**CFR 47 FCC PART 22 H**
**CFR 47 FCC PART 24 E**
**CFR 47 FCC PART 27**
**RSS-132, RSS-133, RSS-139**

# TEST REPORT

*For*

**Acer Connect 5G Mobile Wi-Fi**

**MODEL NUMBER: M6E**

**REPORT NUMBER: 4791517585.3-1-RF-1**

**ISSUE DATE: February 24, 2025**

**FCC ID: HLZM6E**
**IC: 1754F-M6E**

*Prepared for*

**Acer Incorporated**
**8F, 88, Sec. 1, Xintai 5th Rd. Xizhi New Taipei City 221 Taiwan**

*Prepared by*

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Revision History

| Rev. | Issue Date | Revisions | Revised By |
|---|---|---|---|
| V0 | February 24, 2025 | Initial Issue | \ |

Note:
1.This test report is only published to and used by the applicant, and it is not for evidence purpose in China.
2. The measurement result for the sample received is <Pass> according to < CFR 47 FCC PART 22 H >< CFR 47 FCC PART 24 E>< CFR 47 FCC PART 27>< RSS-132, RSS-133, RSS-139 > when < Simple Acceptance > decision rule is applied.

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# 1. ATTESTATION OF TEST RESULTS

**Applicant Information**

| | |
|---|---|
| Company Name: | Acer Incorporated |
| Address: | 8F, 88, Sec. 1, Xintai 5th Rd. Xizhi New Taipei City 221 Taiwan |

**Manufacturer Information**

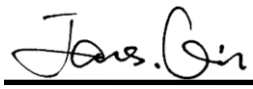
| | |
|---|---|
| Company Name: | Acer Incorporated |
| Address: | 8F, 88, Sec. 1, Xintai 5th Rd. Xizhi New Taipei City 221 Taiwan |

**EUT Information**

| | |
|---|---|
| EUT Name: | Acer Connect 5G Mobile Wi-Fi |
| Model: | M6E |
| Brand: | ACER |
| Sample Received Date: | October 17, 2024 |
| Sample Status: | Normal |
| Sample ID: | 7722525 |
| Date of Tested: | November 11, 2024 ~ February 18, 2025 |

| APPLICABLE STANDARDS | |
|---|---|
| **STANDARD** | **TEST RESULTS** |
| CFR 47 FCC PART 22 H | PASS |
| CFR 47 FCC PART 24 E | PASS |
| CFR 47 FCC PART 27 | PASS |
| RSS-132, RSS-133, RSS-139 | PASS |

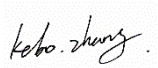
Prepared By:



James Qin

Project Engineer

Checked By:



Kebo Zhang

Senior Project Engineer

Approved By:

Stephen Guo

Operations Manager

# 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.26-2015, 971168 D01 Power Meas License Digital Systems v03r01, 971168 D02 Misc Rev Approv License Devices v02r01, 412172 D01 v01r01 Determining ERP and EIRP, CFR 47 FCC Part 2, Part 22 H, Part 24 E, Part 27, RSS-132, RSS-133, RSS-139.

# 3. FACILITIES AND ACCREDITATION

| | |
|---|---|
| Accreditation Certificate | **A2LA (Certificate No.: 4102.01)**<br>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA.<br>**FCC (FCC Designation No.: CN1187)**<br>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Delcaration of Conformity (DoC) and Certification rules<br>**ISED (Company No.: 21320)**<br>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED.<br>The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046.<br>**VCCI (Registration No.: G-20192, C-20153, T-20155 and R-20202)**<br>UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793.<br>Facility Name:<br>Chamber D, the VCCI registration No. is G-20192 and R-20202.<br>Shielding Room B, the VCCI registration No. is C-20153 and T-20155. |

Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3: For below 30 MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30 MHz had been correlated to measurements performed on an OFS.

# 4. CALIBRATION AND UNCERTAINTY

## 4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations and is traceable to recognize national standards.

## 4.2. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

| Test Item | Uncertainty |
|---|---|
| Conduction emission | 3.62 dB |
| Radiated Emission (Included Fundamental Emission) (9 kHz ~ 30 MHz) | 2.2 dB |
| Radiated Emission (Included Fundamental Emission) (30 MHz ~ 1 GHz) | 4.00 dB |
| Radiated Emission (Included Fundamental Emission) (1 GHz to 40 GHz) | 5.78 dB (1 GHz-18 GHz) |
| | 5.23dB (18 GHz-26 GHz) |
| | 5.64 dB (26 GHz-40 GHz) |
| Bandwidth | 1.1 % |
| Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level using a coverage factor of k=2. | |

# 5. EQUIPMENT UNDER TEST

## 5.1. DESCRIPTION OF EUT

| | |
|---|---|
| EUT Name: | Acer Connect 5G Mobile Wi-Fi |
| Model: | M6E |

## 5.2. TEST CHANNEL CONFIGURATION

| Band | Mode | Low | Middle | High |
|---|---|---|---|---|
| WCDMA Band 2 | HSDPA/HSUPA | 9262 | 9400 | 9538 |
| | | 1852.4 MHz | 1880.0 MHz | 1907.6 MHz |
| WCDMA Band 4 | HSDPA/HSUPA | 1312 | 1413 | 1513 |
| | | 1712.4 MHz | 1732.6 MHz | 1752.6 MHz |
| WCDMA Band 5 | HSDPA/HSUPA | 4132 | 4182 | 4233 |
| | | 826.4 MHz | 836.4 MHz | 846.6 MHz |

## 5.3. MAXIMUM ERP/EIRP POWER AND EMISSION DESIGNATOR

**WCDMA Band2**

| Part 24, RSS-133 | |
|---|---|
| EIRP Limit(W) | 2.0 |
| Antenna Gain (dBi) | 2.13 |

| Mode | Frequency Range (MHz) | Conducted Average power (dBm) | EIRP (W) | 99% OBW (MHz) | Emission Designator |
|---|---|---|---|---|---|
| REL99 | 1852.4 ~ 1907.6 | 23.40 | 0.357 | 4.149 | 4M15F9W |
| HSDPA | | 22.69 | 0.303 | 4.154 | 4M15F9W |
| HSUPA | | 21.63 | 0.238 | 4.157 | 4M16F9W |

**WCDMA Band4**

| Part 27, RSS-139 | |
|---|---|
| EIRP Limit(W) | 1.0 |
| Antenna Gain (dBi) | 3.55 |

| Mode | Frequency Range (MHz) | Conducted Average power (dBm) | EIRP (W) | 99% OBW (MHz) | Emission Designator |
|---|---|---|---|---|---|
| REL99 | 1712.4 ~ 1752.6 | 23.97 | 0.565 | 4.144 | 4M14F9W |
| HSDPA | | 22.95 | 0.447 | 4.151 | 4M15F9W |
| HSUPA | | 21.98 | 0.357 | 4.158 | 4M16F9W |

**WCDMA Band5**

| Part 22, RSS-133 | |
|---|---|
| ERP Limit(W) | 7.0 |
| Antenna Gain (dBi) | -0.81 |

| Mode | Frequency Range (MHz) | Conducted Average power (dBm) | ERP (W) | 99% OBW (MHz) | Emission Designator |
|---|---|---|---|---|---|
| REL99 | 826.4 ~ 846.6 | 24.13 | 0.131 | 4.150 | 4M15F9W |
| HSDPA | | 23.13 | 0.104 | 4.149 | 4M15F9W |
| HSUPA | | 21.34 | 0.069 | 4.152 | 4M15F9W |

## 5.4. WORST-CASE CONFIGURATION AND MODE

The radiated spurious emissions measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT was investigated in three orthogonal orientations X, Y and Z. It was determined that X orientation was the worst-case orientation.

