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RADIO TEST REPORT

Report No.: STS2007339W03

Issued for

Shenzhen Leiwei Guoji Keji Co., Ltd.

Rm1012, Plaza Building, No.74 Baomin Road, Bao'an
District, Shenzhen, China

| | |
|-----------------------|---|
| Product Name: | 4G smartwatch phone |
| Brand Name: | Ckyrin |
| Model Name: | S10 |
| Series Model: | S20, S30, S40, S50, S60, S70, S80, S90, M10, M20, M30, M40, M50, M60, M70, M80, M90, K1, K2, K3, K4, K5, K6, K7, K8, K9, W1, W2, W3, W4, W5, W6, W7, W8, W9, Z1, Z2, Z3, Z4, Z5, Z6, Z7, Z8, Z9 |
| FCC ID: | 2AW57S10 |
| Test Standard: | FCC Part 22H and 24E |

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Shenzhen STS Test Services Co., Ltd.

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TEST RESULT CERTIFICATION


Applicant's Name: Shenzhen Leiwei Guoji Keji Co., Ltd.
 Address: Rm1012, Plaza Building, No.74 Baomin Road, Bao'an District, Shenzhen, China
 Manufacturer's Name: Shenzhen Leiwei Guoji Keji Co., Ltd.
 Address: Rm1012, Plaza Building, No.74 Baomin Road, Bao'an District, Shenzhen, China

Product Description


Product Name: 4G smartwatch phone
 Brand Name: Ckyrin
 Model Name: S10
 Series Model: S20, S30, S40, S50, S60, S70, S80, S90, M10, M20, M30, M40, M50, M60, M70, M80, M90, K1, K2, K3, K4, K5, K6, K7, K8, K9,
 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.....: 29 July 2020
 Date (s) of performance of tests.: 29 July 2020 ~ 17 Aug. 2020
 Date of Issue: 17 Aug. 2020
 Test Result: Pass

Testing Engineer : 

 (Chris Chen)

Technical Manager : 

 (Sean she)

Authorized Signatory : 

 (Vita Li)





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Revision History

| Rev. | Issue Date | Report NO. | Effect Page | Contents |
|------|--------------|---------------|-------------|---------------|
| 00 | 17 Aug. 2020 | STS2007339W03 | 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+10log ₁₀ (P[Watts]) | PASS | |
| 2.1053 22.917 24.238 | Field Strength of Spurious Radiation | < 43+10log ₁₀ (P[Watts]) | PASS | |
| 2.1051 22.917 24.238 | Band Edge | < 43+10log ₁₀ (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 | $\pm 0.68\text{dB}$ |
| 2 | Unwanted Emissions, conducted | $\pm 2.988\text{dB}$ |
| 3 | All emissions, radiated 30-1GHz | $\pm 5.6\text{dB}$ |
| 4 | All emissions, radiated 1G-6GHz | $\pm 5.5\text{dB}$ |
| 5 | All emissions, radiated >6G | $\pm 5.8\text{dB}$ |
| 6 | Conducted Emission (9KHz-150KHz) | $\pm 3.37\text{dB}$ |
| 7 | Conducted Emission (150KHz-30MHz) | $\pm 3.83\text{dB}$ |



2 PRODUCT INFORMATION

| | |
|-----------------------------|--|
| Product Name | 4G smartwatch phone |
| Trade Name | Ckyrin |
| Model Name | S10 |
| Series Model | S20, S30, S40, S50, S60, S70, S80, S90, M10, M20, M30, M40, M50, M60, M70, M80, M90, K1, K2, K3, K4, K5, K6, K7, K8, K9, W1, W2, W3, W4, W5, W6, W7, W8, W9, Z1, Z2, Z3, Z4, Z5, Z6, Z7, Z8, Z9 |
| Model Difference | Only different in model name. |
| 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: | GSM850:31.19dBm, PCS1900:30.22dBm GPRS850(1-Slot):30.82dBm, GPRS1900(1-Slot):29.76dBm GPRS850(2-Slot):30.36dBm, GPRS1900(2-Slot):29.27dBm GPRS850(3-Slot):29.91dBm, GPRS1900(3-Slot):28.81dBm GPRS850(4-Slot):29.44dBm, GPRS1900(4-Slot):28.38dBm EDGE 850(1-Slot):26.42dBm, EDGE 1900(1-Slot):29.75dBm EDGE 850(2-Slot):25.70dBm, EDGE 1900(2-Slot):28.97dBm EDGE 850(3-Slot):24.92dBm, EDGE 1900(3-Slot):28.24dBm EDGE 850(4-Slot):24.18dBm, EDGE 1900(4-Slot):27.50dBm WCDMA Band V:21.48dBm, WCDMA Band II:21.67dBm |
| Type of Emission: | GSM(850): 249KGXW; PCS(1900): 247KGXW GPRS(850): 248KGXW; GPRS(1900): 247KGXW EDGE(850): 245KG7W; EDGE(1900): 252KG7W WCDMA850: 4M19F9W WCDMA1900: 4M17F9W |
| 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: | 1.8dBi |
| Battery parameter: | Rated Voltage: 3.8V Charge Limit: 4.35V Capacity: 900mAh |



| | |
|--|------------------------------------|
| Power Rating: | Input: 5V 1A |
| GPRS/EDGE Class: | Multi-Class12 |
| Extreme Vol. Limits: | DC 2.8V~ DC 4.35V(Normal: DC 3.8V) |
| Extreme Temp. Tolerance: | -30°C to +50°C |
| Hardware version number: | C7S_MB_V1.1_190308 |
| Software version number: | S10_C7S_EN_V1.6_20200523 |
| <i>** Note: The High Voltage 4.35V and Low Voltage 2.8V 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) | 1.8 | 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 | 2/5 | WCDMA | QPSK | 3 | 1.8 | PIFA | 1 SIM 1 is used to tested. |



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 |
| Signal generator | Agilent | 83752A | 3610A02740 | 2019.10.09 | 2020.10.08 |
| 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

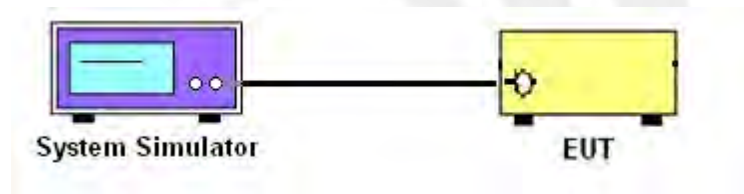
TEST OVERVIEW

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

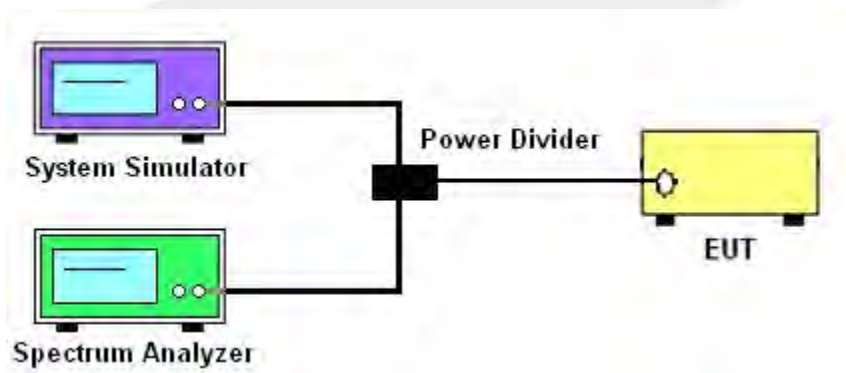
TEST OVERVIEW

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 fckdb 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.
The correction factor (in dB) = S.G. - Tx Cable loss + Substitution antenna gain – Analyzer reading.
Then the EUT's EIRP/ERP was calculated with the correction factor, $EIRP = P.SG + GT - LC$,
 $ERP = EIRP - 2.15$ in radiated method
ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same units as P_{Meas} as, typically dBW or dBm);
P_{Meas}(PK) = measured transmitter output power or PSD, in dBm or dBW;
GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);
LC = signal attenuation in the connecting cable between the transmitter and antenna, in dB.

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.

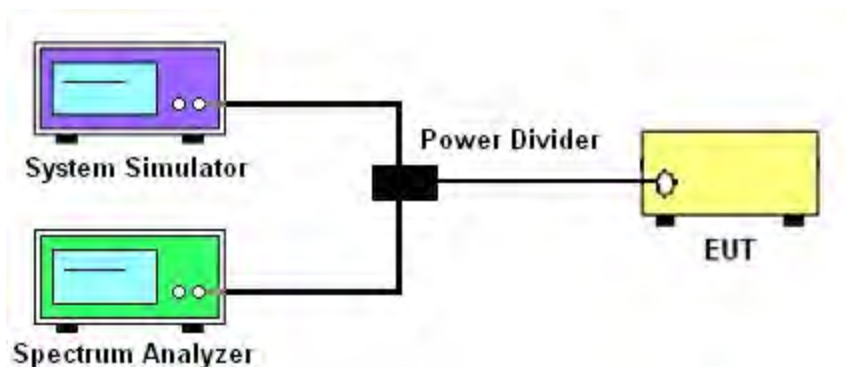
The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 Db below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) 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°C to $+50^{\circ}\text{C}$ 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 $\pm 0.00025\%$ (± 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

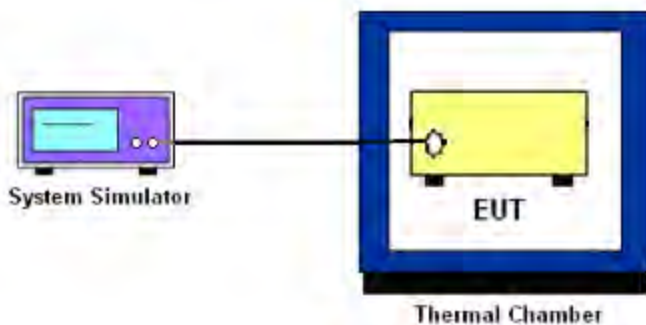
Temperature Variation

1. The testing follows 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°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 $25\pm 5^{\circ}\text{C}$ 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.

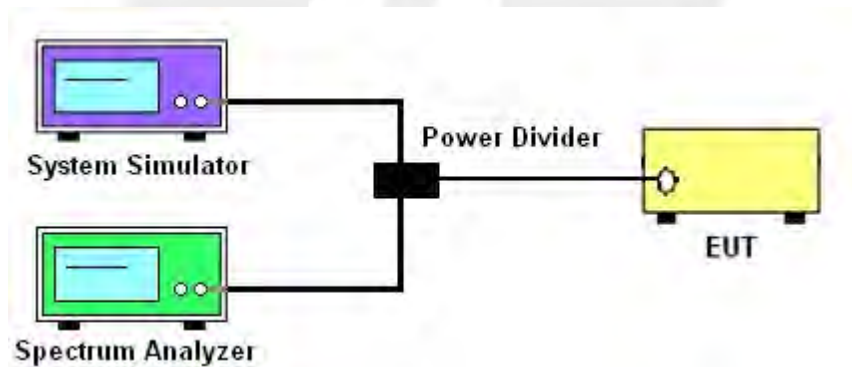
7. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)

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

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

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

TEST SETUP



TEST RESULT

Note: Test data See Appendix 6.

5.7 BAND EDGE

TEST OVERVIEW

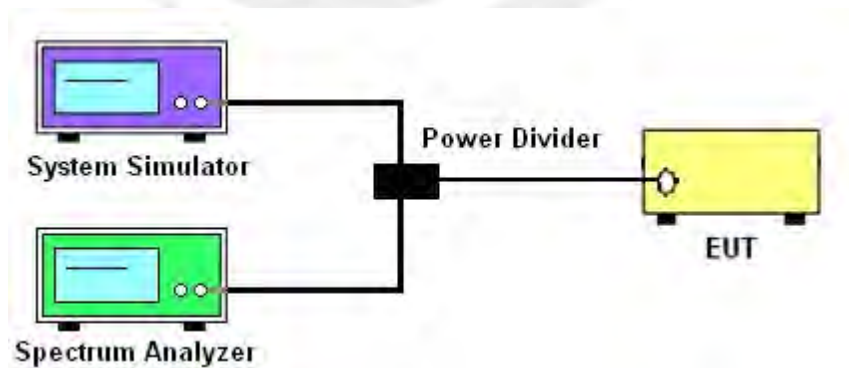
All out of band emissions are measured with a spectrum analyzer connected to the antenna terminal of the EUT while the EUT is operating at maximum power, and at the appropriate frequencies. All data rates were investigated to determine the worst case configuration. All modes of operation were investigated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

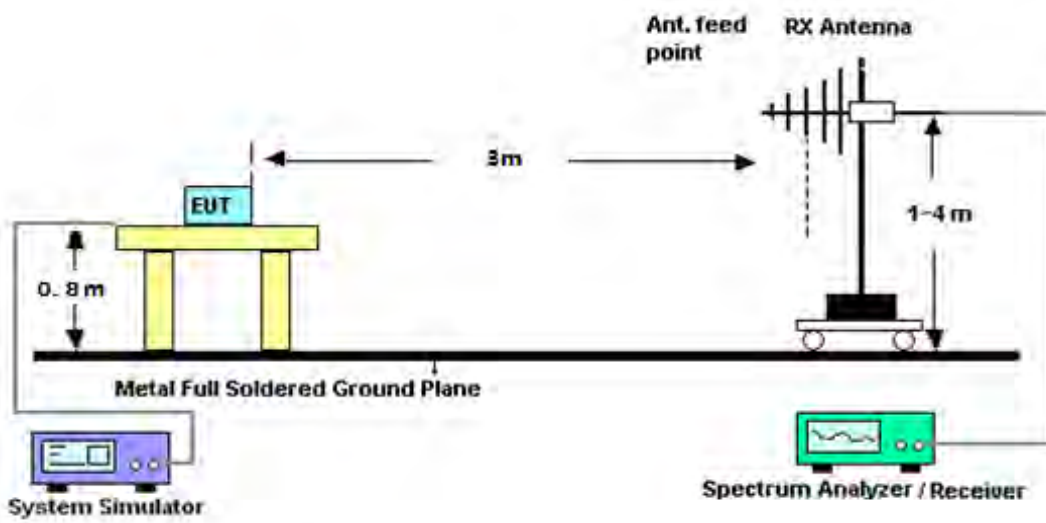
It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

TEST PROCEDURE

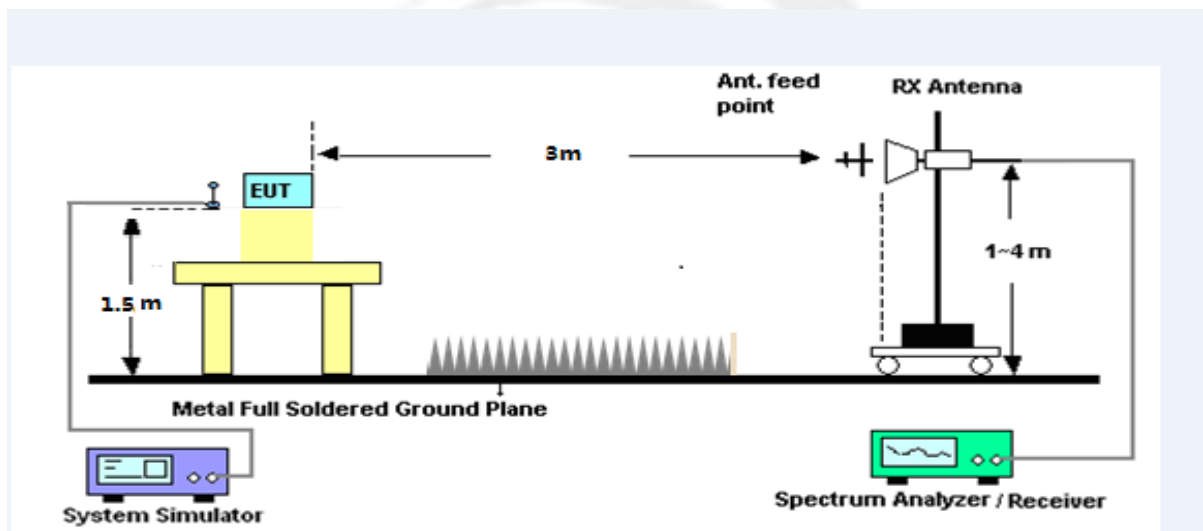
1. The testing FCC KDB 971168 D01 Section 5.8 and ANSI C63.26-2015-Section 5.5.
2. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
3. VBW $\geq 3 \times$ RBW
4. Span = 1.5 times the OBW
5. No. of sweep points $> 2 \times$ span/RBW
6. Detector = Peak
7. Trace mode = max hold
8. 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 | 31.18 |
| | 836.6 | 31.18 |
| | 848.8 | 31.19 |
| GPRS (GMSK,1-Slot) | 824.2 | 30.75 |
| | 836.6 | 30.58 |
| | 848.8 | 30.82 |
| GPRS (GMSK,2-Slot) | 824.2 | 30.33 |
| | 836.6 | 30.17 |
| | 848.8 | 30.36 |
| GPRS (GMSK,3-Slot) | 824.2 | 29.88 |
| | 836.6 | 29.75 |
| | 848.8 | 29.91 |
| GPRS (GMSK,4-Slot) | 824.2 | 29.43 |
| | 836.6 | 29.34 |
| | 848.8 | 29.44 |
| EGPRS (8PSK,1-Slot) | 824.2 | 26.33 |
| | 836.6 | 26.41 |
| | 848.8 | 26.42 |
| EGPRS (8PSK,2-Slot) | 824.2 | 25.56 |
| | 836.6 | 25.70 |
| | 848.8 | 25.68 |
| EGPRS (8PSK,3-Slot) | 824.2 | 24.77 |
| | 836.6 | 24.91 |
| | 848.8 | 24.92 |
| EGPRS (8PSK,4-Slot) | 824.2 | 24.05 |
| | 836.6 | 24.18 |
| | 848.8 | 24.15 |



PCS 1900:

| PCS 1900 | | |
|------------------------|-----------------|----------------|
| Mode | Frequency (MHz) | AVG Power(dBm) |
| GSM (GMSK,1-Slot) | 1850.2 | 30.16 |
| | 1880.0 | 30.22 |
| | 1909.8 | 30.08 |
| GPRS (GMSK,1-Slot) | 1850.2 | 29.67 |
| | 1880.0 | 29.59 |
| | 1909.8 | 29.76 |
| GPRS (GMSK,2-Slot) | 1850.2 | 29.25 |
| | 1880.0 | 29.15 |
| | 1909.8 | 29.27 |
| GPRS (GMSK,3-Slot) | 1850.2 | 28.79 |
| | 1880.0 | 28.75 |
| | 1909.8 | 28.81 |
| GPRS (GMSK,4-Slot) | 1850.2 | 28.36 |
| | 1880.0 | 28.26 |
| | 1909.8 | 28.38 |
| EGPRS (8PSK,1-Slot) | 1850.2 | 29.71 |
| | 1880.0 | 29.66 |
| | 1909.8 | 29.75 |
| EGPRS (8PSK,2-Slot) | 1850.2 | 28.97 |
| | 1880.0 | 28.89 |
| | 1909.8 | 28.97 |
| EGPRS (8PSK,3-Slot) | 1850.2 | 28.24 |
| | 1880.0 | 28.13 |
| | 1909.8 | 28.18 |
| EGPRS (8PSK,4-Slot) | 1850.2 | 27.50 |
| | 1880.0 | 27.38 |
| | 1909.8 | 27.45 |



