LS RESEARCH, LLC
WIRELESS PRODUCT DEVELOPMENT
ACCREDITED
Testing Cert. 1255.01
W66 N220 Commerce Court ● Cedarburg, WI 53012 ● USA
Phone: 262.375.4400 ● Fax: 262.375.4248
www.lsr.com

TEST REPORT # 311043
LSR Job #: C-1117

Compliance Testing of:

Bayer Healthcare's
Contour® Next Link Blood Glucose Meter (Ninja 2)

Test Date(s):
February 28th to March 3rd 2011

Prepared For:

Bayer Healthcare, LLC.
Diabetes Care,
430 South Beiger Street
Mishawaka, IN 46544

In accordance with:
Federal Communications Commission (FCC)
Part 15, Subpart C, Section 15.249
Industry Canada (IC) RSS 210 Annex 2
Transmitters Operating in the
Frequency Band 902 MHz – 928 MHz

This Test Report is issued under the Authority of:
Khairul Aidi Zainal, Senior EMC Engineer

Signature:  Date:3.14.2011

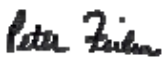
Test Report Reviewed by:	**Tested by:**
Peter Feilen, EMC Engineer	Khairul Aidi Zainal, Senior EMC Engineer
Signature:  Date: 3.14.2011	Signature:  Date:3.14.2011

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EXHIBIT 1. INTRODUCTION

1.1 SCOPE

References:	FCC Part 15, Subpart C, Section 15.249 and 15.209 FCC Part 2, Section 2.1043 paragraph (b)1. RSS GEN and RSS 210 Annex 2
Title:	FCC : Telecommunication – Code of Federal Regulations, CFR 47, Part 15. IC : Low-power License-exempt Radio-communication Devices (All Frequency Bands): Category I Equipment
Purpose of Test:	To gain FCC and IC Certification Authorization for Low-Power License-Exempt Transmitters.
Test Procedures:	Both conducted and radiated emissions measurements were conducted in accordance with American National Standards Institute ANSI C63.4 – American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.
Environmental Classification:	• Commercial, Industrial or Business • Residential

1.2 NORMATIVE REFERENCES

Publication	Title
47 CFR, Parts 0-15 (FCC)	Code of Federal Regulations - Telecommunications
RSS 210	Low-power License-exempt Radio-communication Devices (All Frequency Bands): Category I Equipment
ANSI C63.4	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.
CISPR 16-1-1	Specification for radio disturbance and immunity measuring apparatus and methods. Part 1-1: Measuring Apparatus.
CISPR 16-2-1	Specification for radio disturbance and immunity measuring apparatus and methods. Part 201: Conducted disturbance measurement.

1.3 LS Research, LLC TEST FACILITY

LS Research, LLC is accredited by A2LA (American Association for Laboratory Accreditation) to conform to ISO/IEC 17025, 2005 "General Requirements for the Competence of Calibration and Testing Laboratories".

LS Research, LLC's scope of accreditation includes all test methods listed herein, unless otherwise noted. Accreditation status can be verified at A2LA's web site: www.a2la2.net.

1.4 LOCATION OF TESTING

All testing was performed at LS Research, LLC, W66 N220 Commerce Court, Cedarburg, Wisconsin, 53012 USA, utilizing the facilities listed below, unless otherwise noted.

List of Facilities Located at LS Research, LLC:

- Compact Chamber
- Semi-Anechoic Chamber
- Open Area Test Site (OATS)

1.5 TEST EQUIPMENT UTILIZED

A complete list of equipment utilized in testing is provided in Appendix A of this test report. Calibration dates are indicated in Appendix A. All test equipment is calibrated in accordance with A2LA standards.

EXHIBIT 2. PERFORMANCE ASSESSMENT

2.1 CLIENT INFORMATION

Manufacturer Name:	**Bayer Healthcare LLC**
Address:	**430 South Beiger St. Mishawaka, IN 46544**
Contact Name:	**Kevin Chang**

2.2 EQUIPMENT UNDER TEST (EUT) INFORMATION

The following information has been supplied by the applicant.

Product Name:	Contour Next Link BG Meter
Model Number:	6200
Serial Number:	SN P00001A SN P0000E0

2.3 ASSOCIATED ANTENNA DESCRIPTION

The antenna associated with the EUT is a PCB trace meandered antenna.

