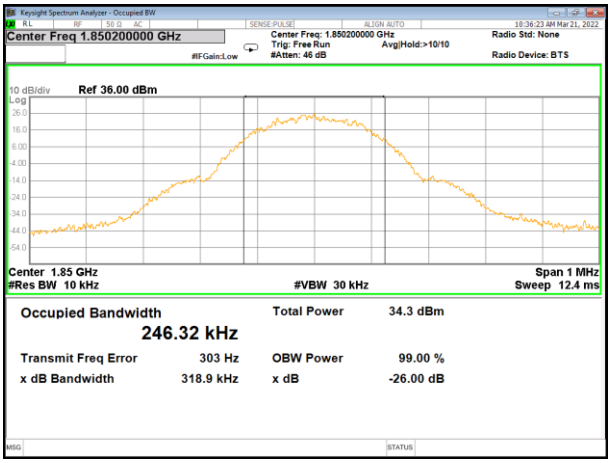
GSM850_High



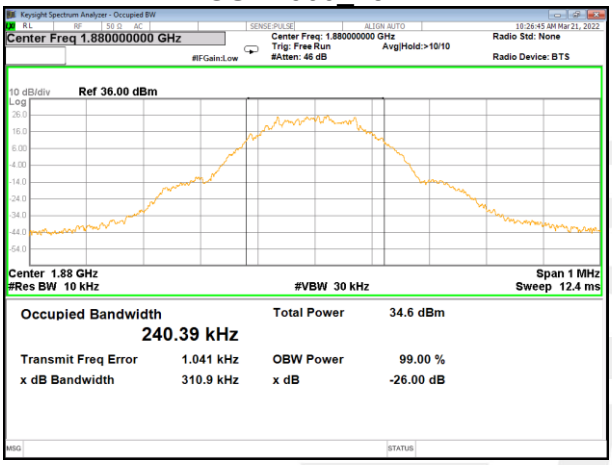
GPRS850_High



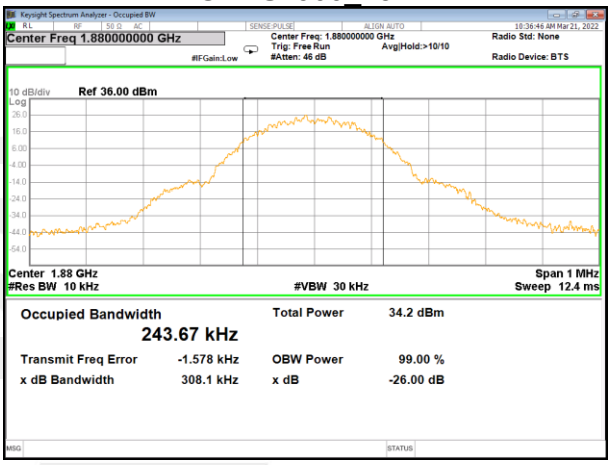
GSM1900_Low



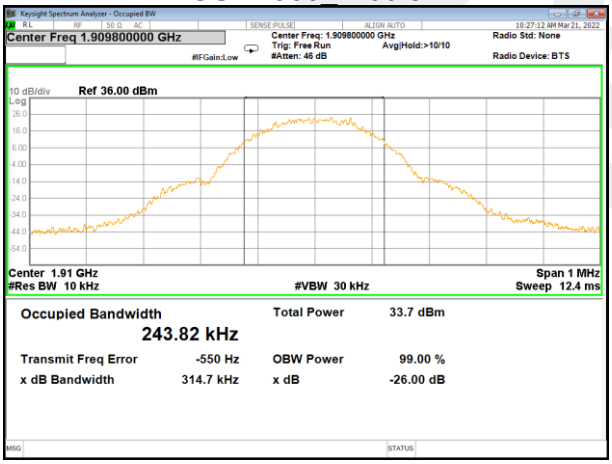
GPRS1900_Low



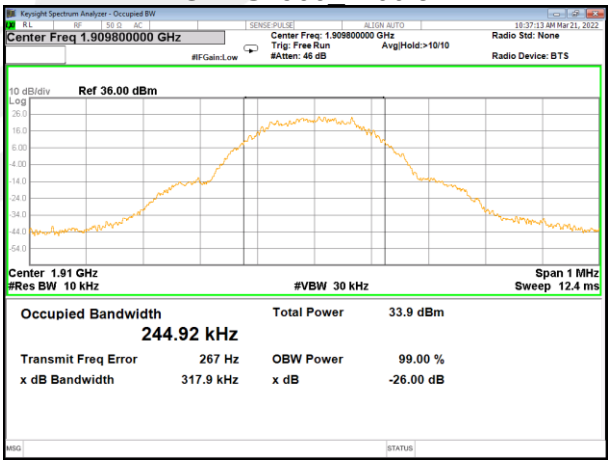
GSM1900_Middle



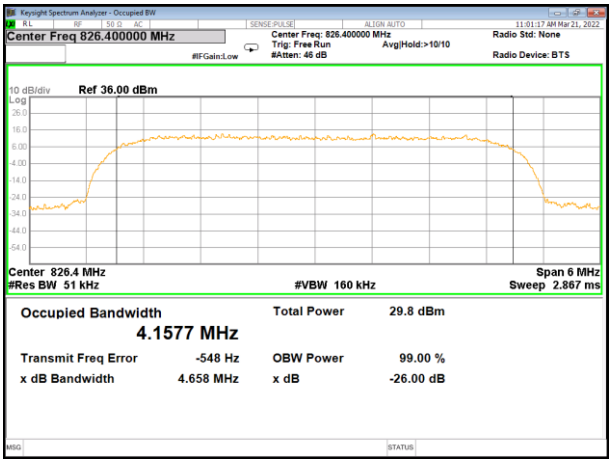
GPRS1900_Middle



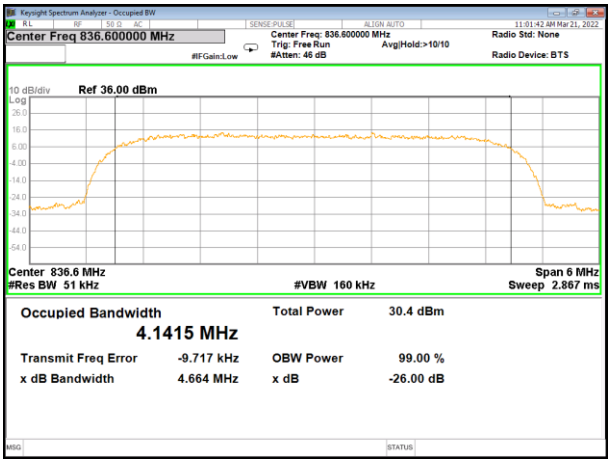
GSM1900_High



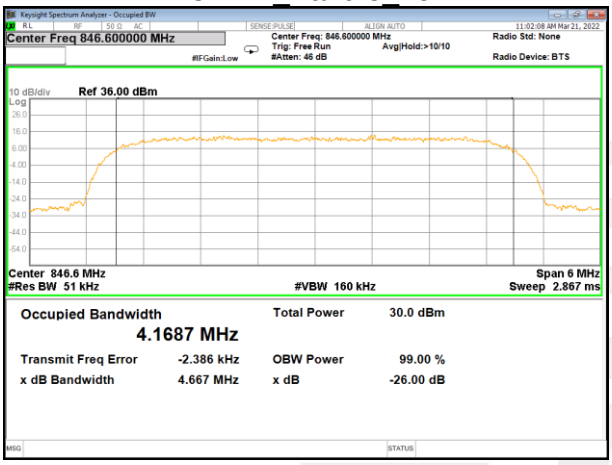
GPRS1900_High



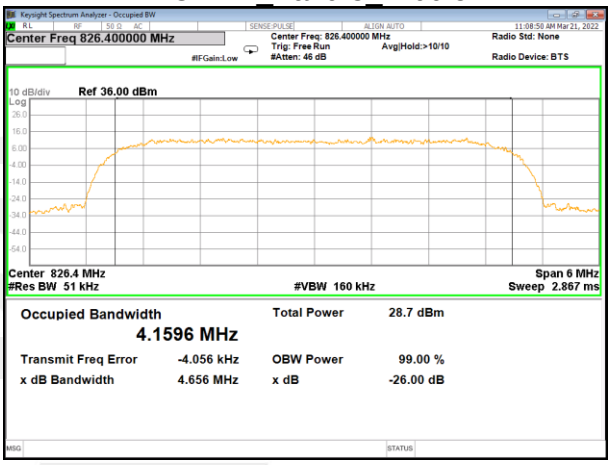
WCDMA_Band 5_Low



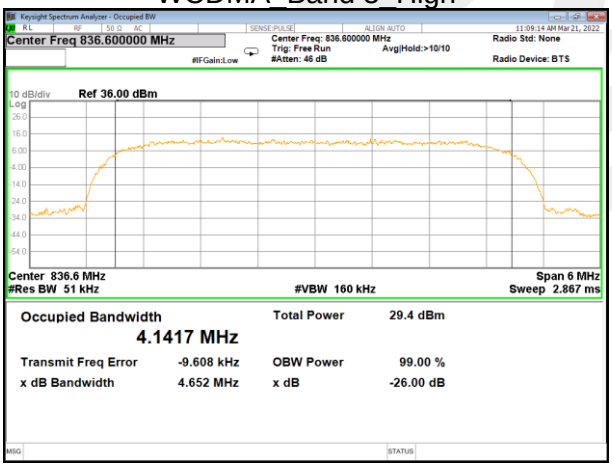
WCDMA_Band 5_Middle



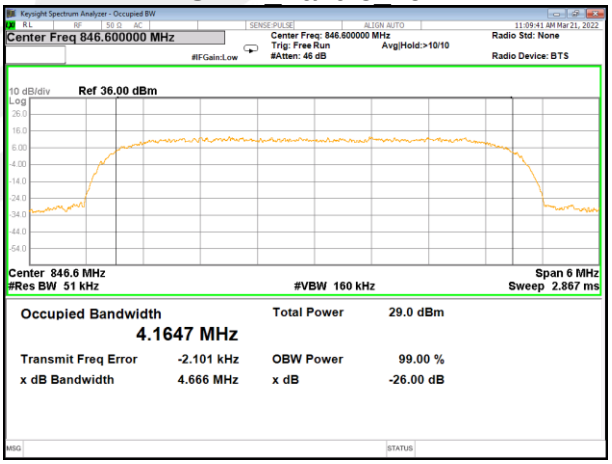
WCDMA_Band 5_High