UMTS BAND V

| UMTS BAND V | | |
|--------------------|----------------|-----------|
| Mode | Frequency(MHz) | AVG Power |
| WCDMA 850 RMC | 826.4 | 21.24 |
| | 836.6 | 21.36 |
| | 846.6 | 21.48 |
| HSDPA Subtest 1 | 826.4 | 20.95 |
| | 836.6 | 21.13 |
| | 846.6 | 21.14 |
| HSDPA Subtest 2 | 826.4 | 20.47 |
| | 836.6 | 20.63 |
| | 846.6 | 20.68 |
| HSDPA Subtest 3 | 826.4 | 20.00 |
| | 836.6 | 20.14 |
| | 846.6 | 20.26 |
| HSDPA Subtest 4 | 826.4 | 19.56 |
| | 836.6 | 19.67 |
| | 846.6 | 19.77 |
| HSUPA Subtest 1 | 826.4 | 20.92 |
| | 836.6 | 20.96 |
| | 846.6 | 21.01 |
| HSUPA Subtest 2 | 826.4 | 19.98 |
| | 836.6 | 19.98 |
| | 846.6 | 20.11 |
| HSUPA Subtest 3 | 826.4 | 19.95 |
| | 836.6 | 19.50 |
| | 846.6 | 19.75 |
| HSUPA Subtest 4 | 826.4 | 19.58 |
| | 836.6 | 19.19 |
| | 846.6 | 19.38 |
| HSUPA Subtest 5 | 826.4 | 18.16 |
| | 836.6 | 17.76 |
| | 846.6 | 17.96 |



UMTS BAND II

| UMTS BAND II | | |
|--------------------|----------------|-----------|
| Mode | Frequency(MHz) | AVG Power |
| WCDMA 1900 RMC | 1852.4 | 21.67 |
| | 1880 | 21.55 |
| | 1907.6 | 21.28 |
| HSDPA Subtest 1 | 1852.4 | 21.45 |
| | 1880 | 21.30 |
| | 1907.6 | 21.40 |
| HSDPA Subtest 2 | 1852.4 | 21.02 |
| | 1880 | 20.89 |
| | 1907.6 | 20.91 |
| HSDPA Subtest 3 | 1852.4 | 20.69 |
| | 1880 | 20.41 |
| | 1907.6 | 20.55 |
| HSDPA Subtest 4 | 1852.4 | 20.27 |
| | 1880 | 20.03 |
| | 1907.6 | 20.22 |
| HSUPA Subtest 1 | 1852.4 | 21.29 |
| | 1880 | 21.26 |
| | 1907.6 | 21.21 |
| HSUPA Subtest 2 | 1852.4 | 20.35 |
| | 1880 | 20.29 |
| | 1907.6 | 20.24 |
| HSUPA Subtest 3 | 1852.4 | 20.21 |
| | 1880 | 19.89 |
| | 1907.6 | 19.86 |
| HSUPA Subtest 4 | 1852.4 | 19.85 |
| | 1880 | 19.55 |
| | 1907.6 | 19.39 |
| HSUPA Subtest 5 | 1852.4 | 18.44 |
| | 1880 | 18.09 |
| | 1907.6 | 17.90 |



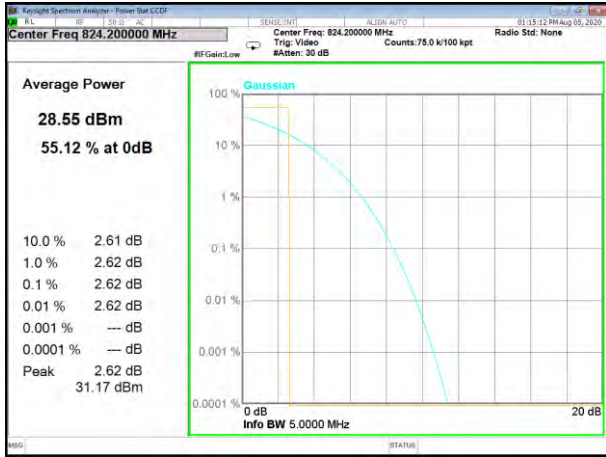
A2. PEAK-TO-AVERAGE RADIO

| GSM 850 | | |
|-----------|-----------------|-------|
| Mode | Frequency (MHz) | PAR |
| GSM 850 | 824.2 | 2.62 |
| | 836.6 | 2.62 |
| | 848.8 | 2.62 |
| GPRS 850 | 824.2 | 2.62 |
| | 836.6 | 2.61 |
| | 848.8 | 2.63 |
| EGPRS 850 | 824.2 | 10.65 |
| | 836.6 | 9.25 |
| | 848.8 | 9.25 |

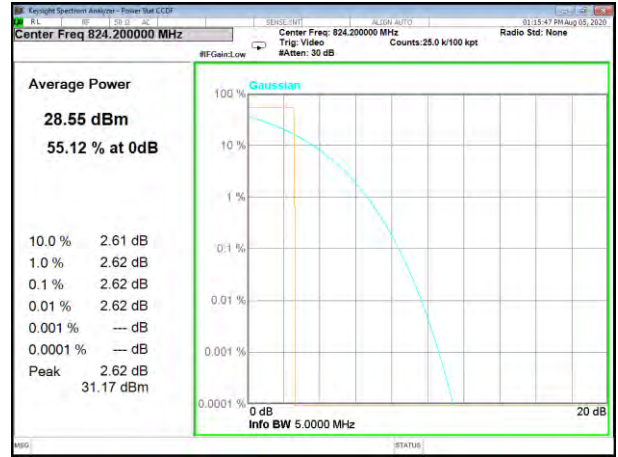
| PCS 1900 | | |
|-----------|-----------------|------|
| Mode | Frequency (MHz) | PAR |
| PCS1900 | 1850.2 | 2.64 |
| | 1880 | 2.64 |
| | 1909.8 | 2.65 |
| GPRS1900 | 1850.2 | 2.64 |
| | 1880 | 2.64 |
| | 1909.8 | 2.64 |
| EGPRS1900 | 1850.2 | 5.31 |
| | 1880 | 5.55 |
| | 1909.8 | 5.84 |

| UMTS Band II | | |
|-------------------|-----------------|------|
| Mode | Frequency (MHz) | PAR |
| WCDMA 1900 RMC | 1852.4 | 2.78 |
| | 1880 | 2.88 |
| | 1907.6 | 2.89 |
| HSDPA 1900 | 1852.4 | 3.38 |
| | 1880 | 3.47 |
| | 1907.6 | 3.27 |
| HSUPA 1900 | 1852.4 | 3.20 |
| | 1880 | 3.31 |
| | 1907.6 | 3.45 |

| UMTS Band V | | |
|------------------|-----------------|------|
| Mode | Frequency (MHz) | PAR |
| WCDMA 850 RMC | 826.4 | 2.87 |
| | 836.6 | 2.83 |
| | 846.6 | 3.04 |
| HSDPA 850 | 826.4 | 3.26 |
| | 836.6 | 3.30 |
| | 846.6 | 3.64 |
| HSUPA 850 | 826.4 | 3.37 |
| | 836.6 | 3.27 |
| | 846.6 | 3.46 |