2.4 EUT'S TECHNICAL SPECIFICATIONS

Additional Information:

EUT Frequency Range (in MHz)	916.5 MHz
RF Power in Watts	0.000177 Watts
Field Strength at 3 meters	87.7 dBµV/m
Occupied Bandwidth (99%)	198.9 kHz
Type of Modulation	ON-OFF Keying (OOK)
Emission Designator	199KA1D
EIRP (in mW)	0.177 mW
Transmitter Spurious (worst case) at 3 meters	40.1 dBµV/m at 5499 MHz
Stepped (Y/N)	N
Step Value:	N/A
Frequency Tolerance %, Hz, ppm	Better than 100 PPM
Microprocessor Model # (if applicable)	TI CC1110
Antenna Information	
Detachable/non-detachable	Non-detachable
Type	PCB trace meandered antenna
Gain (in dBi)	0 dBi
EUT will be operated under FCC Rule Part(s)	15.249
EUT will be operated under RSS Rule Part(s)	RSS 210 Annex 2
Modular Filing	☐ Yes ☒ No
Portable or Mobile?	Portable

RF Technical Information:

Type of Evaluation (check one)		SAR Evaluation: Device Used in the Vicinity of the Human Head
		SAR Evaluation: Body-worn Device
	X	RF Evaluation

If RF Evaluation checked above, test engineer to complete the following:

- Evaluated against exposure limits: ☒ General Public Use ☐ Controlled Use
- Duty Cycle used in evaluation: %
- Standard used for evaluation: OET 65
- Measurement Distance: 20 cm
- RF Value: 0.00035 ☐ V/m ☐ A/m ☒ W/m^2
  ☐ Measured ☐ Computed ☒ Calculated

Since the maximum output power of the EUT, 0.176mW, is less than 64.79mW, no SAR evaluation is necessary.

2.5 PRODUCT DESCRIPTION

The Contour® Next Link is a blood glucose meter that is equipped with an integrated RF transmitter/receiver that facilitates the transfer of BG (blood glucose) measurements to compatible Medtronic diabetes devices (e.g., Medtronic MiniMed® Paradigm® Insulin Pump or Guardian® REAL-Time Continuous Monitoring System). The meter measures blood glucose (BG) and obtains a result in mg/dL or mmol/L. This result is stored in memory and sent to the compatible diabetes devices via the RF transceiver.

EXHIBIT 3. EUT OPERATING CONDITIONS & CONFIGURATIONS DURING TESTS

3.1 CLIMATE TEST CONDITIONS

Temperature:	71 ° F
Humidity:	34 %
Pressure:	739 mmHg

3.2 APPLICABILITY & SUMMARY OF EMC EMISSION TEST RESULTS

FCC and IC Paragraph	Test Requirements	Compliance (yes/no)
FCC : 15.207 IC : RSS GEN sect. 7.2.2	Power Line Conducted Emissions Measurements	Yes
IC : RSS GEN section 4.6.1	20 dB Bandwidth	Yes
FCC : 15.249(A) & 1.1310 IC : RSS 210 A2.9 (a)	Maximum Output Power	Yes
FCC : 1.1307, 1.1310, 2.1091 & 2.1093 IC : RSS 102	RF Exposure Limit	Yes
FCC : 15.249(a) IC : RSS 210 A2.9(a)	Transmitter harmonics	Yes
FCC : 15.249(d), 15.209 & 15.205 IC : RSS 210 A2.9(b),	Transmitter Radiated Emissions	Yes
The digital circuit portion of the EUT has been tested and verified to comply with FCC Part 15, Subpart B, Class B Digital Devices (RSS GEN and RSS 210 of IC) and the associated Radio Receiver has also been tested and found to comply with Part 15, Subpart B – Radio Receivers (RSS GEN and RSS 210 of IC). The Receiver Test Report is available upon request.		

3.3 MODIFICATIONS INCORPORATED IN THE EUT FOR COMPLIANCE PURPOSES

☒ **None** ☐ **Yes (explain below)**

3.4 DEVIATIONS & EXCLUSIONS FROM TEST SPECIFICATIONS

☒ **None** ☐ **Yes (explain below)**

EXHIBIT 4. DECLARATION OF CONFORMITY

The EUT was found to MEET the requirements as described within the specification of FCC Title 47, CFR Part 15.249, and Industry Canada RSS-210, Annex 2.9.