Radiated spurious emissions were investigated below 30 MHz, 30 MHz - 1 GHz and above 1 GHz. There were no emissions found on below 1GHz and above 18 GHz, the emissions between 1 GHz – 18 GHz were tested at the low, mid, high channel and the worst configuration. Only the worst result is reported.

## 5.5. DESCRIPTION OF AVAILABLE ANTENNAS

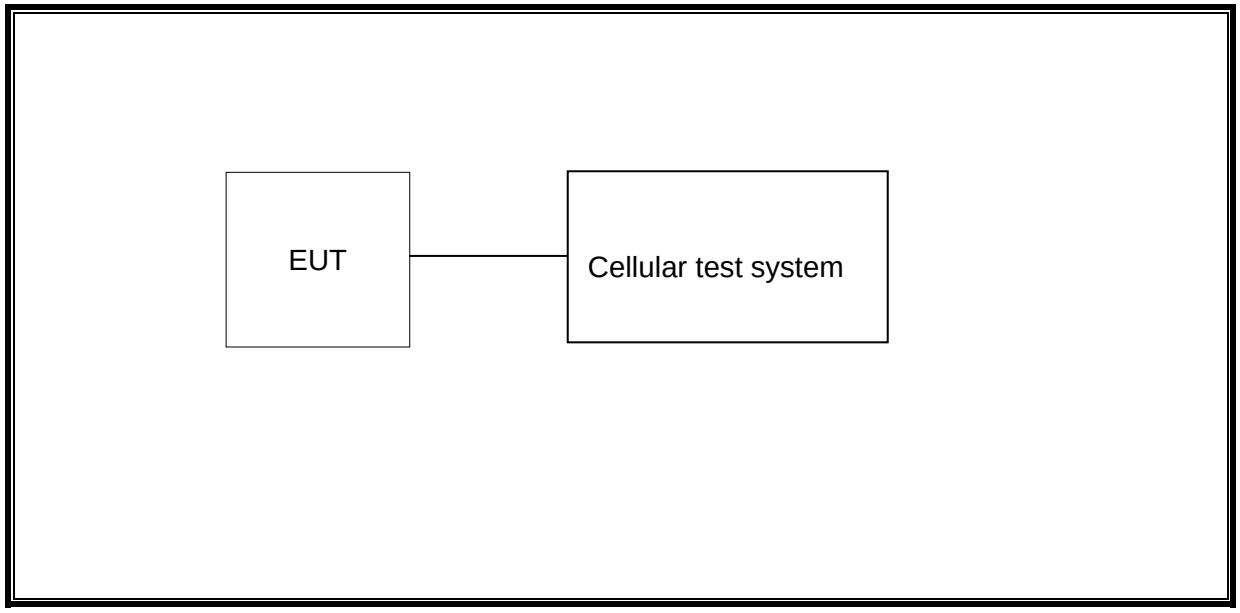
| Antenna | Band | Antenna Type | MAX Antenna Gain (dBi) |
|---|---|---|---|
| Ant0 | WCDMA Band 2 | LDS Antenna | 2.13 |
| Ant0 | WCDMA Band 4 | LDS Antenna | 3.55 |
| Ant0 | WCDMA Band 5 | LDS Antenna | -0.81 |

| Band | Transmit and Receive Mode | Description |
|---|---|---|
| WCDMA Band 2 | ☒1TX, 1RX | Ant0 antenna can be used as transmitting/receiving antenna |
| WCDMA Band 4 | ☒1TX, 1RX | Ant0 antenna can be used as transmitting/receiving antenna |
| WCDMA Band 5 | ☒1TX, 1RX | Ant0 antenna can be used as transmitting/receiving antenna |

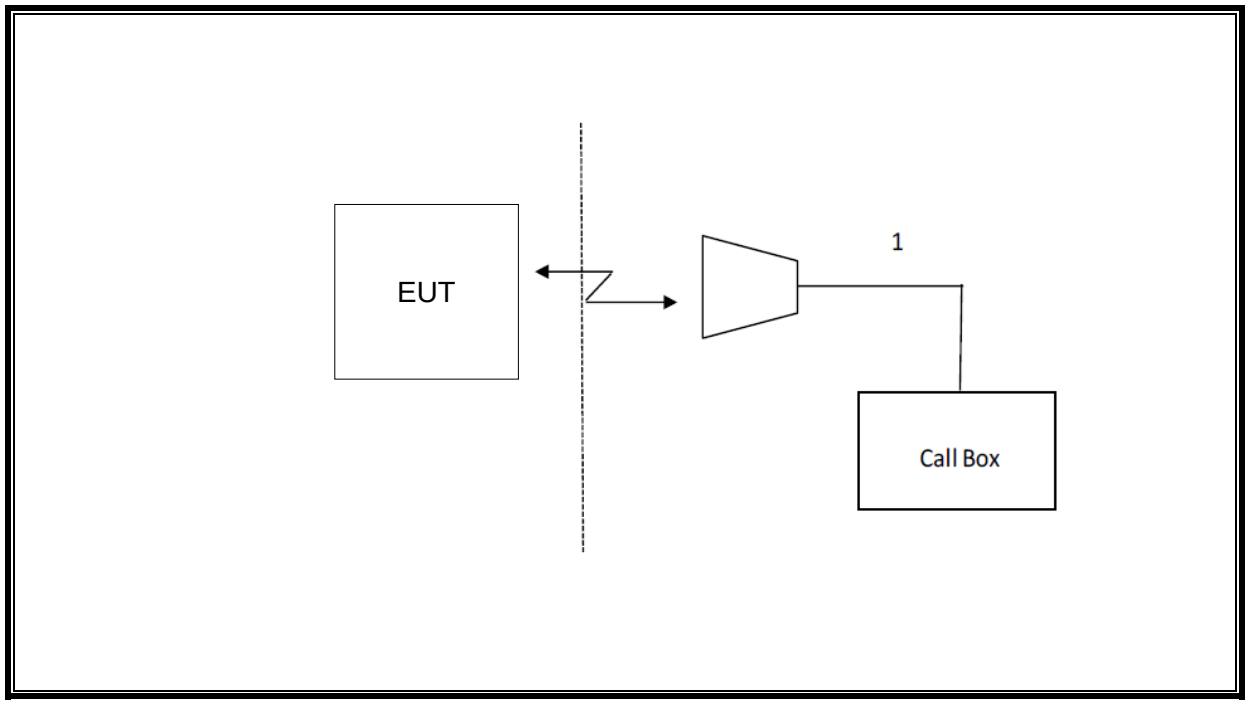
Note: The value of the antenna gain was declared by customer.

