

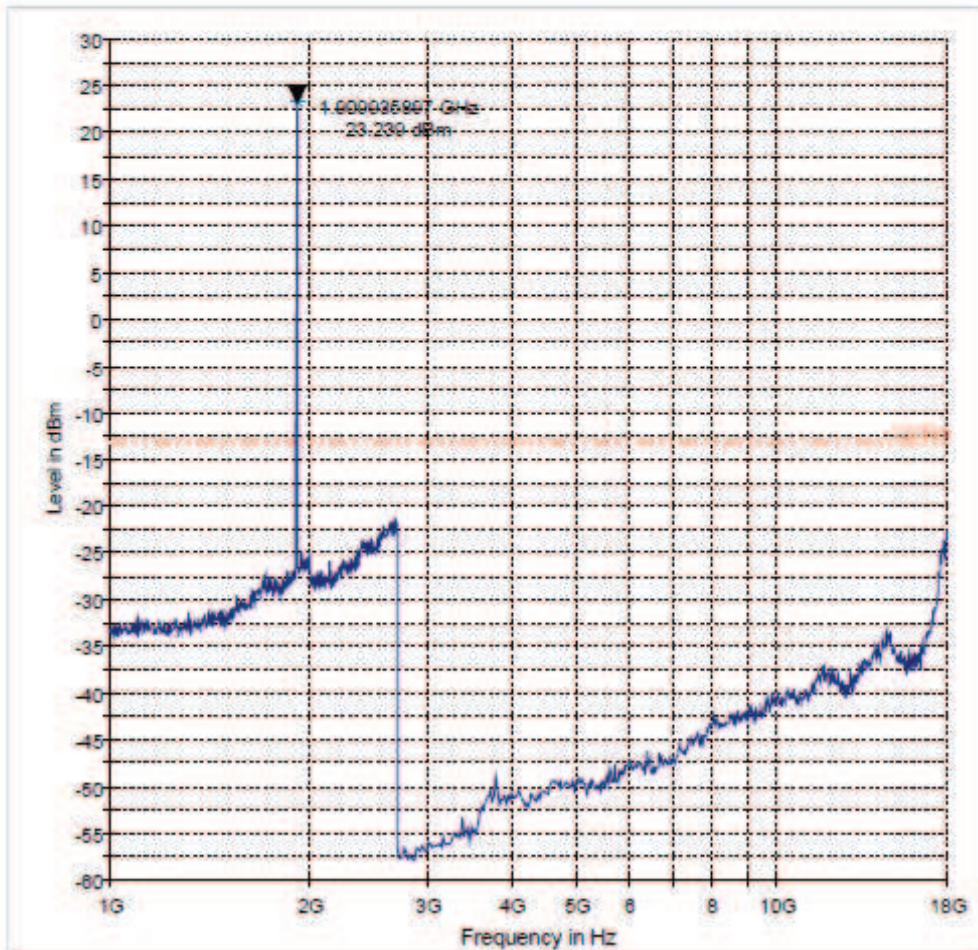
Plot 8: Channel 1175 (1 GHz – 18 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0609-3919-8748 |
| Model #: | SN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 24 1-18GHz



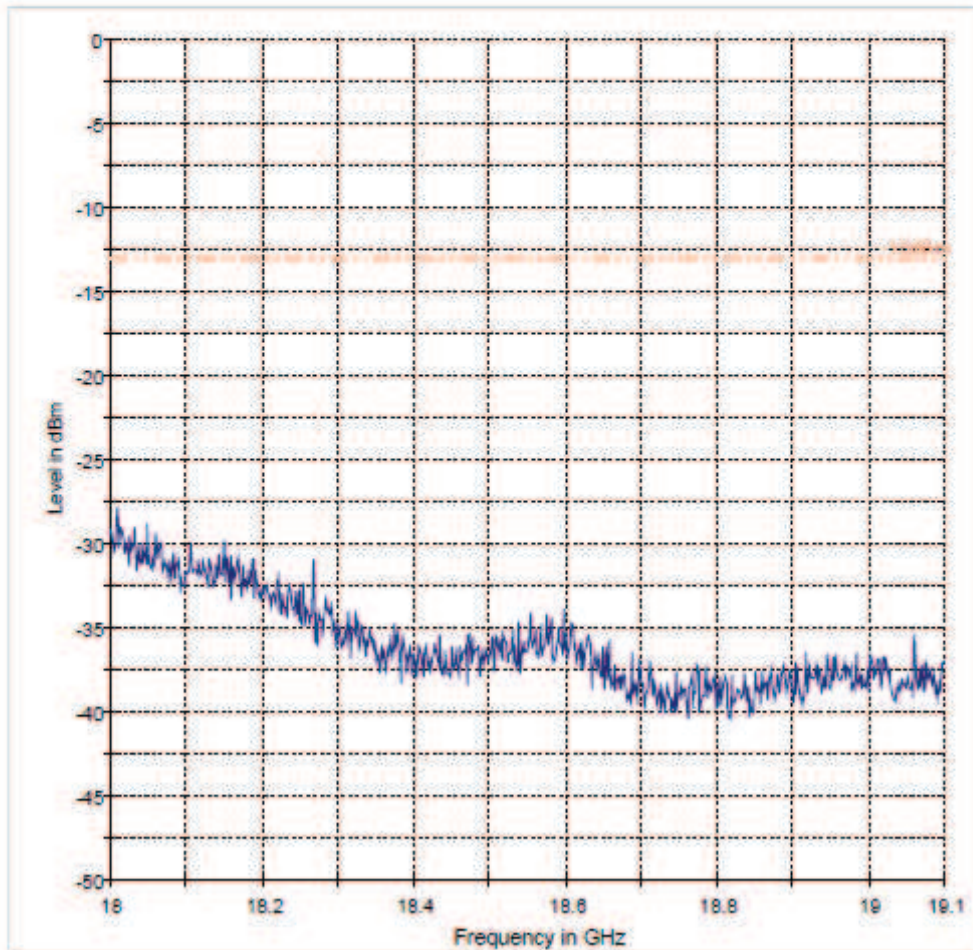
Plot 9: Channel 1175 (18 GHz – 19.1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 24 18-19.1GHz



----- -13dBm ——— Preview Result 1-PK+

Plots: EVDO-mode

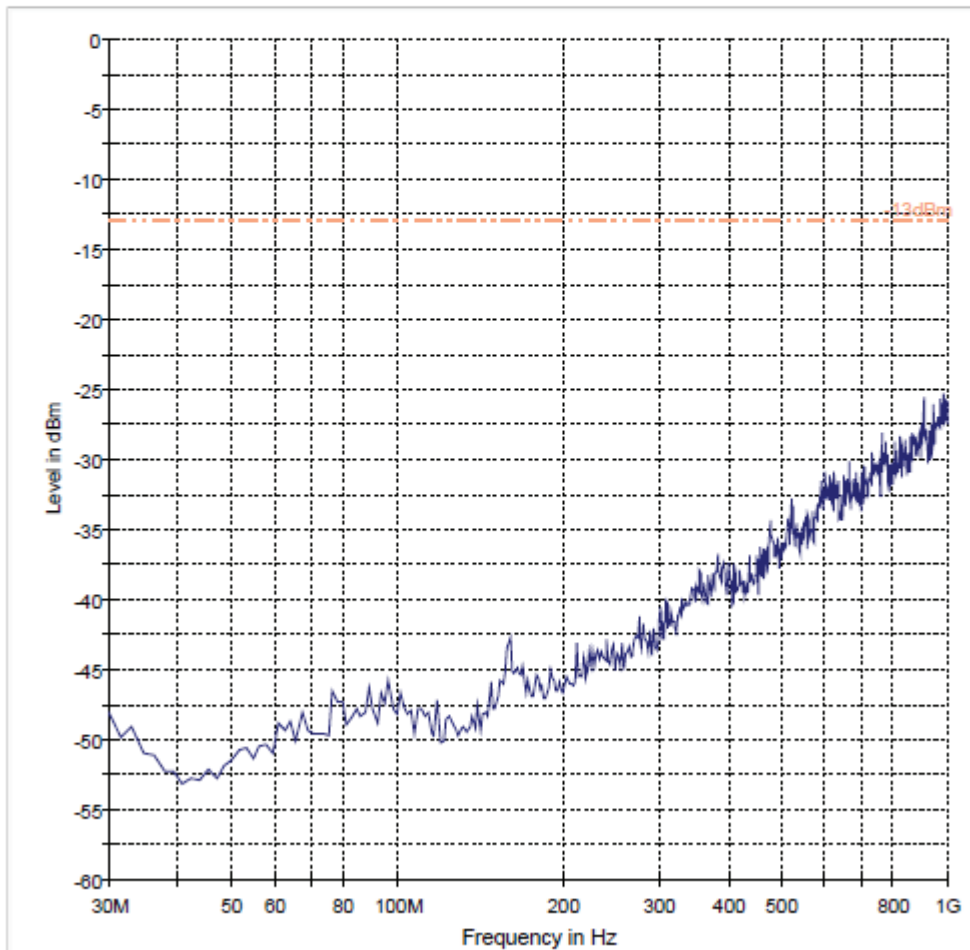
Plot 1: Channel 25 (30 MHz - 1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 24 30-1000MHz



----- -13dBm ——— Preview Result 1-PK+

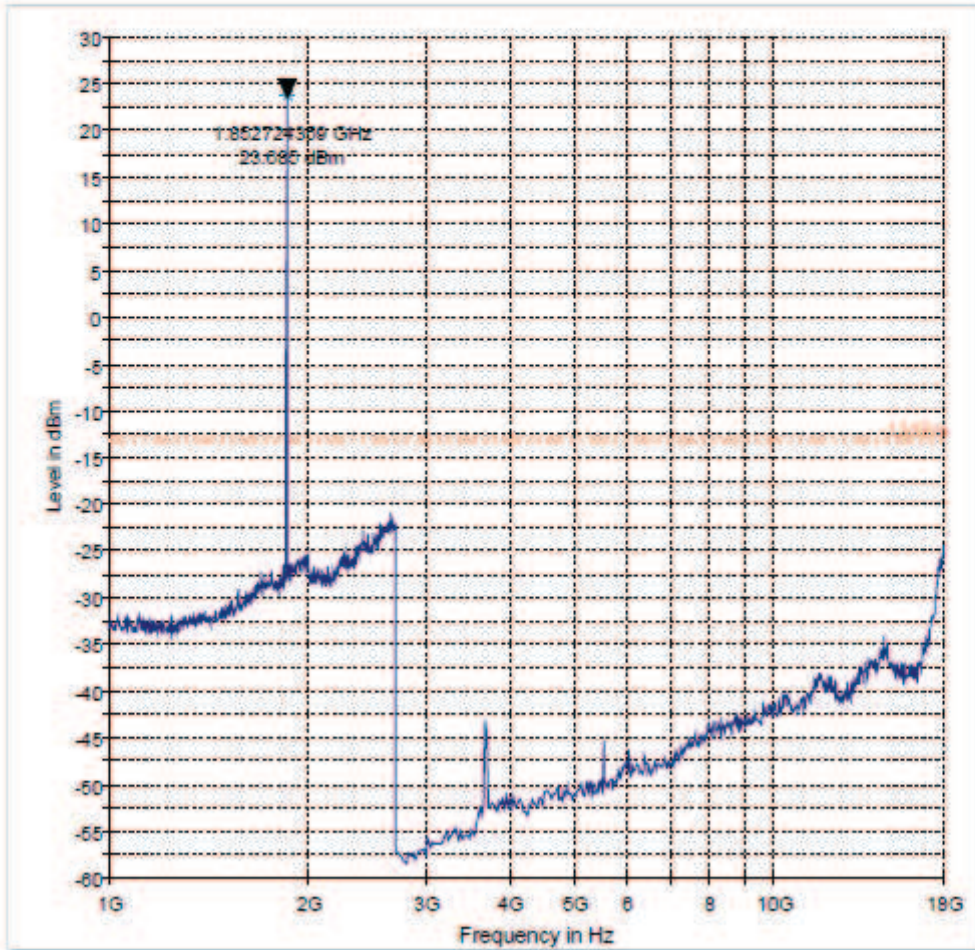
Plot 2: Channel 25 (1 GHz – 18 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 24 1-19GHz