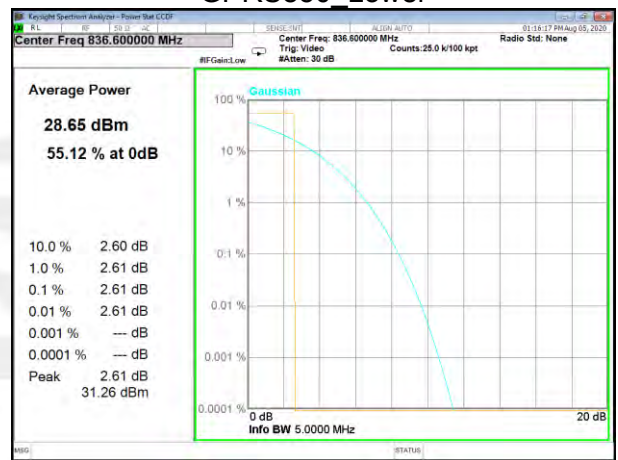
GSM850 Lower



GPRS850 Lower



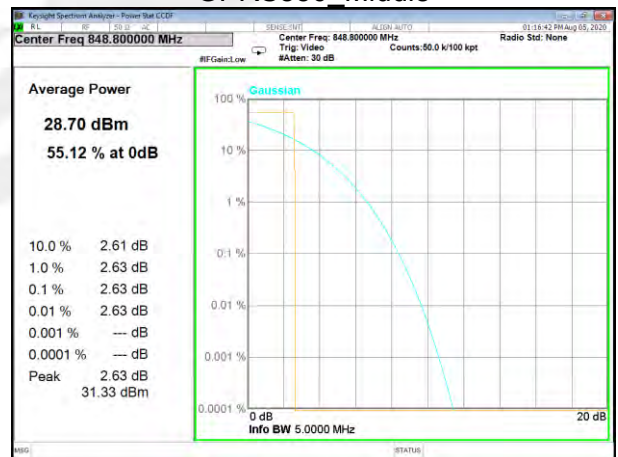
GSM850 Middle



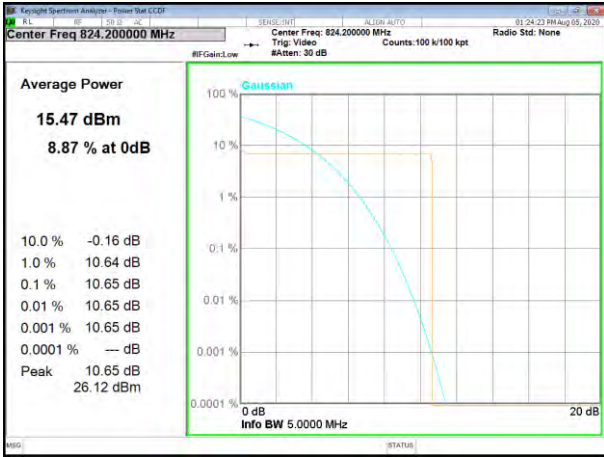
GPRS850 Middle



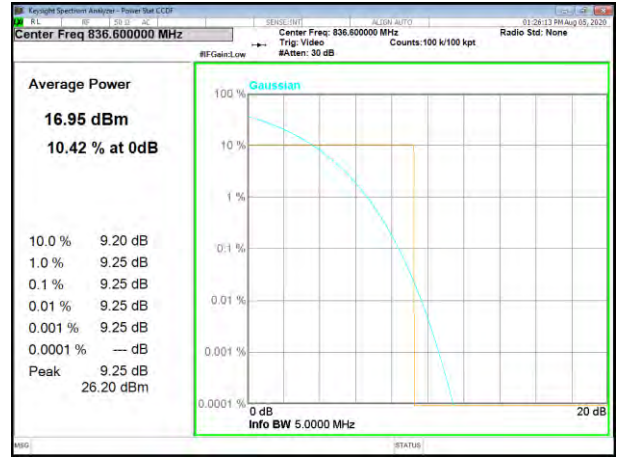
GSM850 Higher



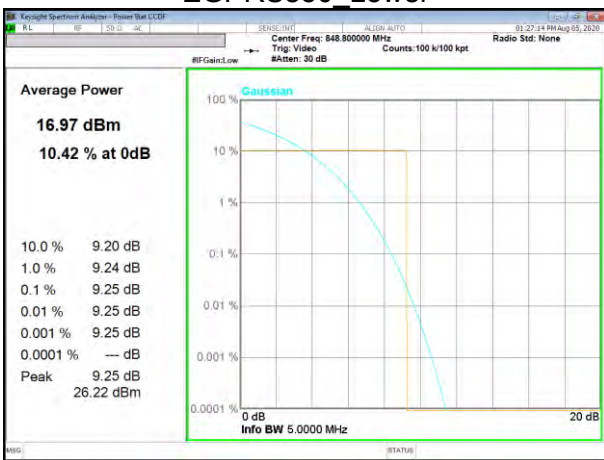
GPRS850 Higher



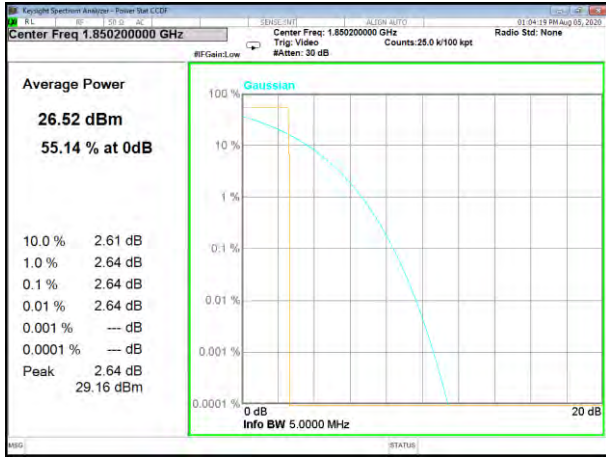
EGPRS850_Lower



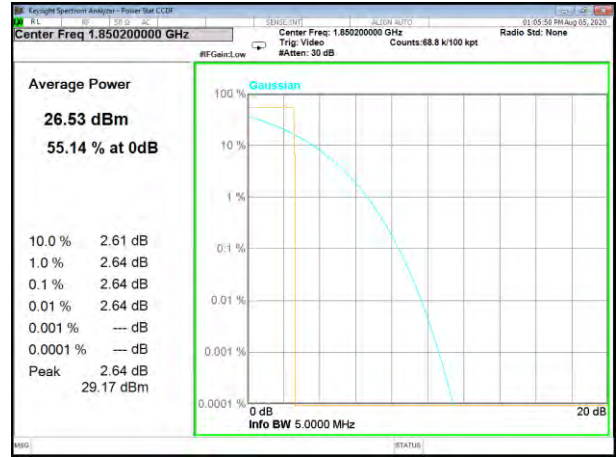
EGPRS850_Middle



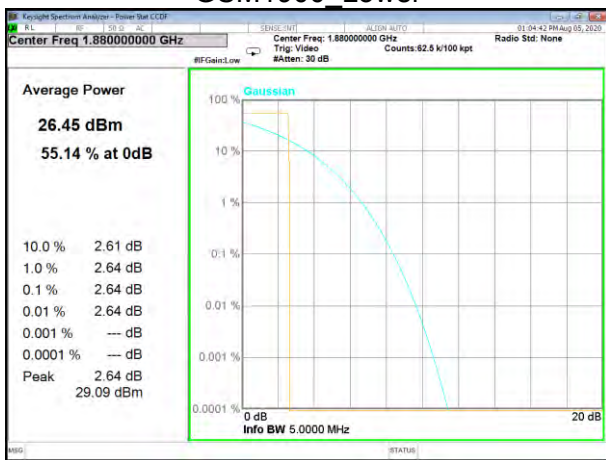
EGPRS850_Higher



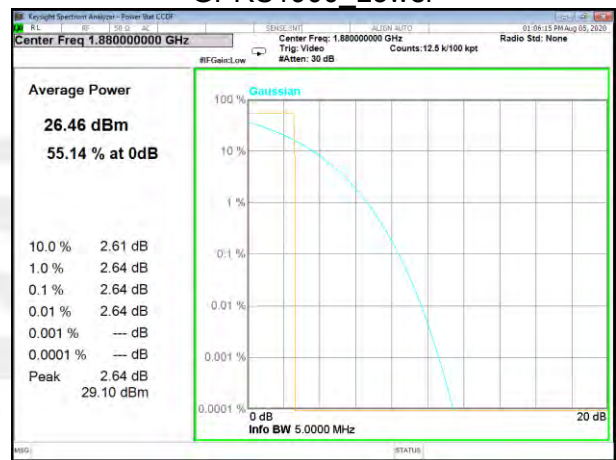
GSM1900 Lower



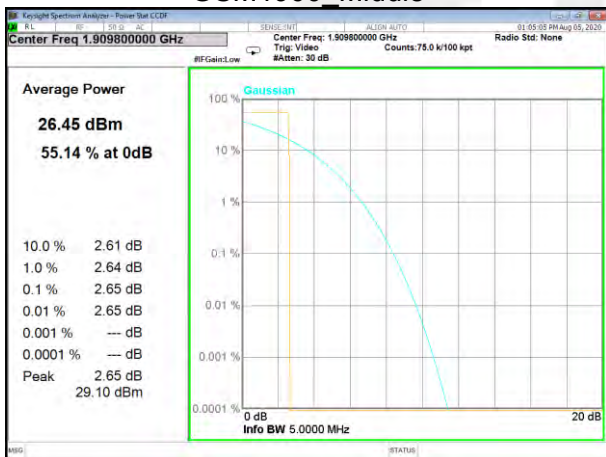
GPRS1900 Lower



GSM1900 Middle



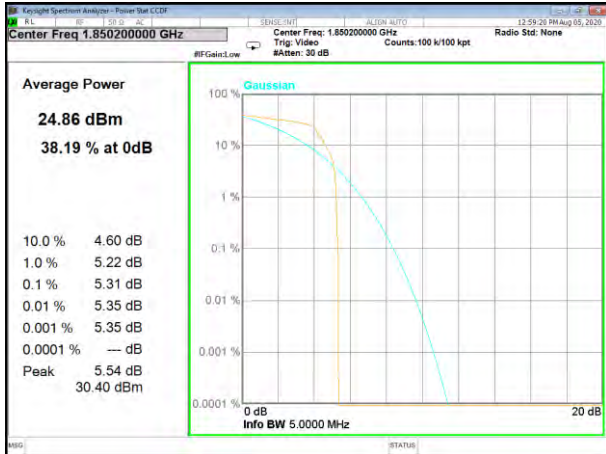
GPRS1900 Middle



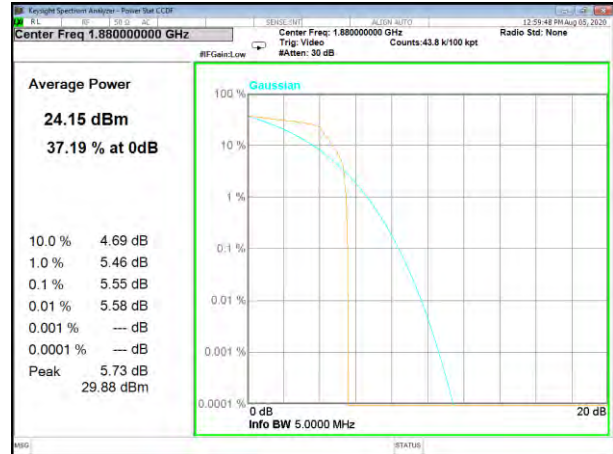
GSM1900_Higher



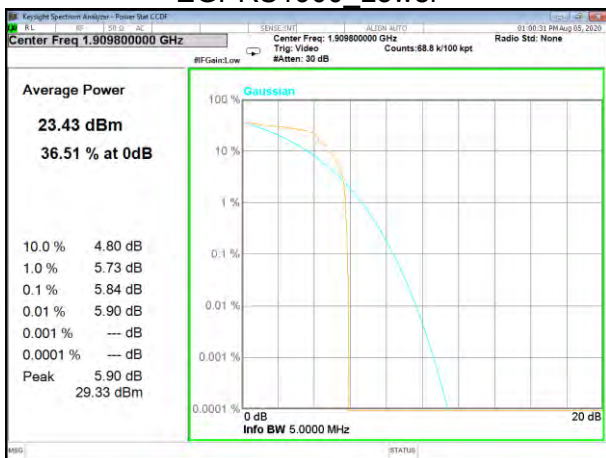
GPRS1900_Higher



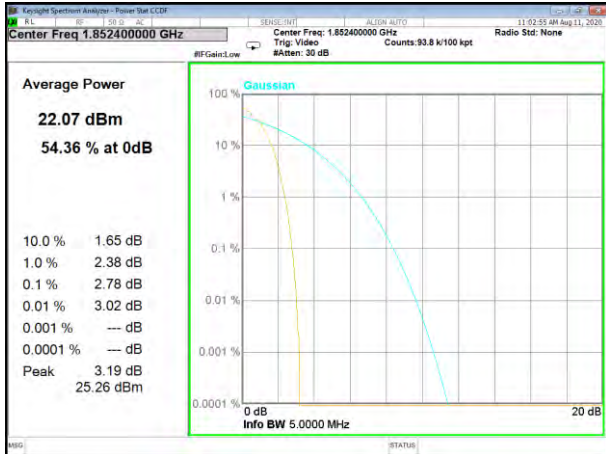
EGPRS1900_Lower



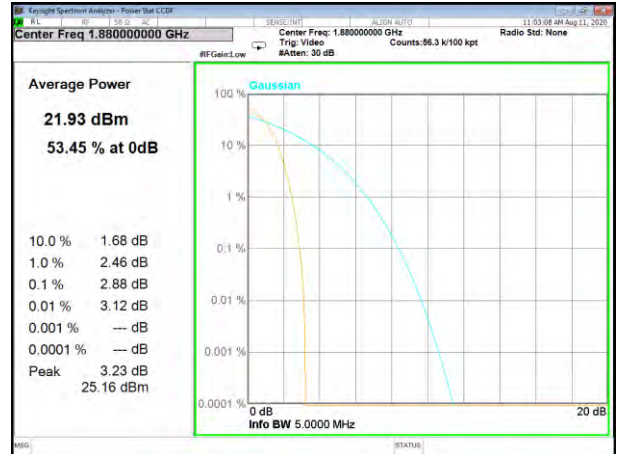
EGPRS1900_Middle



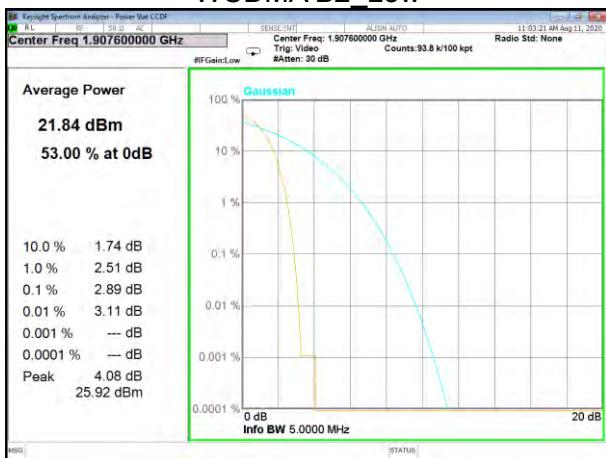
EGPRS1900_Higher



WCDMA B2_Low



WCDMA B2_Middle



WCDMA B2_High



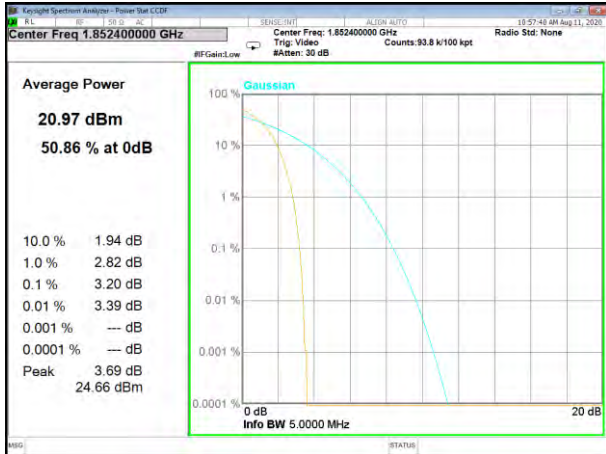
HSDPA B2_Low



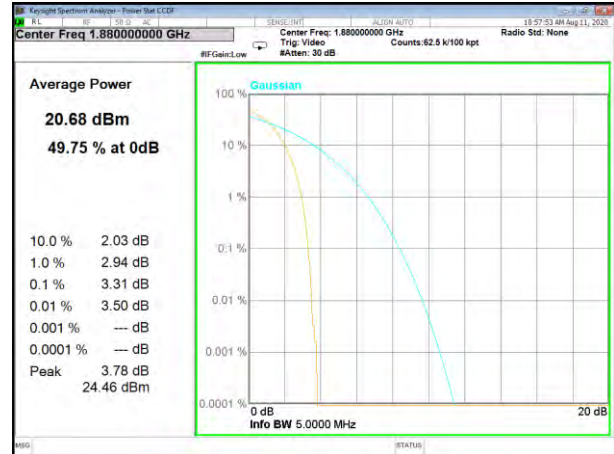
HSDPA B2_Middle



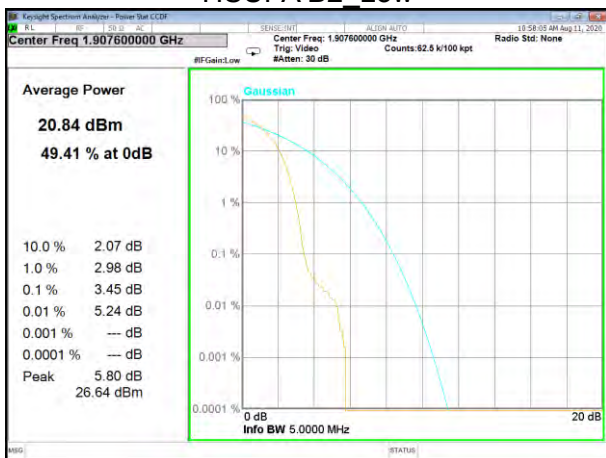
HSDPA B2_High



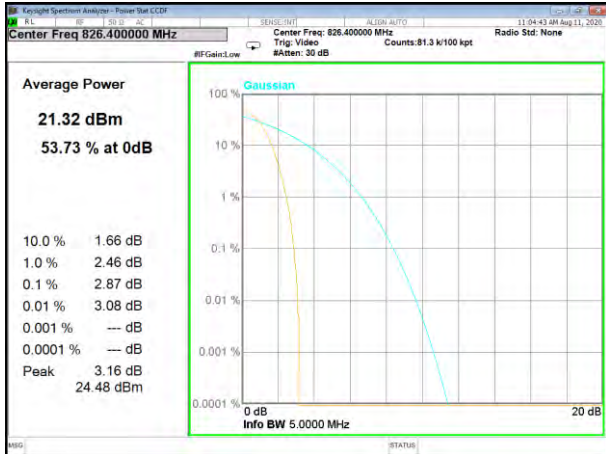
HSDPA B2_Low



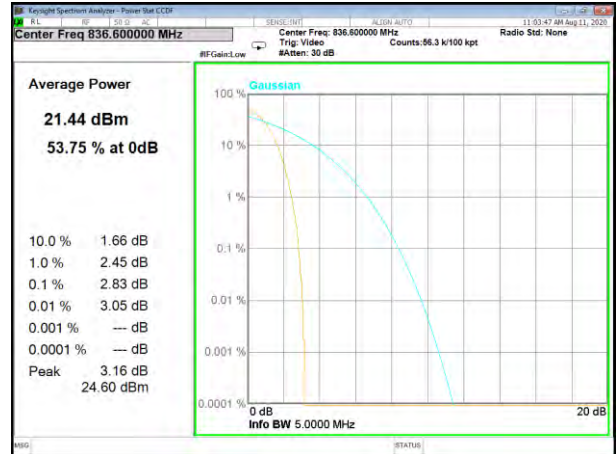
HSDPA B2_Middle



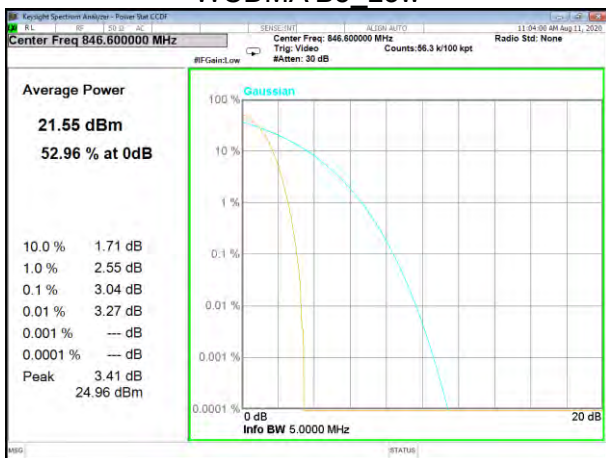
HSDPA B2_High



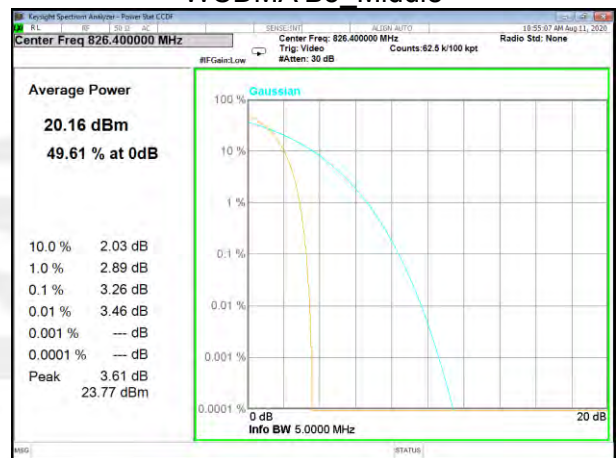
WCDMA B5_Low



WCDMA B5_Middle



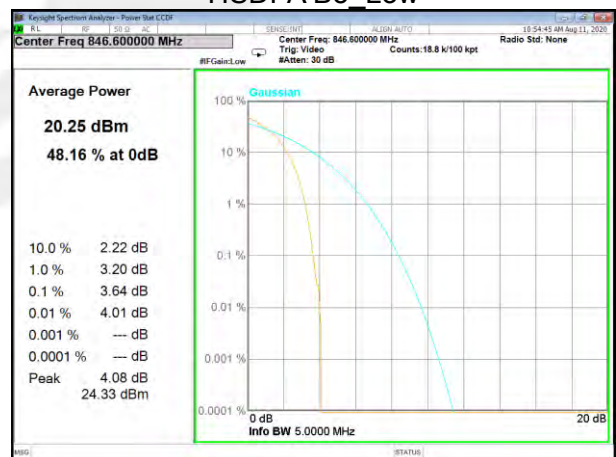
WCDMA B5_High



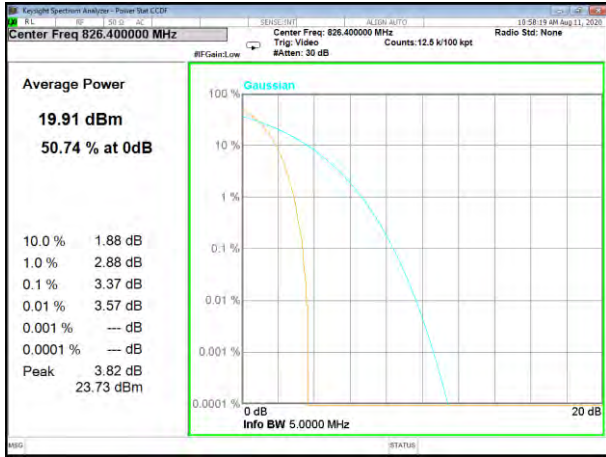
HSDPA B5_Low



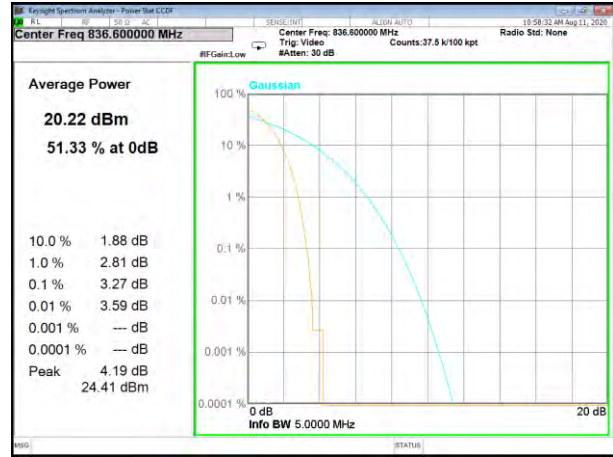
HSDPA B5_Middle



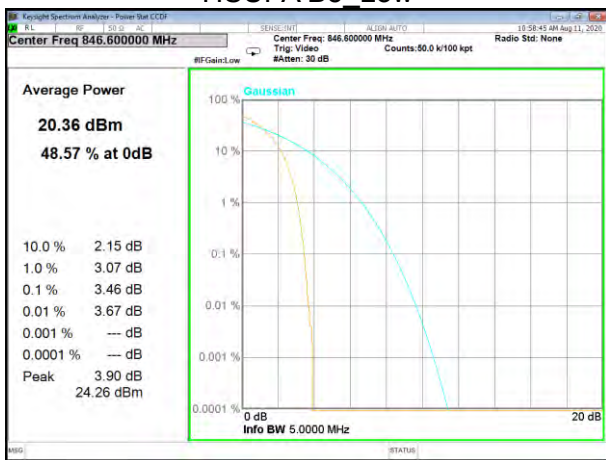
HSDPA B5_High



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 | 24.75 | 0.44 | 6.5 | 2.15 | 28.66 | Horizontal | Pass |
| | 824.2 | 26.50 | 0.44 | 6.5 | 2.15 | 30.41 | Vertical | Pass |
| | 836.6 | 24.71 | 0.45 | 6.5 | 2.15 | 28.61 | Horizontal | Pass |
| | 836.6 | 26.48 | 0.45 | 6.5 | 2.15 | 30.38 | Vertical | Pass |
| | 848.8 | 25.03 | 0.46 | 6.5 | 2.15 | 28.92 | Horizontal | Pass |
| | 848.8 | 26.76 | 0.46 | 6.5 | 2.15 | 30.65 | Vertical | Pass |
| GPRS850 | 824.2 | 24.15 | 0.44 | 6.5 | 2.15 | 28.06 | Horizontal | Pass |
| | 824.2 | 26.22 | 0.44 | 6.5 | 2.15 | 30.13 | Vertical | Pass |
| | 836.6 | 23.63 | 0.45 | 6.5 | 2.15 | 27.53 | Horizontal | Pass |
| | 836.6 | 25.98 | 0.45 | 6.5 | 2.15 | 29.88 | Vertical | Pass |
| | 848.8 | 24.00 | 0.46 | 6.5 | 2.15 | 27.89 | Horizontal | Pass |
| | 848.8 | 26.21 | 0.46 | 6.5 | 2.15 | 30.10 | Vertical | Pass |
| EGPRS850 | 824.2 | 19.70 | 0.44 | 6.5 | 2.15 | 23.61 | Horizontal | Pass |
| | 824.2 | 21.82 | 0.44 | 6.5 | 2.15 | 25.73 | Vertical | Pass |
| | 836.6 | 19.75 | 0.45 | 6.5 | 2.15 | 23.65 | Horizontal | Pass |
| | 836.6 | 21.85 | 0.45 | 6.5 | 2.15 | 25.75 | Vertical | Pass |
| | 848.8 | 19.35 | 0.46 | 6.5 | 2.15 | 23.24 | Horizontal | Pass |
| | 848.8 | 21.75 | 0.46 | 6.5 | 2.15 | 25.64 | 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. ERP | |
| PCS1900 | 1850.2 | 19.51 | 2.41 | 10.35 | 27.45 | Horizontal | Pass |
| | 1850.2 | 21.5 | 2.41 | 10.35 | 29.44 | Vertical | Pass |
| | 1880 | 19.8 | 2.42 | 10.35 | 27.73 | Horizontal | Pass |
| | 1880 | 21.7 | 2.42 | 10.35 | 29.63 | Vertical | Pass |
| | 1909.8 | 19.74 | 2.43 | 10.35 | 27.66 | Horizontal | Pass |
| | 1909.8 | 21.57 | 2.43 | 10.35 | 29.49 | Vertical | Pass |
| GPRS1900 | 1850.2 | 18.44 | 2.41 | 10.35 | 26.38 | Horizontal | Pass |
| | 1850.2 | 20.54 | 2.41 | 10.35 | 28.48 | Vertical | Pass |
| | 1880 | 18.18 | 2.42 | 10.35 | 26.11 | Horizontal | Pass |
| | 1880 | 20.65 | 2.42 | 10.35 | 28.58 | Vertical | Pass |
| | 1909.8 | 18.43 | 2.43 | 10.35 | 26.35 | Horizontal | Pass |
| | 1909.8 | 20.81 | 2.43 | 10.35 | 28.73 | Vertical | Pass |
| EGPRS1900 | 1850.2 | 19.15 | 2.41 | 10.35 | 27.09 | Horizontal | Pass |
| | 1850.2 | 21.18 | 2.41 | 10.35 | 29.12 | Vertical | Pass |
| | 1880 | 18.85 | 2.42 | 10.35 | 26.78 | Horizontal | Pass |
| | 1880 | 21.14 | 2.42 | 10.35 | 29.07 | Vertical | Pass |
| | 1909.8 | 18.59 | 2.43 | 10.35 | 26.51 | Horizontal | Pass |
| | 1909.8 | 21.09 | 2.43 | 10.35 | 29.01 | 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 | 11.28 | 2.41 | 10.35 | 19.22 | Horizontal | Pass | |
| | 1852.4 | 13.12 | 2.41 | 10.35 | 21.06 | Vertical | Pass | |
| | 1880 | 10.96 | 2.42 | 10.35 | 18.89 | Horizontal | Pass | |
| | 1880 | 12.94 | 2.42 | 10.35 | 20.87 | Vertical | Pass | |
| | 1907.4 | 10.98 | 2.43 | 10.35 | 18.90 | Horizontal | Pass | |
| | 1907.4 | 12.69 | 2.43 | 10.35 | 20.61 | Vertical | Pass | |
| HSUPA | 1852.4 | 11 | 2.41 | 10.35 | 18.94 | Horizontal | Pass | |
| | 1852.4 | 12.97 | 2.41 | 10.35 | 20.91 | Vertical | Pass | |
| | 1880 | 10.86 | 2.42 | 10.35 | 18.79 | Horizontal | Pass | |
| | 1880 | 12.59 | 2.42 | 10.35 | 20.52 | Vertical | Pass | |
| | 1907.4 | 10.95 | 2.43 | 10.35 | 18.87 | Horizontal | Pass | |
| | 1907.4 | 12.66 | 2.43 | 10.35 | 20.58 | Vertical | Pass | |
| HSDPA | 1852.4 | 10.62 | 2.41 | 10.35 | 18.56 | Horizontal | Pass | |
| | 1852.4 | 12.47 | 2.41 | 10.35 | 20.41 | Vertical | Pass | |
| | 1880 | 10.78 | 2.42 | 10.35 | 18.71 | Horizontal | Pass | |
| | 1880 | 12.49 | 2.42 | 10.35 | 20.42 | Vertical | Pass | |
| | 1907.4 | 10.71 | 2.43 | 10.35 | 18.63 | Horizontal | Pass | |
| | 1907.4 | 12.5 | 2.43 | 10.35 | 20.42 | 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 | 14.93 | 0.44 | 6.5 | 2.15 | 18.84 | Horizontal | Pass |
| | 826.4 | 16.71 | 0.44 | 6.5 | 2.15 | 20.62 | Vertical | Pass |
| | 836.6 | 14.79 | 0.45 | 6.5 | 2.15 | 18.69 | Horizontal | Pass |
| | 836.6 | 16.78 | 0.45 | 6.5 | 2.15 | 20.68 | Vertical | Pass |
| | 846.4 | 15.27 | 0.46 | 6.5 | 2.15 | 19.16 | Horizontal | Pass |
| | 846.4 | 17.08 | 0.46 | 6.5 | 2.15 | 20.97 | Vertical | Pass |
| HSUPA | 826.4 | 14.37 | 0.44 | 6.5 | 2.15 | 18.28 | Horizontal | Pass |
| | 826.4 | 16.32 | 0.44 | 6.5 | 2.15 | 20.23 | Vertical | Pass |
| | 836.6 | 14.53 | 0.45 | 6.5 | 2.15 | 18.43 | Horizontal | Pass |
| | 836.6 | 16.53 | 0.45 | 6.5 | 2.15 | 20.43 | Vertical | Pass |
| | 846.4 | 14.93 | 0.46 | 6.5 | 2.15 | 18.82 | Horizontal | Pass |
| | 846.4 | 16.63 | 0.46 | 6.5 | 2.15 | 20.52 | Vertical | Pass |
| HSDPA | 826.4 | 14.62 | 0.44 | 6.5 | 2.15 | 18.53 | Horizontal | Pass |
| | 826.4 | 16.50 | 0.44 | 6.5 | 2.15 | 20.41 | Vertical | Pass |
| | 836.6 | 14.43 | 0.45 | 6.5 | 2.15 | 18.33 | Horizontal | Pass |
| | 836.6 | 16.36 | 0.45 | 6.5 | 2.15 | 20.26 | Vertical | Pass |
| | 846.4 | 14.56 | 0.46 | 6.5 | 2.15 | 18.45 | Horizontal | Pass |
| | 846.4 | 16.33 | 0.46 | 6.5 | 2.15 | 20.22 | Vertical | Pass |
| Limit | ERP<7W=38.45dBm | | | | | | | |