If some emissions are seen to be within 3 dB of their respective limits:
As these levels are within the tolerances of the test equipment and site employed, there is a possibility that this unit, or a similar unit selected out of production may not meet the required limit specification if tested by another agency.

LS Research, LLC certifies that the data contained herein was taken under conditions that meet or exceed the requirements of the test specifications. The results in this Test Report apply only to the item(s) tested on the above-specified dates. Any modifications made to the EUT subsequent to the indicated test date(s) will invalidate the data herein, and void this certification.

EXHIBIT 5. RADIATED EMISSIONS TEST

5.1 Test Setup

The test setup was assembled in accordance with Title 47, CFR FCC Part 15, RSS GEN and ANSI C63.4. The EUT was placed on an 80cm high non-conductive pedestal, centered on a flush mounted 2-meter diameter turntable inside a 3 meter Semi-Anechoic, FCC listed Chamber. The EUT was operated in continuously transmitting modulated mode using power as provided by a rechargeable battery and USB. The unit has the capability to operate on a single channel. Instructions on how to operate the EUT test mode is in Appendix D of this report.

The applicable limits apply at a 3 meter distance. Measurements above 3 GHz were performed at a 1.0 meter separation distance. The calculations to determine these limits are detailed in the following pages. Please refer to Appendix A for a complete list of test equipment. The test sample was operated on one channel: **916.5 MHz**

In measuring the fundamental emission, the EUT was setup as transmitting while being powered by rechargeable battery and also while charging using the USB port.

5.2 Test Procedure

Radiated RF measurements were performed on the EUT in a 3 meter Semi-Anechoic, FCC listed Chamber. The frequency range from 30 MHz to 10000 MHz was scanned and investigated. The radiated RF emission levels were manually noted at the various fixed degree settings of azimuth on the turntable and antenna height. The EUT was placed on a non-conductive pedestal in the 3 meter Semi-Anechoic Chamber, with the antenna mast placed such that the antenna was 3 meters from the EUT. A Biconical Antenna was used to measure emissions from 30 MHz to 300 MHz, and a Log Periodic Antenna was used to measure emissions from 300 MHz to 1000 MHz. A Double-Ridged Waveguide Horn Antenna was used from 1 GHz to 10 GHz.
In the frequency range of 30 MHz to 4 GHz, the maximum radiated RF emissions were found by raising and lowering the antenna between 1 and 4 meters in height while for the range of 4 GHz to 10 GHz the antenna was raised and lowered between 1 and 1.8 meters in height. In addition, the polarity of the antenna was switched between horizontal and vertical polarity.

The EUT was positioned in three orthogonal positions for the test.

5.3 Test Equipment Utilized

A list of the test equipment and antennas utilized for the Radiated Emissions test can be found in Appendix A. This list includes calibration information and equipment descriptions. All equipment is calibrated and used according to the operation manuals supplied by the manufacturers. All calibrations of the antennas used were performed at an IEC/ISO 17025 accredited calibration laboratory, traceable to the SI standard. In addition, the Connecting Cables were measured for losses using a calibrated Signal Generator and an EMI Receiver. The resulting correction factors and the cable loss factors from these calibrations were entered into the EMI Receiver database. As a result, the data taken from the EMI Receiver accounts for the antenna correction factor as well as cable loss or other corrections, and can therefore be entered into the database as a corrected meter reading. The EMI Receiver was operated with resolution bandwidths as prescribed in ANSI C63.4.

5.4 Test Results

The EUT was found to **MEET** the Radiated Emissions requirements of Title 47 CFR, FCC Part 15.249 and Canada RSS-210, Annex 2.9. The frequencies with significant RF signal strength were recorded and plotted as shown in the Data Charts and Graphs.

5.5 CALCULATION OF RADIATED EMISSIONS LIMITS AND REPORTED DATA.

Reported data:

For both fundamental and spurious emissions measurement, the data reported includes all necessary correction factors. These correction factors are loaded onto the EMI receiver when measurements are performed.

Reported Measurement data = Raw receiver measurement (dBµV/m) + Antenna correction Factor + Cable factor (dB) + Miscellaneous factors when applicable (dB) – amplification factor when applicable (dB).

Generic example of reported data at 200 MHz:

Reported Measurement data = 18.2 (raw receiver measurement) + 15.8 (antenna factor) + 1.45 (cable factor) = 35.45 (dBµV/m).