-13dBm Preview Result 1-PK+ + Data Reduction Result 1 [2]-PK+

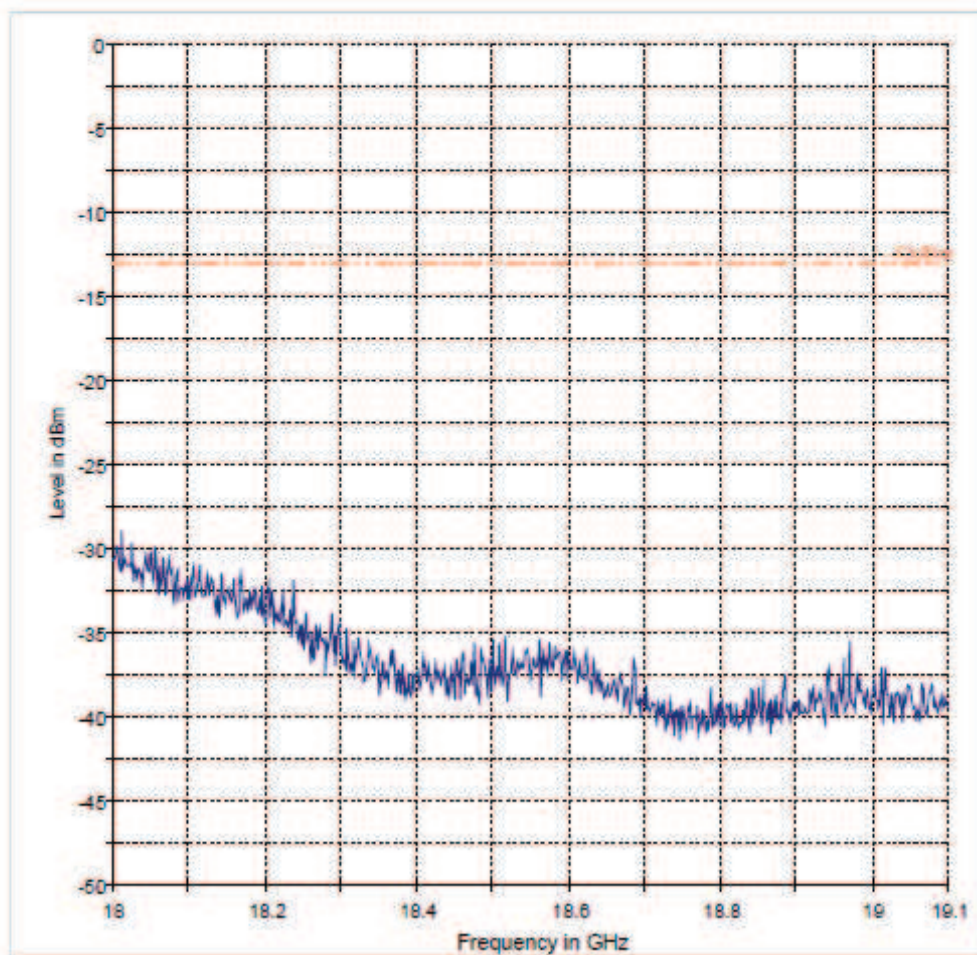
Plot 3: Channel 25 (18 GHz – 19.1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 24 18-19.1GHz



-13dBm Preview Result 1-PK+

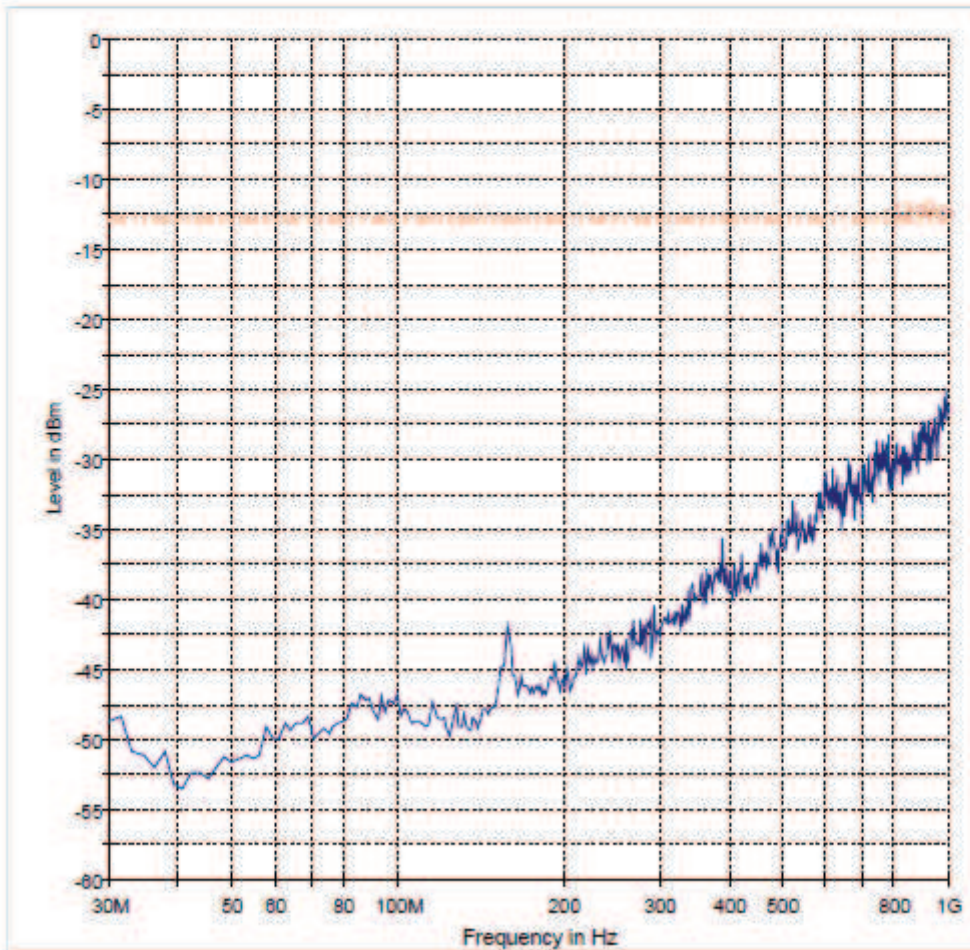
Plot 4: Channel 600 (30 MHz - 1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 24 30-1000MHz



----- -13dBm ——— Preview Result 1-PK+

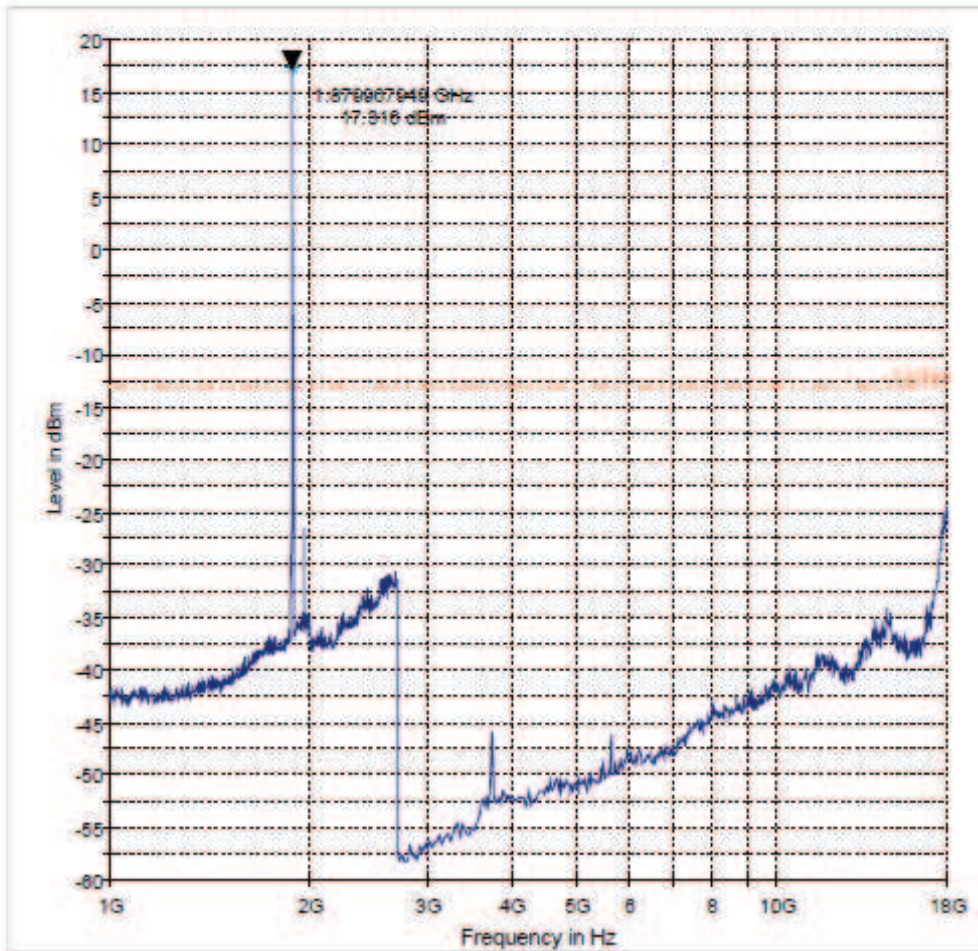
Plot 5: Channel 600 (1 GHz – 18 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0609-3919-8748 |
| Model #: | SN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 24 1-18GHz



— -13dBm — Preview Result 1-PK+ * Data Reduction Result 1 [2]-PK+

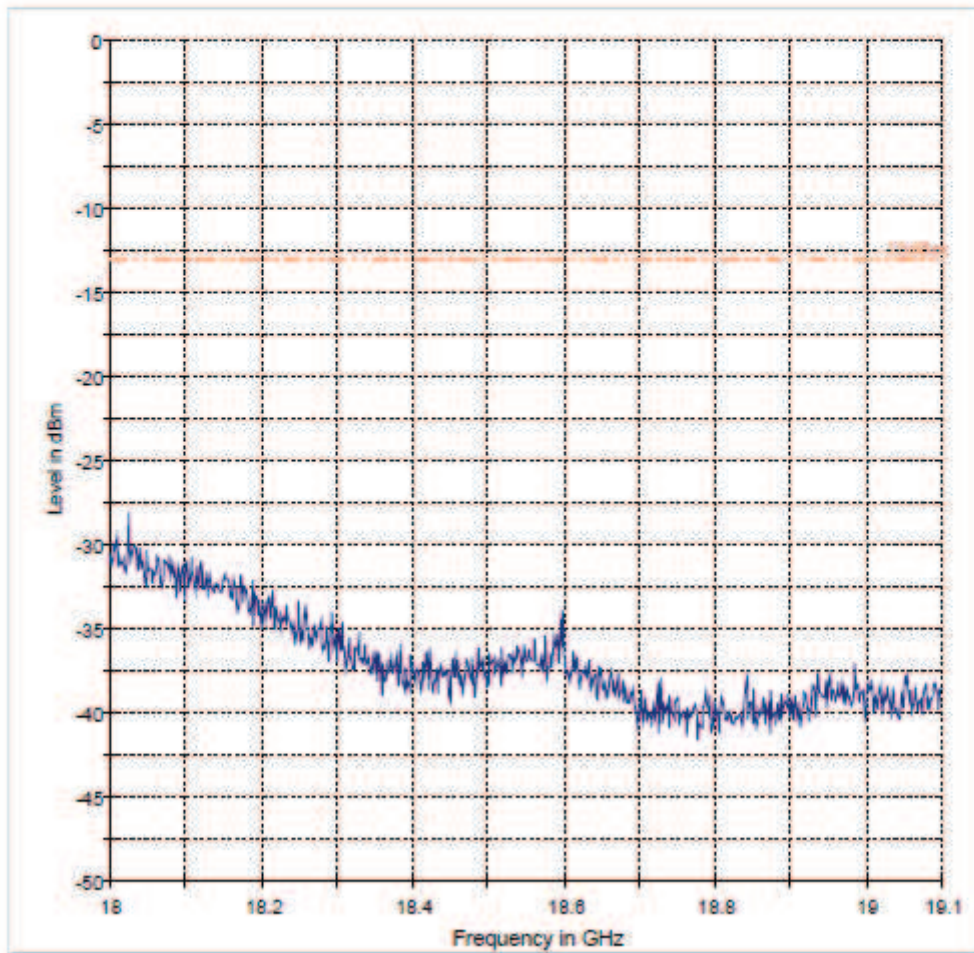
Plot 6: Channel 600 (18 GHz – 19.1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 24 18-19.1GHz



-13dBm Preview Result 1-PK+

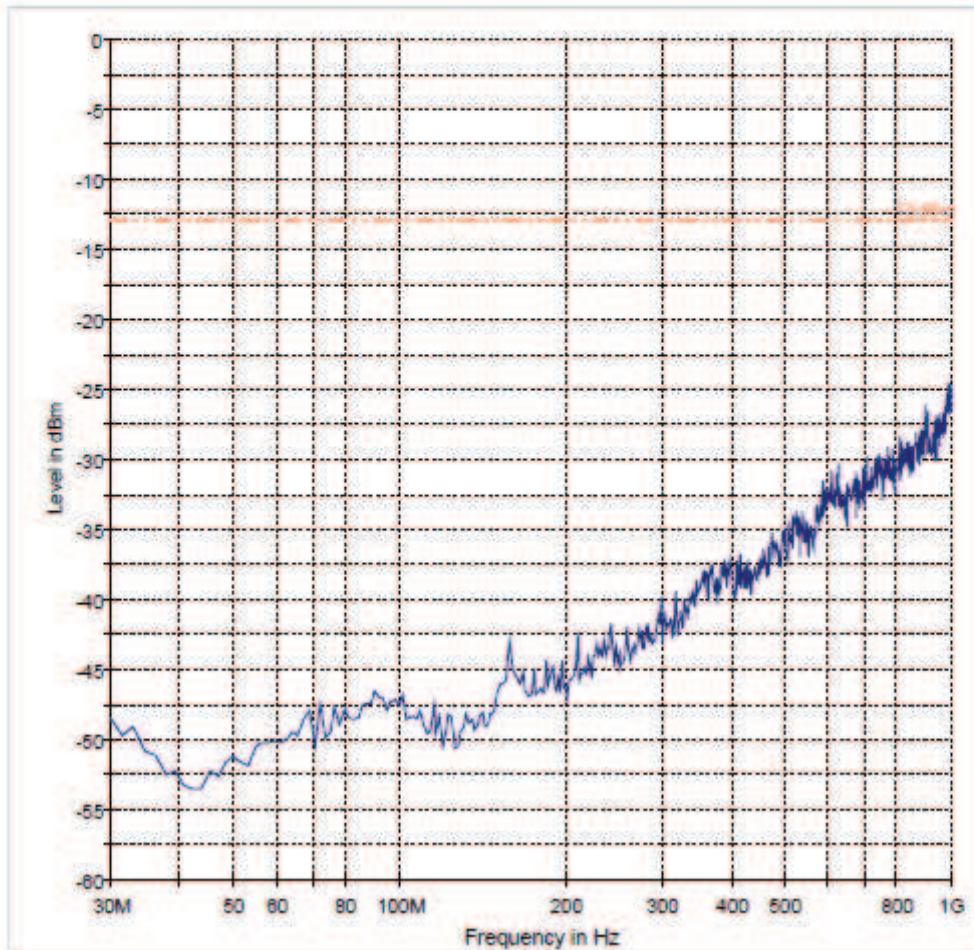
Plot 7: Channel 1175 (30 MHz - 1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0609-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 24 30-1000MHz