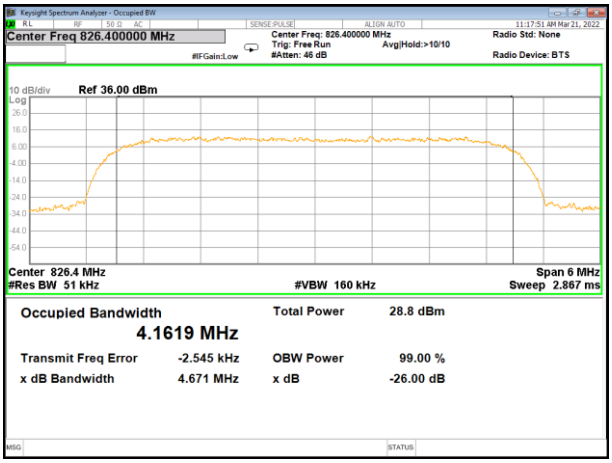
HSDPA_Band 5_Low



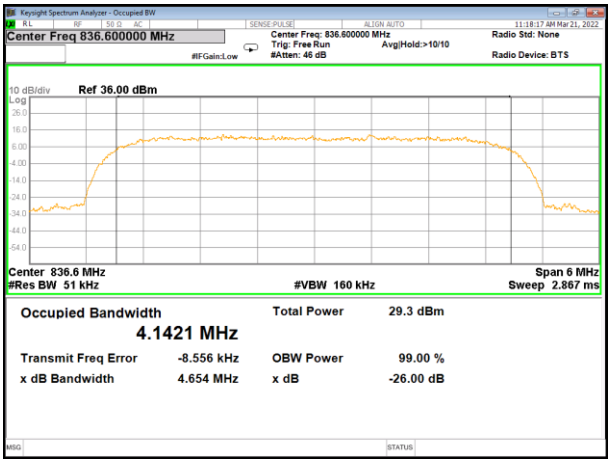
HSDPA_Band 5_Middle



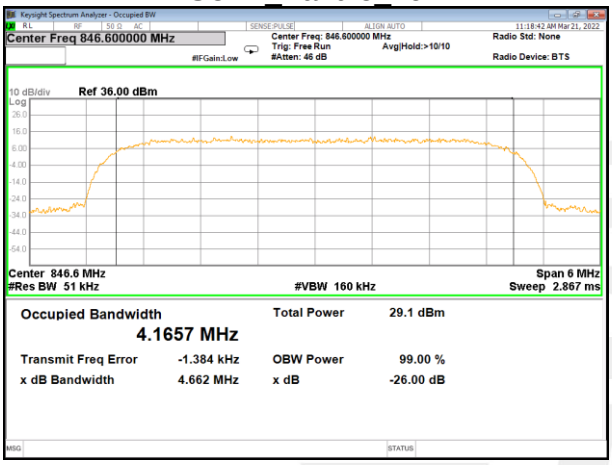
HSDPA_Band 5_High



HSUPA_Band 5_Low



HSUPA_Band 5_Middle



HSUPA_Band 5_High

A4. FREQUENCY STABILITY

Normal Voltage = 3.8V; Battery End Point (BEP) = 3.65V; Maximum Voltage =4.35V

GSM 850 /836.6MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	14.84	0.018	2.5ppm	PASS
40		19.64	0.023		
30		27.93	0.033		
20		30.92	0.037		
10		19.67	0.024		
0		27.60	0.033		
-10		24.74	0.030		
-20		18.88	0.023		
-30		23.14	0.028		
20	Maximum Voltage	34.44	0.041		
20	BEP	23.50	0.028		