Field Strength of Fundamental Frequencies:
The fundamental emissions for an intentional radiator in the 902-928 MHz band, operating under FCC part 15.249 and RSS 210 A2.9 limits, must have electric field strength of no greater than 50 mV/m, for the fundamental frequency, when measured at 3 meters, and harmonic field strength of no greater than 500 µV/m, when measured at 3 meters. Spurious emissions outside the 902-928 MHz band shall be attenuated by at least 50 dB below the level of the fundamental, or meet the limits expressed in FCC part 15.209 under general emission limits.
Field Strength of Fundamental Frequencies is Limited to 50,000 µV/m, or 94 dBµV/m.
Field Strength of Harmonic and Spurious Frequencies is Limited by FCC 15.249 a and d
The harmonic limit of –50 dBc with respect to the fundamental limit would be:

94 dBµV/m – 50 dB = 44 dBµV/m,

*****with the exception of where FCC 15.209***** allows for a higher limit to be used.

Frequency (MHz)	3 m Limit (µV/m)	3 m Limit (dBµV/m)
902-928	50,000	94.0
30-88 ; 88-216	159	44.0
216-902 ; 928-960	500	46.0*****
960-40,000	500	54.0*****

The following table depicts the general radiated emission limits obtained from Title 47 CFR, part 15.209a, for radiated emissions measurements, including restricted band limits as expressed in 47 CFR, part 15.205.

Frequency (MHz)	3 m Limit (µV/m)	3 m Limit (dBµV/m)
30-88	100	40.0
88-216	150	43.5
216-960	200	46.0
960-40,000	500	54.0

Sample conversion from field strength µV/m to dBµV/m:

$dB\mu V/m = 20 \log_{10}$ (3m limit)

from 30 - 88 MHz for example: $dB\mu V/m = 20 \log_{10}$ (100)

$40.0\ dB\mu V/m = 20 \log_{10}$ (100)

For measurements made at 1 meter, a 9.5 dB correction may be been invoked.

960 MHz to 40,000 MHz

500 µV/m or 54.0 dBµV/m at 3 meters

54.0 + 9.5 = 63.5 dBµV/m at 1 meter

Note: Limits are conservatively rounded to the nearest tenth of a whole number.

5.6 RADIATED EMISSIONS TEST DATA CHART

Measurements of Electromagnetic Radiated Emissions
Frequency Range Inspected: 30 MHz to 25000 MHz

Manufacturer:	Bayer Healthcare LLC						
Date(s) of Test:	February 28th to March 3rd 2011						
Project Engineer:	Khairul Aidi Zainal						
Test Engineer(s):	Khairul Aidi Zainal,						
Voltage:	4.0 VDC						
Operation Mode:	Continuous modulated transmit						
Environmental Conditions in the Lab:	Temperature: 71° F Relative Humidity: 34 %						
EUT Power:		Single Phase 120 VAC		3 Phase ___VAC			
	X	Battery	X	Other: USB			
EUT Placement:	X	80cm non-conductive table		10cm Spacers			
EUT Test Location:	X	3 Meter Semi-Anechoic FCC Listed Chamber		3/10m OATS			
Measurements:		Pre-Compliance		Preliminary	X	Final	
Detectors Used:	X	Peak	X	Quasi-Peak	X	Average	

The following table depicts the level of radiated fundamental:

FREQ (MHz)	ANT	EUT	HEIGHT (m)	AZIMUTH (°)	PEAK (dBµv/m)	Q.PEAK (dBµv/m)	AVERAGE (dBµv/m)	Q.PEAK (mv/m)	LIMIT (mv/m)	LIMIT (dBµv/m)	MARGIN (dB)	EUT MODE
916.50	H	F	1.00	22	87.8	87.7	80.5	24.2	50.0	94.0	6.3	USB
916.50	H	S	1.36	168	83.6	83.4	76.2	14.8	50.0	94.0	10.6	Battery

Note: Column labeled 'EUT Mode' notes how the EUT was powered.