----- -13dBm ——— Preview Result 1-PK+

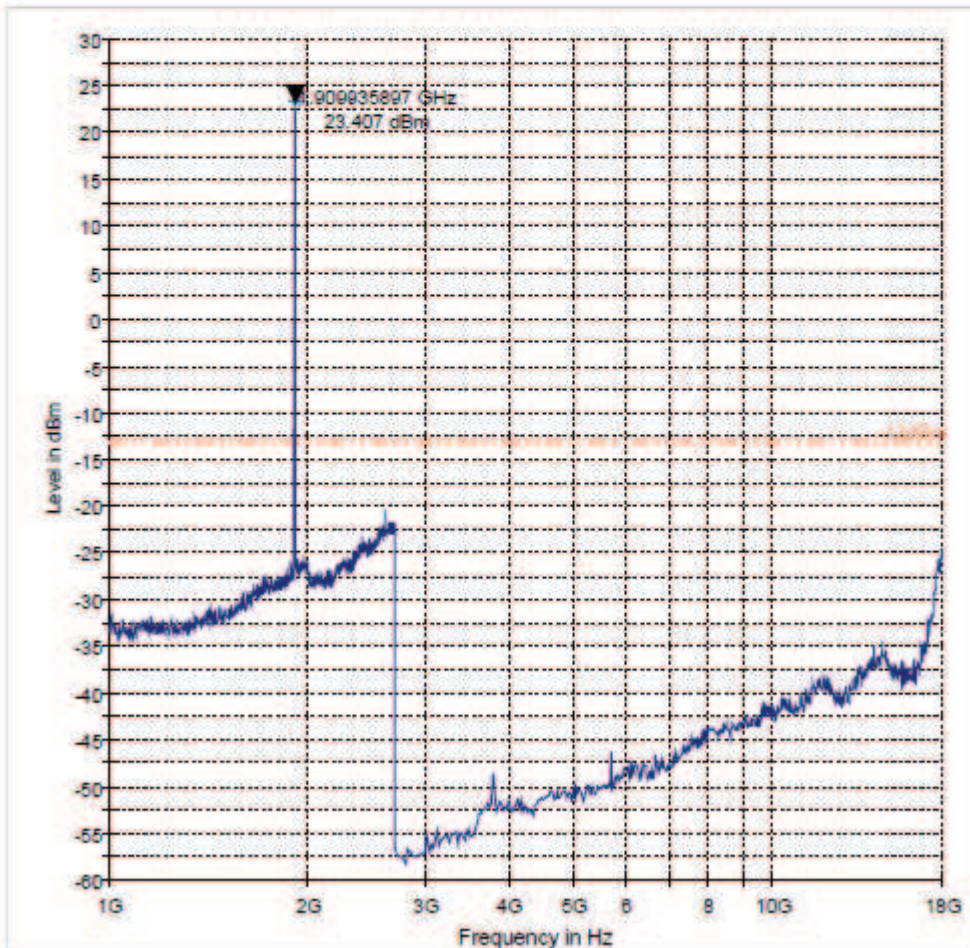
Plot 8: Channel 1175 (1 GHz – 18 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 24 1-18GHz



-13dBm Preview Result 1-PK+ * Data Reduction Result 1 [2]-PK+

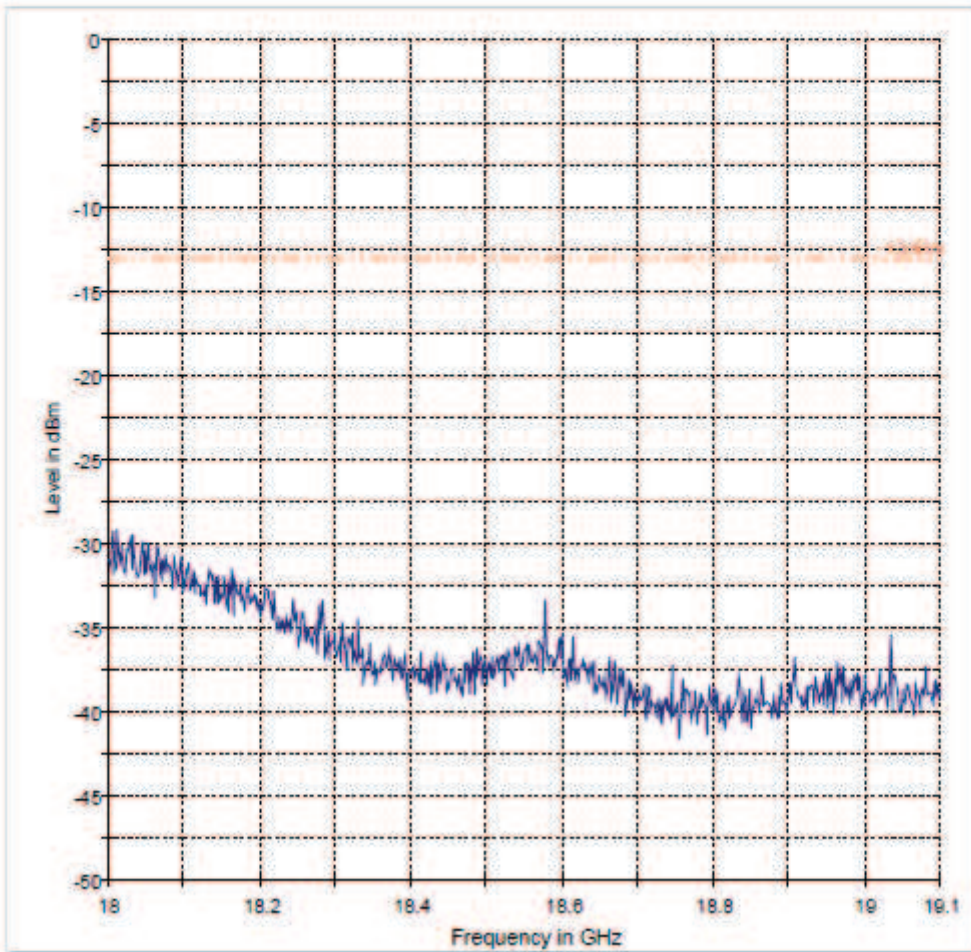
Plot 9: Channel 1175 (18 GHz – 19.1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 24 18-19.1GHz



— -13dBm — Preview Result 1-PK+

8.6.4 Spurious emissions conducted

Not performed

8.6.5 Block edge compliance

Not performed

8.6.6 Occupied bandwidth

Not performed

8.7 Results CDMA2000 Cellular

8.7.1 RF output power

Description:

This paragraph contains average power, peak output power and ERP measurements for the mobile station. In all cases, the peak output power is within the required mask (this mask is specified in the JTC standards, TIA PN3389 Vol. 1 Chap 7, and is no FCC requirement).

Measurement:

The mobile was set up for the maximum output power with pseudo random data modulation.

| Measurement parameters | |
|------------------------|-------------------------------|
| Detector: | Peak and RMS (Power in Burst) |
| Sweep time: | Auto |
| Video bandwidth: | 1 MHz |
| Resolution bandwidth: | 1 MHz |
| Span: | Zero Span |
| Trace-Mode: | Max Hold |

Limits:

| FCC | IC |
|---|---------|
| CFR Part 22.913 CFR Part 2.1046 | RSS 132 |
| Nominal Peak Output Power | |
| +38.45 dBm 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. | |

Results:

| Output Power (radiated) CDMA2000 Loopback mode | |
|--|----------------------------------|
| Frequency (MHz) | Average Output Power (dBm) - ERP |
| 824.70 | 21.3 |
| 836.52 | 22.1 |
| 848.31 | 21.7 |
| Measurement uncertainty | ± 2.0 dB |

| Output Power (radiated) CDMA2000 EVDO mode | |
|--|----------------------------------|
| Frequency (MHz) | Average Output Power (dBm) - ERP |
| 824.70 | 21.8 |
| 836.52 | 21.8 |
| 848.31 | 21.4 |
| Measurement uncertainty | ± 2.0 dB |

Result: **Passed**

8.7.2 Frequency stability

Not performed

8.7.3 Spurious emissions radiated

Description:

The following steps outline the procedure used to measure the radiated emissions from the mobile station. The site is constructed in accordance with ANSI C63.4:2009 requirements and is recognized by the FCC to be in compliance for a 3 and a 10 meter site. The spectrum was scanned from 30 MHz to the 10th harmonic of the highest frequency generated within the equipment, which is the transmitted carrier that can be as high as 848.31 MHz. This was rounded up to 12 GHz. The resolution bandwidth is set as outlined in Part 22.917. The spectrum was scanned with the mobile station transmitting at carrier frequencies that pertain to low, mid and high channels of the CDMA2000 BC0 band.

The final open field emission (here 10m semi-anechoic chamber listed by FCC) test procedure is as follows:

- a) The test item was placed on a 0.8 meter high non-conductive stand at a 3 meter test distance from the receive antenna.
- b) The antenna output was terminated in a 50 ohm load (if possible).
- c) A double ridged wave guide antenna was placed on an adjustable height antenna mast 3 meters from the test item for emission measurements.
- d) Detected emissions were maximized at each frequency by rotating the test item and adjusting the receive antenna height and polarization. The maximum meter reading was recorded. The radiated emission measurements of the harmonics of the transmit frequency through the 10th harmonic were measured with peak detector and 1 MHz bandwidth. If the harmonic could not be detected above the noise floor, the ambient level was recorded. The equivalent power into a dipole antenna was calculated from the field intensity levels measured at 3 meters.
- e) Now each detected emissions were substituted by the substitution method, in accordance with the TIA/EIA 603.

Measurement:

| Measurement parameters | |
|------------------------|--|
| Detector: | Peak |
| Sweep time: | 2 sec. |
| Video bandwidth: | Below 1 GHz: 100 kHz Above 1 GHz: 1 MHz |
| Resolution bandwidth: | Below 1 GHz: 100 kHz Above 1 GHz: 1 MHz |
| Span: | 100 MHz Steps |
| Trace-Mode: | Max Hold |

Limits:

| FCC | IC |
|--|---------|
| CFR Part 22.917 CFR Part 2.1053 | RSS 132 |
| Spurious Emissions Radiated | |
| Attenuation $\geq 43 + 10\log(P)$ (P, Power in Watts) | |
| -13 dBm | |

Results:

Radiated emissions measurements were made only at the upper, center, and lower carrier frequencies of the CDMA2000 BC0 band (824.70 MHz, 836.52 MHz and 848.31 MHz). It was decided that measurements at these three carrier frequencies would be sufficient to demonstrate compliance with emissions limits because it was seen that all the significant spurs occur well outside the band and no radiation was seen from a carrier in one block of the CDMA2000 BC0 band into any of the other blocks. The equipment must still, however, meet emissions requirements with the carrier at all frequencies over which it is capable of operating and it is the manufacturer's responsibility to verify this.

The final open field radiated levels are presented on the next pages. All measurements were done in horizontal and vertical polarization; the plots show the worst case. The plots show only the middle channel. If spurious were detected, the lowest and highest channel were checked too. The found values are stated in the table below.