## 5.6. DESCRIPTION OF TEST SETUP

Conducted




Radiated



# 6. MEASURING INSTRUMENT AND SOFTWARE USED

| Antenna Terminal Test | | | | | | |
|---|---|---|---|---|---|---|
| Instrument | | | | | | |
| Used | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
| ☑ | Spectrum Analyzer | R&S | FSW | 1312.8000K26-103950-sj | Sept. 28, 2024 | Sept. 27, 2025 |
| ☑ | Wideband Radio Communication Tester | R&S | CMW500 | 155523 | Sept. 28, 2024 | Sept. 27, 2025 |
| Software | | | | | | |
| Used | Description | | Manufacturer | Name | | Version |
| ☑ | Tonsend Cellular Test System | | Tonsend | JS1120 RF Auto Test System | | 3.1.46 |
| **Radiated Test** | | | | | | |
| Instrument | | | | | | |
| Used | Equipment | Manufacturer | Model No. | Serial No. | Last Cal. | Next Cal. |
| ☑ | MXE EMI Receiver | KESIGHT | N9038A | MY56400036 | Sept.28, 2024 | Sept.27, 2025 |
| ☑ | Hybrid Log Periodic Antenna | TDK | HLP-3003C | 130959 | June.28, 2024 | June.27, 2027 |
| ☑ | Preamplifier | HP | 8447D | 2944A09099 | June.18, 2024 | June.17, 2025 |
| ☑ | EMI Measurement Receiver | R&S | ESR26 | 101377 | Sept.28, 2024 | Sept.27, 2025 |
| ☑ | Horn Antenna | TDK | HRN-0118 | 130940 | Dece. 12, 2024 | Dece. 11, 2027 |
| ☑ | Horn Antenna | Schwarzbeck | BBHA9170 | 697 | June.30, 2024 | June.29, 2027 |
| ☑ | Preamplifier | TDK | PA-02-0118 | TRS-305-00066 | June.18, 2024 | June.17, 2025 |
| ☑ | Preamplifier | TDK | PA-02-2 | TRS-307-00003 | June.18, 2024 | June.17, 2025 |
| ☑ | Loop antenna | Schwarzbeck | 1519B | 00008 | Dec.09, 2024 | Dec.08,2027 |
| ☑ | High Pass Filter | Wi | WHKX10-2700-3000-18000-40SS | 23 | June.18, 2024 | June.17, 2025 |
| Software | | | | | | |
| Used | Description | | Manufacturer | Name | | Version |
| ☑ | Test Software for Radiated disturbance | | Farad | EZ-EMC | | Ver. UL-3A1 |

# 7. ANTENNA TERMINAL TEST RESULTS

## 7.1. EFFECTIVE (ISOTROPIC) RADIATED POWER OF TRANSMITTER

**RULE PART(S)**

FCC: §2.1046, §22.913, §24.232, §27.50
RSS-132, RSS-133, RSS-139

**LIMITS**

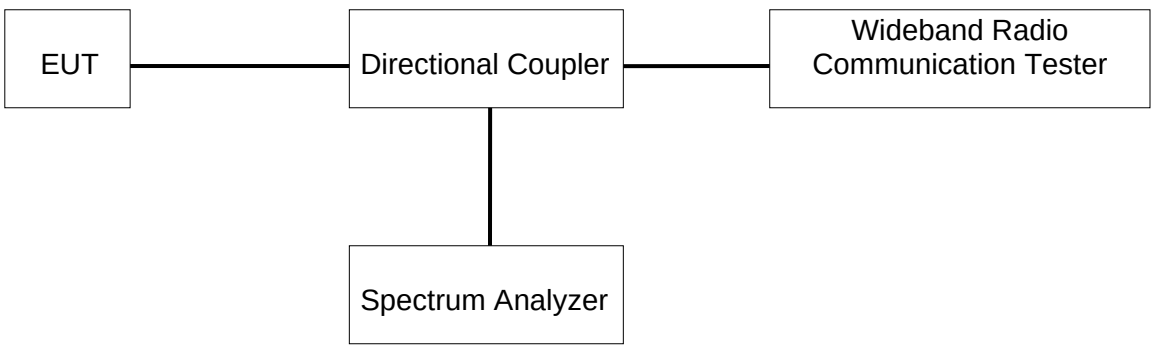
22.913(a) The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 Watts.
24.232(c) Mobile/portable stations are limited to 2 watts e.i.r.p. peak power and the equipment must employ means to limit the power to the minimum necessary for successful communications.
27.50(c) Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.
27.50(d) Fixed, mobile, and portable (hand-held) stations operating in the 1710-1755 MHz band and mobile and portable stations operating in the 1695-1710 MHz and 1755-1780 MHz bands are limited to 1 watts EIRP.
27.50(h) Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.
In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13 dB.

**TEST PROCEDURE**

Refer to ANSI C63.26:2015 and KDB 971168 D01 Section 5.6
ERP/ EIRP = PMeas + GT − LC
where:
ERP or EIRP = effective or equivalent isotropically radiated power, respectively (expressed in the same units as PMeas, typically dBW or dBm);
PMeas = 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

The transmitter has a maximum radiated ERP / EIRP output powers as follows:

**TEST SETUP**



**TEST ENVIRONMENT**

| | | | |
|---|---|---|---|
| Temperature | 22.1°C | Relative Humidity | 57.6% |
| Atmosphere Pressure | 101kPa | Test Voltage | DC 3.87 V |

**RESULTS**

Please refer to No.: 4791517585.3-1-SAR-1- App A Conducted Power.

## 7.2. PEAK TO AVERAGE RADIO

**LIMITS**

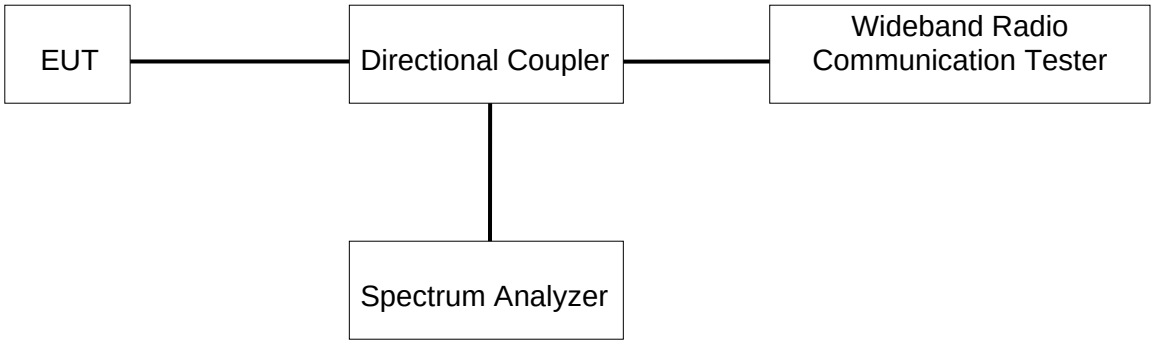
In addition, when the transmitter power is measured in terms of average value, the peak-to-average ratio of the power shall not exceed 13 dB.