RADIATED EMISSIONS DATA CHART *(continued)*

The following table depicts the level of harmonic emissions seen on:

FREQ (MHz)	ANT	EUT	HEIGHT (m)	AZIMUTH (°)	PEAK (dBµv/m)	Q.PEAK (dBµv/m)	AVERAGE (dBµv/m)	AVERAGE (mv/m)	LIMIT (mv/m)	LIMIT (dBµv/m)	MARGIN (dB)
1833.00						Note 3					
2749.5						Note 3					
3666.00	H	V	1.13	0	43.2	N/A	31.5	0.04	0.5	54.0	22.5
4582.50						Note 3					
5499.00	H	S	1.02	195	53.9	N/A	49.6	0.10	0.5	63.5	13.9
6415.50	H	S	1.00	137	48.1	N/A	38.0	0.03	0.5	63.5	25.5
7332.00	V	S	1.00	206	53.4	N/A	42.7	0.05	0.5	63.5	20.8
8248.50						Note 3					
9165.00						Note 3					

Notes:

1) A Peak Detector was used in measurements above 1 GHz, for average measurement, the peak detector was used with lower VBW. The peak detector was used to ensure the peak emissions did not exceed 20 dB above the limits.
2) Measurements above 4 GHz were made at 1 meter of separation from the EUT.
3) Measurement at receiver system noise floor.
4) Harmonic measurements were performed with the EUT transmitting while charging via USB.
5) H: Horizontal; V:Vertical; S:Side; F:Flat.

The following table depicts the level of significant spurious radiated RF emissions (other than harmonics) found:

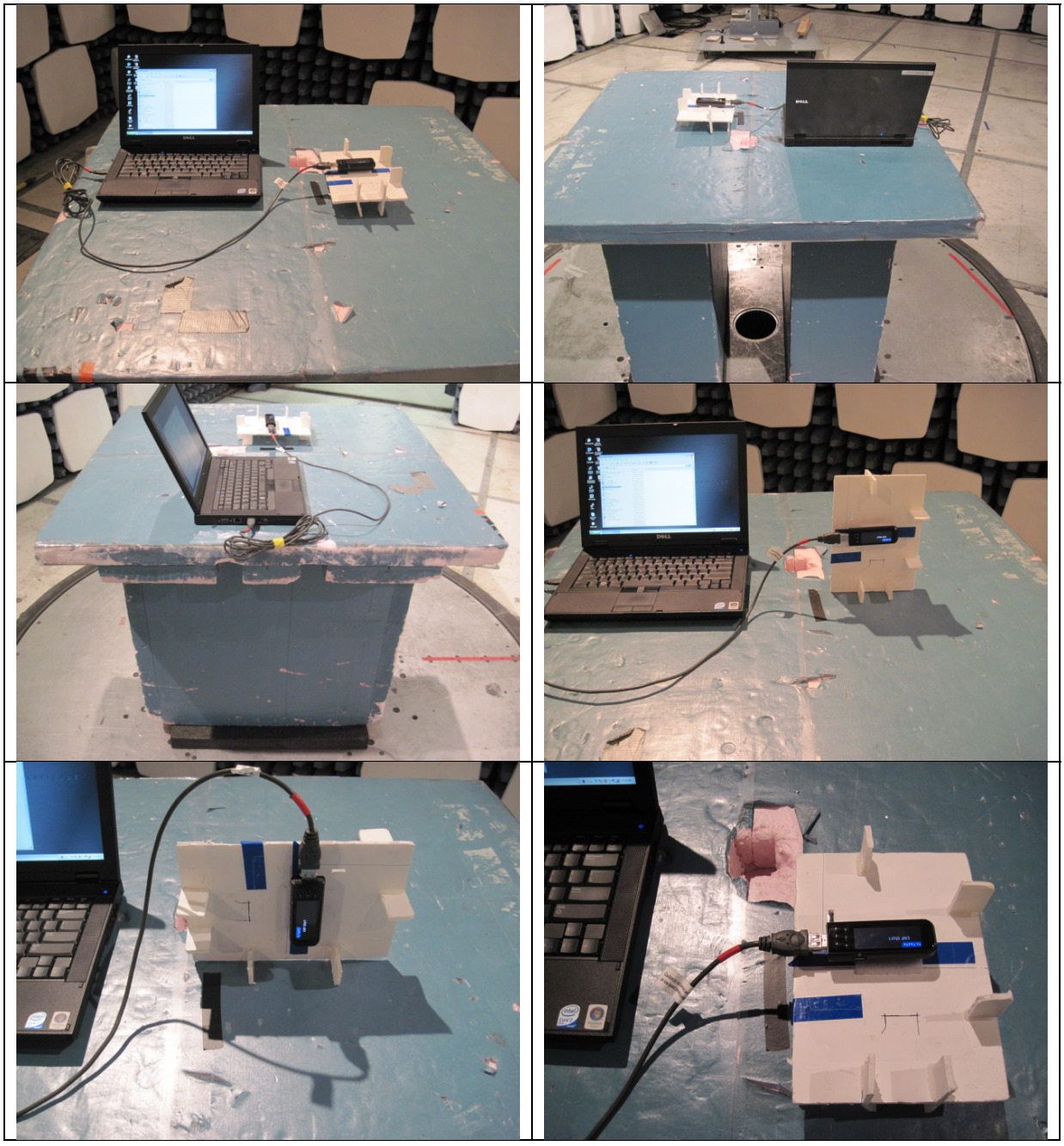
FREQ (MHz)	ANT	EUT	HEIGHT (m)	AZIMUTH (°)	PEAK (dBµv/m)	Q.PEAK (dBµv/m)	AVERAGE (dBµv/m)	LIMIT (dBµv/m)	MARGIN (dB)	NOTES
719.65	H	S	1.00	0	32.8	26.4	19.9	46.0	26.1	2.0
336.14	H	F	1.00	187	33.2	28.8	17.1	46.0	28.9	1.0
503.49	V	F	2.06	353	37.4	31.1	20.2	46.0	14.9	1.0
240.00	H	S	1.40	337	39.3	36.5	34.3	46.0	9.5	1.0