GPRS 850 /836.6MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	25.92	0.031	2.5ppm	PASS
40		24.15	0.029		
30		32.98	0.039		
20		30.15	0.036		
10		23.44	0.028		
0		20.44	0.024		
-10		16.49	0.020		
-20		29.13	0.035		
-30		19.66	0.023		
20	Maximum Voltage	14.49	0.017		
20	BEP	18.53	0.022		

GSM 1900 / 1880MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	21.99	0.012	Within Authorized Band	PASS
40		34.50	0.018		
30		29.46	0.016		
20		27.49	0.015		
10		22.43	0.012		
0		16.87	0.009		
-10		18.26	0.010		
-20		19.12	0.010		
-30		32.54	0.017		
20	Maximum Voltage	19.19	0.010		
20	BEP	27.17	0.014		

GPRS 1900 / 1880MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	19.65	0.010	Within Authorized Band	PASS
40		18.45	0.010		
30		22.38	0.012		
20		31.09	0.017		
10		21.58	0.011		
0		27.45	0.015		
-10		32.94	0.018		
-20		35.88	0.019		
-30		12.27	0.007		
20	Maximum Voltage	18.17	0.010		
20	BEP	18.54	0.010		

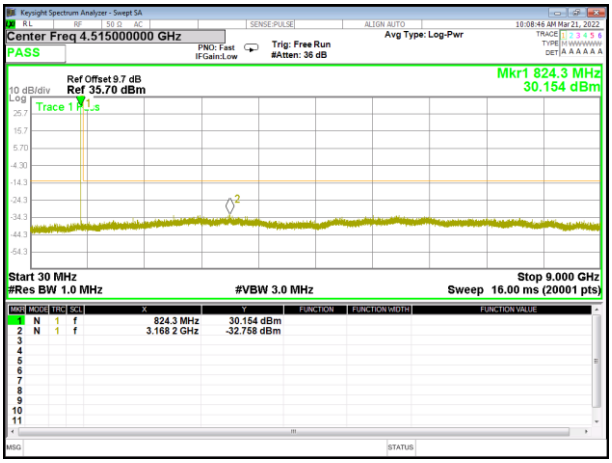
UMTS Band 5 / 836.6MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	22.30	0.027	2.5ppm	PASS
40		24.46	0.029		
30		24.04	0.029		
20		26.07	0.031		
10		21.30	0.025		
0		21.08	0.025		
-10		12.01	0.014		
-20		19.77	0.024		
-30		18.66	0.022		
20	Maximum Voltage	35.79	0.043		
20	BEP	28.21	0.034		

HSDPA Band 5 / 836.6MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev.	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	23.03	0.028	2.5ppm	PASS
40		25.68	0.031		
30		31.53	0.038		
20		30.40	0.036		
10		27.29	0.033		
0		12.11	0.014		
-10		31.13	0.037		
-20		12.29	0.015		
-30		29.56	0.035		
20	Maximum Voltage	33.11	0.040		
20	BEP	25.45	0.030		

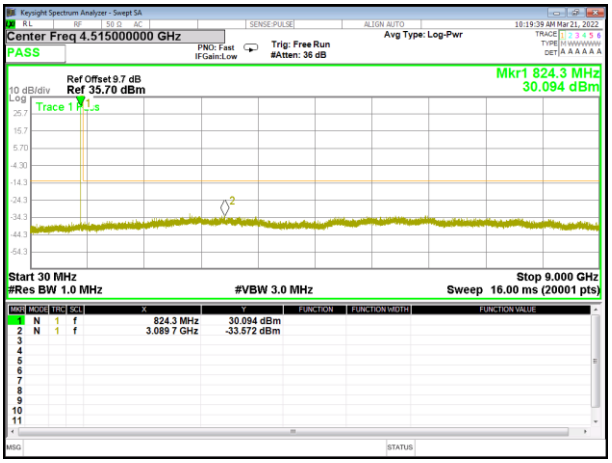
HSUPA Band 5 / 836.6MHz					
Temperature (°C)	Voltage (Volt)	Freq. Dev. (Hz)	Freq. Dev. (ppm)	Limit	Result
50	Normal Voltage	14.60	0.017	2.5ppm	PASS
40		35.53	0.042		
30		25.54	0.031		
20		25.23	0.030		
10		29.65	0.035		
0		26.06	0.031		
-10		29.47	0.035		
-20		28.68	0.034		
-30		20.11	0.024		
20	Maximum Voltage	25.07	0.030		
20	BEP	28.83	0.034		