**TEST PROCEDURE**

Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01;

The transmitter output was connected to a CMW500 Test Set and configured to operate at maximum power. The PAR was measured on the Spectrum Analyzer.

**TEST SETUP**




**TEST ENVIRONMENT**

| | | | |
|---|---|---|---|
| Temperature | 22.1°C | Relative Humidity | 57.6% |
| Atmosphere Pressure | 101kPa | Test Voltage | DC 3.87 V |

**RESULTS**

Middle was used to measure as the worst case. The results from all CCDF plots are passed with 13dB peak-to-average power ratio criteria.

Please refer to Appendix-WCDMA-B2&B4&B5.

## 7.3. OCCUPIED BANDWIDTH

**RULE PART(S)**

FCC: §2.1049
RSS-132, RSS-133, RSS-139

**LIMITS**

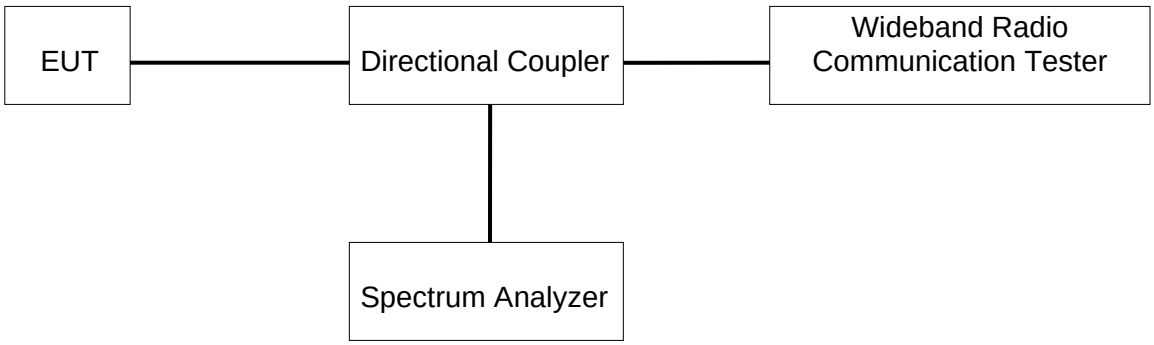
For reporting purposes only.

**TEST PROCEDURE**

The transmitter output was connected to a calibrated coaxial cable and coupler, the other end of which was connected to a spectrum analyzer. The occupied bandwidth was measured with the spectrum analyzer at the low, middle and high channel in each band. The -26dB bandwidth was also measured and recorded.

(Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01)

**TEST SETUP**




**TEST ENVIRONMENT**

| | | | |
|---|---|---|---|
| Temperature | 22.1°C | Relative Humidity | 57.6% |
| Atmosphere Pressure | 101kPa | Test Voltage | DC 3.87 V |

**RESULTS**

There is no limit required and power is the same for low, middle and high channel, therefore, only middle channel was tested.

Please refer to Appendix-WCDMA-B2&B4&B5.

## 7.4. BAND EDGE EMISSIONS

**RULE PART(S)**

FCC §2.1051, §22.917, §24.238, §27.53
RSS-132, RSS-133, RSS-139

**LIMITS**

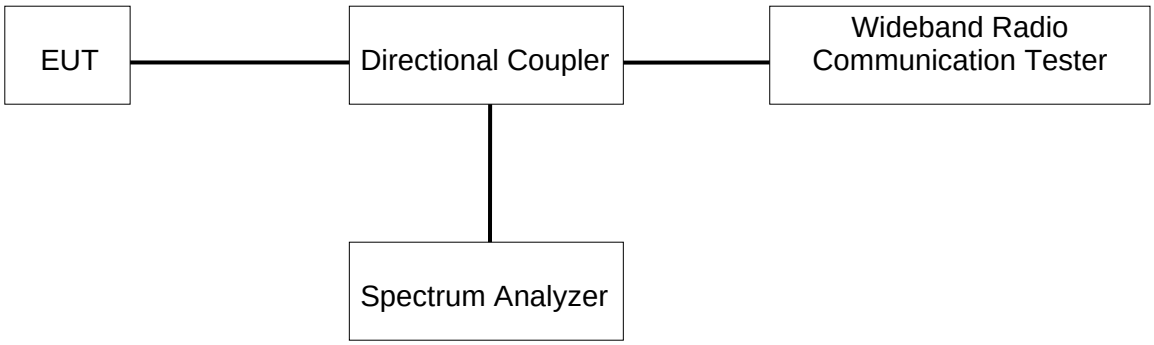
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

**TEST PROCEDURE**

Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01
The transmitter output was connected to a CMW500 Test Set and configured to operate at maximum power. The band edge emissions were measured at the required operating frequencies in each band on the Spectrum Analyzer.

a) Set the RBW = 1 ~ 1.5 % of OBW (Typically limited to a minimum RBW of 1% of the OBW)
b) Set VBW ≥ 3 × RBW;
c) Set span ≥ 1.5 times the OBW;
d) Sweep time = Auto;
e) Detector = RMS;
f) Ensure that the number of measurement points ≥ 2*Span/RBW;
g) Trace mode = Average (100);

**TEST SETUP**




**TEST ENVIRONMENT**

| | | | |
|---|---|---|---|
| Temperature | 22.1°C | Relative Humidity | 57.6% |
| Atmosphere Pressure | 101kPa | Test Voltage | DC 3.87 V |

**RESULTS**

Please refer to Appendix-WCDMA-B2&B4&B5.

## 7.5. SPURIOUS EMISSION AT ANTENNA TERMINAL

**RULE PART(S)**

FCC: §2.1051, §22.901, §22.917, §24.238, §27.53
RSS-132, RSS-133, RSS-139

**LIMITS**

FCC: §22.901, §22.917, §24.238
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log (P) dB.