Note:

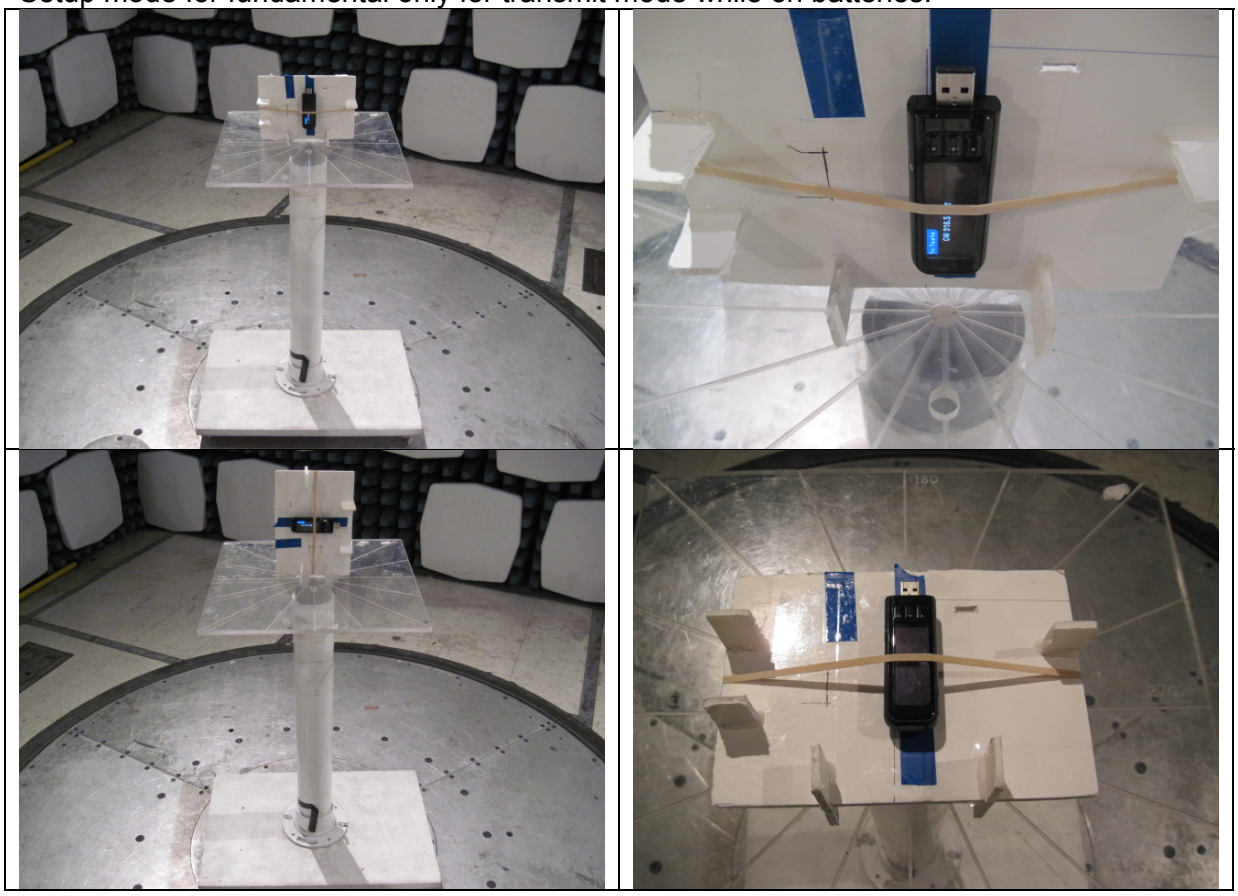
1) Spurious emission detected was not a function of the transceiver.
2) Measurement at receiver system noise floor.
3) Spurious emissions measurements were performed with the EUT transmitting while charging via USB.
4) H: Horizontal; V:Vertical; S:Side; F:Flat.