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

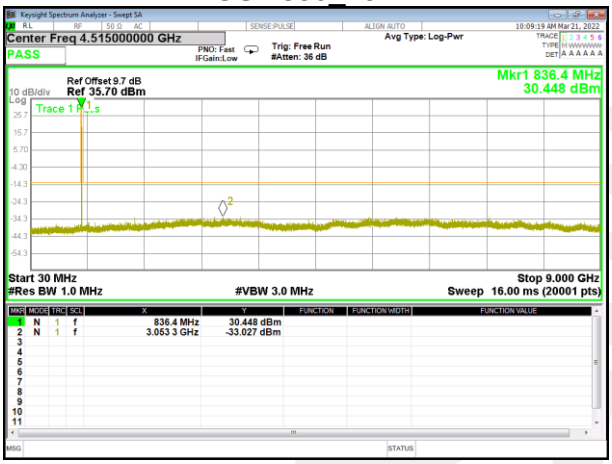
A5. SPURIOUS EMISSIONS AT ANTENNA TERMINALS



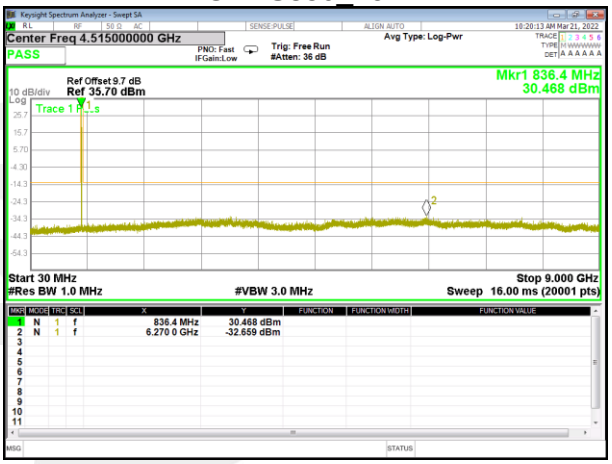
GSM850_Low



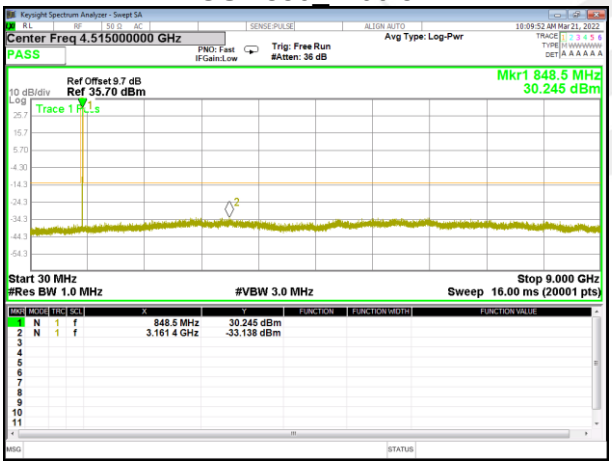
GPRS850_Low



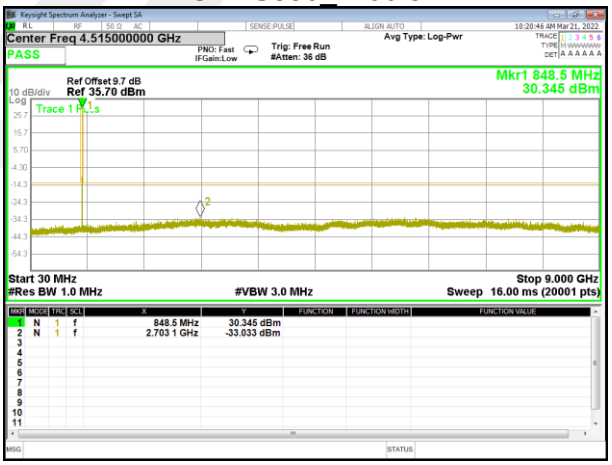
GSM850_Middle



GPRS850_Middle

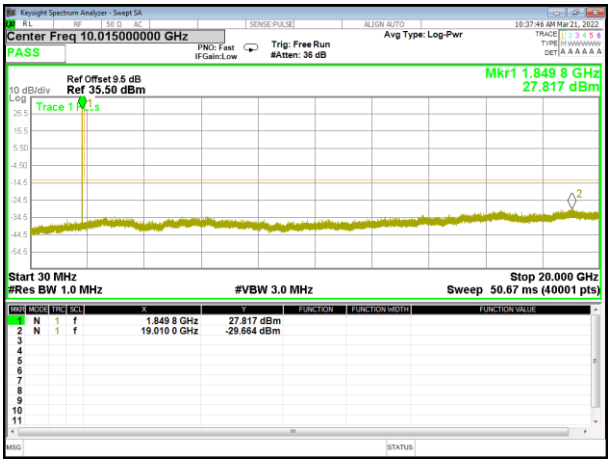


GSM850_High



GPRS850_High

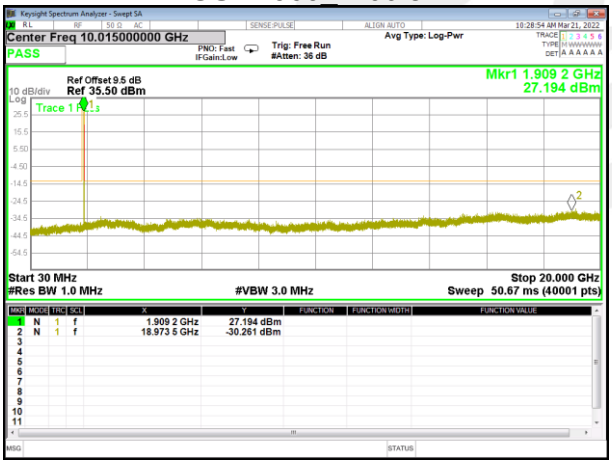
GSM1900_Low



GPRS1900_Low

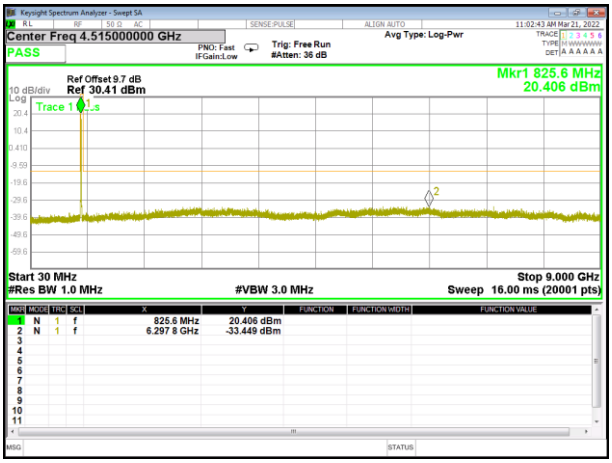
GSM1900_Middle

GPRS1900_Middle

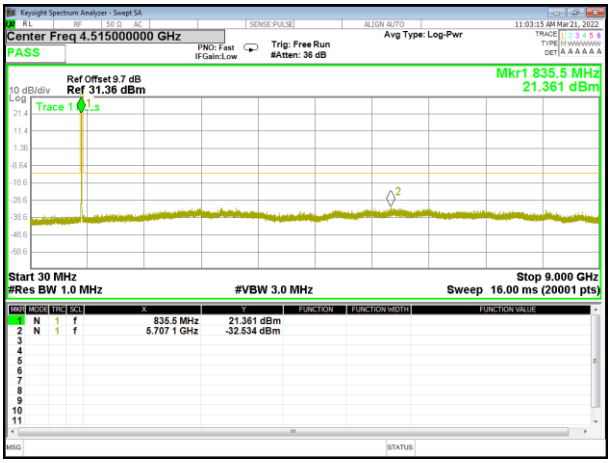


GSM1900_High

GPRS1900_High



WCDMA_Band 5_Low



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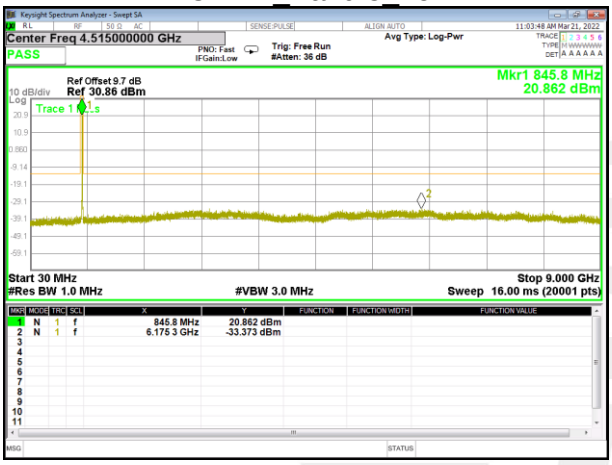