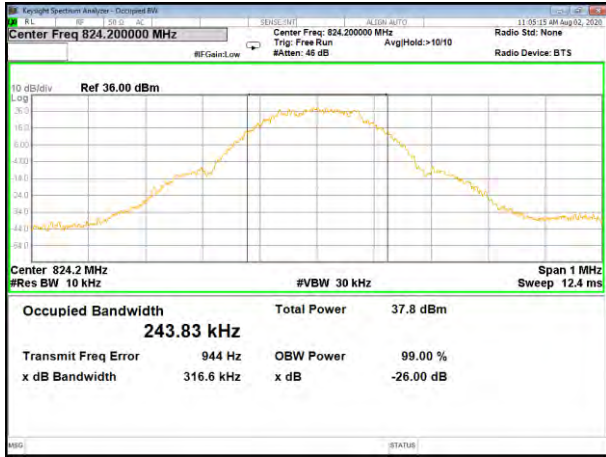
A4. OCCUPIED BANDWIDTH (99% OCCUPIED BANDWIDTH/26dB BANDWIDTH)

| GSM Bandwidth [KHz] | | | | | | |
|---------------------|--------|---------|--------|---------|---------|---------|
| Mode | Lowest | | Middle | | Highest | |
| | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW | 26dB BW |
| GSM850 | 243.83 | 316.6 | 244.73 | 315.8 | 248.9 | 315.8 |
| GPRS850 | 247.65 | 320.6 | 246.02 | 318.2 | 246.21 | 316.9 |
| EGPRS850 | 245.29 | 312.2 | 245.24 | 309.5 | 241.37 | 314.1 |

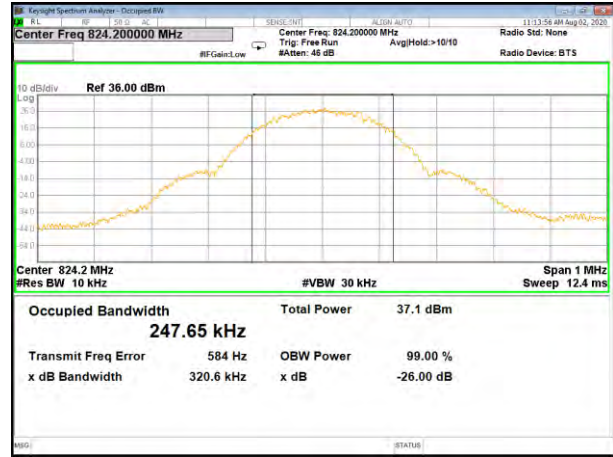
| GSM Bandwidth [KHz] | | | | | | |
|---------------------|--------|---------|--------|---------|---------|---------|
| Mode | Lowest | | Middle | | Highest | |
| | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW | 26dB BW |
| GSM1900 | 244.78 | 313.1 | 246.7 | 315.6 | 246.41 | 314.7 |
| GPRS1900 | 244.86 | 314.6 | 246.96 | 319.8 | 241.65 | 315.1 |
| EGPRS1900 | 251.86 | 313.6 | 246.36 | 306.1 | 246.1 | 388.9 |

| WCDMA Bandwidth [MHz] | | | | | | |
|-----------------------|--------|---------|--------|---------|---------|---------|
| Mode | Lowest | | Middle | | Highest | |
| | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW | 26dB BW |
| WCDMA II | 4.156 | 4.694 | 4.173 | 4.682 | 4.1574 | 4.69 |
| HSDPA II | 4.171 | 4.671 | 4.172 | 4.683 | 4.175 | 4.688 |
| HSUPA II | 4.17 | 4.685 | 4.17 | 4.674 | 4.173 | 4.695 |

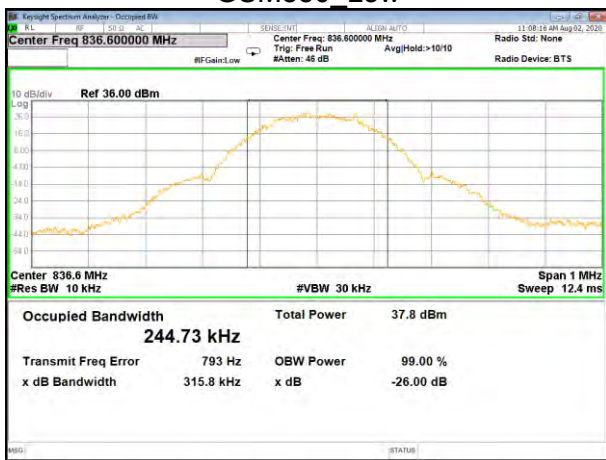
| WCDMA Bandwidth [MHz] | | | | | | |
|-----------------------|--------|---------|--------|---------|---------|---------|
| Mode | Lowest | | Middle | | Highest | |
| | 99% BW | 26dB BW | 99% BW | 26dB BW | 99% BW | 26dB BW |
| WCDMA V | 4.158 | 4.684 | 4.173 | 4.689 | 4.178 | 4.686 |
| HSDPA V | 4.163 | 4.674 | 4.173 | 4.665 | 4.178 | 4.681 |
| HSUPA V | 4.159 | 4.671 | 4.169 | 4.676 | 4.189 | 4.666 |