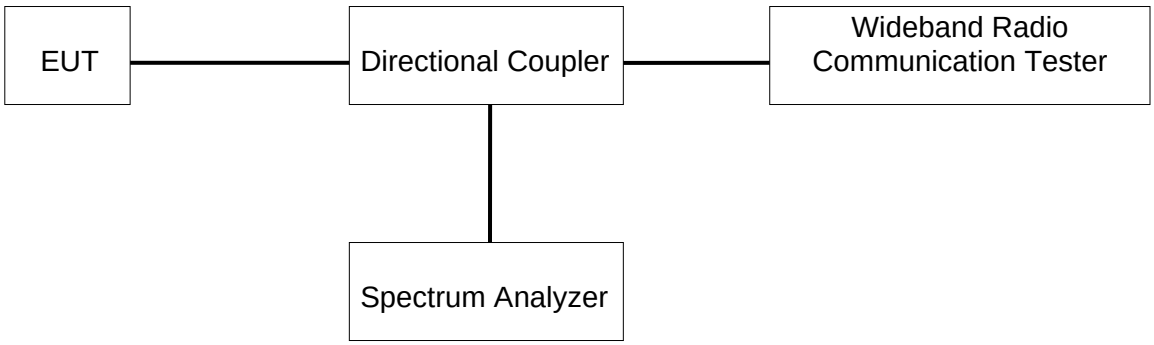
**TEST PROCEDURE**

Per KDB 971168 D01 Power Meas License Digital Systems v03r01
The RF output of the transmitter was connected to a spectrum analyzer through a calibrated coaxial cable. Sufficient scans were taken to show the out-of-band Emissions, if any, up to 10th harmonic. Multiple sweeps were recorded in maximum hold mode using a peak detector to ensure that the worst-case emissions were caught.

a) Set the RBW = 100 kHz for emission below 1GHz and 1MHz for emissions above 1GHz (Tests were performed 1 MHz [Worst case], to sweep 1 time for all frequency range)
b) Set VBW ≥ 3 × RBW;
c) Set span ≥ 1.5 times the OBW;
d) Sweep time = auto couple;
e) Detector = rms;
f) Ensure that the number of measurement points = Max (40001);
g) Trace mode = average (LTE 5), Maxhold (LTE Band7);

Note: Please refer to section 5.4 for bandwidth and RB setting about LTE bands.

**TEST SETUP**



**TEST ENVIRONMENT**

| | | | |
|---|---|---|---|
| Temperature | 22.1°C | Relative Humidity | 57.6% |
| Atmosphere Pressure | 101kPa | Test Voltage | DC 3.87 V |

**RESULTS**

Please refer to Appendix-WCDMA-B2&B4&B5.

## 7.6. FREQUENCY STABILITY

**Rule Part**:
FCC: §2.1055, §22.355, §24.235, §27.54
RSS-132, RSS-133, RSS-139

**LIMITS**

§22.355 - The carrier frequency shall not depart from the reference frequency in excess of ±2.5 ppm for mobile stations.

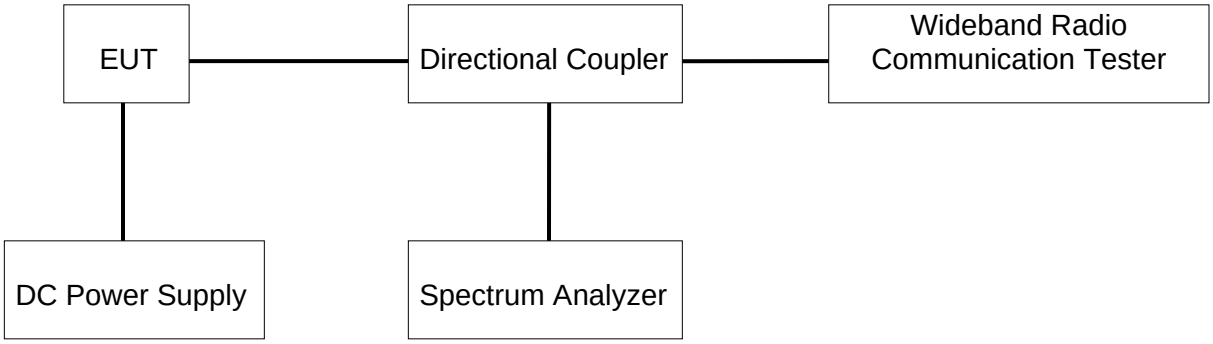
§24.235 and §27.54 - The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

**TEST PROCEDURE**

Refer to KDB 971168 D01 Power Meas License Digital Systems v03r01.

| | Normal Test Conditions | Extreme Test Conditions |
|---|---|---|
| Relative Humidity | 45 % - 75 % | / |
| Atmospheric Pressure | 100 kPa ~102 kPa | / |
| Temperature | $T_N$ (Normal Temperature): 24.7 °C | $T_L$ (Low Temperature): -30 °C |
| | | $T_H$ (High Temperature): 50 °C |
| Supply Voltage | $V_N$ (Normal Voltage): DC 3.87 V | $V_L$ (Low Voltage): DC 3.3V |
| | | $V_H$ (High Voltage): DC 4.5 V |

**TEST SETUP**




**TEST ENVIRONMENT**

| | | | |
|---|---|---|---|
| Temperature | 22.1°C | Relative Humidity | 57.6% |
| Atmosphere Pressure | 101kPa | Test Voltage | / |

**RESULTS**

The peak frequency error is recorded (worst-case).

Please refer to Appendix-WCDMA-B2&B4&B5.

# 8. RADIATED SPURIOUS EMISSIONS

**LIMIT**

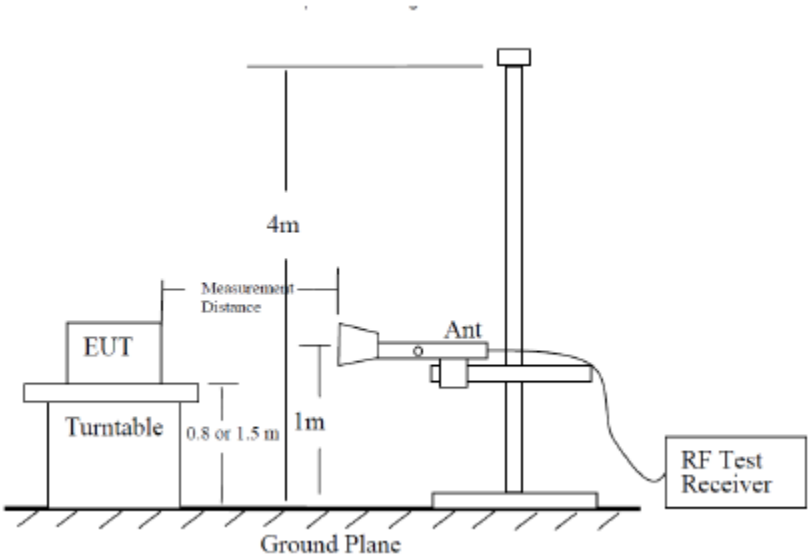
FCC: §24.238(a), RSS-133 (WCDMA Band 2)
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 l0g (P) dB.

FCC: §27.53(h), RSS-139 (WCDMA Band 4)The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 l0g (P) dB.

FCC: §22.917(a), RSS-132 (WCDMA Band 5)The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 10g (P) dB.

**TEST PROCEDURE**

Following the test configuration shown below, radiated emissions measured directly from the EUT and convert the measured field strength or received power to ERP or EIRP, as required, for comparison to the applicable limits. As stated in section 5.5.1 of ANSI C63.26-2015. The field strength measurement method by using a test site validated to the requirement of ANSI C63.4 is an alternative method to the substitution measurement.