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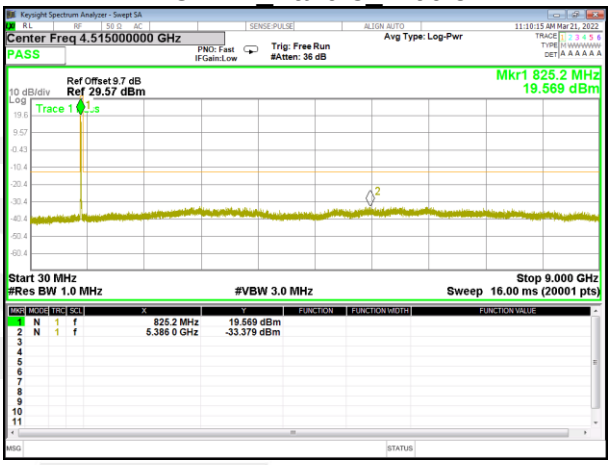
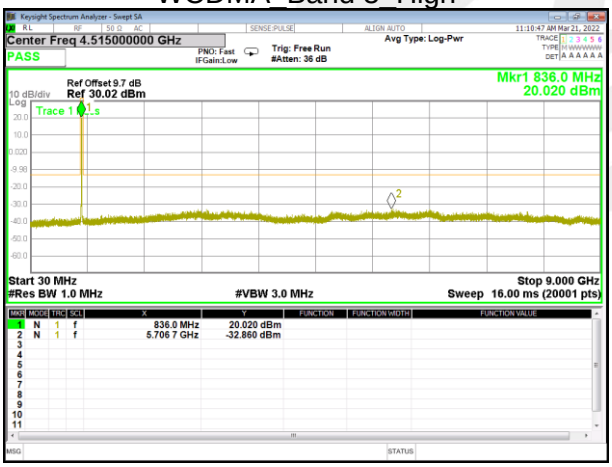
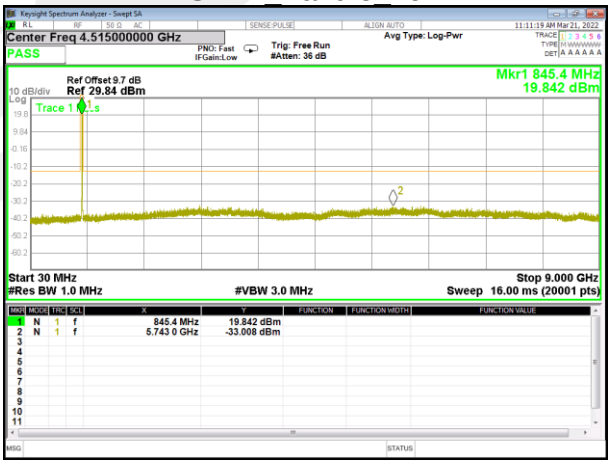