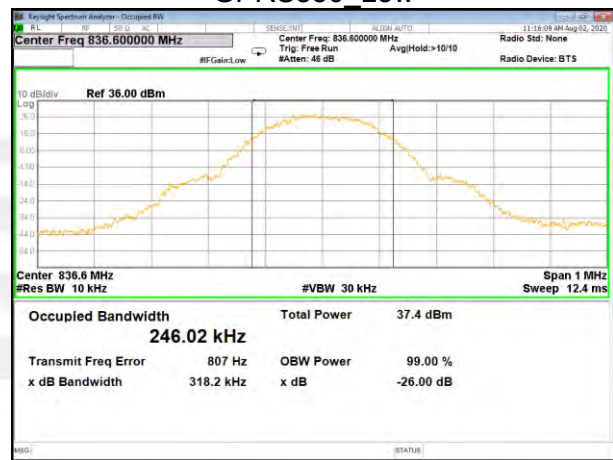
GSM850_Low



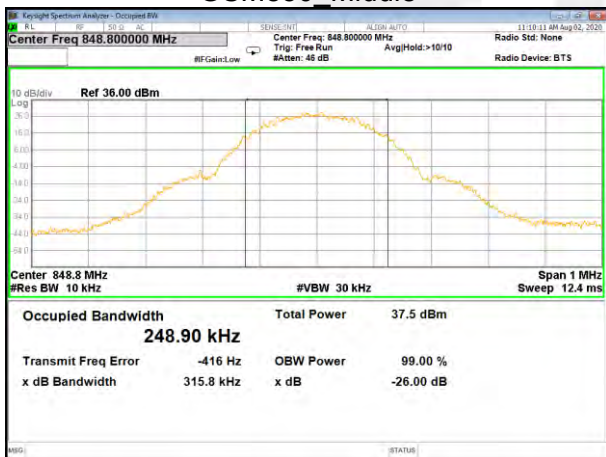
GPRS850_Low



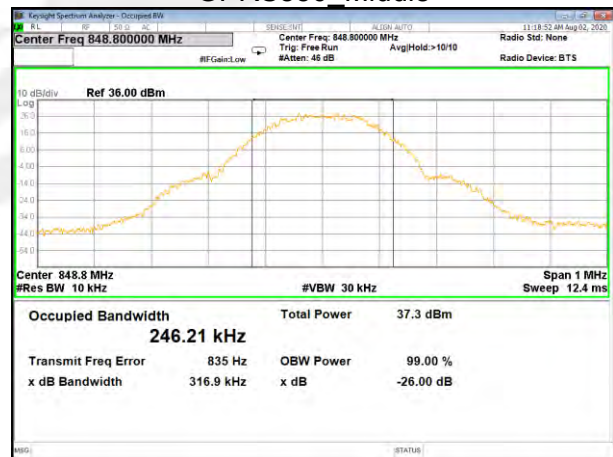
GSM850_Middle



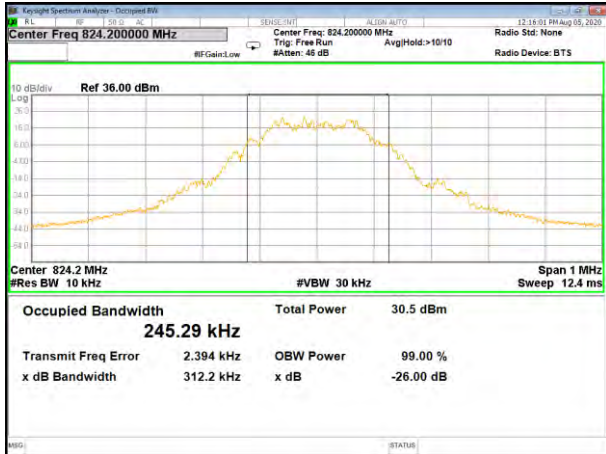
GPRS850_Middle



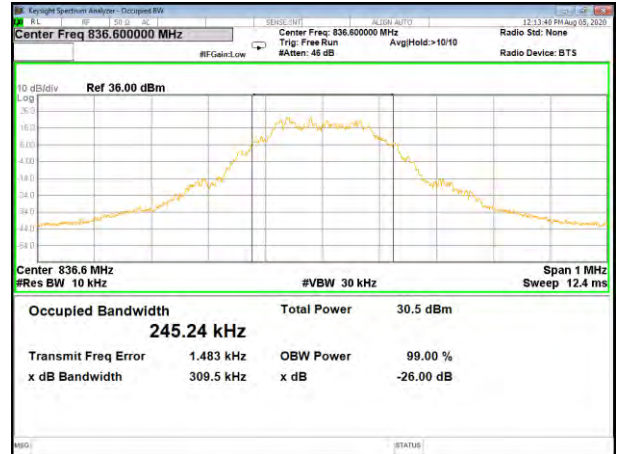
GSM850_High



GPRS850_High



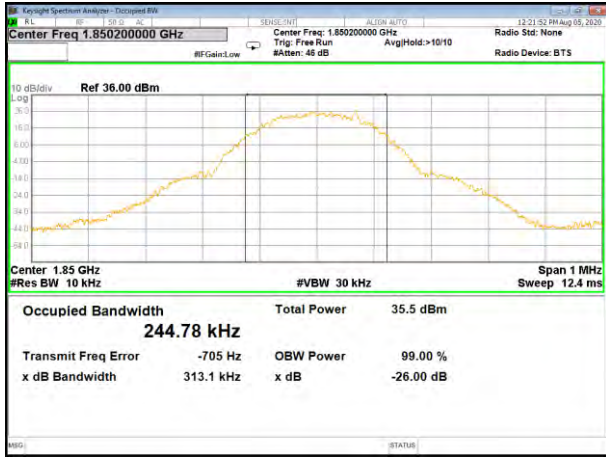
EGPRS850_Low



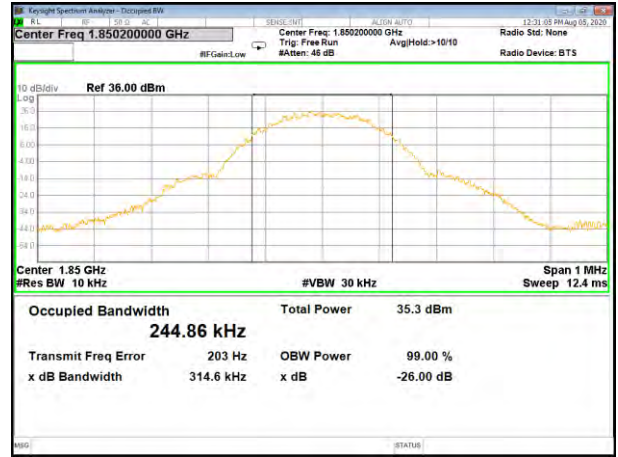
EGPRS850_Middle



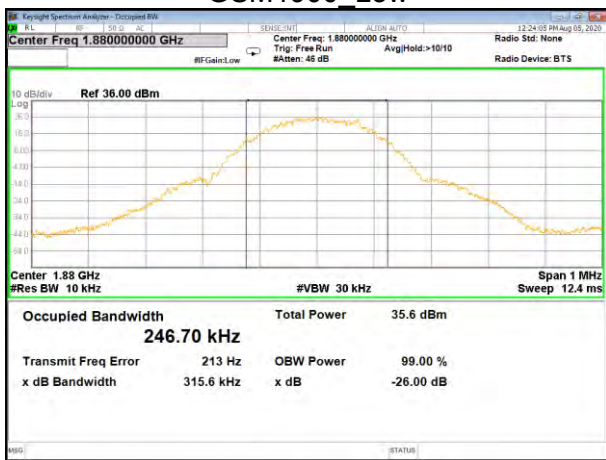
EGPRS850_High



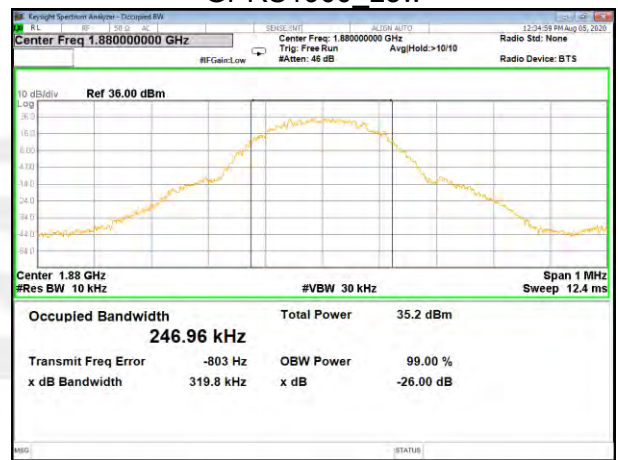
GSM1900 Low



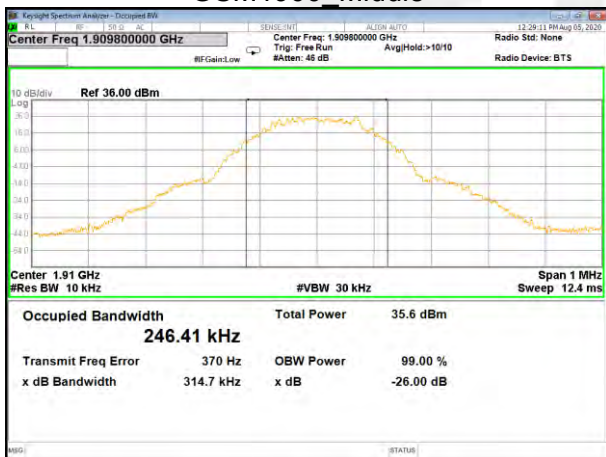
GPRS1900 Low



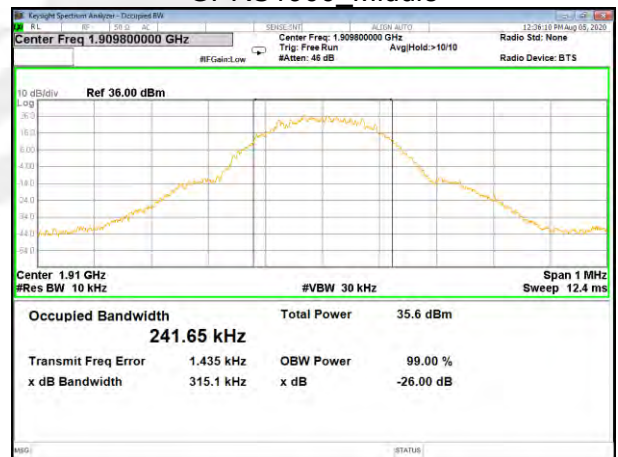
GSM1900 Middle



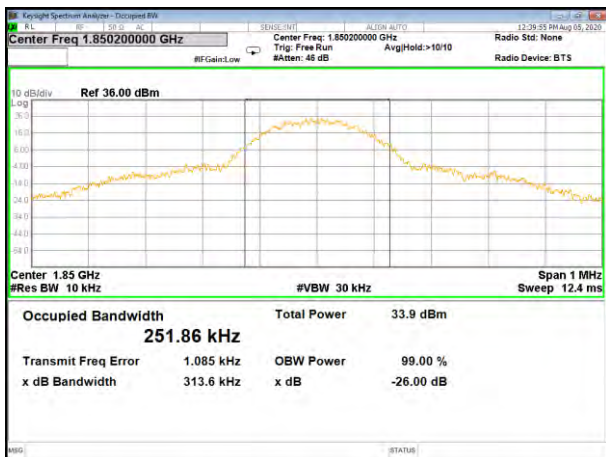
GPRS1900 Middle



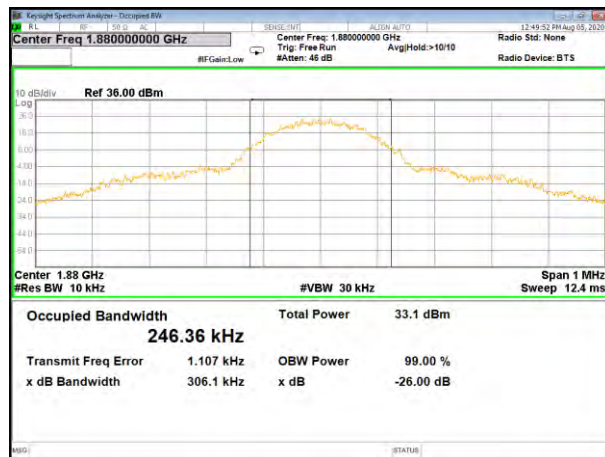
GSM1900_High



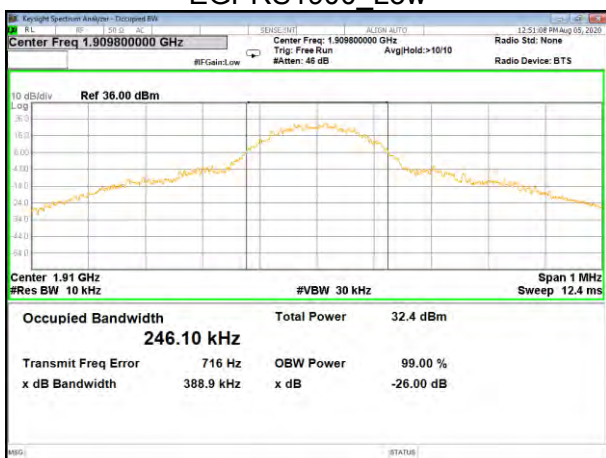
GPRS1900_High



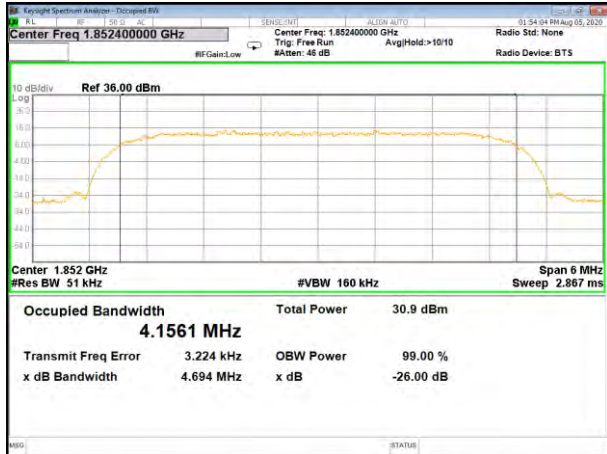
EGPRS1900_Low



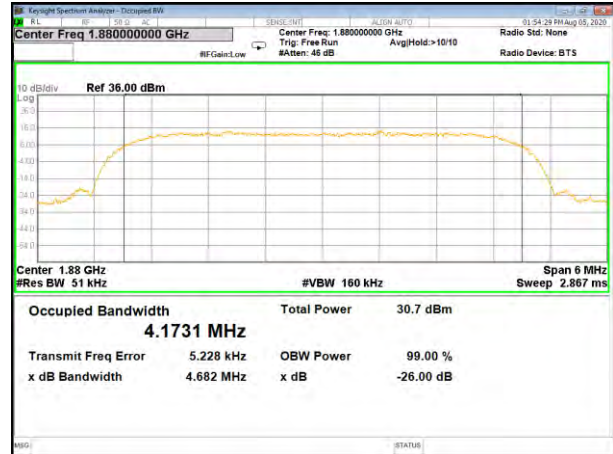
EGPRS1900_Middle



EGPRS1900_High



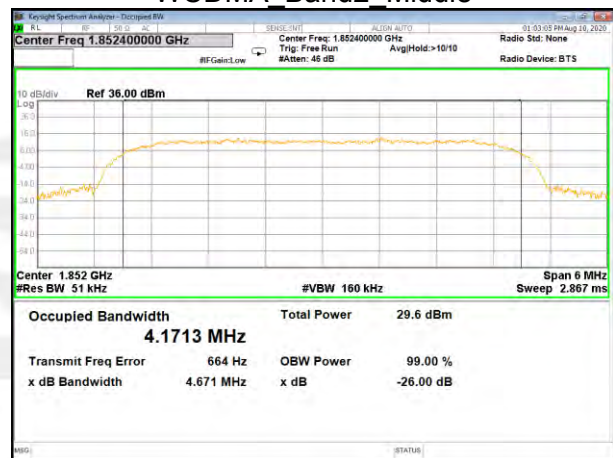
WCDMA Band2 Low



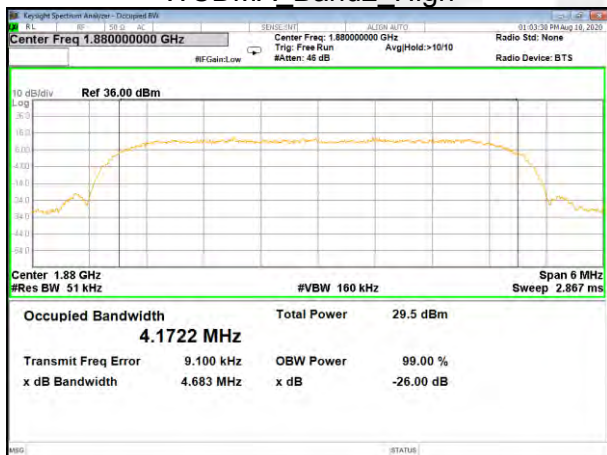
WCDMA Band2 Middle



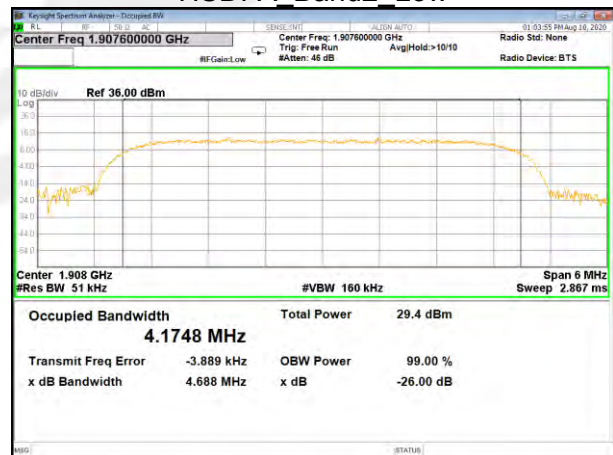
WCDMA Band2 High



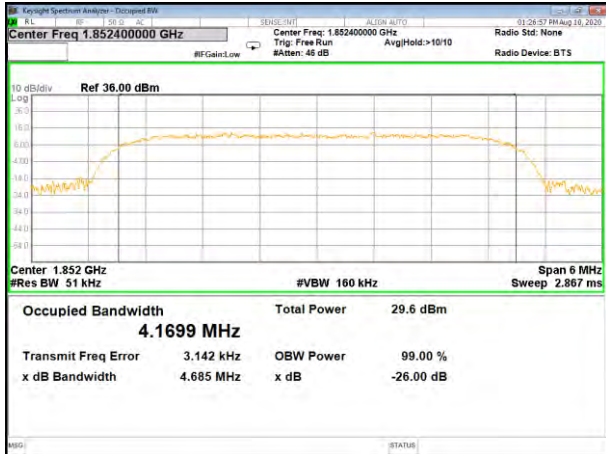
HSDPA Band2 Low



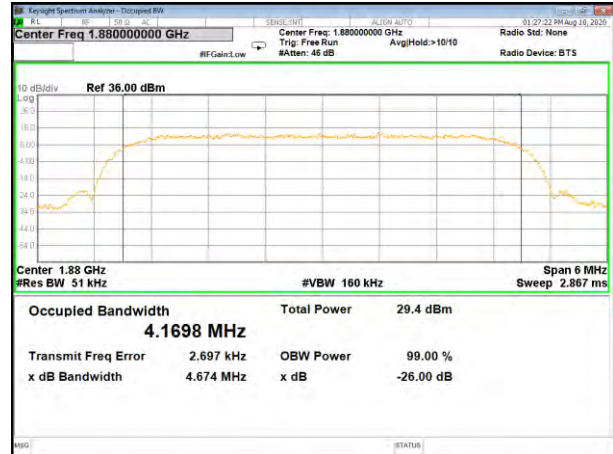
HSDPA_Band2_Middle



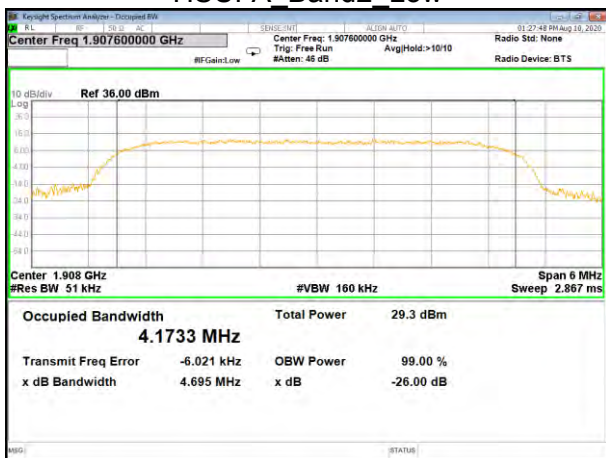
HSDPA_Band2_High



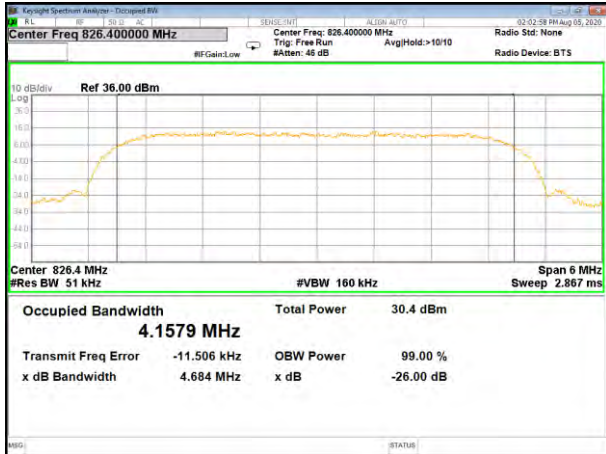
HSUPA_Band2_Low



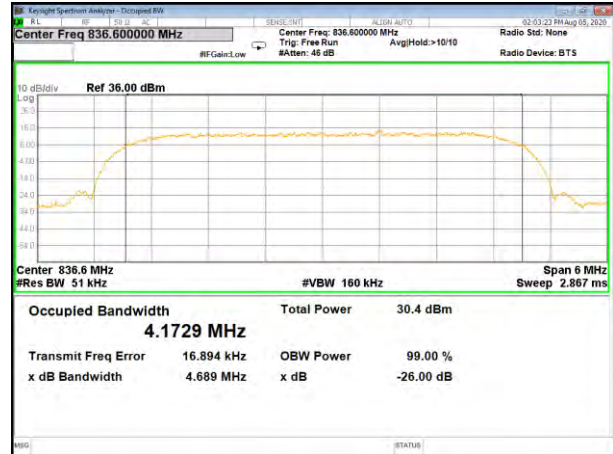
HSUPA_Band2_Middle



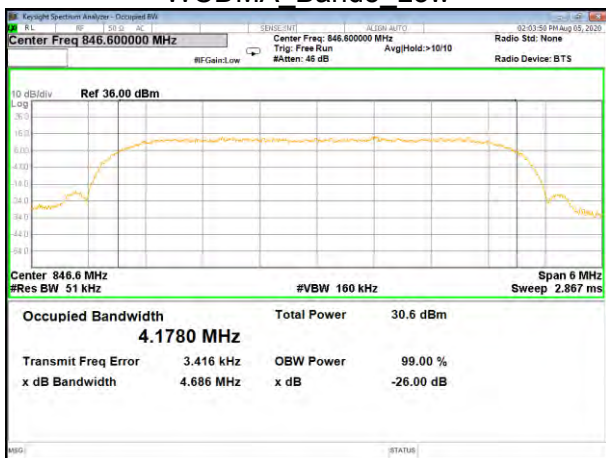
HSUPA_Band2_High



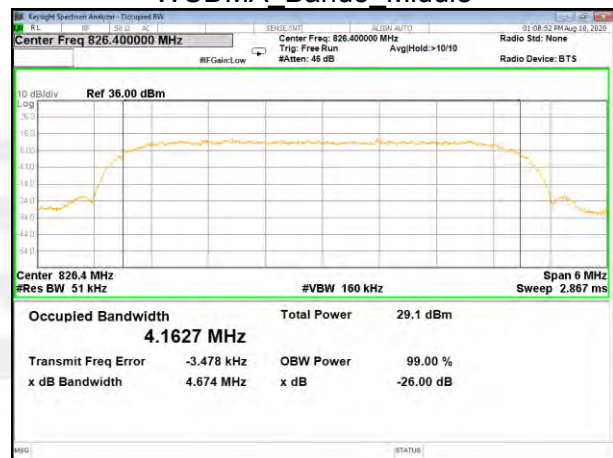
WCDMA Band5 Low



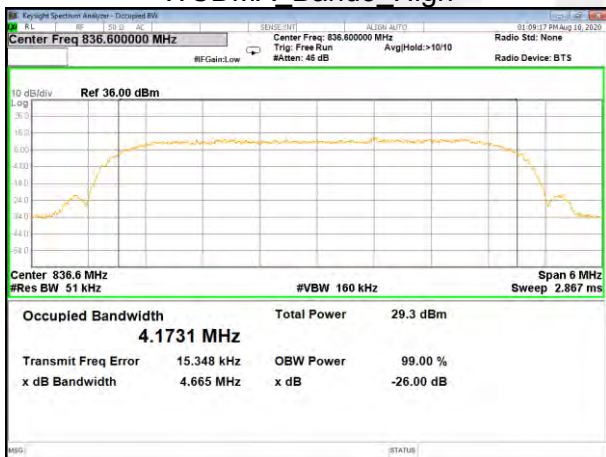
WCDMA Band5 Middle



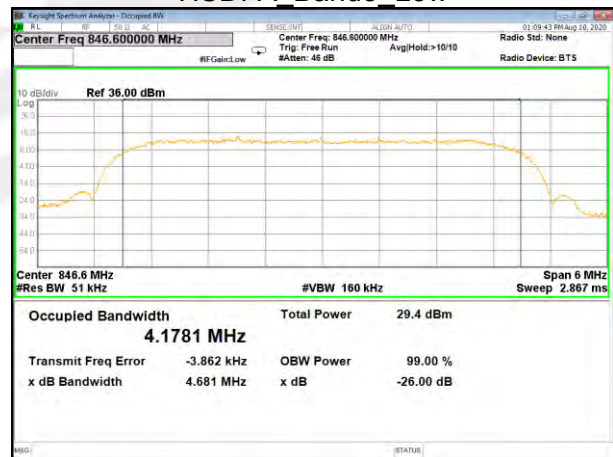
WCDMA Band5 High



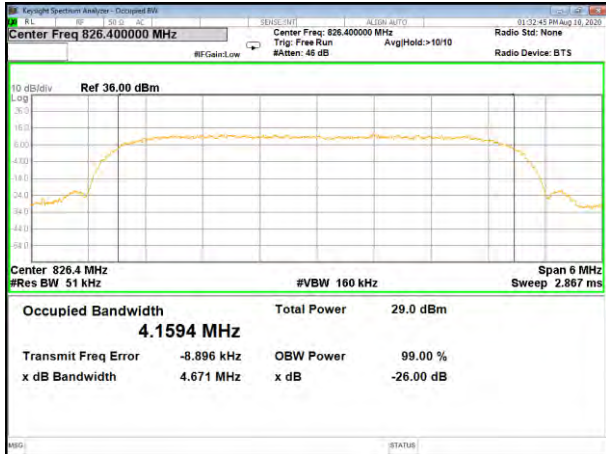
HSDPA Band5 Low



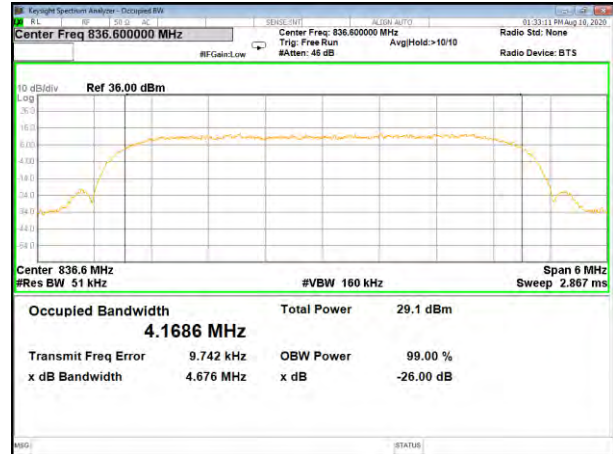
HSDPA_Band5_Middle



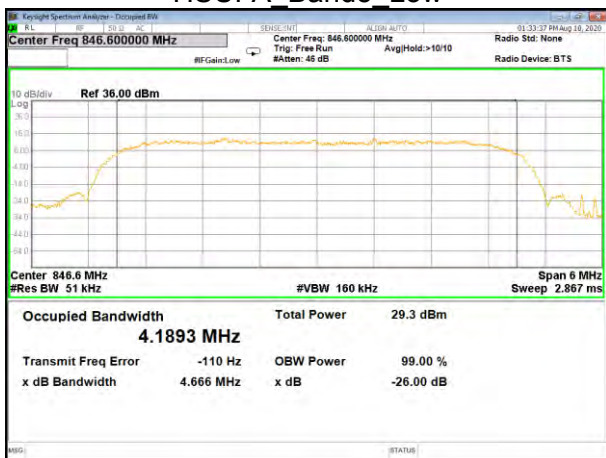
HSDPA_Band5_High



HSUPA_Band5_Low



HSUPA_Band5_Middle



HSUPA_Band5_High



A5. FREQUENCY STABILITY

Normal Voltage = 3.8V; Battery End Point (BEP) = 2.8V; Maximum Voltage =4.35V

| GSM 850 /836.6MHz | | | | | |
|-------------------|----------------|-----------------|------------|--------|--------|
| Temperature (°C) | Voltage | Freq. Dev. | Freq. Dev. | Limit | Result |
| | (Volt) | (Hz) | (ppm) | | |
| 50 | Normal Voltage | 23.64 | 0.028 | 2.5ppm | PASS |
| 40 | | 13.70 | 0.016 | | |
| 30 | | 31.02 | 0.037 | | |
| 20 | | 18.58 | 0.022 | | |
| 10 | | 28.83 | 0.034 | | |
| 0 | | 27.50 | 0.033 | | |
| -10 | | 19.52 | 0.023 | | |
| -20 | | 22.80 | 0.027 | | |
| -30 | | 20.63 | 0.025 | | |
| 20 | | Maximum Voltage | 18.26 | | |
| 20 | BEP | 27.58 | 0.033 | | |

| GPRS 850 /836.6MHz | | | | | |
|--------------------|----------------|-----------------|------------|--------|--------|
| Temperature (°C) | Voltage | Freq. Dev. | Freq. Dev. | Limit | Result |
| | (Volt) | (Hz) | (ppm) | | |
| 50 | Normal Voltage | 12.37 | 0.015 | 2.5ppm | PASS |
| 40 | | 19.23 | 0.023 | | |
| 30 | | 32.01 | 0.038 | | |
| 20 | | 17.24 | 0.021 | | |
| 10 | | 25.51 | 0.030 | | |
| 0 | | 11.81 | 0.014 | | |
| -10 | | 27.70 | 0.033 | | |
| -20 | | 34.65 | 0.041 | | |
| -30 | | 17.62 | 0.021 | | |
| 20 | | Maximum Voltage | 19.06 | | |
| 20 | BEP | 27.53 | 0.033 | | |

| EGPRS 850 /836.6MHz | | | | | |
|---------------------|----------------|-----------------|------------|--------|--------|
| Temperature (°C) | Voltage | Freq. Dev. | Freq. Dev. | Limit | Result |
| | (Volt) | (Hz) | (ppm) | | |
| 50 | Normal Voltage | 14.76 | 0.018 | 2.5ppm | PASS |
| 40 | | 26.34 | 0.031 | | |
| 30 | | 28.00 | 0.033 | | |
| 20 | | 19.66 | 0.023 | | |
| 10 | | 26.05 | 0.031 | | |
| 0 | | 36.04 | 0.043 | | |
| -10 | | 14.16 | 0.017 | | |
| -20 | | 22.13 | 0.026 | | |
| -30 | | 19.26 | 0.023 | | |
| 20 | | Maximum Voltage | 27.04 | | |
| 20 | BEP | 31.18 | 0.037 | | |



| GSM 1900 / 1880MHz | | | | | |
|--------------------|----------------|-----------------|------------|------------------------|--------|
| Temperature (°C) | Voltage | Freq. Dev. | Freq. Dev. | Limit | Result |
| | (Volt) | (Hz) | (ppm) | | |
| 50 | Normal Voltage | 35.69 | 0.019 | Within Authorized Band | PASS |
| 40 | | 22.33 | 0.012 | | |
| 30 | | 33.08 | 0.018 | | |
| 20 | | 14.25 | 0.008 | | |
| 10 | | 31.95 | 0.017 | | |
| 0 | | 35.40 | 0.019 | | |
| -10 | | 28.61 | 0.015 | | |
| -20 | | 29.90 | 0.016 | | |
| -30 | | 23.97 | 0.013 | | |
| 20 | | Maximum Voltage | 21.37 | | |
| 20 | BEP | 24.05 | 0.013 | | |

| GPRS 1900 / 1880MHz | | | | | |
|---------------------|----------------|-----------------|------------|------------------------|--------|
| Temperature (°C) | Voltage | Freq. Dev. | Freq. Dev. | Limit | Result |
| | (Volt) | (Hz) | (ppm) | | |
| 50 | Normal Voltage | 32.96 | 0.018 | Within Authorized Band | PASS |
| 40 | | 30.59 | 0.016 | | |
| 30 | | 34.50 | 0.018 | | |
| 20 | | 31.12 | 0.017 | | |
| 10 | | 13.21 | 0.007 | | |
| 0 | | 16.21 | 0.009 | | |
| -10 | | 28.03 | 0.015 | | |
| -20 | | 22.35 | 0.012 | | |
| -30 | | 32.72 | 0.017 | | |
| 20 | | Maximum Voltage | 30.39 | | |
| 20 | BEP | 27.61 | 0.015 | | |

| EGPRS 1900 / 1880MHz | | | | | |
|----------------------|----------------|-----------------|------------|------------------------|--------|
| Temperature (°C) | Voltage | Freq. Dev. | Freq. Dev. | Limit | Result |
| | (Volt) | (Hz) | (ppm) | | |
| 50 | Normal Voltage | 35.55 | 0.019 | Within Authorized Band | PASS |
| 40 | | 20.01 | 0.011 | | |
| 30 | | 27.65 | 0.015 | | |
| 20 | | 21.01 | 0.011 | | |
| 10 | | 35.92 | 0.019 | | |
| 0 | | 23.40 | 0.012 | | |
| -10 | | 21.56 | 0.011 | | |
| -20 | | 23.62 | 0.013 | | |
| -30 | | 33.70 | 0.018 | | |
| 20 | | Maximum Voltage | 18.59 | | |
| 20 | BEP | 24.85 | 0.013 | | |