As can be seen from this data, the emissions from the test item were within the specification limit.

| SPURIOUS EMISSION LEVEL (dBm) | | | | | | | | |
|-------------------------------|----------------------|-------------|----------|---------------------|-------------|----------|---------------------|-------------|
| Harmonic | Ch. 1013 Freq. (MHz) | Level [dBm] | Harmonic | Ch. 384 Freq. (MHz) | Level [dBm] | Harmonic | Ch. 777 Freq. (MHz) | Level [dBm] |
| 2 | 1649.4 | - | 2 | 1673.0 | - | 2 | 1696.6 | - |
| 3 | 2474.1 | - | 3 | 2509.5 | - | 3 | 2544.9 | - |
| 4 | 3298.8 | - | 4 | 3346.1 | - | 4 | 3393.2 | - |
| 5 | 4123.5 | - | 5 | 4182.6 | - | 5 | 4241.6 | - |
| 6 | 4948.2 | - | 6 | 5019.1 | - | 6 | 5089.9 | - |
| 7 | 5772.9 | - | 7 | 5865.6 | - | 7 | 5938.2 | - |
| 8 | 6597.6 | - | 8 | 6692.1 | - | 8 | 6786.5 | - |
| 9 | 7422.3 | - | 9 | 7528.7 | - | 9 | 7634.8 | - |
| 10 | 8247.0 | - | 10 | 8365.2 | - | 10 | 8483.1 | - |
| Measurement uncertainty | | | | | ± 3dB | | | |

Result: Passed

Plots: Loopback-mode

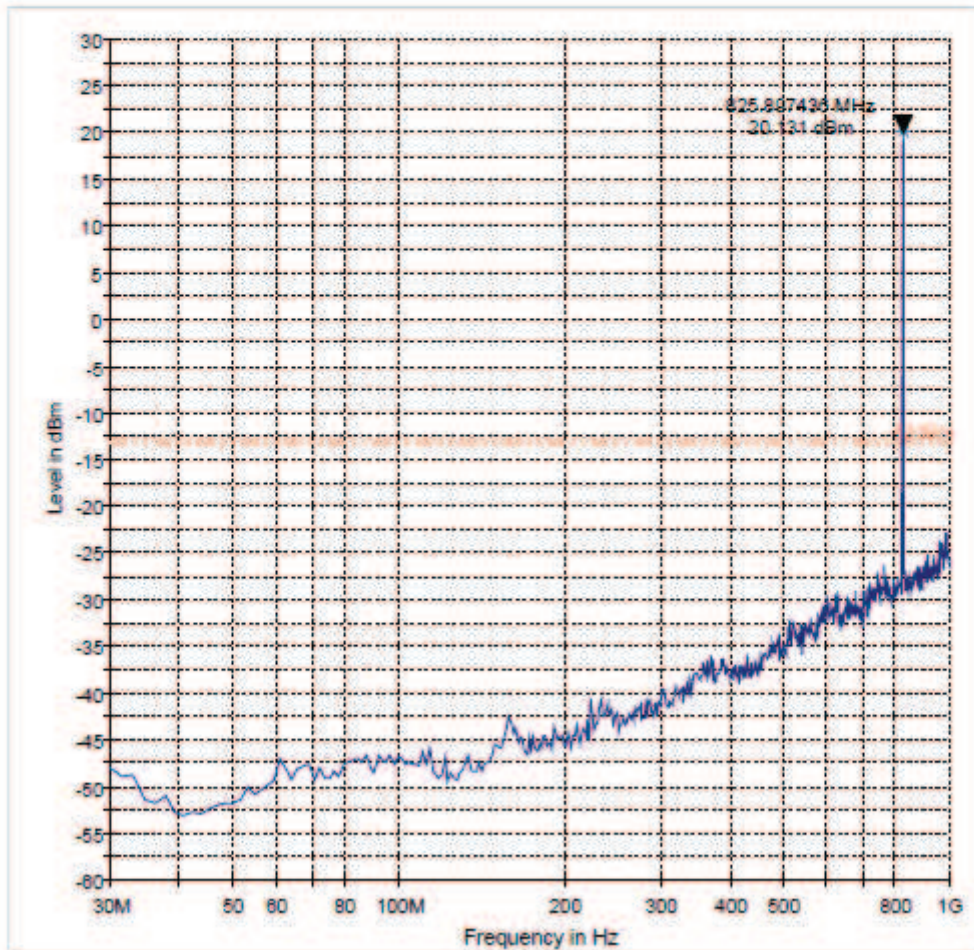
Plot 1: Channel 1013 (30 MHz - 1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0609-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 30-1000MHz



----- -13dBm
 — Preview Result 1-PK+
 + Data Reduction Result 1 [1]-PK+

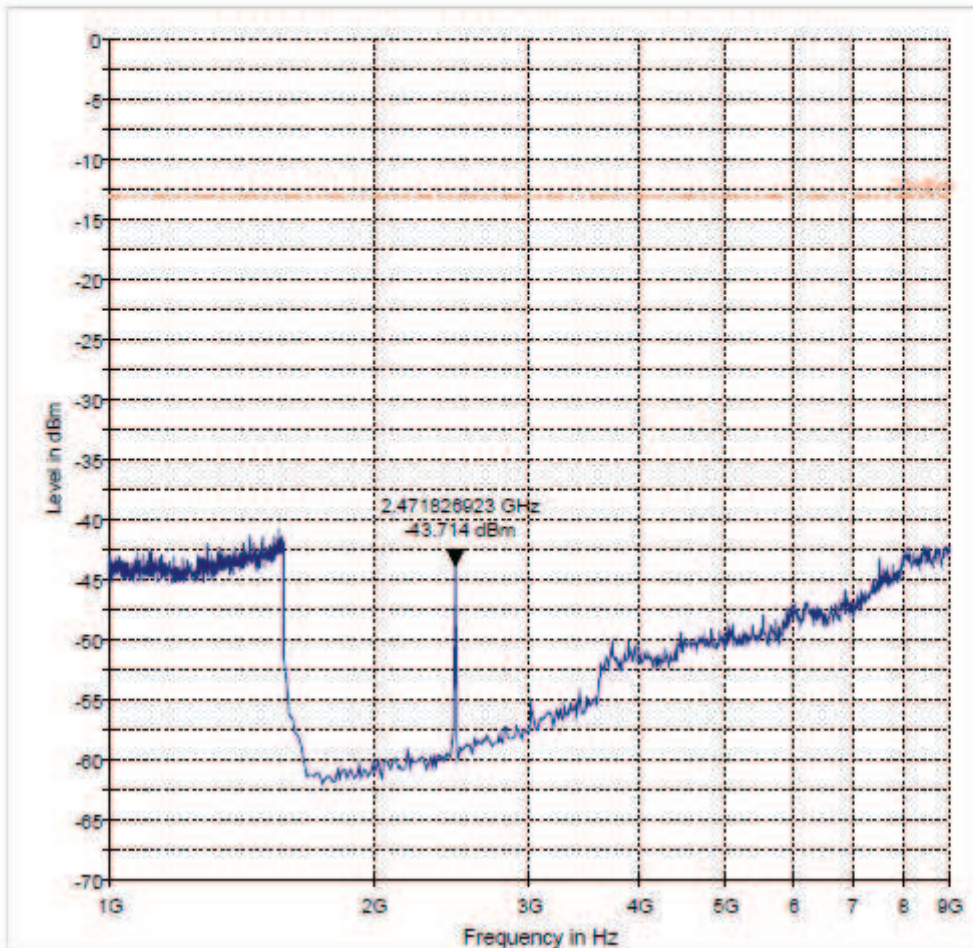
Plot 2: Channel 1013 (1 GHz – 9 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL, due to measurement uncertainty considerations.

FCC 22 1-9GHz



— -13dBm — Preview Result 1-PK+

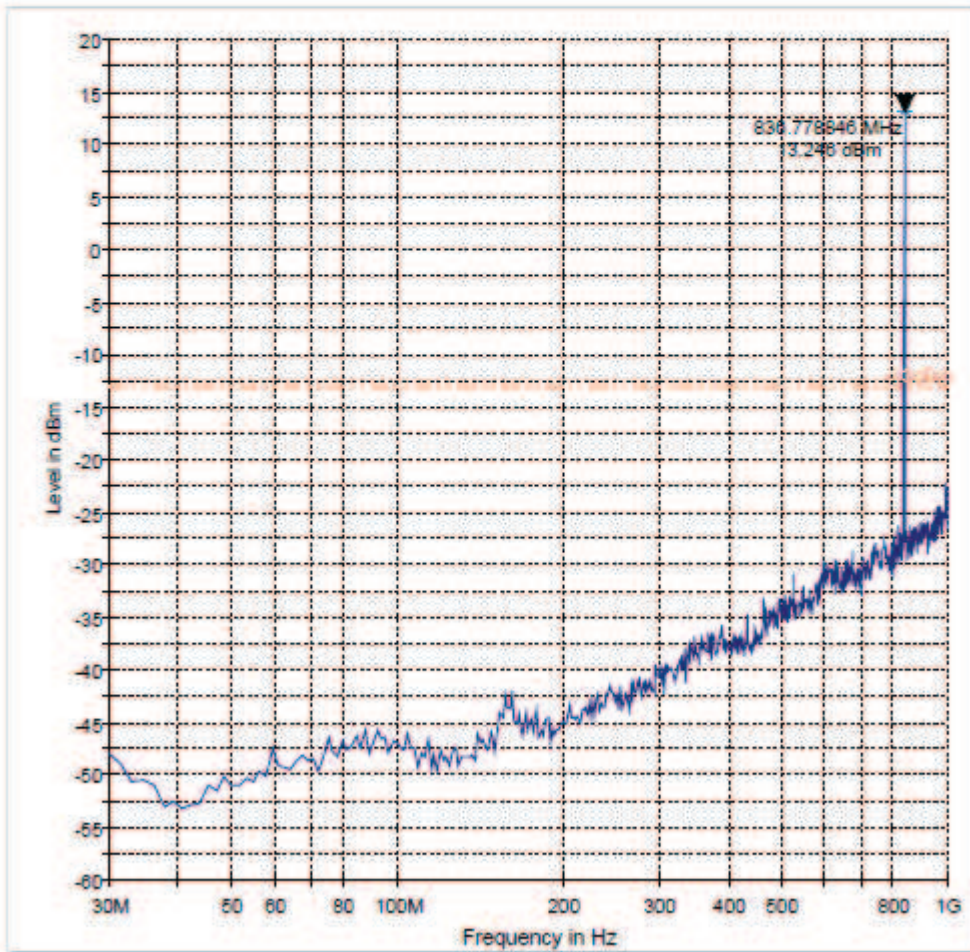
Plot 3: Channel 384 (30 MHz - 1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 30-1000MHz



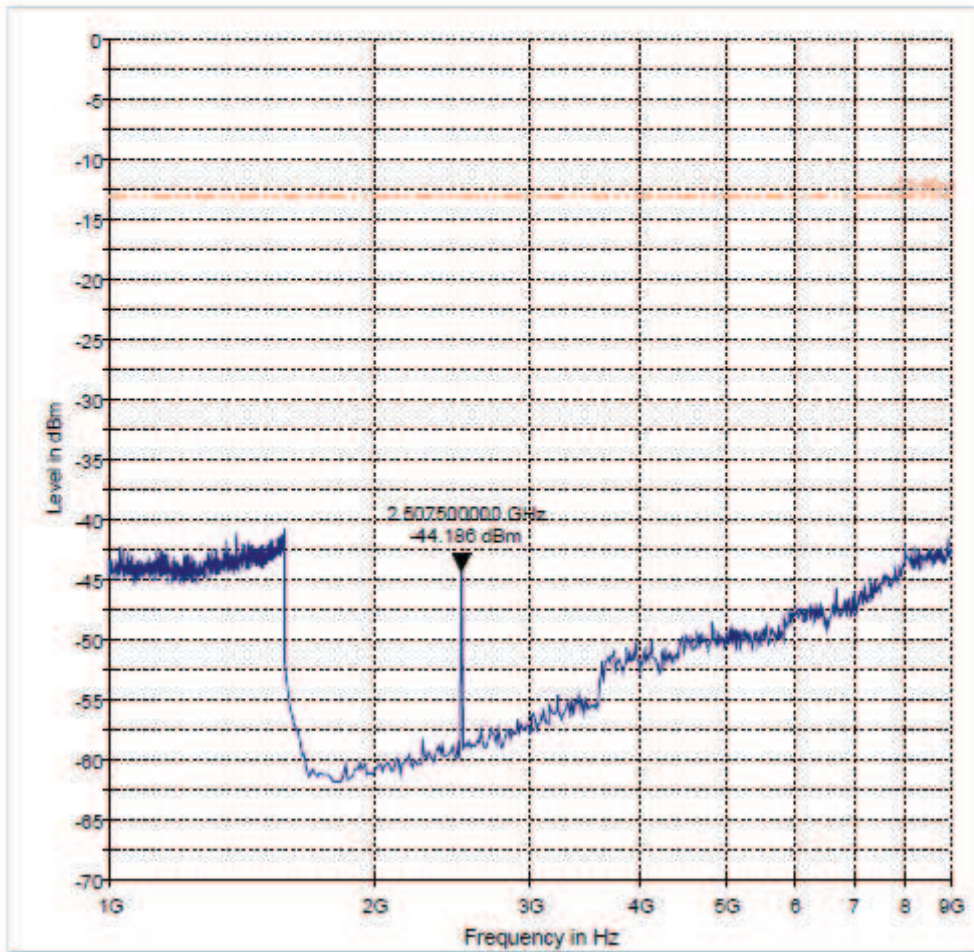
Plot 4: Channel 384 (1 GHz – 9 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 1-9GHz