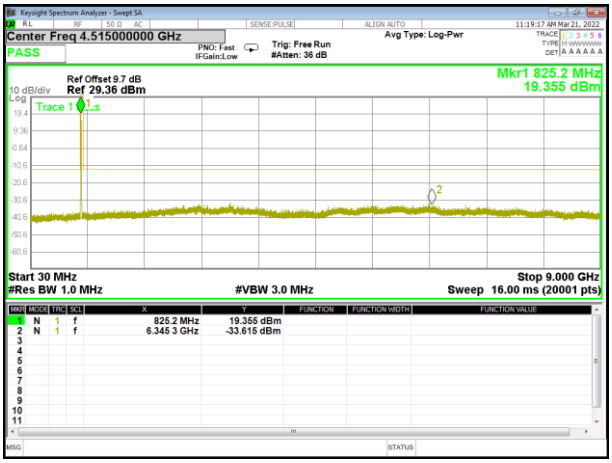
HSDPA_Band 5_Low



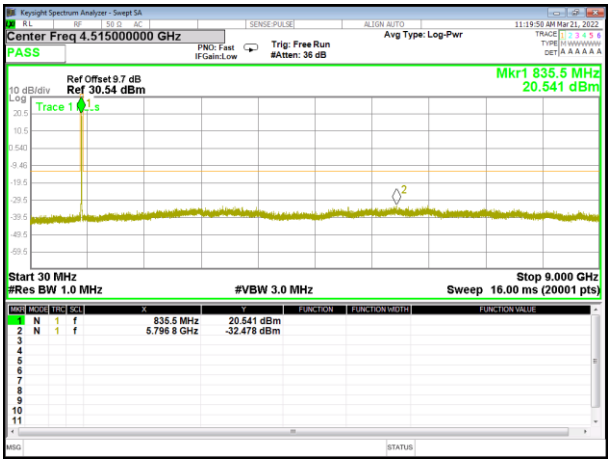
HSDPA_Band 5_Middle



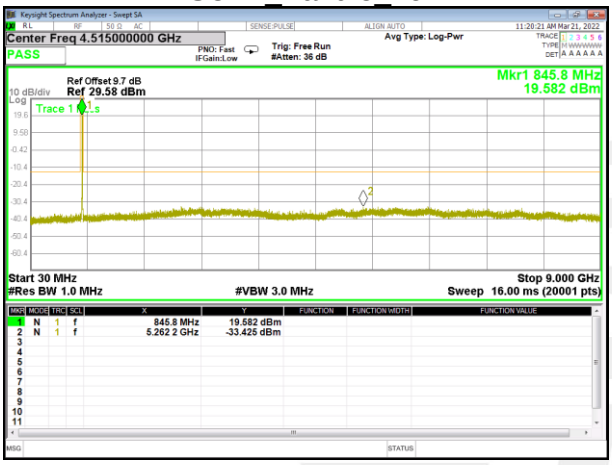
HSDPA_Band 5_High



HSUPA_Band 5_Low

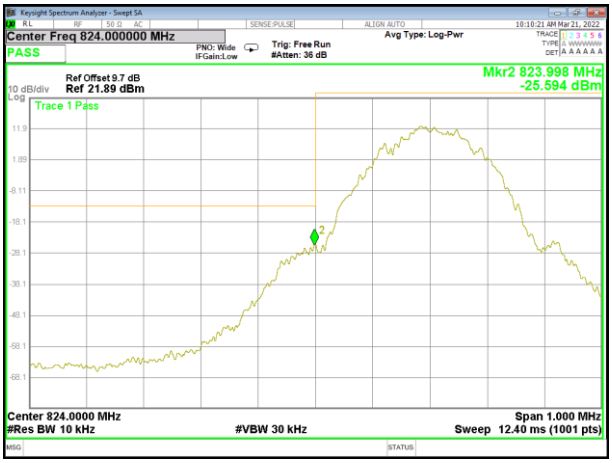


HSUPA_Band 5_Middle

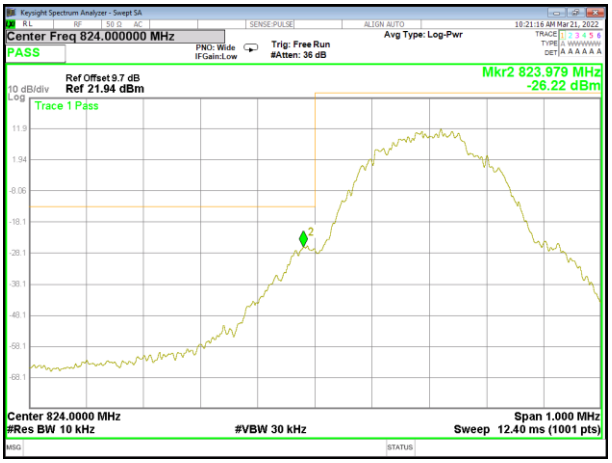


HSUPA_Band 5_High

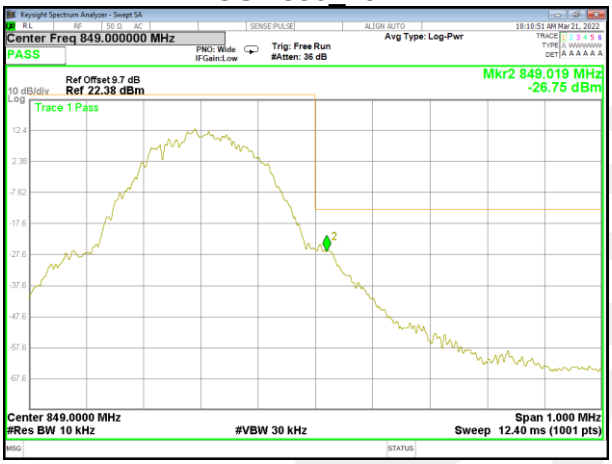
A6. BAND EDGE



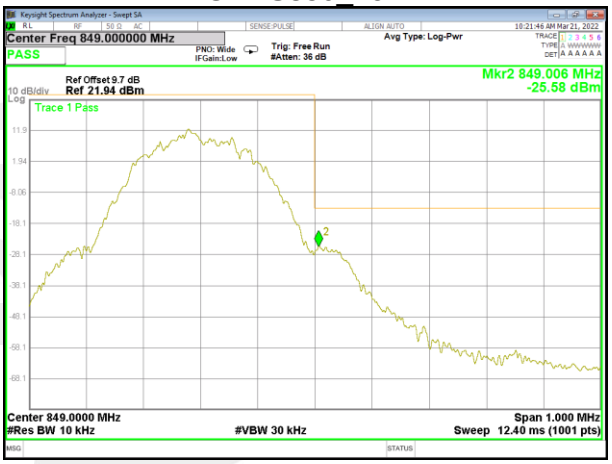
GSM850_Low



GPRS850_Low



GSM850_High



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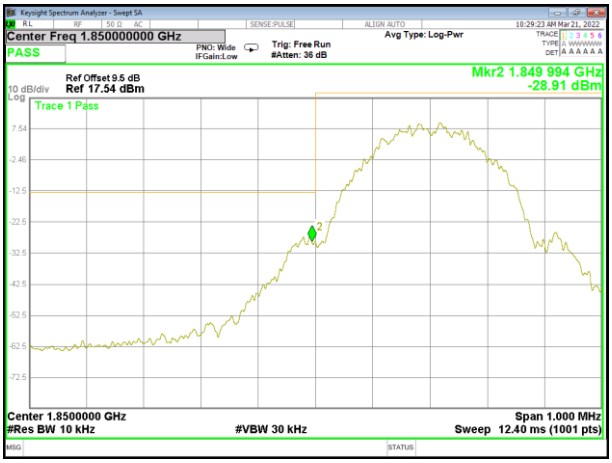

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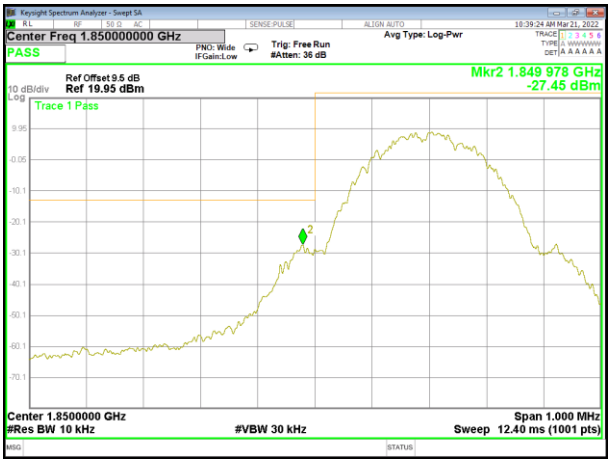
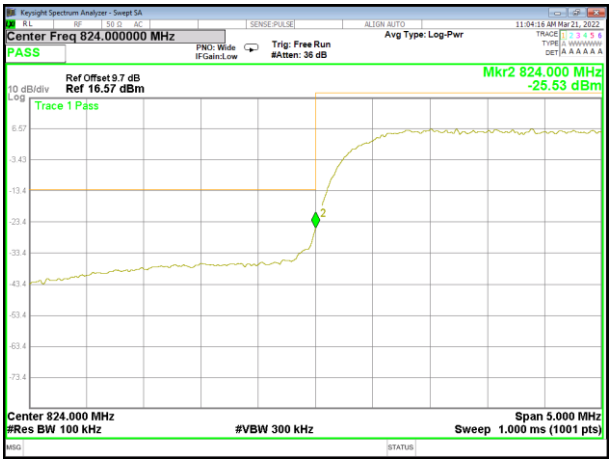