| UMTS Band II /1880MHz | | | | | |
|-----------------------|----------------|-----------------|------------|------------------------|--------|
| Temperature (°C) | Voltage | Freq. Dev. | Freq. Dev. | Limit | Result |
| | (Volt) | (Hz) | (ppm) | | |
| 50 | Normal Voltage | 15.12 | 0.008 | Within Authorized Band | PASS |
| 40 | | 19.77 | 0.011 | | |
| 30 | | 24.85 | 0.013 | | |
| 20 | | 23.87 | 0.013 | | |
| 10 | | 16.65 | 0.009 | | |
| 0 | | 14.69 | 0.008 | | |
| -10 | | 13.61 | 0.007 | | |
| -20 | | 23.47 | 0.012 | | |
| -30 | | 12.71 | 0.007 | | |
| 20 | | Maximum Voltage | 31.36 | | |
| 20 | BEP | 37.58 | 0.020 | | |

| HSDPA Band II /1880MHz | | | | | |
|------------------------|----------------|-----------------|------------|------------------------|--------|
| Temperature (°C) | Voltage | Freq. Dev. | Freq. Dev. | Limit | Result |
| | (Volt) | (Hz) | (ppm) | | |
| 50 | Normal Voltage | 33.51 | 0.018 | Within Authorized Band | PASS |
| 40 | | 17.88 | 0.010 | | |
| 30 | | 30.27 | 0.016 | | |
| 20 | | 12.15 | 0.006 | | |
| 10 | | 36.45 | 0.019 | | |
| 0 | | 18.87 | 0.010 | | |
| -10 | | 15.74 | 0.008 | | |
| -20 | | 31.19 | 0.017 | | |
| -30 | | 30.78 | 0.016 | | |
| 20 | | Maximum Voltage | 27.74 | | |
| 20 | BEP | 20.05 | 0.011 | | |

| HSUPA Band II /1880MHz | | | | | |
|------------------------|----------------|-----------------|------------|------------------------|--------|
| Temperature (°C) | Voltage | Freq. Dev. | Freq. Dev. | Limit | Result |
| | (Volt) | (Hz) | (ppm) | | |
| 50 | Normal Voltage | 20.39 | 0.011 | Within Authorized Band | PASS |
| 40 | | 19.53 | 0.010 | | |
| 30 | | 17.70 | 0.009 | | |
| 20 | | 14.50 | 0.008 | | |
| 10 | | 20.64 | 0.011 | | |
| 0 | | 32.82 | 0.017 | | |
| -10 | | 12.85 | 0.007 | | |
| -20 | | 32.35 | 0.017 | | |
| -30 | | 35.64 | 0.019 | | |
| 20 | | Maximum Voltage | 18.85 | | |
| 20 | BEP | 20.68 | 0.011 | | |



| UMTS Band V / 836.6MHz | | | | | |
|------------------------|----------------|-----------------|------------|--------|--------|
| Temperature (°C) | Voltage | Freq. Dev. | Freq. Dev. | Limit | Result |
| | (Volt) | (Hz) | (ppm) | | |
| 50 | Normal Voltage | 26.11 | 0.031 | 2.5ppm | PASS |
| 40 | | 31.89 | 0.038 | | |
| 30 | | 12.31 | 0.015 | | |
| 20 | | 15.92 | 0.019 | | |
| 10 | | 32.17 | 0.038 | | |
| 0 | | 14.01 | 0.017 | | |
| -10 | | 15.67 | 0.019 | | |
| -20 | | 30.89 | 0.037 | | |
| -30 | | 27.54 | 0.033 | | |
| 20 | | Maximum Voltage | 27.99 | | |
| 20 | BEP | 24.03 | 0.029 | | |

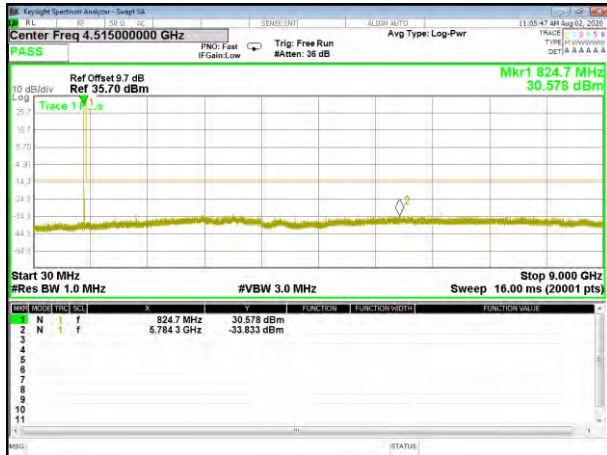
| HSDPA Band V / 836.6MHz | | | | | |
|-------------------------|----------------|-----------------|------------|--------|--------|
| Temperature (°C) | Voltage | Freq. Dev. | Freq. Dev. | Limit | Result |
| | (Volt) | (Hz) | (ppm) | | |
| 50 | Normal Voltage | 17.67 | 0.021 | 2.5ppm | PASS |
| 40 | | 19.15 | 0.023 | | |
| 30 | | 28.01 | 0.033 | | |
| 20 | | 20.76 | 0.025 | | |
| 10 | | 28.90 | 0.035 | | |
| 0 | | 30.26 | 0.036 | | |
| -10 | | 19.77 | 0.024 | | |
| -20 | | 23.42 | 0.028 | | |
| -30 | | 33.86 | 0.040 | | |
| 20 | | Maximum Voltage | 25.94 | | |
| 20 | BEP | 16.55 | 0.020 | | |

| HSUPA Band V / 836.6MHz | | | | | |
|-------------------------|----------------|-----------------|------------|--------|--------|
| Temperature (°C) | Voltage | Freq. Dev. | Freq. Dev. | Limit | Result |
| | (Volt) | (Hz) | (ppm) | | |
| 50 | Normal Voltage | 25.42 | 0.030 | 2.5ppm | PASS |
| 40 | | 24.63 | 0.029 | | |
| 30 | | 19.26 | 0.023 | | |
| 20 | | 36.28 | 0.043 | | |
| 10 | | 33.16 | 0.040 | | |
| 0 | | 22.95 | 0.027 | | |
| -10 | | 28.64 | 0.034 | | |
| -20 | | 20.06 | 0.024 | | |
| -30 | | 15.30 | 0.018 | | |
| 20 | | Maximum Voltage | 22.73 | | |
| 20 | BEP | 28.96 | 0.035 | | |

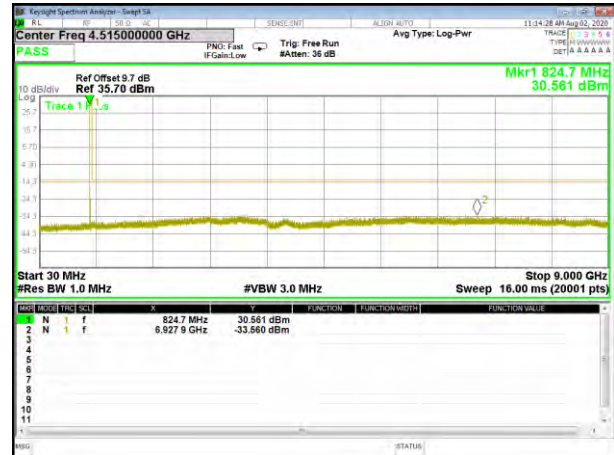
1. The frequency fundamental emissions stay within the authorized frequency block based on the frequency deviation measured is small.