5.7 Test Setup Photo(s) – Radiated Emissions Test

A. Setup for fundamental and spurious emissions for transmit mode while charging.



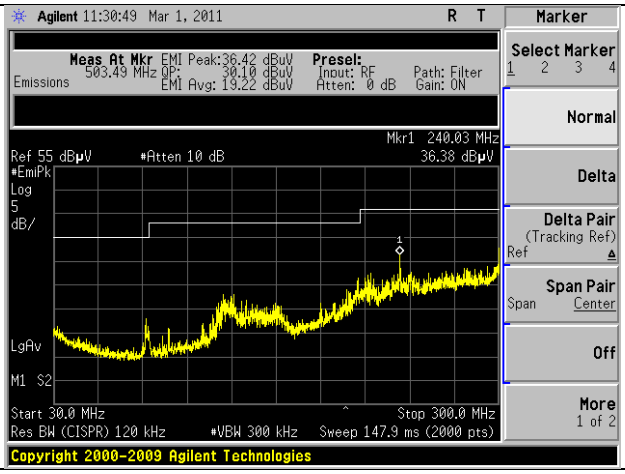
B. Setup mode for fundamental only for transmit mode while on batteries.



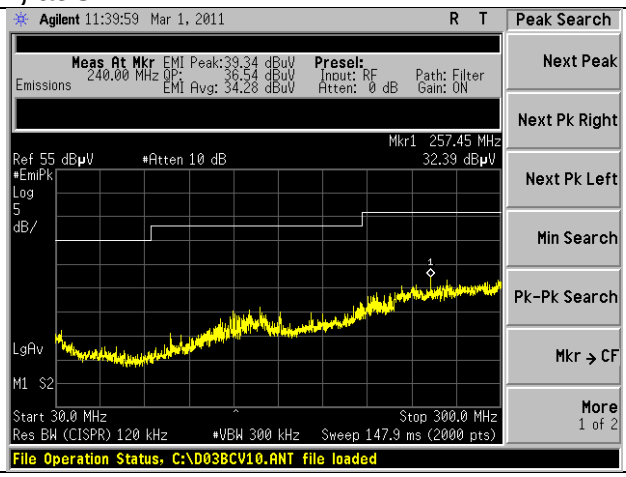
5.8 Screen Captures - Radiated Emissions Test

These screen captures represent Peak Emissions. For radiated emission measurements, a Quasi-Peak detector function is utilized when measuring frequencies below 1 GHz, and a peak detector with video averaging is utilized when measuring frequencies above 1 GHz. The signature scans shown here are from worst-case emissions

