

POWER REDUCTION VERIFICATION

This device supports manufacturer’s proprietary power reduction mechanism called, ‘Detect mode’ for the Main Cellular Antenna. Details of this mechanism can be found in the Operational Description.

The verification plan consists of two parts.

- Verification of the detect mechanism
- Verification of the power reduction levels

The verification plan for the overall power setting is proposed to follow the Table 1 below.

A. Verification of the detect mechanism

Body detect verification will be done with following test cases.

- In-hand
- On-lap with little or no voluntary movement
- On a stationary object

B. Verification of power reduction levels

Table 1 lists the test plan. Since the reduction mechanism is antenna agnostic all tests will be conducted by locking transmission to one antenna and then verifying power.

Table 1

| Cellular ² | Test Cases | Power Mode A Cell Table ¹ | Power Mode B Cell Table ¹ |
|-----------------------|----------------------|--------------------------------------|--------------------------------------|
| | GSM 850 (2Slots) | | |
| | GSM 1900 (2Slots) | 26.3 dBm | 19.3 dBm |
| | CDMA BC10 | | |
| | CDMA BC0 | | |
| | CDMA BC1 | 22.23 dBm | 13.34 dBm |
| | WCDMA B5 | | |
| | WCDMA B4 | 22.33 dBm | 14.31 dBm |
| | WCDMA B2 | 22.24 dBm | 13.1 dBm |
| | LTE B12 | | |
| | LTE B13 | | |
| | LTE B14 | | |

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|---------------------------------------|----------------------------------------------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|
| | LTE B71 | | | | |
| | LTE B5 | | | | |
| | LTE B26 | | | | |
| | LTE B25 | 22.3 dBm | 13.3 dBm | | |
| | LTE B30 | 22.3 dBm | 18.2 dBm | | |
| | LTE B7 | 22.25 dBm | 17 dBm | | |
| | LTE B41 | 22.3 dBm | 18.2 dBm | | |
| | LTE B48 | 22.5 dBm | 18.1 dBm | | |
| Wi-Fi 1x mode, rate, channel | Test Cases | Cell On Head Wi-Fi Table | Cell Off Head Wi-Fi Table | Cell On Body Wi-Fi Table | Cell Off Body Wi-Fi Table |
| | 2.4 GHz 11n HT20 Ch6 SISO | E: 14.5 M: 14.3 | E: 19.0 M: 18.8 | E: 16.75 M: 16.50 | E: 19.75 M: 19.60 |
| | 5.0 GHz 802.11n HT20 Ch40 SISO Ant6 | E: 11.0 M: 10.7 | E: 17.0 M: 16.6 | E: 13.0 M: 12.7 | E: 16.75 M: 16.40 |

| | | | | | | | | | |
|-----------------------|------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| BT EDR, Hopping | Test Cases | Cell On 5GHz On Head Plow mode A BT Table P ₁ | Cell On 5GHz Off Head PHigh mode A BT Table P ₃ | Cell Off 5GHz On Head PHigh mode A BT Table P ₅ | Cell Off 5GHz Off Head PStandalone BT Table P ₇ | Cell On 5GHz On Body Plow mode B BT Table P ₂ | Cell On 5GHz Off Body PHigh mode B BT Table P ₄ | Cell Off 5GHz On Body PHigh mode B BT Table P ₆ | Cell Off 5GHz Off Body PStandalone BT Table P ₈ |
| | Ch 39 | E: 8.0 M: 7.8 | E: 14.0 M:13.6 | E: 14.0 M:13.8 | E: 14.5 M:14.2 | E: 8.5 M:8.4 | E: 14.5 M:14.1 | E: 14.5 M:14.4 | E: 14.5 M:14.3 |

Notes:

1. Head test cases will be done with the device resting on table and body test cases will be done with the device in hand.
2. When there is no delta between the head cell table and body cell table within a test case, we will exclude that test case