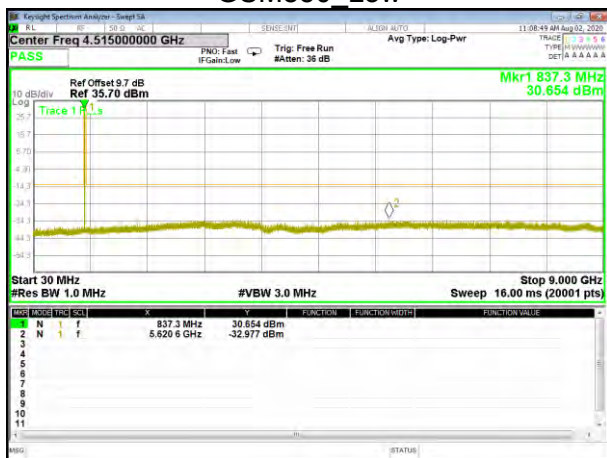
A6. SPURIOUS EMISSIONS AT ANTENNA TERMINALS



GSM850 Low



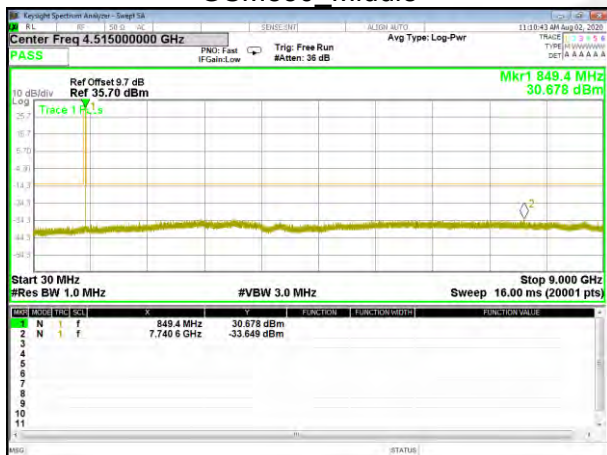
GPRS850 Low



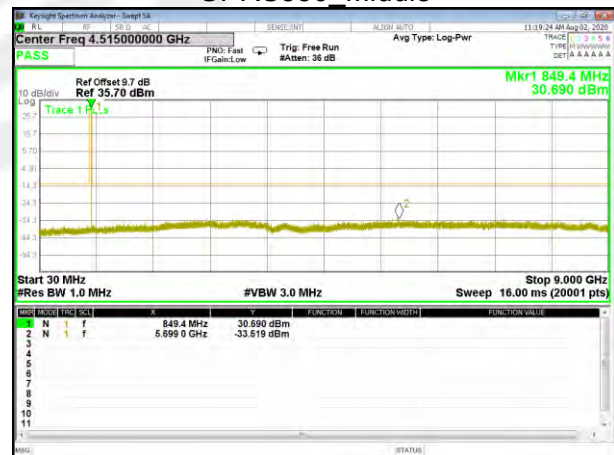
GSM850 Middle



GPRS850 Middle



GSM850 High



GPRS850 High



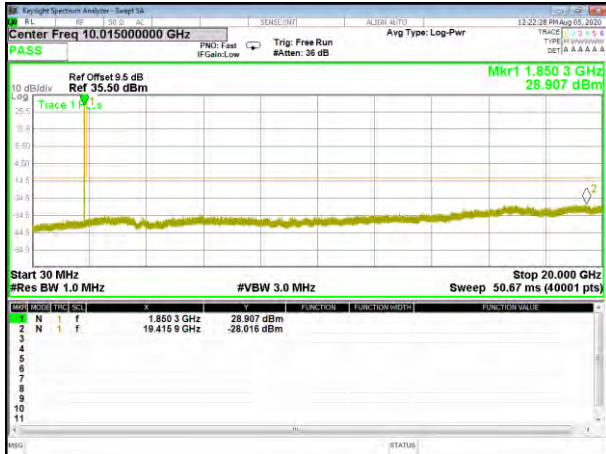
EGPRS850_Low



EGPRS850_Middle



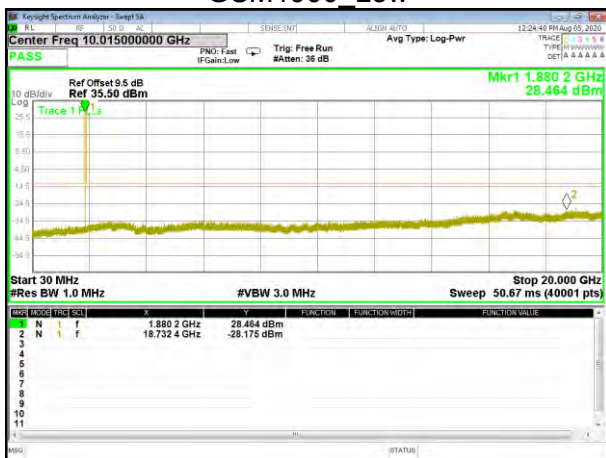
EGPRS850_High



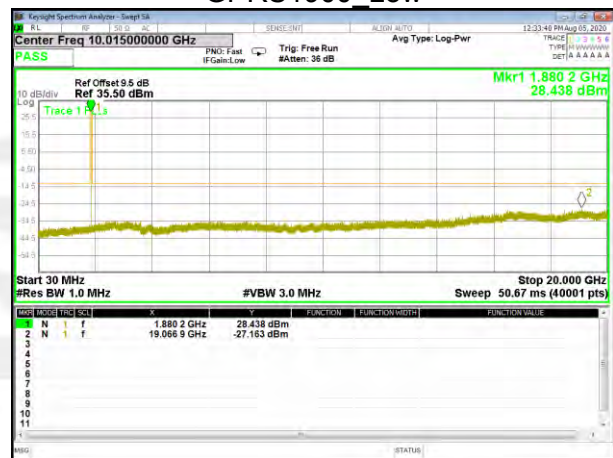
GSM1900 Low



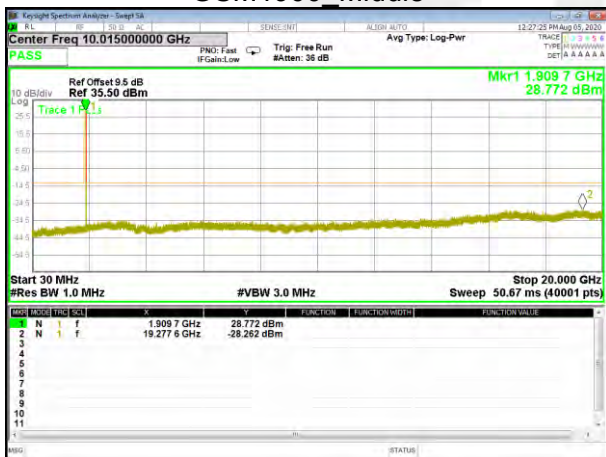
GPRS1900 Low



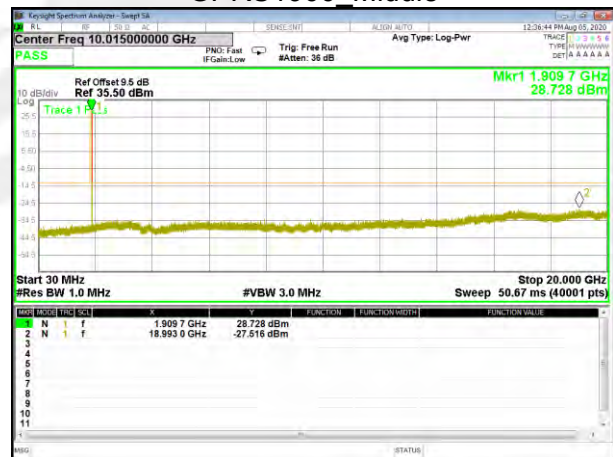
GSM1900 Middle



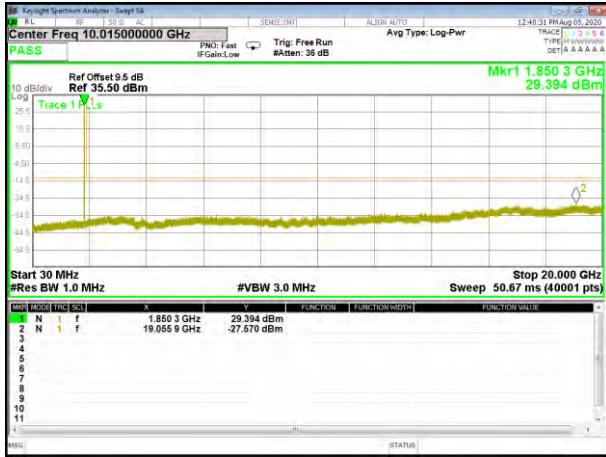
GPRS1900 Middle



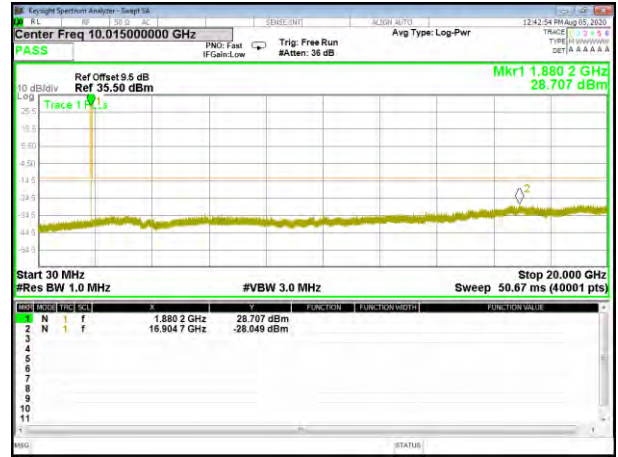
GSM1900_High



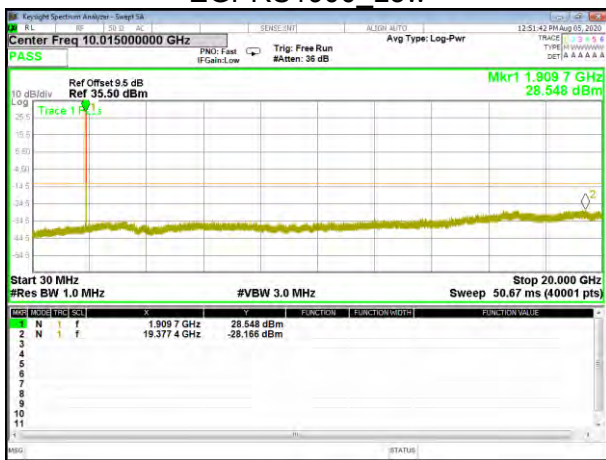
GPRS1900_High



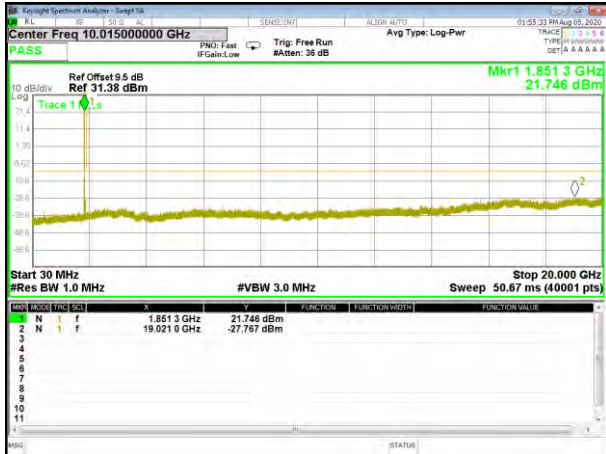
EGPRS1900_Low



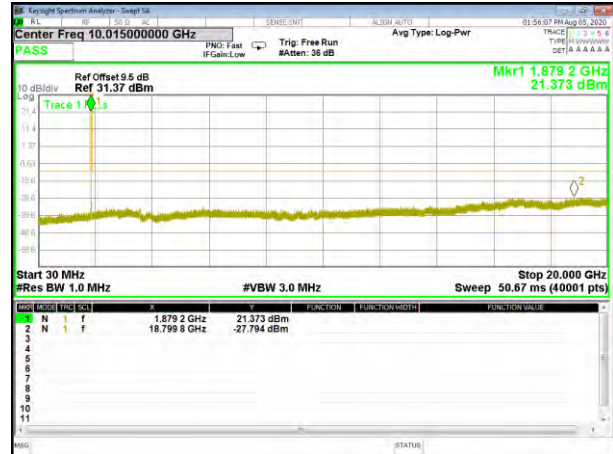
EGPRS1900_Middle



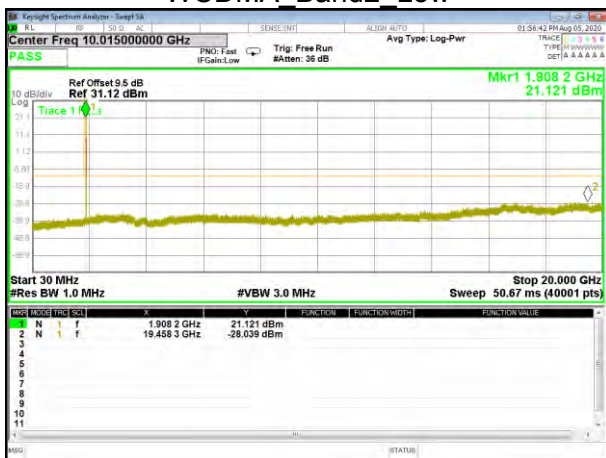
EGPRS1900_High



WCDMA Band2 Low



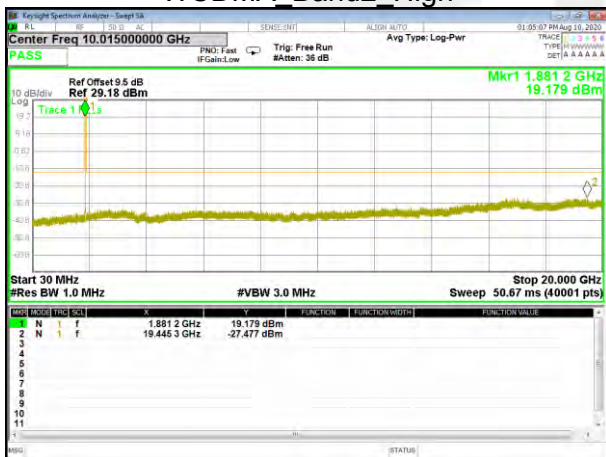
WCDMA Band2 Middle



WCDMA Band2 High



HSDPA Band2 Low



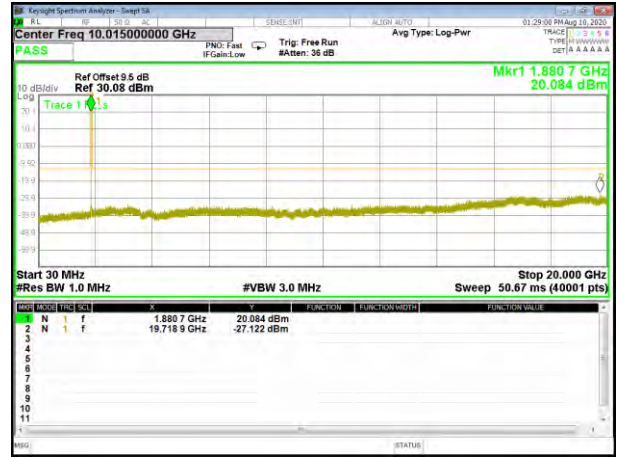
HSDPA_Band2_Middle



HSDPA_Band2_High



HSUPA_Band2_Low



HSUPA_Band2_Middle



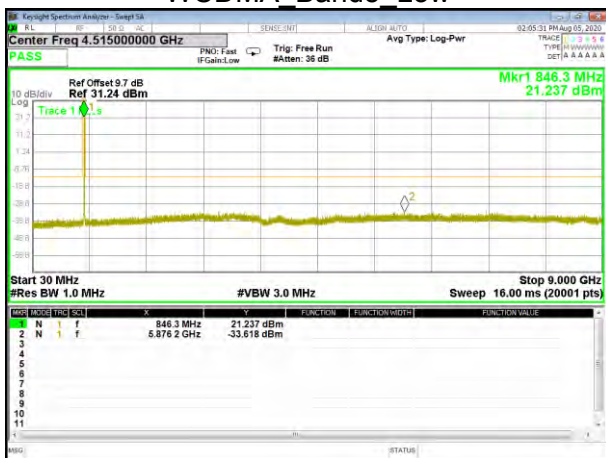
HSUPA_Band2_High



WCDMA Band5 Low



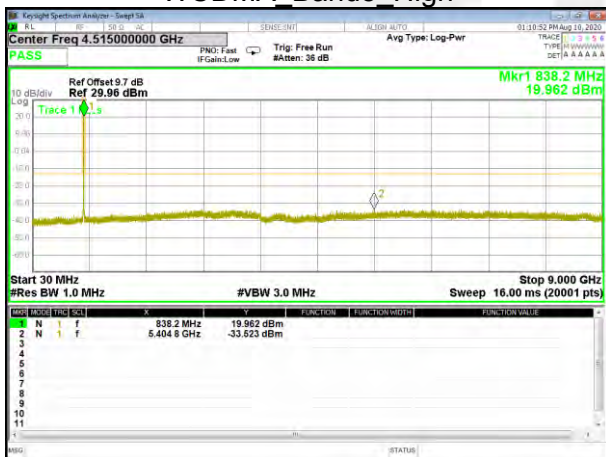
WCDMA Band5 Middle



WCDMA Band5 High



HSDPA Band5 Low



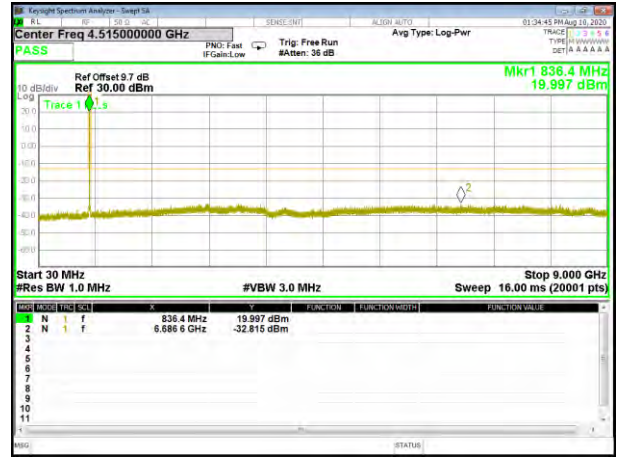
HSDPA_Band5_Middle



HSDPA_Band5_High



HSUPA_Band5_Low



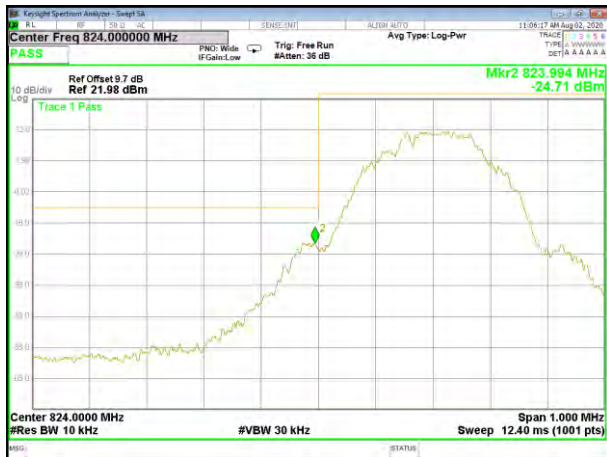
HSUPA_Band5_Middle



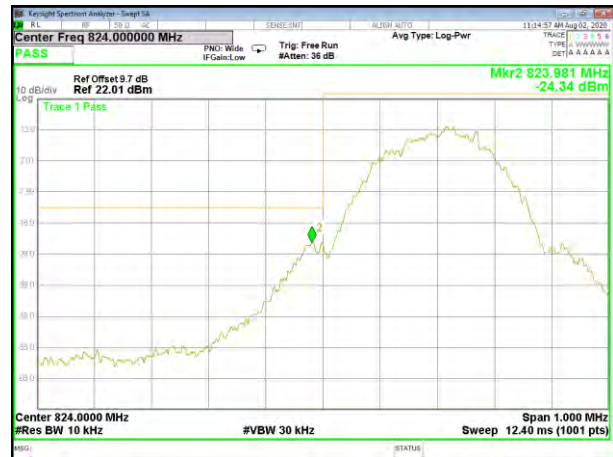
HSUPA_Band5_High



A7. BAND EDGE



GSM850_Low



GPRS850_Low



GSM850_High



GPRS850_High



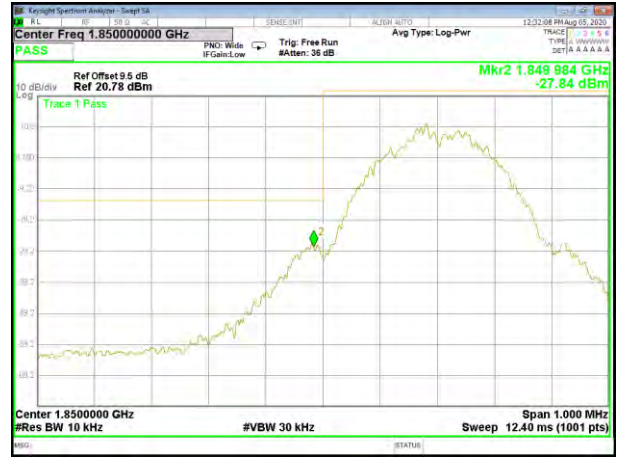
EGPRS850_Low



EGPRS850_High



GSM1900 Low



GPRS1900 Low



GSM1900 High



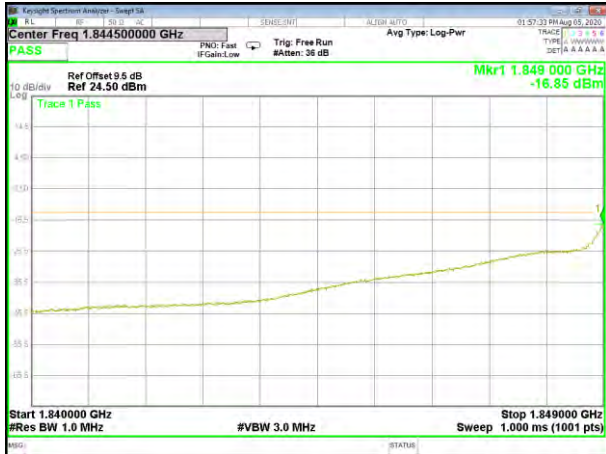
GPRS1900 High



EGPRS1900_Low



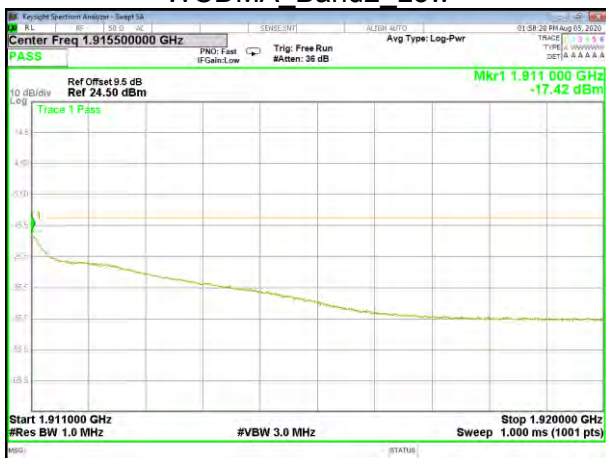
EGPRS1900_High



WCDMA Band2 Low



WCDMA Band2 Low



WCDMA Band2 High



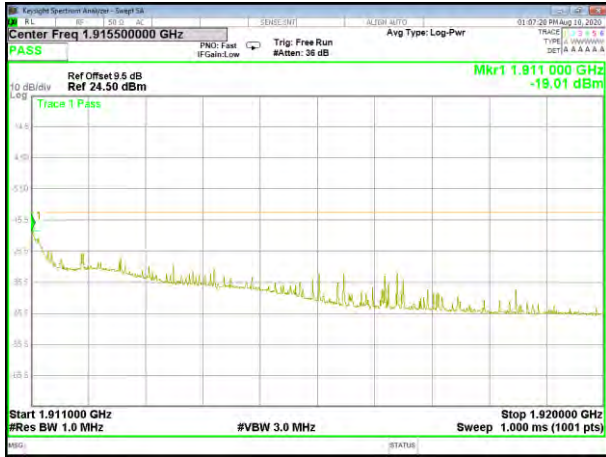
WCDMA Band2 High



HSDPA_Band2_Low



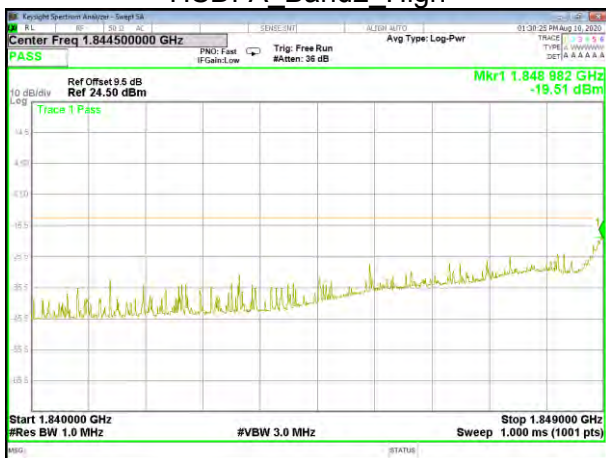
HSDPA_Band2_Low



HSDPA_Band2_High



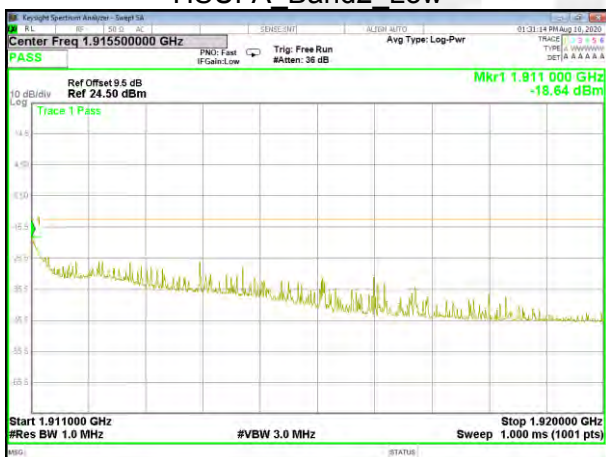
HSDPA_Band2_High



HSUPA_Band2_Low



HSUPA_Band2_Low



HSUPA_Band2_High



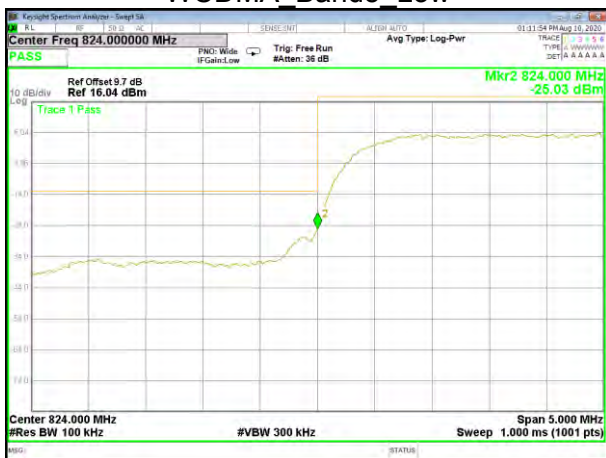
HSUPA_Band2_High



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 |
| 1648.48 | -40.71 | 9.40 | 4.75 | -36.06 | -13.00 | -23.06 | H |
| 2472.59 | -39.57 | 10.60 | 8.39 | -37.36 | -13.00 | -24.36 | H |
| 3296.43 | -31.37 | 12.00 | 11.79 | -31.16 | -13.00 | -18.16 | H |
| 1648.49 | -44.04 | 9.40 | 4.75 | -39.39 | -13.00 | -26.39 | V |
| 2472.39 | -45.26 | 10.60 | 8.39 | -43.05 | -13.00 | -30.05 | V |
| 3296.63 | -43.01 | 12.00 | 11.79 | -42.80 | -13.00 | -29.80 | 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 |
| 1673.25 | -41.09 | 9.50 | 4.76 | -36.35 | -13.00 | -23.35 | H |
| 2509.73 | -40.47 | 10.70 | 8.40 | -38.17 | -13.00 | -25.17 | H |
| 3346.24 | -32.00 | 12.20 | 11.80 | -31.60 | -13.00 | -18.60 | H |
| 1672.91 | -44.45 | 9.40 | 4.75 | -39.80 | -13.00 | -26.80 | V |
| 2509.80 | -45.14 | 10.60 | 8.39 | -42.93 | -13.00 | -29.93 | V |
| 3346.03 | -43.13 | 12.20 | 11.82 | -42.75 | -13.00 | -29.75 | 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 |
| 1697.42 | -40.78 | 9.60 | 4.77 | -35.95 | -13.00 | -22.95 | H |
| 2546.55 | -39.82 | 10.80 | 8.50 | -37.52 | -13.00 | -24.52 | H |
| 3395.12 | -32.06 | 12.50 | 11.90 | -31.46 | -13.00 | -18.46 | H |
| 1697.20 | -43.75 | 9.60 | 4.77 | -38.92 | -13.00 | -25.92 | V |
| 2546.21 | -44.64 | 10.80 | 8.50 | -42.34 | -13.00 | -29.34 | V |
| 3395.10 | -43.64 | 12.50 | 11.90 | -43.04 | -13.00 | -30.04 | 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 |
| 1648.32 | -41.09 | 9.40 | 4.75 | -36.44 | -13.00 | -23.44 | H |
| 2472.53 | -40.08 | 10.60 | 8.39 | -37.87 | -13.00 | -24.87 | H |
| 3296.87 | -31.61 | 12.00 | 11.79 | -31.40 | -13.00 | -18.40 | H |
| 1648.11 | -43.54 | 9.40 | 4.75 | -38.89 | -13.00 | -25.89 | V |
| 2472.60 | -44.55 | 10.60 | 8.39 | -42.34 | -13.00 | -29.34 | V |
| 3296.86 | -43.20 | 12.00 | 11.79 | -42.99 | -13.00 | -29.99 | 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 |
| 1672.85 | -40.21 | 9.50 | 4.76 | -35.47 | -13.00 | -22.47 | H |
| 2509.92 | -40.47 | 10.70 | 8.40 | -38.17 | -13.00 | -25.17 | H |
| 3346.30 | -31.63 | 12.20 | 11.80 | -31.23 | -13.00 | -18.23 | H |
| 1673.03 | -44.37 | 9.40 | 4.75 | -39.72 | -13.00 | -26.72 | V |
| 2509.92 | -43.97 | 10.60 | 8.39 | -41.76 | -13.00 | -28.76 | V |
| 3346.29 | -43.05 | 12.20 | 11.82 | -42.67 | -13.00 | -29.67 | 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 |
| 1697.50 | -40.23 | 9.60 | 4.77 | -35.40 | -13.00 | -22.40 | H |
| 2546.36 | -39.85 | 10.80 | 8.50 | -37.55 | -13.00 | -24.55 | H |
| 3395.33 | -31.99 | 12.50 | 11.90 | -31.39 | -13.00 | -18.39 | H |
| 1697.54 | -44.39 | 9.60 | 4.77 | -39.56 | -13.00 | -26.56 | V |
| 2546.07 | -45.35 | 10.80 | 8.50 | -43.05 | -13.00 | -30.05 | V |
| 3394.93 | -42.68 | 12.50 | 11.90 | -42.08 | -13.00 | -29.08 | 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 | Limit | Margin | Polarity |
| | | | | (dBm) | (dBm) | (dBm) | |
| 1648.02 | -40.67 | 9.40 | 4.75 | -36.02 | -13.00 | -23.02 | H |
| 2472.30 | -40.23 | 10.60 | 8.39 | -38.02 | -13.00 | -25.02 | H |
| 3296.87 | -31.74 | 12.00 | 11.79 | -31.53 | -13.00 | -18.53 | H |
| 1648.48 | -43.83 | 9.40 | 4.75 | -39.18 | -13.00 | -26.18 | V |
| 2472.65 | -45.01 | 10.60 | 8.39 | -42.80 | -13.00 | -29.80 | V |
| 3296.90 | -43.62 | 12.00 | 11.79 | -43.41 | -13.00 | -30.41 | V |
| The Worst Test Results Channel 190/836.6 MHz | | | | | | | |
| Frequency(MHz) | S G.Lev (dBm) | Ant(dBi) | Loss | PMea | Limit | Margin | Polarity |
| | | | | (dBm) | (dBm) | (dBm) | |
| 1673.07 | -40.28 | 9.50 | 4.76 | -35.54 | -13.00 | -22.54 | H |
| 2509.65 | -40.18 | 10.70 | 8.40 | -37.88 | -13.00 | -24.88 | H |
| 3346.25 | -31.18 | 12.20 | 11.80 | -30.78 | -13.00 | -17.78 | H |
| 1672.97 | -43.79 | 9.40 | 4.75 | -39.14 | -13.00 | -26.14 | V |
| 2509.74 | -44.10 | 10.60 | 8.39 | -41.89 | -13.00 | -28.89 | V |
| 3345.97 | -43.64 | 12.20 | 11.82 | -43.26 | -13.00 | -30.26 | V |
| The Worst Test Results Channel 251/848.8 MHz | | | | | | | |
| Frequency(MHz) | S G.Lev (dBm) | Ant(dBi) | Loss | PMea | Limit | Margin | Polarity |
| | | | | (dBm) | (dBm) | (dBm) | |
| 1697.53 | -40.60 | 9.60 | 4.77 | -35.77 | -13.00 | -22.77 | H |
| 2546.13 | -40.06 | 10.80 | 8.50 | -37.76 | -13.00 | -24.76 | H |
| 3394.99 | -30.95 | 12.50 | 11.90 | -30.35 | -13.00 | -17.35 | H |
| 1697.49 | -44.09 | 9.60 | 4.77 | -39.26 | -13.00 | -26.26 | V |
| 2546.35 | -44.75 | 10.80 | 8.50 | -42.45 | -13.00 | -29.45 | V |
| 3395.19 | -42.82 | 12.50 | 11.90 | -42.22 | -13.00 | -29.22 | 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 |
| 3700.19 | -34.58 | 12.60 | 12.93 | -34.91 | -13.00 | -21.91 | H |
| 5550.59 | -34.59 | 13.10 | 17.11 | -38.60 | -13.00 | -25.60 | H |
| 7400.80 | -32.59 | 11.50 | 22.20 | -43.29 | -13.00 | -30.29 | H |
| 3700.49 | -35.26 | 12.60 | 12.93 | -35.59 | -13.00 | -22.59 | V |
| 5550.42 | -34.50 | 13.10 | 17.11 | -38.51 | -13.00 | -25.51 | V |
| 7400.81 | -32.27 | 11.50 | 22.20 | -42.97 | -13.00 | -29.97 | 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 |
| 3759.87 | -33.65 | 12.60 | 12.93 | -33.98 | -13.00 | -20.98 | H |
| 5639.92 | -34.21 | 13.10 | 17.11 | -38.22 | -13.00 | -25.22 | H |
| 7520.16 | -32.71 | 11.50 | 22.20 | -43.41 | -13.00 | -30.41 | H |
| 3759.97 | -35.90 | 12.60 | 12.93 | -36.23 | -13.00 | -23.23 | V |
| 5639.99 | -34.40 | 13.10 | 17.11 | -38.41 | -13.00 | -25.41 | V |
| 7519.87 | -32.32 | 11.50 | 22.20 | -43.02 | -13.00 | -30.02 | 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 |
| 3819.48 | -34.93 | 12.60 | 12.93 | -35.26 | -13.00 | -22.26 | H |
| 5729.35 | -35.37 | 13.10 | 17.11 | -39.38 | -13.00 | -26.38 | H |
| 7639.06 | -33.58 | 11.50 | 22.20 | -44.28 | -13.00 | -31.28 | H |
| 3819.77 | -35.30 | 12.60 | 12.93 | -35.63 | -13.00 | -22.63 | V |
| 5729.30 | -34.04 | 13.10 | 17.11 | -38.05 | -13.00 | -25.05 | V |
| 7639.16 | -32.42 | 11.50 | 22.20 | -43.12 | -13.00 | -30.12 | 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 |
| 3700.41 | -34.68 | 12.60 | 12.93 | -35.01 | -13.00 | -22.01 | H |
| 5550.60 | -35.46 | 13.10 | 17.11 | -39.47 | -13.00 | -26.47 | H |
| 7400.67 | -32.85 | 11.50 | 22.20 | -43.55 | -13.00 | -30.55 | H |
| 3700.08 | -34.65 | 12.60 | 12.93 | -34.98 | -13.00 | -21.98 | V |
| 5550.37 | -34.44 | 13.10 | 17.11 | -38.45 | -13.00 | -25.45 | V |
| 7400.64 | -32.70 | 11.50 | 22.20 | -43.40 | -13.00 | -30.40 | 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 |
| 3759.99 | -33.83 | 12.60 | 12.93 | -34.16 | -13.00 | -21.16 | H |
| 5640.19 | -34.08 | 13.10 | 17.11 | -38.09 | -13.00 | -25.09 | H |
| 7520.25 | -32.18 | 11.50 | 22.20 | -42.88 | -13.00 | -29.88 | H |
| 3759.88 | -34.67 | 12.60 | 12.93 | -35.00 | -13.00 | -22.00 | V |
| 5640.29 | -34.35 | 13.10 | 17.11 | -38.36 | -13.00 | -25.36 | V |
| 7519.84 | -32.57 | 11.50 | 22.20 | -43.27 | -13.00 | -30.27 | 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 | -33.86 | 12.60 | 12.93 | -34.19 | -13.00 | -21.19 | H |
| 5729.03 | -35.09 | 13.10 | 17.11 | -39.10 | -13.00 | -26.10 | H |
| 7639.32 | -32.71 | 11.50 | 22.20 | -43.41 | -13.00 | -30.41 | H |
| 3819.33 | -34.59 | 12.60 | 12.93 | -34.92 | -13.00 | -21.92 | V |
| 5729.09 | -33.79 | 13.10 | 17.11 | -37.80 | -13.00 | -24.80 | V |
| 7639.17 | -32.70 | 11.50 | 22.20 | -43.40 | -13.00 | -30.40 | 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 |