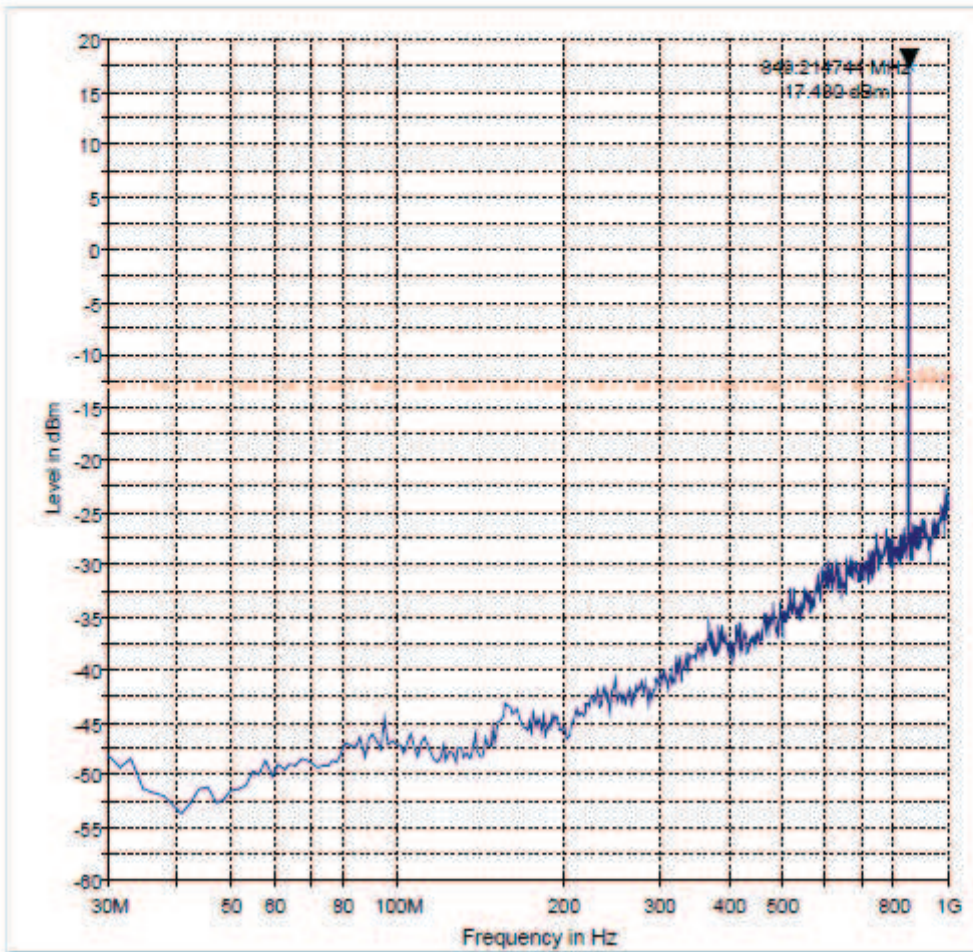
Plot 5: Channel 777 (30 MHz - 1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 30-1000MHz



----- -13dBm ——— Preview Result 1-PK+ * Data Reduction Result 1 [1]-PK+

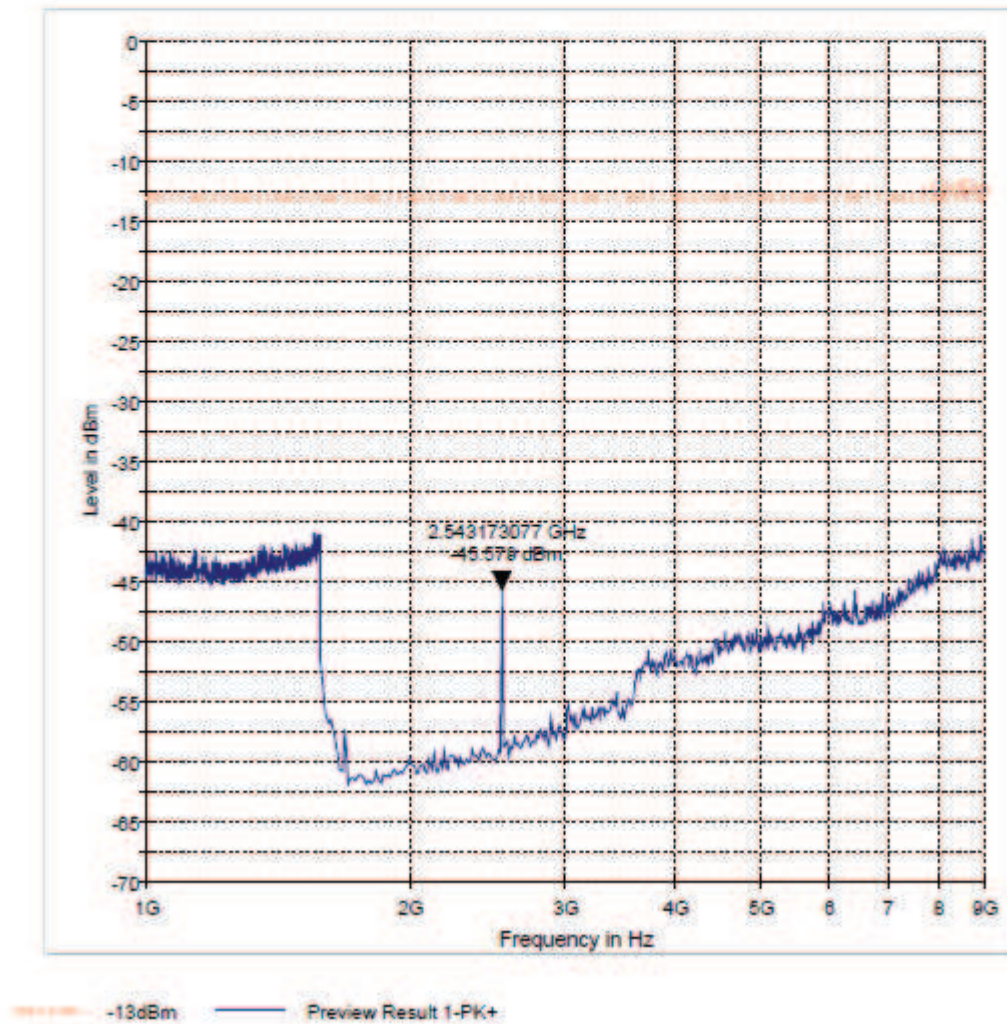
Plot 6: Channel 777 (1 GHz – 9 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 1-9GHz



Plots: Test data-mode

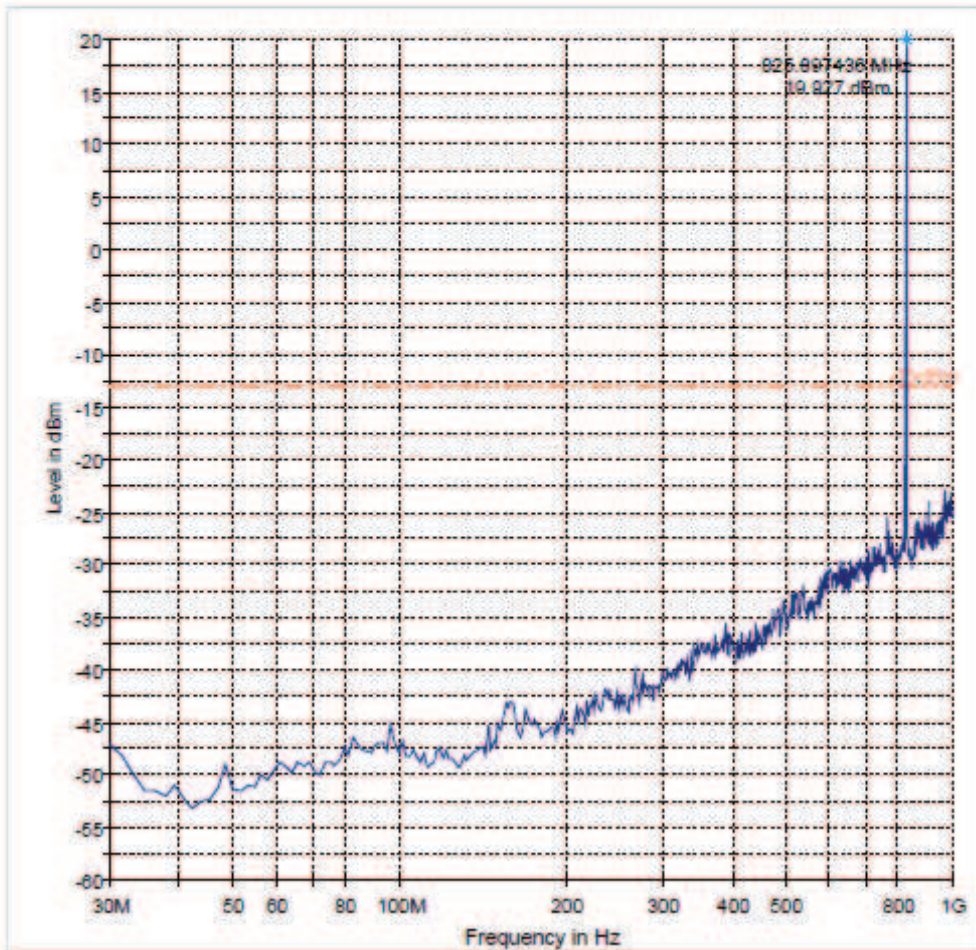
Plot 1: Channel 1013 (30 MHz - 1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 30-1000MHz



----- -13dBm ——— Preview Result 1-PK+ + Data Reduction Result 1 [1]-PK+

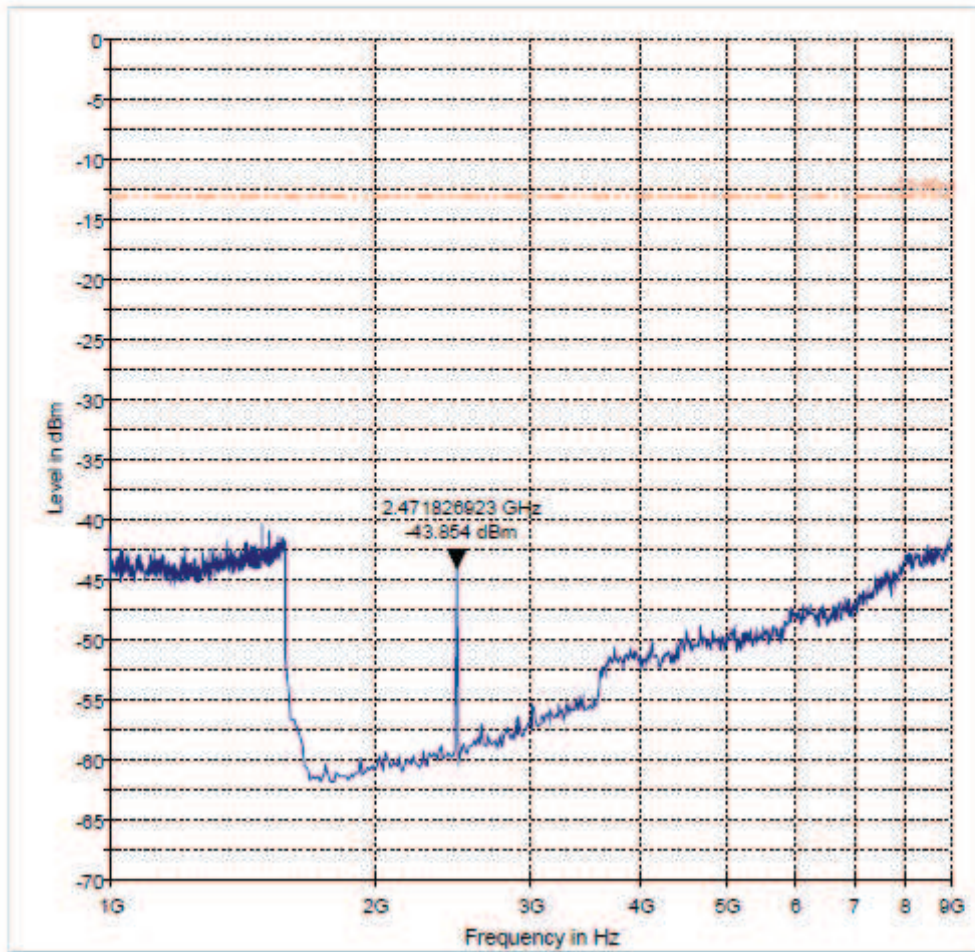
Plot 2: Channel 1013 (1 GHz – 9 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0609-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 1-9GHz