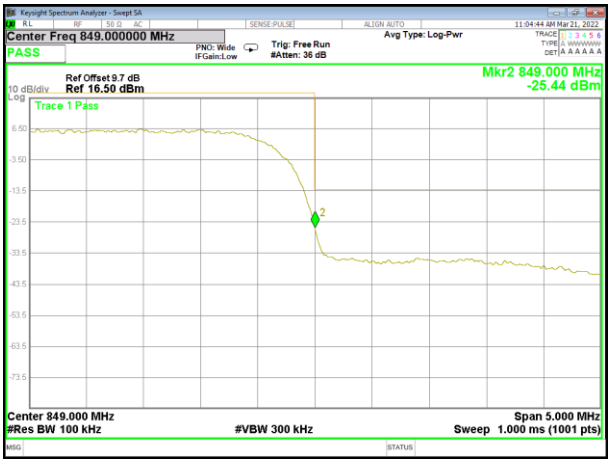
GPRS1900_Low

GSM1900_High

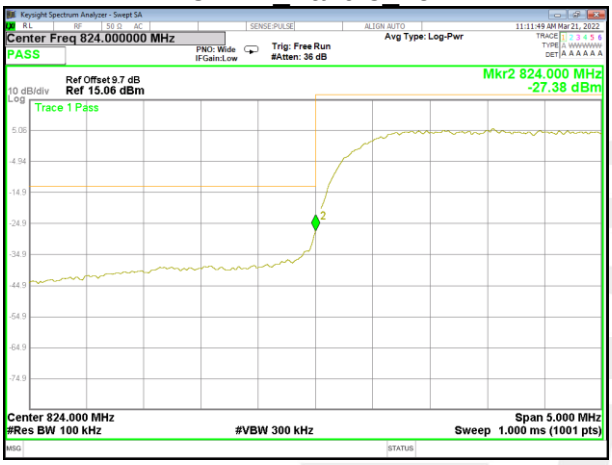
GPRS1900_High



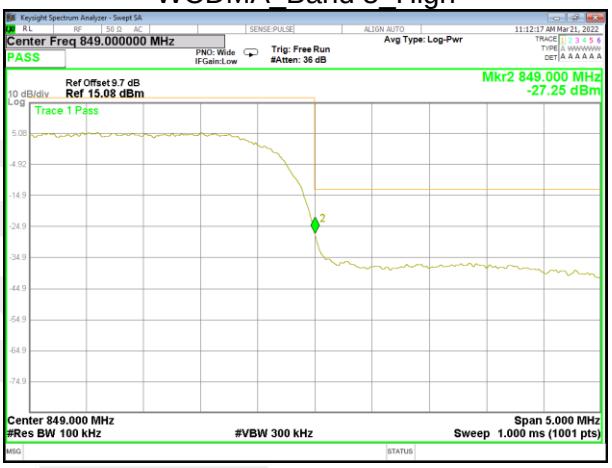
WCDMA_Band 5_Low



WCDMA_Band 5_High



HSDPA_Band 5_Low



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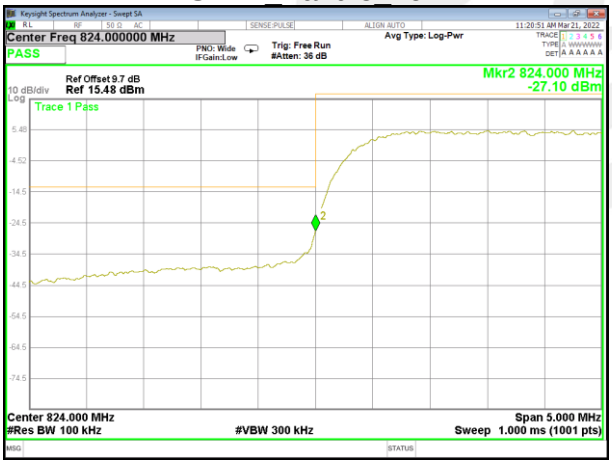
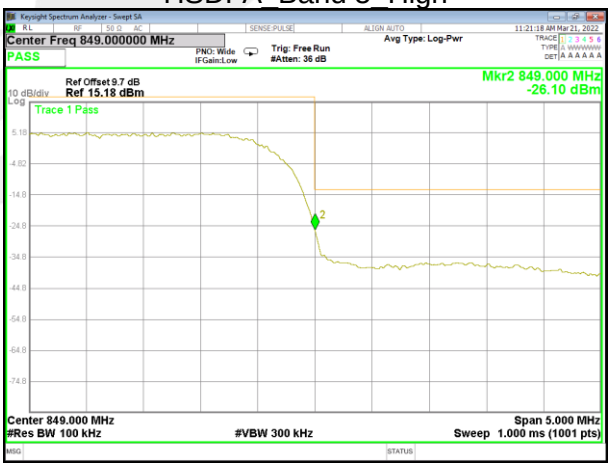


HSUPA_Band 5_Low



HSUPA_Band 5_High

A7. FIELD STRENGTH OF SPURIOUS RADIATION MEASUREMENT

Note: (1) Spurious emissions which are attenuated by more than 20dB below the permissible value for frequeny 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	-40.32	9.40	4.75	-35.67	-13.00	-22.67	H
2472.40	-40.29	10.60	8.39	-38.08	-13.00	-25.08	H
3296.54	-31.72	12.00	11.79	-31.51	-13.00	-18.51	H
1648.38	-43.43	9.40	4.75	-38.78	-13.00	-25.78	V
2472.67	-44.94	10.60	8.39	-42.73	-13.00	-29.73	V
3296.88	-43.84	12.00	11.79	-43.63	-13.00	-30.63	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
1673.04	-40.60	9.50	4.76	-35.86	-13.00	-22.86	H
2509.69	-40.04	10.70	8.40	-37.74	-13.00	-24.74	H
3346.28	-32.28	12.20	11.80	-31.88	-13.00	-18.88	H
1672.81	-43.22	9.40	4.75	-38.57	-13.00	-25.57	V
2509.42	-44.24	10.60	8.39	-42.03	-13.00	-29.03	V
3346.04	-43.25	12.20	11.82	-42.87	-13.00	-29.87	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
1697.21	-41.39	9.60	4.77	-36.56	-13.00	-23.56	H
2546.48	-39.86	10.80	8.50	-37.56	-13.00	-24.56	H
3395.04	-31.41	12.50	11.90	-30.81	-13.00	-17.81	H
1697.39	-43.69	9.60	4.77	-38.86	-13.00	-25.86	V
2546.37	-45.00	10.80	8.50	-42.70	-13.00	-29.70	V
3395.20	-43.85	12.50	11.90	-43.25	-13.00	-30.25	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
1648.02	-40.96	9.40	4.75	-36.31	-13.00	-23.31	H
2472.22	-39.87	10.60	8.39	-37.66	-13.00	-24.66	H
3296.90	-31.24	12.00	11.79	-31.03	-13.00	-18.03	H
1648.34	-43.46	9.40	4.75	-38.81	-13.00	-25.81	V
2472.58	-44.77	10.60	8.39	-42.56	-13.00	-29.56	V
3296.64	-42.81	12.00	11.79	-42.60	-13.00	-29.60	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
1673.23	-40.49	9.50	4.76	-35.75	-13.00	-22.75	H
2509.43	-39.26	10.70	8.40	-36.96	-13.00	-23.96	H
3346.30	-31.54	12.20	11.80	-31.14	-13.00	-18.14	H
1673.26	-43.35	9.40	4.75	-38.70	-13.00	-25.70	V
2509.67	-44.10	10.60	8.39	-41.89	-13.00	-28.89	V
3346.40	-42.57	12.20	11.82	-42.19	-13.00	-29.19	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
1697.65	-40.86	9.60	4.77	-36.03	-13.00	-23.03	H
2546.12	-40.25	10.80	8.50	-37.95	-13.00	-24.95	H
3395.14	-31.97	12.50	11.90	-31.37	-13.00	-18.37	H
1697.43	-43.82	9.60	4.77	-38.99	-13.00	-25.99	V
2546.24	-45.01	10.80	8.50	-42.71	-13.00	-29.71	V
3395.21	-43.82	12.50	11.90	-43.22	-13.00	-30.22	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
3700.21	-34.35	12.60	12.93	-34.68	-13.00	-21.68	H
5550.46	-34.72	13.10	17.11	-38.73	-13.00	-25.73	H
7400.84	-32.68	11.50	22.20	-43.38	-13.00	-30.38	H
3700.06	-34.66	12.60	12.93	-34.99	-13.00	-21.99	V
5550.36	-35.10	13.10	17.11	-39.11	-13.00	-26.11	V
7400.79	-32.65	11.50	22.20	-43.35	-13.00	-30.35	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
3759.95	-34.87	12.60	12.93	-35.20	-13.00	-22.20	H
5640.30	-34.51	13.10	17.11	-38.52	-13.00	-25.52	H
7520.04	-32.18	11.50	22.20	-42.88	-13.00	-29.88	H
3759.90	-35.65	12.60	12.93	-35.98	-13.00	-22.98	V
5640.25	-34.12	13.10	17.11	-38.13	-13.00	-25.13	V
7519.90	-32.51	11.50	22.20	-43.21	-13.00	-30.21	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
3819.24	-34.04	12.60	12.93	-34.37	-13.00	-21.37	H
5729.39	-34.31	13.10	17.11	-38.32	-13.00	-25.32	H
7639.27	-32.66	11.50	22.20	-43.36	-13.00	-30.36	H
3819.59	-35.84	12.60	12.93	-36.17	-13.00	-23.17	V
5729.05	-34.80	13.10	17.11	-38.81	-13.00	-25.81	V
7639.14	-32.33	11.50	22.20	-43.03	-13.00	-30.03	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
3700.29	-34.53	12.60	12.93	-34.86	-13.00	-21.86	H
5550.52	-34.62	13.10	17.11	-38.63	-13.00	-25.63	H
7400.88	-32.89	11.50	22.20	-43.59	-13.00	-30.59	H
3700.02	-35.82	12.60	12.93	-36.15	-13.00	-23.15	V
5550.25	-34.90	13.10	17.11	-38.91	-13.00	-25.91	V
7400.98	-32.11	11.50	22.20	-42.81	-13.00	-29.81	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
3760.17	-33.45	12.60	12.93	-33.78	-13.00	-20.78	H
5640.16	-35.41	13.10	17.11	-39.42	-13.00	-26.42	H
7520.04	-32.98	11.50	22.20	-43.68	-13.00	-30.68	H
3759.87	-34.89	12.60	12.93	-35.22	-13.00	-22.22	V
5640.23	-34.33	13.10	17.11	-38.34	-13.00	-25.34	V
7519.87	-31.94	11.50	22.20	-42.64	-13.00	-29.64	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
3819.36	-34.63	12.60	12.93	-34.96	-13.00	-21.96	H
5729.19	-35.49	13.10	17.11	-39.50	-13.00	-26.50	H
7638.97	-33.50	11.50	22.20	-44.20	-13.00	-31.20	H
3819.63	-35.93	12.60	12.93	-36.26	-13.00	-23.26	V
5729.28	-34.58	13.10	17.11	-38.59	-13.00	-25.59	V
7638.92	-31.96	11.50	22.20	-42.66	-13.00	-29.66	V