**Radiated Power Measurement Calculation According to ANSI C63.26-2015**

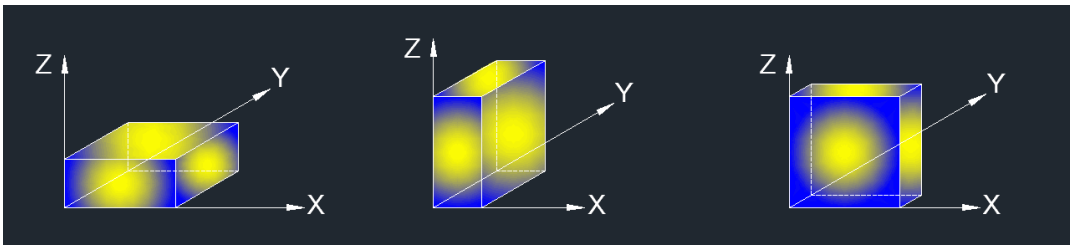
a) E (dBμV/m) = Measured amplitude level (dBμV) + Cable Loss (dB)+ Antenna Factor (dB/m).
b) E (dBμV/m) = Measured amplitude level (dBm) + 107 + Cable Loss (dB) + Antenna Factor (dB/m).
c) E (dBμV/m) = EIRP (dBm) -- 20l0g(D) + 104.8, where D is the measurement distance (in the far field region) in m.
d) EIRP (dBm) = E (dBμV/m) + 20l0g(D) - 104.8, where D is the measurement distance (in the far field region) in m.

So, from d)

The measuring distance is at 3m, then 20*Log (3) = 9.5424

Then, EIRP (dBm) = E (dBμV/m) + 9.5424 - 104.8 = E (dBμV/m) - 95.2576

X axis, Y axis, Z axis positions:




Note: The EUT was investigated in three orthogonal orientations X/Y/Z on ANT0 to determine the worst-case orientation. X orientation is finally determined the worst.

**TEST ENVIRONMENT**

| | | | |
|---|---|---|---|
| Temperature | 24.3°C | Relative Humidity | 61% |
| Atmosphere Pressure | 101kPa | Test Voltage | / |

**RESULTS**

**WCDMA Band 2**

REL99- Low Channel- Horizontal

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 4710.000 | 42.63 | -0.66 | 41.97 | 82.25 | -40.28 | peak |
| 2 | 6795.000 | 40.18 | 5.68 | 45.86 | 82.25 | -36.39 | peak |
| 3 | 9060.000 | 39.45 | 10.51 | 49.96 | 82.25 | -32.29 | peak |
| 4 | 11850.000 | 38.37 | 17.56 | 55.93 | 82.25 | -26.32 | peak |
| 5 | 13875.000 | 35.69 | 21.70 | 57.39 | 82.25 | -24.86 | peak |
| 6 | 17970.000 | 30.86 | 25.51 | 56.37 | 82.25 | -25.88 | peak |

REL99- Low Channel- Vertical

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 4995.000 | 43.71 | 0.43 | 44.14 | 82.25 | -38.11 | peak |
| 2 | 7185.000 | 39.38 | 6.55 | 45.93 | 82.25 | -36.32 | peak |
| 3 | 9225.000 | 40.23 | 10.58 | 50.81 | 82.25 | -31.44 | peak |
| 4 | 11535.000 | 38.64 | 16.70 | 55.34 | 82.25 | -26.91 | peak |
| 5 | 13635.000 | 35.96 | 21.19 | 57.15 | 82.25 | -25.10 | peak |
| 6 | 17940.000 | 30.79 | 25.34 | 56.13 | 82.25 | -26.12 | peak |

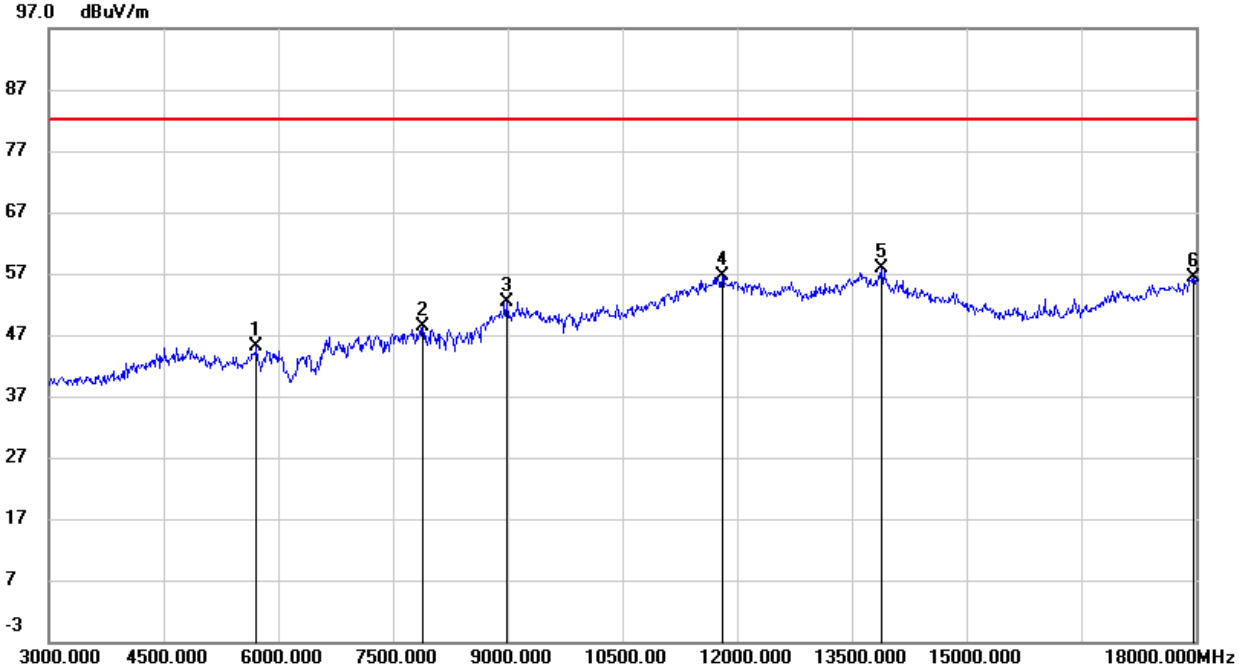
REL99- Mid Channel- Horizontal

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 7170.000 | 39.15 | 6.56 | 45.71 | 82.25 | -36.54 | peak |
| 2 | 9135.000 | 40.48 | 10.55 | 51.03 | 82.25 | -31.22 | peak |
| 3 | 10185.000 | 39.86 | 12.38 | 52.24 | 82.25 | -30.01 | peak |
| 4 | 12180.000 | 38.12 | 17.83 | 55.95 | 82.25 | -26.30 | peak |
| 5 | 13860.000 | 34.28 | 21.67 | 55.95 | 82.25 | -26.30 | peak |
| 6 | 17940.000 | 29.62 | 25.34 | 54.96 | 82.25 | -27.29 | peak |