— -13dBm — Preview Result 1-PK+

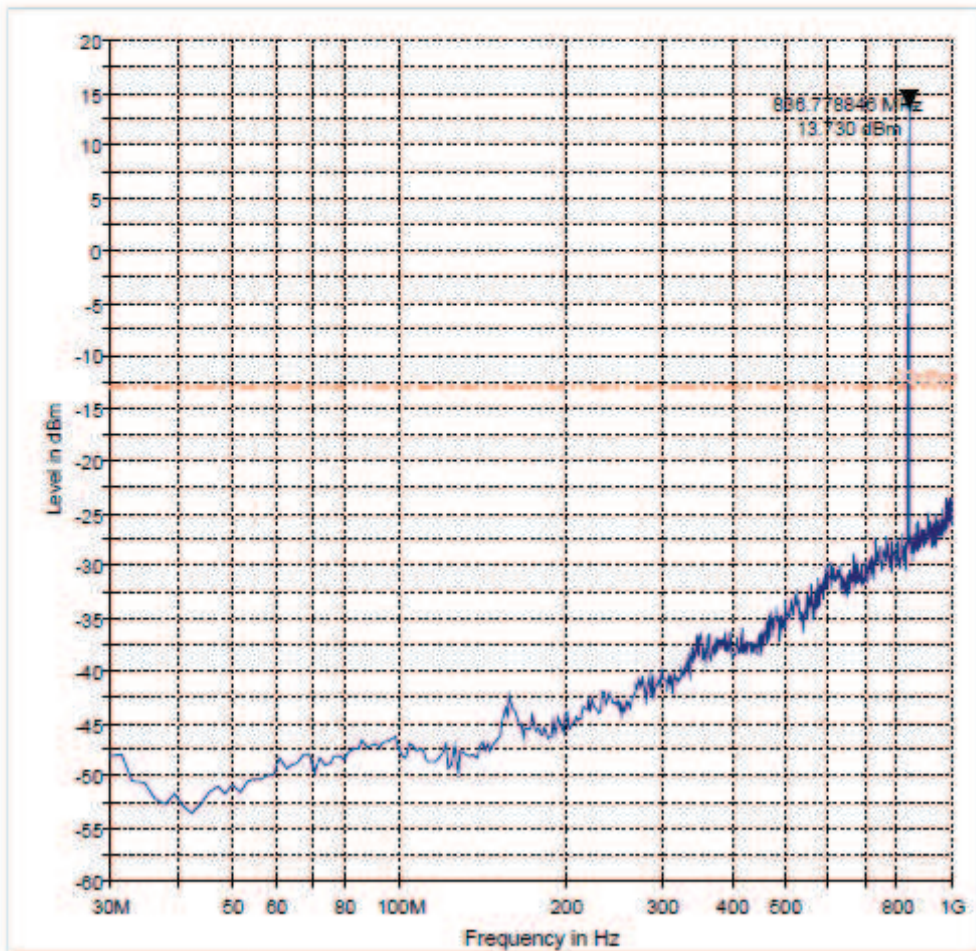
Plot 3: Channel 384 (30 MHz - 1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 30-1000MHz



— -13dBm — Preview Result 1-PK+ + Data Reduction Result 1 [1]-PK+

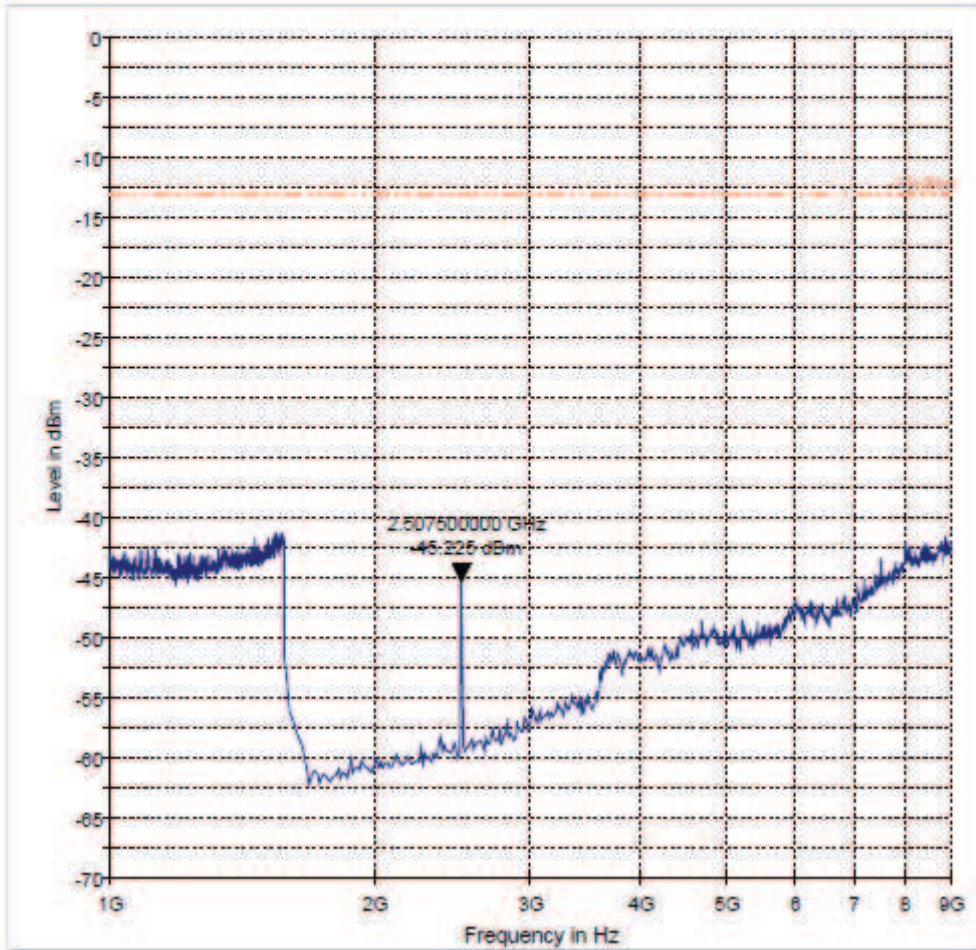
Plot 4: Channel 384 (1 GHz – 9 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 1-9GHz



— -13dBm — Preview Result 1-PK+

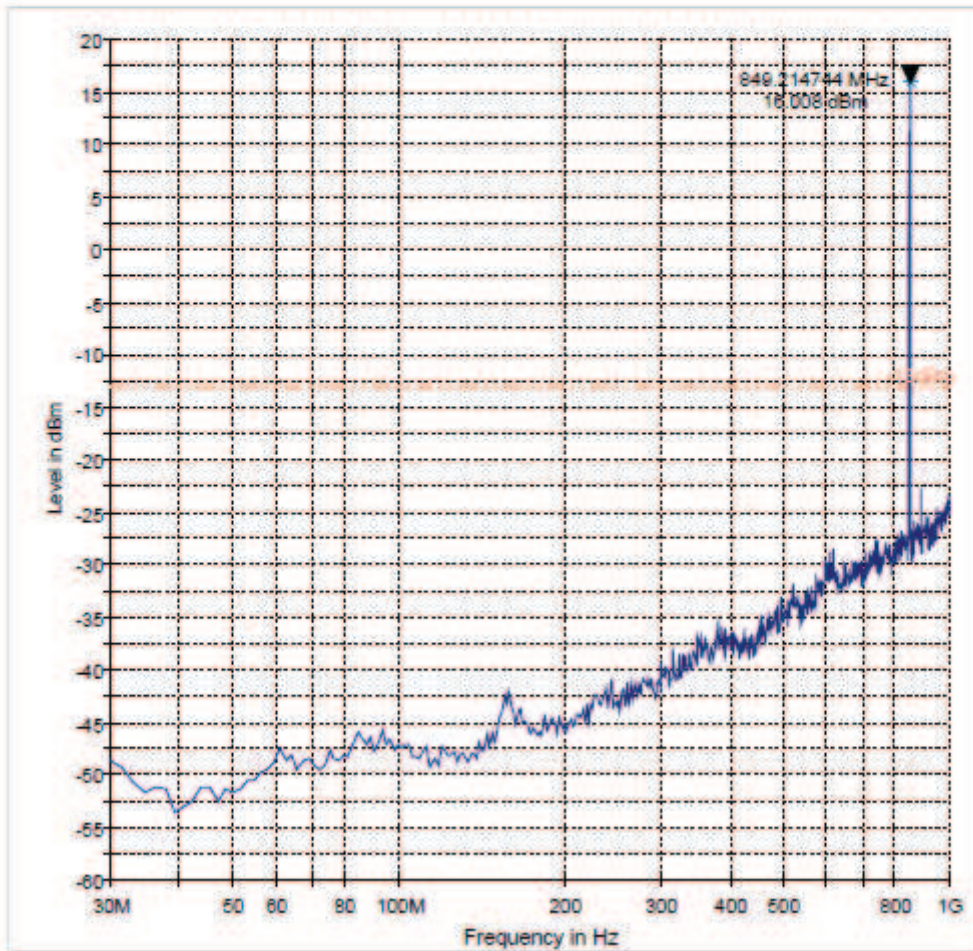
Plot 5: Channel 777 (30 MHz - 1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 30-1000MHz



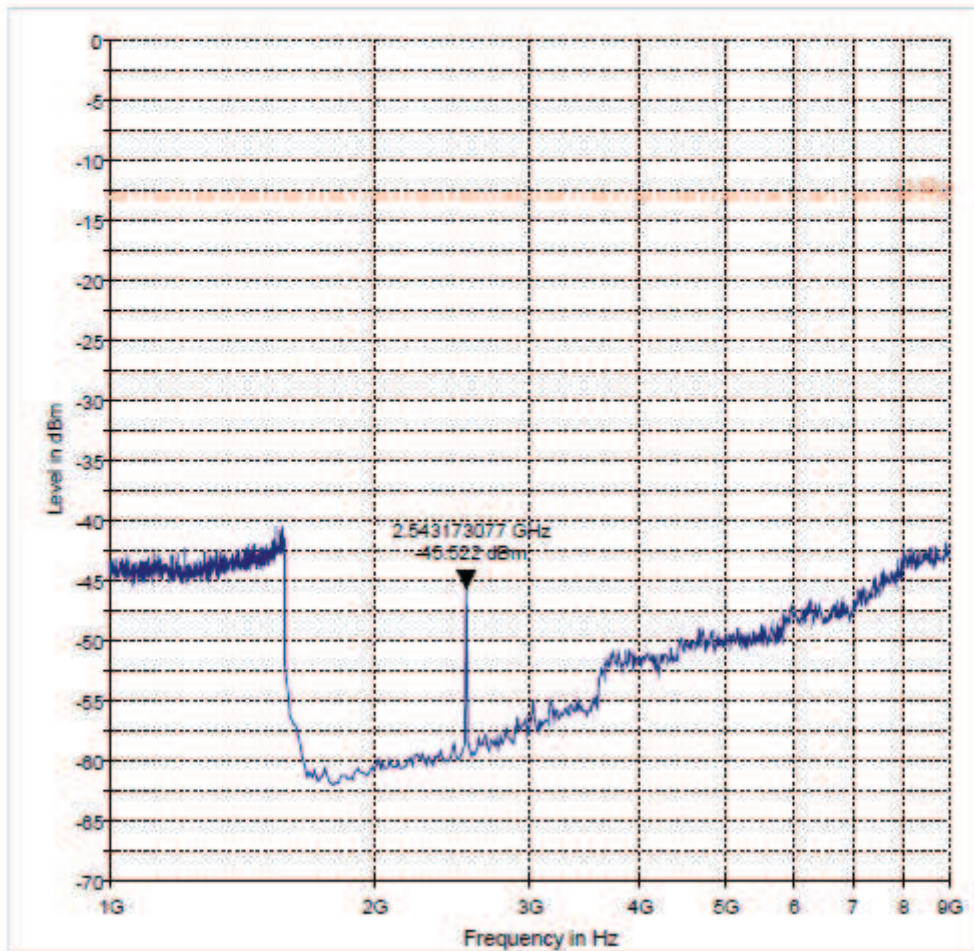
Plot 6: Channel 777 (1 GHz – 9 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 1-9GHz



Plots: EVDO-mode

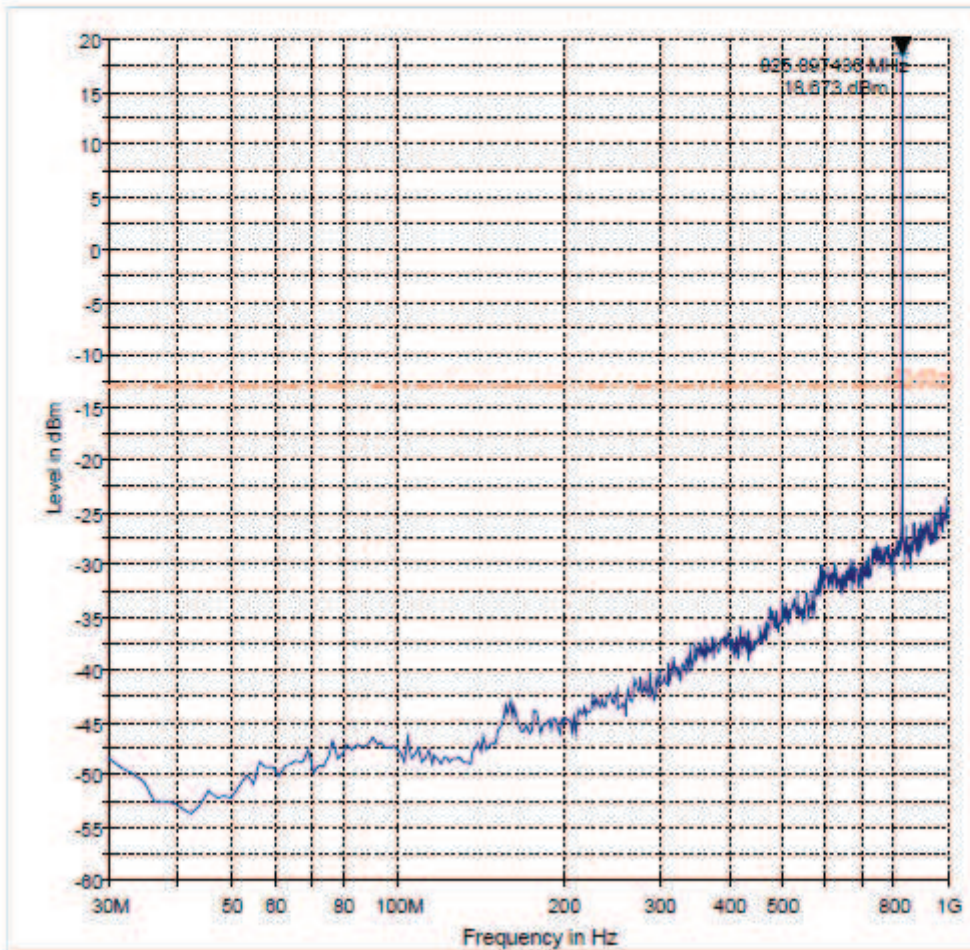
Plot 1: Channel 1013 (30 MHz - 1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 30-1000MHz