| 3700.25 | -34.56 | 12.60 | 12.93 | -34.89 | -13.00 | -21.89 | H |
| 5550.57 | -34.01 | 13.10 | 17.11 | -38.02 | -13.00 | -25.02 | H |
| 7400.67 | -33.59 | 11.50 | 22.20 | -44.29 | -13.00 | -31.29 | H |
| 3700.29 | -35.32 | 12.60 | 12.93 | -35.65 | -13.00 | -22.65 | V |
| 5550.26 | -35.04 | 13.10 | 17.11 | -39.05 | -13.00 | -26.05 | V |
| 7400.81 | -32.80 | 11.50 | 22.20 | -43.50 | -13.00 | -30.50 | 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 |
| 3760.10 | -34.33 | 12.60 | 12.93 | -34.66 | -13.00 | -21.66 | H |
| 5640.18 | -35.42 | 13.10 | 17.11 | -39.43 | -13.00 | -26.43 | H |
| 7519.84 | -33.65 | 11.50 | 22.20 | -44.35 | -13.00 | -31.35 | H |
| 3759.96 | -35.90 | 12.60 | 12.93 | -36.23 | -13.00 | -23.23 | V |
| 5639.94 | -33.98 | 13.10 | 17.11 | -37.99 | -13.00 | -24.99 | V |
| 7520.09 | -33.18 | 11.50 | 22.20 | -43.88 | -13.00 | -30.88 | 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 |
| 3819.51 | -34.70 | 12.60 | 12.93 | -35.03 | -13.00 | -22.03 | H |
| 5729.32 | -35.30 | 13.10 | 17.11 | -39.31 | -13.00 | -26.31 | H |
| 7639.12 | -32.88 | 11.50 | 22.20 | -43.58 | -13.00 | -30.58 | H |
| 3819.79 | -35.03 | 12.60 | 12.93 | -35.36 | -13.00 | -22.36 | V |
| 5729.29 | -34.91 | 13.10 | 17.11 | -38.92 | -13.00 | -25.92 | V |
| 7639.10 | -32.73 | 11.50 | 22.20 | -43.43 | -13.00 | -30.43 | 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 |
| 1652.20 | -41.38 | 9.40 | 4.75 | -36.73 | -13.00 | -23.73 | H |
| 2479.36 | -39.29 | 10.60 | 8.39 | -37.08 | -13.00 | -24.08 | H |
| 3305.61 | -32.18 | 12.00 | 11.79 | -31.97 | -13.00 | -18.97 | H |
| 1652.43 | -44.32 | 9.40 | 4.75 | -39.67 | -13.00 | -26.67 | V |
| 2479.50 | -45.21 | 10.60 | 8.39 | -43.00 | -13.00 | -30.00 | V |
| 3305.47 | -43.12 | 12.00 | 11.79 | -42.91 | -13.00 | -29.91 | 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 |
| 1672.98 | -41.25 | 9.40 | 4.75 | -36.60 | -13.00 | -23.60 | H |
| 2509.55 | -40.21 | 10.60 | 8.39 | -38.00 | -13.00 | -25.00 | H |
| 3346.14 | -30.90 | 12.00 | 11.79 | -30.69 | -13.00 | -17.69 | H |
| 1673.13 | -43.85 | 9.40 | 4.75 | -39.20 | -13.00 | -26.20 | V |
| 2509.45 | -44.16 | 10.60 | 8.39 | -41.95 | -13.00 | -28.95 | V |
| 3346.17 | -42.93 | 12.00 | 11.79 | -42.72 | -13.00 | -29.72 | 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 |
| 1693.29 | -41.60 | 9.40 | 4.75 | -36.95 | -13.00 | -23.95 | H |
| 2539.36 | -40.13 | 10.60 | 8.39 | -37.92 | -13.00 | -24.92 | H |
| 3386.19 | -31.18 | 12.00 | 11.79 | -30.97 | -13.00 | -17.97 | H |
| 1693.59 | -43.87 | 9.40 | 4.75 | -39.22 | -13.00 | -26.22 | V |
| 2539.20 | -44.39 | 10.60 | 8.39 | -42.18 | -13.00 | -29.18 | V |
| 3386.10 | -43.12 | 12.00 | 11.79 | -42.91 | -13.00 | -29.91 | 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 |
| 1652.31 | -40.17 | 9.40 | 4.75 | -35.52 | -13.00 | -22.52 | H |
| 2479.22 | -39.47 | 10.60 | 8.39 | -37.26 | -13.00 | -24.26 | H |
| 3305.45 | -31.24 | 12.00 | 11.79 | -31.03 | -13.00 | -18.03 | H |
| 1652.09 | -43.78 | 9.40 | 4.75 | -39.13 | -13.00 | -26.13 | V |
| 2479.29 | -45.01 | 10.60 | 8.39 | -42.80 | -13.00 | -29.80 | V |
| 3305.48 | -43.02 | 12.00 | 11.79 | -42.81 | -13.00 | -29.81 | 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 |
| 1673.28 | -41.30 | 9.40 | 4.75 | -36.65 | -13.00 | -23.65 | H |
| 2509.91 | -40.00 | 10.60 | 8.39 | -37.79 | -13.00 | -24.79 | H |
| 3346.19 | -31.27 | 12.00 | 11.79 | -31.06 | -13.00 | -18.06 | H |
| 1673.10 | -44.54 | 9.40 | 4.75 | -39.89 | -13.00 | -26.89 | V |
| 2509.83 | -44.62 | 10.60 | 8.39 | -42.41 | -13.00 | -29.41 | V |
| 3346.16 | -43.51 | 12.00 | 11.79 | -43.30 | -13.00 | -30.30 | 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 |
| 1693.58 | -40.24 | 9.40 | 4.75 | -35.59 | -13.00 | -22.59 | H |
| 2539.42 | -39.73 | 10.60 | 8.39 | -37.52 | -13.00 | -24.52 | H |
| 3386.17 | -31.70 | 12.00 | 11.79 | -31.49 | -13.00 | -18.49 | H |
| 1693.55 | -43.61 | 9.40 | 4.75 | -38.96 | -13.00 | -25.96 | V |
| 2539.28 | -45.15 | 10.60 | 8.39 | -42.94 | -13.00 | -29.94 | V |
| 3386.09 | -43.62 | 12.00 | 11.79 | -43.41 | -13.00 | -30.41 | 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 |
| 1652.16 | -40.79 | 9.40 | 4.75 | -36.14 | -13.00 | -23.14 | H |
| 2479.51 | -40.46 | 10.60 | 8.39 | -38.25 | -13.00 | -25.25 | H |
| 3305.50 | -31.34 | 12.00 | 11.79 | -31.13 | -13.00 | -18.13 | H |
| 1652.29 | -44.29 | 9.40 | 4.75 | -39.64 | -13.00 | -26.64 | V |
| 2479.26 | -44.36 | 10.60 | 8.39 | -42.15 | -13.00 | -29.15 | V |
| 3305.74 | -42.87 | 12.00 | 11.79 | -42.66 | -13.00 | -29.66 | 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 |
| 1673.10 | -40.32 | 9.40 | 4.75 | -35.67 | -13.00 | -22.67 | H |
| 2509.79 | -40.50 | 10.60 | 8.39 | -38.29 | -13.00 | -25.29 | H |
| 3346.09 | -31.54 | 12.00 | 11.79 | -31.33 | -13.00 | -18.33 | H |
| 1672.96 | -44.49 | 9.40 | 4.75 | -39.84 | -13.00 | -26.84 | V |
| 2509.52 | -44.63 | 10.60 | 8.39 | -42.42 | -13.00 | -29.42 | V |
| 3346.05 | -43.37 | 12.00 | 11.79 | -43.16 | -13.00 | -30.16 | 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 |
| 1693.33 | -41.31 | 9.40 | 4.75 | -36.66 | -13.00 | -23.66 | H |
| 2539.39 | -40.55 | 10.60 | 8.39 | -38.34 | -13.00 | -25.34 | H |
| 3386.16 | -32.04 | 12.00 | 11.79 | -31.83 | -13.00 | -18.83 | H |
| 1693.33 | -44.43 | 9.40 | 4.75 | -39.78 | -13.00 | -26.78 | V |
| 2539.15 | -44.30 | 10.60 | 8.39 | -42.09 | -13.00 | -29.09 | V |
| 3385.89 | -43.94 | 12.00 | 11.79 | -43.73 | -13.00 | -30.73 | 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 |
| 3704.39 | -34.93 | 12.60 | 12.93 | -35.26 | -13.00 | -22.26 | H |
| 5557.50 | -34.70 | 13.10 | 17.11 | -38.71 | -13.00 | -25.71 | H |
| 7409.55 | -32.84 | 11.50 | 22.20 | -43.54 | -13.00 | -30.54 | H |
| 3704.27 | -35.64 | 12.60 | 12.93 | -35.97 | -13.00 | -22.97 | V |
| 5557.41 | -35.18 | 13.10 | 17.11 | -39.19 | -13.00 | -26.19 | V |
| 7409.81 | -32.54 | 11.50 | 22.20 | -43.24 | -13.00 | -30.24 | 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 |
| 3759.96 | -33.61 | 12.60 | 12.93 | -33.94 | -13.00 | -20.94 | H |
| 5640.06 | -34.72 | 13.10 | 17.11 | -38.73 | -13.00 | -25.73 | H |
| 7519.92 | -33.22 | 11.50 | 22.20 | -43.92 | -13.00 | -30.92 | H |
| 3759.95 | -35.54 | 12.60 | 12.93 | -35.87 | -13.00 | -22.87 | V |
| 5640.06 | -33.77 | 13.10 | 17.11 | -37.78 | -13.00 | -24.78 | V |
| 7520.29 | -32.56 | 11.50 | 22.20 | -43.26 | -13.00 | -30.26 | 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 |
| 3815.31 | -34.27 | 12.60 | 12.93 | -34.60 | -13.00 | -21.60 | H |
| 5722.19 | -35.31 | 13.10 | 17.11 | -39.32 | -13.00 | -26.32 | H |
| 7630.07 | -33.33 | 11.50 | 22.20 | -44.03 | -13.00 | -31.03 | H |
| 3815.46 | -35.10 | 12.60 | 12.93 | -35.43 | -13.00 | -22.43 | V |
| 5722.23 | -34.85 | 13.10 | 17.11 | -38.86 | -13.00 | -25.86 | V |
| 7630.05 | -31.72 | 11.50 | 22.20 | -42.42 | -13.00 | -29.42 | 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 |
| 3704.29 | -34.79 | 12.60 | 12.93 | -35.12 | -13.00 | -22.12 | H |
| 5557.21 | -34.30 | 13.10 | 17.11 | -38.31 | -13.00 | -25.31 | H |
| 7409.86 | -33.49 | 11.50 | 22.20 | -44.19 | -13.00 | -31.19 | H |
| 3704.13 | -34.62 | 12.60 | 12.93 | -34.95 | -13.00 | -21.95 | V |
| 5557.39 | -34.74 | 13.10 | 17.11 | -38.75 | -13.00 | -25.75 | V |
| 7409.81 | -31.77 | 11.50 | 22.20 | -42.47 | -13.00 | -29.47 | 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 |
| 3759.93 | -34.67 | 12.60 | 12.93 | -35.00 | -13.00 | -22.00 | H |
| 5640.21 | -34.71 | 13.10 | 17.11 | -38.72 | -13.00 | -25.72 | H |
| 7520.24 | -32.69 | 11.50 | 22.20 | -43.39 | -13.00 | -30.39 | H |
| 3760.00 | -35.62 | 12.60 | 12.93 | -35.95 | -13.00 | -22.95 | V |
| 5639.85 | -33.81 | 13.10 | 17.11 | -37.82 | -13.00 | -24.82 | V |
| 7520.03 | -31.99 | 11.50 | 22.20 | -42.69 | -13.00 | -29.69 | 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 |
| 3815.47 | -34.01 | 12.60 | 12.93 | -34.34 | -13.00 | -21.34 | H |
| 5722.40 | -34.33 | 13.10 | 17.11 | -38.34 | -13.00 | -25.34 | H |
| 7630.27 | -32.86 | 11.50 | 22.20 | -43.56 | -13.00 | -30.56 | H |
| 3815.33 | -34.76 | 12.60 | 12.93 | -35.09 | -13.00 | -22.09 | V |
| 5722.05 | -34.19 | 13.10 | 17.11 | -38.20 | -13.00 | -25.20 | V |
| 7629.95 | -33.02 | 11.50 | 22.20 | -43.72 | -13.00 | -30.72 | 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 |
| 3704.43 | -34.22 | 12.60 | 12.93 | -34.55 | -13.00 | -21.55 | H |
| 5557.23 | -34.36 | 13.10 | 17.11 | -38.37 | -13.00 | -25.37 | H |
| 7409.51 | -32.77 | 11.50 | 22.20 | -43.47 | -13.00 | -30.47 | H |
| 3704.29 | -35.44 | 12.60 | 12.93 | -35.77 | -13.00 | -22.77 | V |
| 5557.26 | -35.21 | 13.10 | 17.11 | -39.22 | -13.00 | -26.22 | V |
| 7409.81 | -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 |
| 3759.99 | -33.99 | 12.60 | 12.93 | -34.32 | -13.00 | -21.32 | H |
| 5640.27 | -34.44 | 13.10 | 17.11 | -38.45 | -13.00 | -25.45 | H |
| 7520.21 | -33.06 | 11.50 | 22.20 | -43.76 | -13.00 | -30.76 | H |
| 3759.86 | -34.94 | 12.60 | 12.93 | -35.27 | -13.00 | -22.27 | V |
| 5640.12 | -33.96 | 13.10 | 17.11 | -37.97 | -13.00 | -24.97 | V |
| 7519.83 | -31.94 | 11.50 | 22.20 | -42.64 | -13.00 | -29.64 | 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 |
| 3815.53 | -33.98 | 12.60 | 12.93 | -34.31 | -13.00 | -21.31 | H |
| 5722.16 | -34.90 | 13.10 | 17.11 | -38.91 | -13.00 | -25.91 | H |
| 7629.98 | -32.69 | 11.50 | 22.20 | -43.39 | -13.00 | -30.39 | H |
| 3815.47 | -35.47 | 12.60 | 12.93 | -35.80 | -13.00 | -22.80 | V |
| 5722.24 | -34.29 | 13.10 | 17.11 | -38.30 | -13.00 | -25.30 | V |
| 7630.11 | -32.11 | 11.50 | 22.20 | -42.81 | -13.00 | -29.81 | 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*****