REL99- Mid Channel- Vertical

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 5865.000 | 42.32 | 1.88 | 44.20 | 82.25 | -38.05 | peak |
| 2 | 9105.000 | 39.39 | 10.53 | 49.92 | 82.25 | -32.33 | peak |
| 3 | 11865.000 | 37.68 | 17.59 | 55.27 | 82.25 | -26.98 | peak |
| 4 | 13590.000 | 36.73 | 21.09 | 57.82 | 82.25 | -24.43 | peak |
| 5 | 17910.000 | 30.95 | 25.16 | 56.11 | 82.25 | -26.14 | peak |

REL99- High Channel- Horizontal




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 5715.000 | 43.57 | 1.46 | 45.03 | 82.25 | -37.22 | peak |
| 2 | 7890.000 | 42.14 | 6.31 | 48.45 | 82.25 | -33.80 | peak |
| 3 | 8985.000 | 42.08 | 10.37 | 52.45 | 82.25 | -29.80 | peak |
| 4 | 11805.000 | 39.13 | 17.43 | 56.56 | 82.25 | -25.69 | peak |
| 5 | 13890.000 | 36.11 | 21.72 | 57.83 | 82.25 | -24.42 | peak |
| 6 | 17970.000 | 30.79 | 25.51 | 56.30 | 82.25 | -25.95 | peak |

REL99- High Channel- Vertical

| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 7770.000 | 41.47 | 6.31 | 47.78 | 82.25 | -34.47 | peak |
| 2 | 9180.000 | 40.29 | 10.56 | 50.85 | 82.25 | -31.40 | peak |
| 3 | 11520.000 | 36.80 | 16.65 | 53.45 | 82.25 | -28.80 | peak |
| 4 | 12735.000 | 35.65 | 18.12 | 53.77 | 82.25 | -28.48 | peak |
| 5 | 13755.000 | 32.50 | 21.45 | 53.95 | 82.25 | -28.30 | peak |
| 6 | 17880.000 | 28.01 | 24.98 | 52.99 | 82.25 | -29.26 | peak |

**WCDMA Band 4**

REL99- Low Channel- Horizontal

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 5655.000 | 42.34 | 1.29 | 43.63 | 82.25 | -38.62 | peak |
| 2 | 7500.000 | 41.67 | 6.33 | 48.00 | 82.25 | -34.25 | peak |
| 3 | 10035.000 | 39.29 | 12.08 | 51.37 | 82.25 | -30.88 | peak |
| 4 | 12690.000 | 38.00 | 18.02 | 56.02 | 82.25 | -26.23 | peak |
| 5 | 13635.000 | 35.50 | 21.19 | 56.69 | 82.25 | -25.56 | peak |
| 6 | 18000.000 | 30.71 | 25.69 | 56.40 | 82.25 | -25.85 | peak |

REL99- Low Channel- Vertical

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 4995.000 | 42.96 | 0.43 | 43.39 | 82.25 | -38.86 | peak |
| 2 | 7035.000 | 39.66 | 6.67 | 46.33 | 82.25 | -35.92 | peak |
| 3 | 8985.000 | 40.32 | 10.37 | 50.69 | 82.25 | -31.56 | peak |
| 4 | 11790.000 | 38.57 | 17.38 | 55.95 | 82.25 | -26.30 | peak |
| 5 | 13620.000 | 35.36 | 21.15 | 56.51 | 82.25 | -25.74 | peak |
| 6 | 17985.000 | 30.92 | 25.60 | 56.52 | 82.25 | -25.73 | peak |

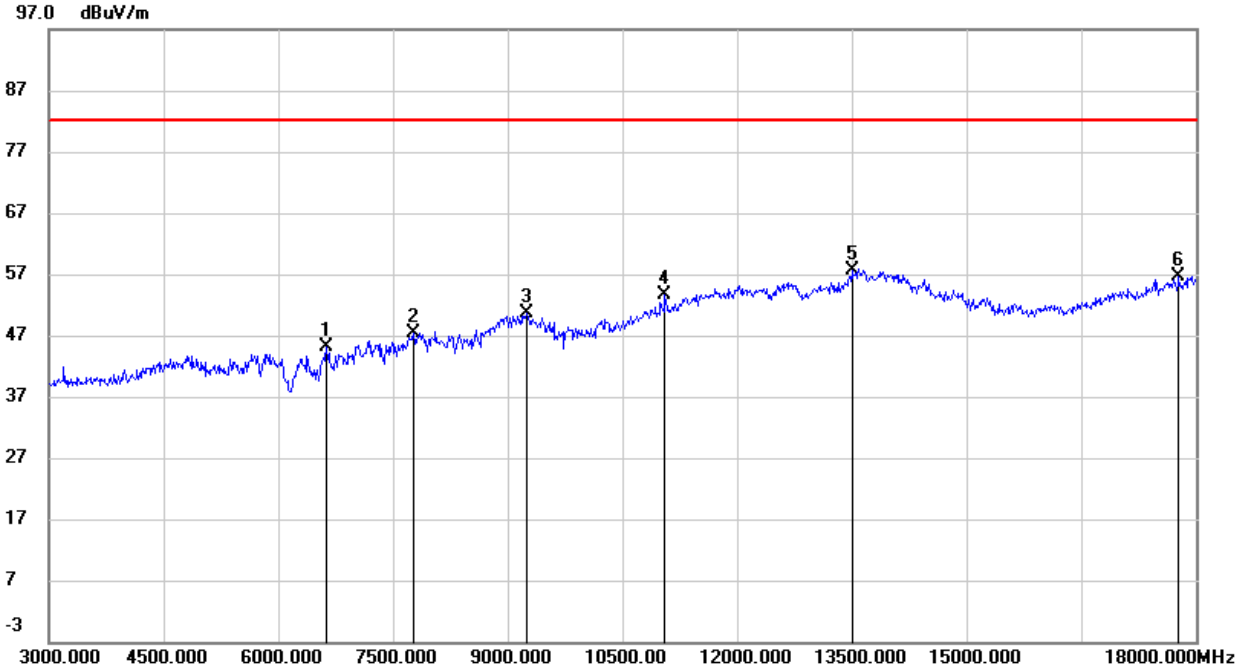
REL99- Mid Channel- Horizontal

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 5850.000 | 40.53 | 1.82 | 42.35 | 82.25 | -39.90 | peak |
| 2 | 7890.000 | 41.84 | 6.31 | 48.15 | 82.25 | -34.10 | peak |
| 3 | 9300.000 | 39.26 | 10.61 | 49.87 | 82.25 | -32.38 | peak |
| 4 | 11730.000 | 38.76 | 17.22 | 55.98 | 82.25 | -26.27 | peak |
| 5 | 13980.000 | 35.19 | 21.92 | 57.11 | 82.25 | -25.14 | peak |
| 6 | 17985.000 | 31.23 | 25.60 | 56.83 | 82.25 | -25.42 | peak |