----- -13dBm ——— Preview Result 1-PK+ * Data Reduction Result 1 [1]-PK+

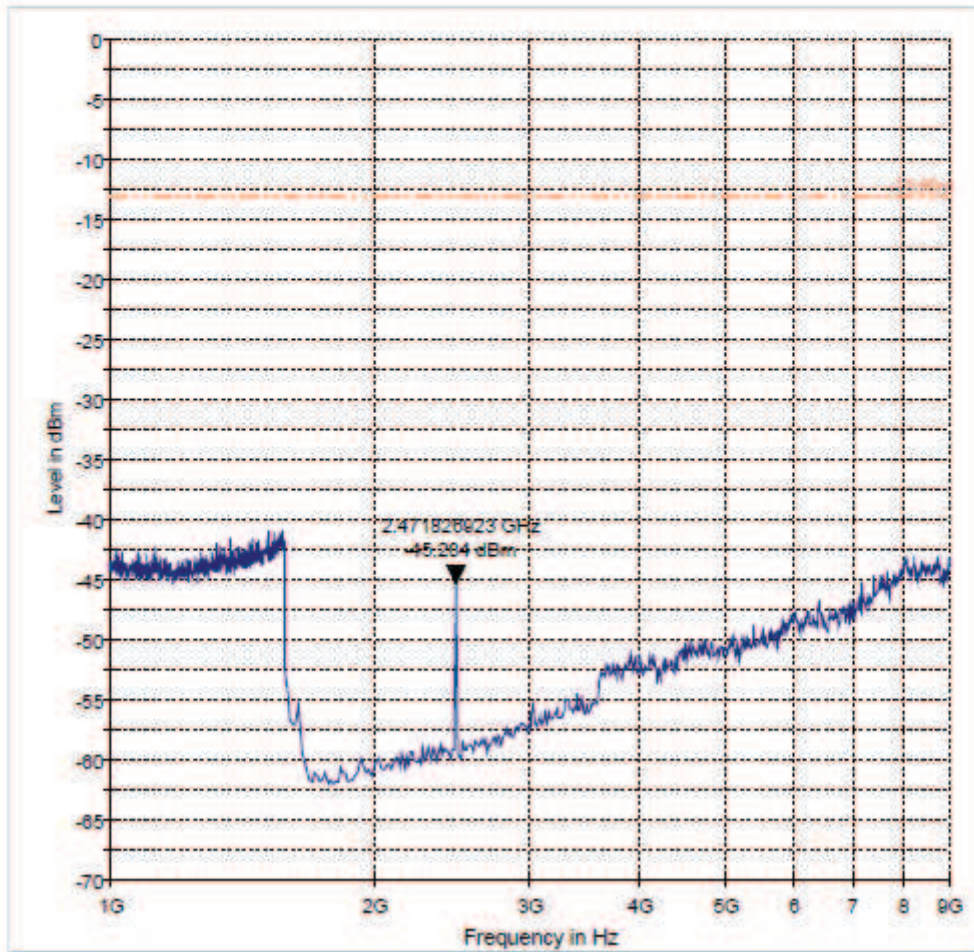
Plot 2: Channel 1013 (1 GHz – 9 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0609-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 1-9GHz



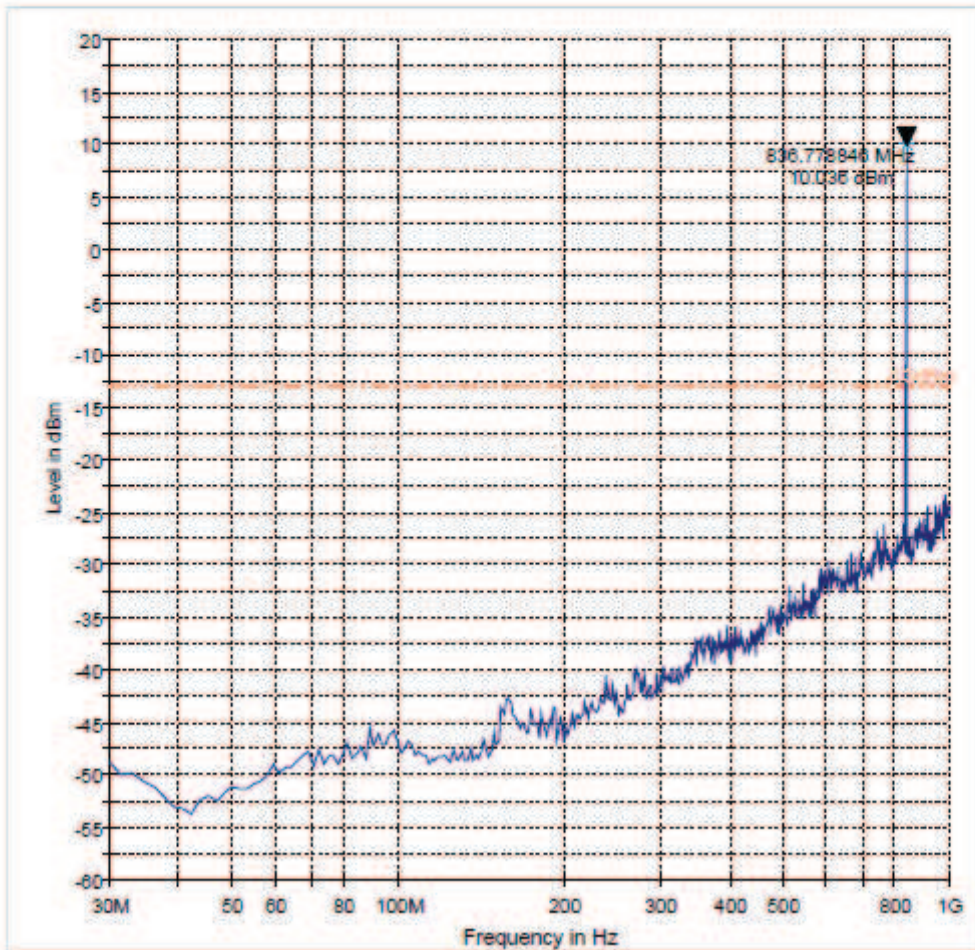
Plot 3: Channel 384 (30 MHz - 1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL, due to measurement uncertainty considerations.

FCC 22 30-1000MHz



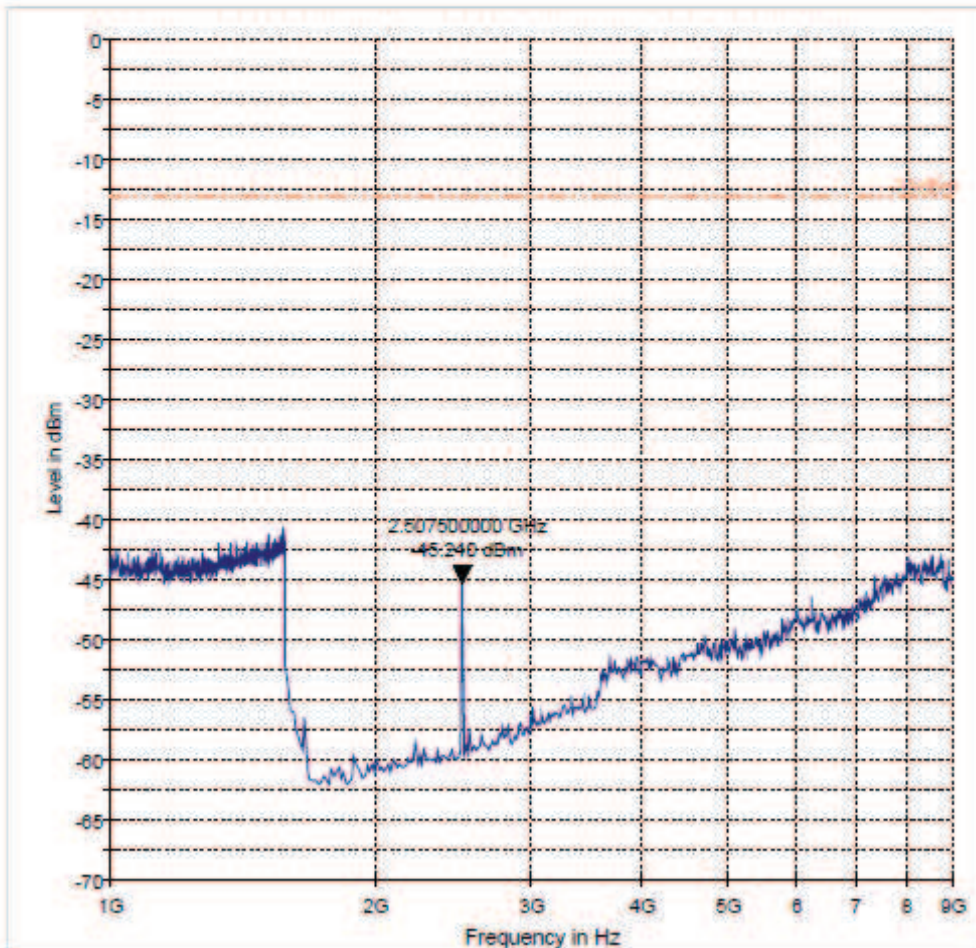
Plot 4: Channel 384 (1 GHz – 9 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 1-9GHz



— -13dBm — Preview Result 1-PK+

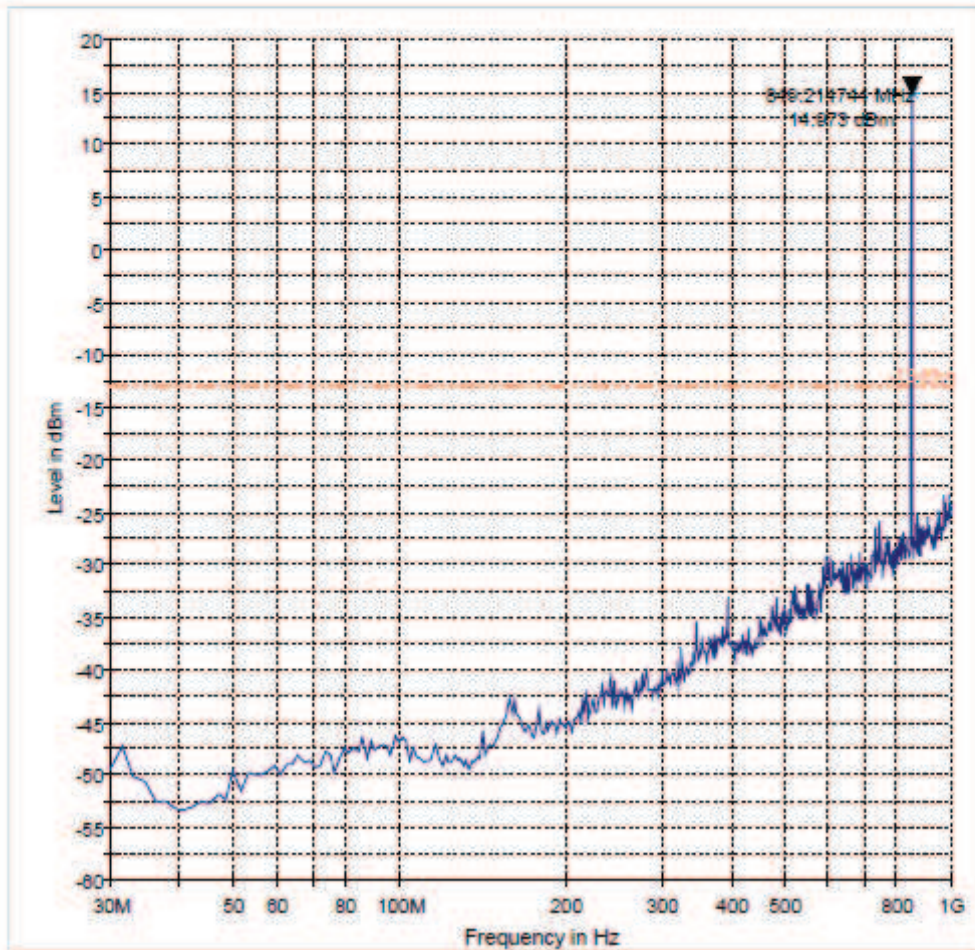
Plot 5: Channel 777 (30 MHz - 1 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SON100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FOC 22 30-1000MHz