WCDMA Band 5: (30-9000)MHz							
The wost testresults channel 4132/826.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1652.36	-40.49	9.40	4.75	-35.84	-13.00	-22.84	H
2479.48	-39.72	10.60	8.39	-37.51	-13.00	-24.51	H
3305.59	-31.52	12.00	11.79	-31.31	-13.00	-18.31	H
1652.30	-44.00	9.40	4.75	-39.35	-13.00	-26.35	V
2479.68	-44.02	10.60	8.39	-41.81	-13.00	-28.81	V
3305.59	-43.16	12.00	11.79	-42.95	-13.00	-29.95	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
1672.99	-41.41	9.40	4.75	-36.76	-13.00	-23.76	H
2509.72	-39.29	10.60	8.39	-37.08	-13.00	-24.08	H
3346.15	-32.25	12.00	11.79	-32.04	-13.00	-19.04	H
1672.89	-44.20	9.40	4.75	-39.55	-13.00	-26.55	V
2509.49	-44.47	10.60	8.39	-42.26	-13.00	-29.26	V
3346.43	-43.95	12.00	11.79	-43.74	-13.00	-30.74	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
1693.55	-41.18	9.40	4.75	-36.53	-13.00	-23.53	H
2539.20	-40.49	10.60	8.39	-38.28	-13.00	-25.28	H
3386.24	-31.87	12.00	11.79	-31.66	-13.00	-18.66	H
1693.59	-44.54	9.40	4.75	-39.89	-13.00	-26.89	V
2539.29	-45.02	10.60	8.39	-42.81	-13.00	-29.81	V
3386.02	-43.97	12.00	11.79	-43.76	-13.00	-30.76	V

HSUPA Band 5: (30-9000)MHz							
The wost testresults channel 4132/826.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1652.03	-41.07	9.40	4.75	-36.42	-13.00	-23.42	H
2479.25	-39.94	10.60	8.39	-37.73	-13.00	-24.73	H
3305.59	-30.87	12.00	11.79	-30.66	-13.00	-17.66	H
1652.14	-44.24	9.40	4.75	-39.59	-13.00	-26.59	V
2479.59	-44.74	10.60	8.39	-42.53	-13.00	-29.53	V
3305.44	-43.28	12.00	11.79	-43.07	-13.00	-30.07	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
1673.13	-40.78	9.40	4.75	-36.13	-13.00	-23.13	H
2509.87	-40.41	10.60	8.39	-38.20	-13.00	-25.20	H
3346.43	-30.88	12.00	11.79	-30.67	-13.00	-17.67	H
1673.20	-44.10	9.40	4.75	-39.45	-13.00	-26.45	V
2509.53	-44.17	10.60	8.39	-41.96	-13.00	-28.96	V
3346.42	-43.81	12.00	11.79	-43.60	-13.00	-30.60	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
1693.37	-40.86	9.40	4.75	-36.21	-13.00	-23.21	H
2539.54	-40.63	10.60	8.39	-38.42	-13.00	-25.42	H
3385.93	-31.32	12.00	11.79	-31.11	-13.00	-18.11	H
1693.66	-43.23	9.40	4.75	-38.58	-13.00	-25.58	V
2539.17	-45.08	10.60	8.39	-42.87	-13.00	-29.87	V
3386.01	-42.52	12.00	11.79	-42.31	-13.00	-29.31	V

HSDPA Band 5: (30-9000)MHz							
The wost testresults channel 4132/826.4MHz							
Frequency(MHz)	S G.Lev (dBm)	Ant(dBi)	Loss	PMea (dBm)	Limit （dBm）	Margin (dBm)	Polarity
1652.49	-40.65	9.40	4.75	-36.00	-13.00	-23.00	H
2479.25	-40.26	10.60	8.39	-38.05	-13.00	-25.05	H
3305.44	-31.10	12.00	11.79	-30.89	-13.00	-17.89	H
1652.24	-44.60	9.40	4.75	-39.95	-13.00	-26.95	V
2479.70	-44.36	10.60	8.39	-42.15	-13.00	-29.15	V
3305.91	-43.13	12.00	11.79	-42.92	-13.00	-29.92	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
1673.17	-41.41	9.40	4.75	-36.76	-13.00	-23.76	H
2509.49	-39.76	10.60	8.39	-37.55	-13.00	-24.55	H
3346.41	-31.38	12.00	11.79	-31.17	-13.00	-18.17	H
1673.09	-44.12	9.40	4.75	-39.47	-13.00	-26.47	V
2509.59	-44.21	10.60	8.39	-42.00	-13.00	-29.00	V
3346.12	-42.86	12.00	11.79	-42.65	-13.00	-29.65	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	-40.97	9.40	4.75	-36.32	-13.00	-23.32	H
2539.10	-39.48	10.60	8.39	-37.27	-13.00	-24.27	H
3386.25	-32.17	12.00	11.79	-31.96	-13.00	-18.96	H
1693.20	-43.19	9.40	4.75	-38.54	-13.00	-25.54	V
2539.28	-44.11	10.60	8.39	-41.90	-13.00	-28.90	V
3386.05	-42.63	12.00	11.79	-42.42	-13.00	-29.42	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※※※※※