REL99- Mid Channel- Vertical

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 4995.000 | 43.35 | 0.43 | 43.78 | 82.25 | -38.47 | peak |
| 2 | 7755.000 | 40.98 | 6.31 | 47.29 | 82.25 | -34.96 | peak |
| 3 | 9960.000 | 38.17 | 11.90 | 50.07 | 82.25 | -32.18 | peak |
| 4 | 11835.000 | 38.32 | 17.51 | 55.83 | 82.25 | -26.42 | peak |
| 5 | 13815.000 | 36.11 | 21.56 | 57.67 | 82.25 | -24.58 | peak |
| 6 | 17985.000 | 30.66 | 25.60 | 56.26 | 82.25 | -25.99 | peak |

REL99- High Channel- Horizontal




| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 6630.000 | 40.23 | 4.86 | 45.09 | 82.25 | -37.16 | peak |
| 2 | 7770.000 | 41.11 | 6.31 | 47.42 | 82.25 | -34.83 | peak |
| 3 | 9240.000 | 40.13 | 10.58 | 50.71 | 82.25 | -31.54 | peak |
| 4 | 11055.000 | 38.69 | 14.96 | 53.65 | 82.25 | -28.60 | peak |
| 5 | 13500.000 | 36.84 | 20.90 | 57.74 | 82.25 | -24.51 | peak |
| 6 | 17775.000 | 32.37 | 24.36 | 56.73 | 82.25 | -25.52 | peak |

REL99- High Channel- Vertical

| No. | Frequency (MHz) | Reading (dBuV) | Correct (dB/m) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Remark |
|---|---|---|---|---|---|---|---|
| 1 | 5925.000 | 41.64 | 2.04 | 43.68 | 82.25 | -38.57 | peak |
| 2 | 7755.000 | 40.54 | 6.31 | 46.85 | 82.25 | -35.40 | peak |
| 3 | 9075.000 | 39.35 | 10.52 | 49.87 | 82.25 | -32.38 | peak |
| 4 | 11745.000 | 38.79 | 17.27 | 56.06 | 82.25 | -26.19 | peak |
| 5 | 13920.000 | 35.03 | 21.79 | 56.82 | 82.25 | -25.43 | peak |
| 6 | 18000.000 | 30.64 | 25.69 | 56.33 | 82.25 | -25.92 | peak |

**WCDMA Band 5**

REL99- Low Channel- Horizontal

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 2494.000 | 46.82 | -8.52 | 38.30 | 82.25 | -43.95 | peak |
| 2 | 4996.000 | 44.04 | -0.17 | 43.87 | 82.25 | -38.38 | peak |
| 3 | 7012.000 | 39.25 | 6.18 | 45.43 | 82.25 | -36.82 | peak |
| 4 | 7903.000 | 40.46 | 5.66 | 46.12 | 82.25 | -36.13 | peak |
| 5 | 8938.000 | 39.35 | 9.31 | 48.66 | 82.25 | -33.59 | peak |
| 6 | 9478.000 | 39.26 | 9.93 | 49.19 | 82.25 | -33.06 | peak |

REL99- Low Channel- Vertical

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 2494.000 | 48.22 | -8.52 | 39.70 | 82.25 | -42.55 | peak |
| 2 | 3502.000 | 45.73 | -5.85 | 39.88 | 82.25 | -42.37 | peak |
| 3 | 4996.000 | 43.73 | -0.17 | 43.56 | 82.25 | -38.69 | peak |
| 4 | 7039.000 | 39.05 | 6.17 | 45.22 | 82.25 | -37.03 | peak |
| 5 | 7642.000 | 40.20 | 5.69 | 45.89 | 82.25 | -36.36 | peak |
| 6 | 9226.000 | 39.32 | 9.83 | 49.15 | 82.25 | -33.10 | peak |

REL99- Mid Channel- Horizontal

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 2467.000 | 47.05 | -8.66 | 38.39 | 82.25 | -43.86 | peak |
| 2 | 3736.000 | 47.41 | -5.21 | 42.20 | 82.25 | -40.05 | peak |
| 3 | 4888.000 | 43.73 | -0.60 | 43.13 | 82.25 | -39.12 | peak |
| 4 | 5671.000 | 42.93 | 0.91 | 43.84 | 82.25 | -38.41 | peak |
| 5 | 7633.000 | 40.65 | 5.68 | 46.33 | 82.25 | -35.92 | peak |
| 6 | 9199.000 | 39.31 | 9.82 | 49.13 | 82.25 | -33.12 | peak |

REL99- Mid Channel- Vertical

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 2494.000 | 48.69 | -8.52 | 40.17 | 82.25 | -42.08 | peak |
| 2 | 2908.000 | 47.38 | -7.26 | 40.12 | 82.25 | -42.13 | peak |
| 3 | 4996.000 | 43.13 | -0.17 | 42.96 | 82.25 | -39.29 | peak |
| 4 | 7192.000 | 39.86 | 6.00 | 45.86 | 82.25 | -36.39 | peak |
| 5 | 7642.000 | 41.96 | 5.69 | 47.65 | 82.25 | -34.60 | peak |
| 6 | 9307.000 | 39.46 | 9.86 | 49.32 | 82.25 | -32.93 | peak |

REL99- High Channel- Horizontal

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|
| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
| 1 | 2899.000 | 48.10 | -7.28 | 40.82 | 82.25 | -41.43 | peak |
| 2 | 4447.000 | 45.94 | -2.40 | 43.54 | 82.25 | -38.71 | peak |
| 3 | 6661.000 | 40.68 | 4.52 | 45.20 | 82.25 | -37.05 | peak |
| 4 | 7030.000 | 40.04 | 6.18 | 46.22 | 82.25 | -36.03 | peak |
| 5 | 7714.000 | 41.70 | 5.68 | 47.38 | 82.25 | -34.87 | peak |
| 6 | 8965.000 | 39.95 | 9.49 | 49.44 | 82.25 | -32.81 | peak |

REL99- High Channel- Vertical

| No. | Frequency | Reading | Correct | Result | Limit | Margin | Remark |
|---|---|---|---|---|---|---|---|

| | (MHz) | (dBuV) | (dB/m) | (dBuV/m) | (dBuV/m) | (dB) | |
|---|---|---|---|---|---|---|---|
| 1 | 2494.000 | 48.13 | -8.52 | 39.61 | 82.25 | -42.64 | peak |
| 2 | 4825.000 | 44.08 | -0.84 | 43.24 | 82.25 | -39.01 | peak |
| 3 | 5716.000 | 41.81 | 1.04 | 42.85 | 82.25 | -39.40 | peak |
| 4 | 7021.000 | 39.01 | 6.19 | 45.20 | 82.25 | -37.05 | peak |
| 5 | 7876.000 | 40.18 | 5.66 | 45.84 | 82.25 | -36.41 | peak |
| 6 | 9073.000 | 39.20 | 9.77 | 48.97 | 82.25 | -33.28 | peak |

Remark: All the modulation WCDMA, HSDPA, HSUPA have been tested at low, middle, high channels, only the worst modulation show in the test report.

**END OF REPORT**