----- -13dBm ——— Preview Result 1-PK+ * Data Reduction Result 1 [1]-PK+

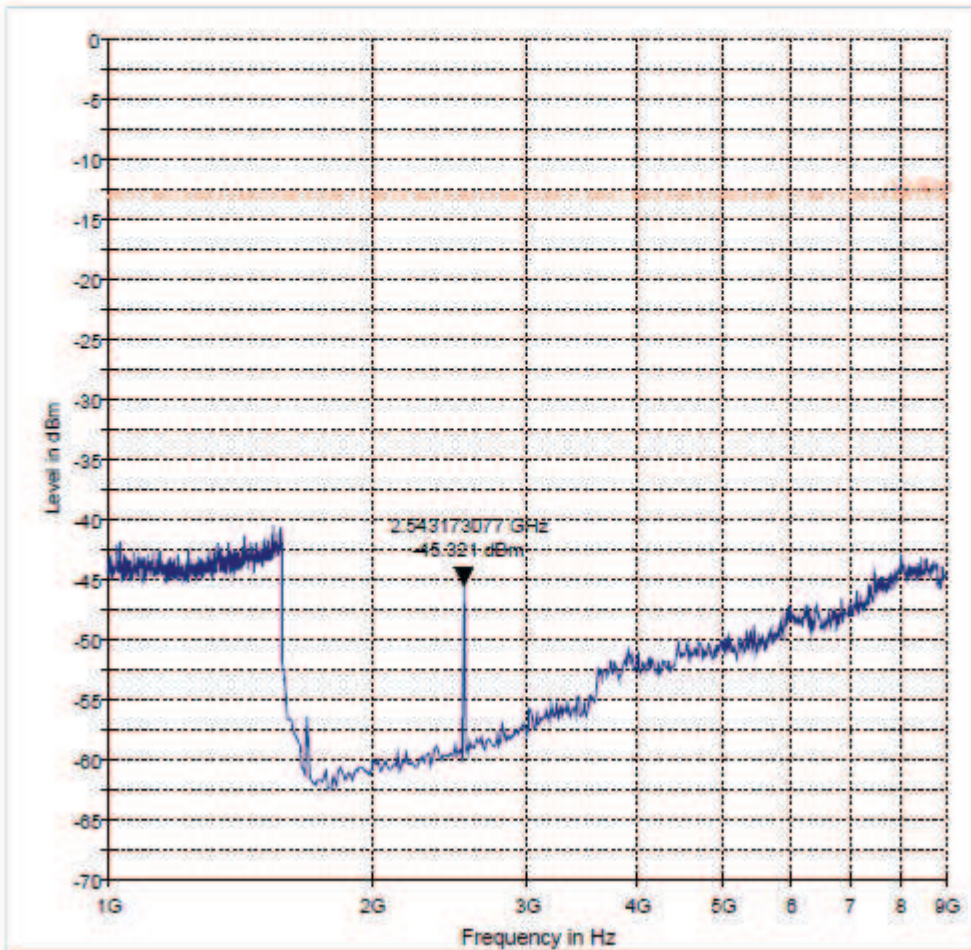
Plot 6: Channel 777 (1 GHz – 9 GHz)

EUT Information

| | |
|----------------|------------------|
| EUT Name: | BlackBerry Q10 |
| Manufacturer: | BlackBerry |
| Serial Number: | 0809-3919-8748 |
| Model #: | SQN100-2 |
| O/S: | 127.0.1.4318 |
| Comment: | internal battery |

Disclaimer: Any measurement data within 2dB from the limit line is conditional PASS/FAIL due to measurement uncertainty considerations.

FCC 22 1-9GHz



-13dBm Preview Result 1-PK+

8.7.4 Spurious emissions conducted

Not performed

8.7.5 Block edge compliance

Not performed

8.7.6 Occupied bandwidth

Not performed

9 Test equipment and ancillaries used for tests

Typically, the calibrations of the test apparatus are commissioned to and performed by an accredited calibration laboratory. The calibration intervals are determined in accordance with the DIN EN ISO/IEC 17025. In addition to the external calibrations, the laboratory executes comparison measurements with other calibrated test systems or effective verifications. Weekly chamber inspections and range calibrations are performed. Where possible, rf-generating and signalling equipment as well as measuring receivers and analyzers are connected to an external high-precision 10 MHz reference (GPS-based or rubidium frequency standard).

In order to simplify the identification of the equipment used at some special tests, some items of test equipment and ancillaries can be provided with an identifier or number in the equipment list below (Labor/Item).

| No. | Lab / Item | Equipment | Type | Manufact. | Serial No. | INV. No Cetecom | Kind of Calibration | Last Calibration | Next Calibration |
|-----|------------|--|----------------------------------|----------------------|------------|--------------------|------------------------|---------------------|---------------------|
| 1 | n. a. | DC power supply, 60Vdc, 50A, 1200 W | 6032A | HP Meßtechnik | 2818A03450 | 300001040 | Ve | 12.01.2012 | 12.01.2015 |
| 2 | n. a. | Double-Ridged Waveguide Horn Antenna 1-18.0GHz | 3115 | EMCO | 8812-3088 | 300001032 | viKI! | 11.05.2011 | 11.05.2013 |
| 3 | n. a. | Active Loop Antenna | 6502 | EMCO | 2210 | 300001015 | ne | | |
| 4 | n. a. | Anechoic chamber | FAC 3/5m | MWB / TDK | 87400/02 | 300000996 | ev | | |
| 5 | n. a. | Switch / Control Unit | 3488A | HP Meßtechnik | * | 300000199 | ne | | |
| 6 | n. a. | Switch / Control Unit | 3488A | HP Meßtechnik | 2719A15013 | 300001156 | ne | | |
| 7 | 9 | Isolating Transformer | MPL IEC625 Bus Regeltrennt ravo | Erfi | 91350 | 300001155 | ne | | |
| 8 | n. a. | Three-Way Power Splitter, 50 Ohm | 11850C | HP Meßtechnik | | 300000997 | ne | | |
| 9 | n. a. | Amplifier | js42-00502650-28-5a | Parzich GMBH | 928979 | 300003143 | ne | | |
| 10 | n. a. | Band Reject filter | WRCG185 5/1910-1835/1925-40/8SS | Wainwright | 7 | 300003350 | ev | | |
| 11 | n. a. | Band Reject filter | WRCG240 0/2483-2375/2505-50/10SS | Wainwright | 11 | 300003351 | ev | | |
| 12 | n. a. | Highpass Filter | WHKX7.0/1 8G-8SS | Wainwright | 18 | 300003789 | ne | | |
| 13 | n. a. | TRILOG Broadband Test-Antenna 30 MHz - 3 GHz | VULB9163 | Schwarzbeck | 371 | 300003854 | viKI! | 14.10.2011 | 14.10.2014 |
| 14 | n. a. | MXE EMI Receiver 20 Hz bis 26,5 GHz | N9038A | Agilent Technologies | MY51210197 | 300004405 | k | 21.02.2013 | 21.02.2014 |
| 15 | CR 79 | Std. Gain Horn Antenna 26.5-40.0 GHz | V637 | Narda | 7911 | 300001751 | ne | | |
| 16 | 11b | Microwave System Amplifier, 0.5-26.5 GHz | 83017A | HP Meßtechnik | 00419 | 300002268 | ev | | |
| 17 | A025 | Std. Gain Horn Antenna 12.4 to 18.0 GHz | 639 | Narda | | 300000786 | ne | | |
| 18 | A026 | Std. Gain Horn Antenna 12.4 to 18.0 GHz | 639 | Narda | | 300000787 | ne | | |
| 19 | A027 | Std. Gain Horn Antenna 18.0 to 26.5 GHz | 638 | Narda | | 300000486 | ne | | |
| 20 | A028 | Std. Gain Horn Antenna 18.0 to 26.5 GHz | 638 | Narda | | 300002440 | ne | | |
| 21 | A029 | Std. Gain Horn | 638 | Narda | | 300002442 | ne | | |

| | | | | | | | | | |
|----|-------|---|----------------------------|----------------------|------------|-----------|------|------------|------------|
| | | Antenna 18.0 to 26.5 GHz | | | | | | | |
| 22 | A030 | Std. Gain Horn Antenna 18.0 to 26.5 GHz | 638 | Narda | | 300000487 | ne | | |
| 23 | n. a. | Std. Gain Horn Antenna 26.5-40.0 GHz | V637 | Narda | 7911 | 300001752 | ne | | |
| 24 | n. a. | Spectrum Analyzer 20 Hz - 50 GHz | F5U50 | R&S | 200012 | 300003443 | Ve | 09.10.2012 | 09.10.2014 |
| 25 | n. a. | Spectrum Analyzer 9kHz to 30GHz - 140..+30dBm | FSP30 | R&S | 100886 | 300003575 | k | 22.08.2012 | 22.08.2014 |
| 26 | n. a. | MXA Signal Analyzer 20 Hz - 26.5 GHz | N9020A MXA Signal Analyzer | Agilent Technologies | US46220229 | 300003805 | vKl! | 16.01.2013 | 16.01.2015 |
| 27 | n. a. | Broadband Low Noise Amplifier 18-50 GHz | CBL18503 070-XX | CERNEX | 19338 | 300004273 | ne | | |
| 28 | n. a. | PXA Spectrum Analyzer 3Hz to 50GHz | N9030A PXA Signal Analyzer | Agilent Technologies | US51350267 | 300004338 | k | 16.12.2012 | 16.12.2013 |
| 29 | n. a. | Signal Analyzer 40 GHz | FSV40 | R&S | 101042 | 300004517 | k | 22.10.2012 | 22.10.2013 |

Agenda: Kind of Calibration

- | | | | |
|------|--|-----|--|
| k | calibration / calibrated | EK | limited calibration |
| ne | not required (k, ev, izw, zw not required) | zw | cyclical maintenance (external cyclical maintenance) |
| ev | periodic self verification | izw | internal cyclical maintenance |
| Ve | long-term stability recognized | g | blocked for accredited testing |
| vKl! | Attention: extended calibration interval | *) | next calibration ordered / currently in progress |
| NK! | Attention: not calibrated | | |

10 Observations

No observations exceeding those reported with the single test cases have been made.

Annex A Document history

| Version | Applied changes | Date of release |
|---------|--------------------------|-----------------|
| 1.0 | Initial release | 2013-03-28 |
| -A | Editorial changes | 2013-04-03 |
| -B | Changed standard version | 2013-04-04 |

Annex B Further information

Glossary

| | | |
|----------|---|--|
| AVG | - | Average |
| DUT | - | Device under test |
| EMC | - | Electromagnetic Compatibility |
| EN | - | European Standard |
| EUT | - | Equipment under test |
| ETSI | - | European Telecommunications Standard Institute |
| FCC | - | Federal Communication Commission |
| FCC ID | - | Company Identifier at FCC |
| HW | - | Hardware |
| IC | - | Industry Canada |
| Inv. No. | - | Inventory number |
| N/A | - | Not applicable |
| PP | - | Positive peak |
| QP | - | Quasi peak |
| S/N | - | Serial number |
| SW | - | Software |

Annex C Accreditation Certificate

Front side of certificate

Deutsche Akkreditierungsstelle GmbH
 Befehlens gemäß § 8 Absatz 1 AkkStelleG i.V.m. § 1 Absatz 1 AkkStelleGBV
 Unterzeichnerin der Multilateralen Abkommen
 von EA, ILAC und IAF zur gegenseitigen Anerkennung

Akkreditierung

Die Deutsche Akkreditierungsstelle GmbH bestätigt hiermit, dass das Prüflaboratorium
CETECOM ICT Services GmbH
 Untertürkheimer Straße 6-10, 66117 Saarbrücken

die Kompetenz nach DIN EN ISO/IEC 17025:2005 besitzt, Prüfungen in folgenden Bereichen durchzuführen:

- Drahtgebundene Kommunikation einschließlich xDSL**
- VoIP und DECT
- Akustik
- Funk einschließlich WLAN
- Short Range Devices (SRD)
- RFID
- WiMax und Richtfunk
- Mobilfunk (GSM / DCS, Over the Air (OTA) Performance)
- Elektromagnetische Verträglichkeit (EMV) einschließlich Automotive
- Produktsicherheit
- SAR und Hearing Aid Compatibility (HAC)
- Umweltsimulation
- Smart Card Terminals
- Bluetooth
- Wi-Fi Services

Die Akkreditierungskunde gilt nur in Verbindung mit dem Bescheid vom 18.01.2013 mit der Akkreditierungsnummer D-PL-12076-01 und ist gültig 17.01.2018. Sie besteht aus diesem Deckblatt, der Rückseite des Deckblatts und der folgenden Anlage mit insgesamt 80 Seiten.

Registrierungsnummer der Urkunde: D-PL-12076-01-01

Frankfurt am Main, 18.01.2013

Daniela Pflüger
Abteilungsleiter

Back side of certificate

Deutsche Akkreditierungsstelle GmbH

| | | |
|--|---|--|
| Standort Berlin Spittelmarkt 10 10117 Berlin | Standort Frankfurt am Main Gartenstraße 5 60594 Frankfurt am Main | Standort Braunschweig Rundeschaue 100 38116 Braunschweig |
|--|---|--|

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 ILAC: www.ilac.org
 IAF: www.iaf.ru

Note:

The current certificate including annex is published on our website (see link below) or may be received from CETECOM ICT Services on request.

<http://www.cetecom.com/eu/de/cetecom-group/europa/deutschland-saarbruecken/akkreditierungen.html>