30-300 MHz, at 3m

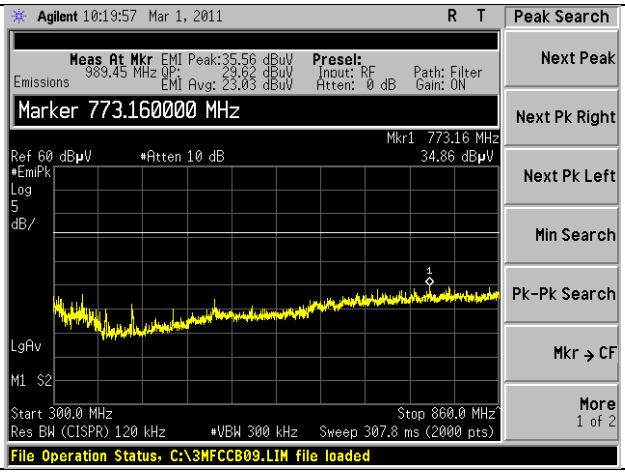


Horizontal Polarization

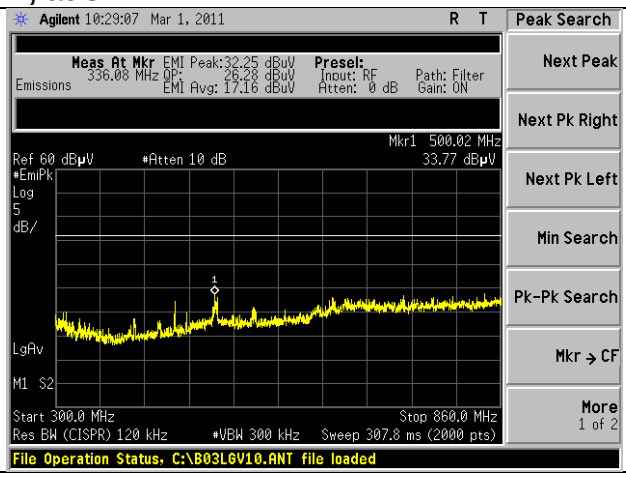


Vertical Polarization

300-860 MHz, at 3m



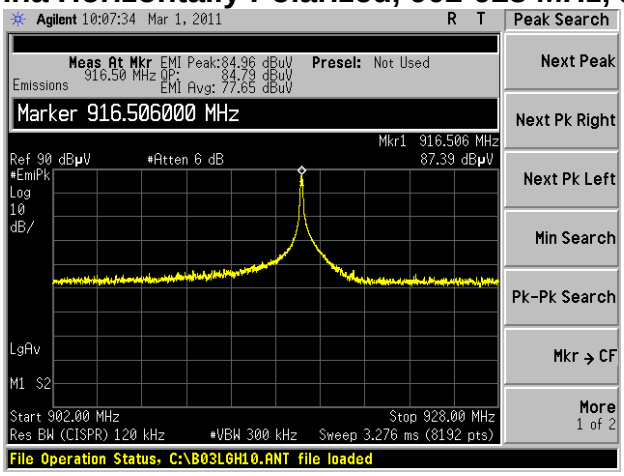
Horizontal Polarization



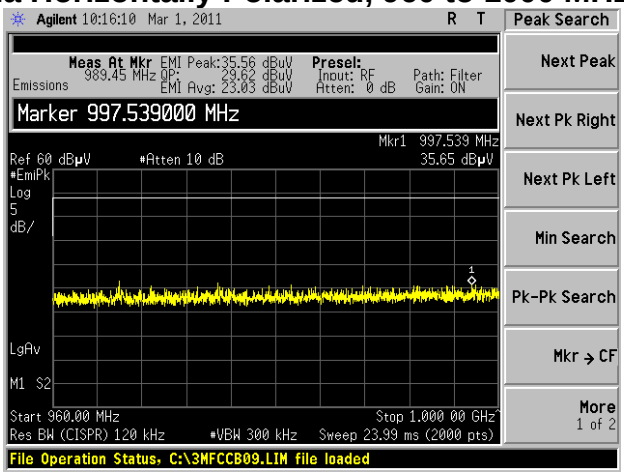
Vertical Polarization

Screen Captures - Radiated Emissions Testing *(continued)*

Antenna Horizontally Polarized, 902-928 MHz, at 3m



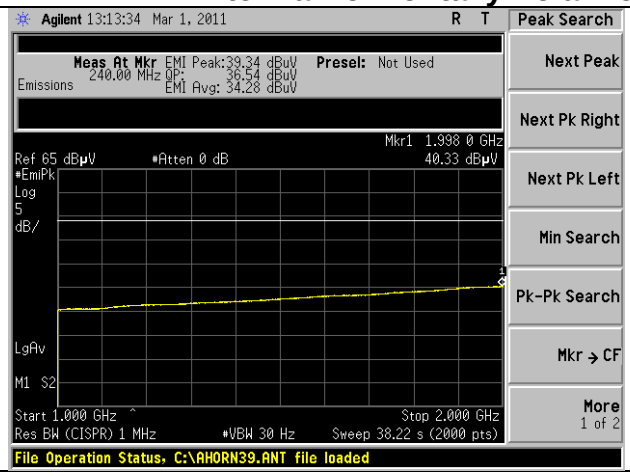
Antenna Horizontally Polarized, 960 to 1000 MHz, at 3m



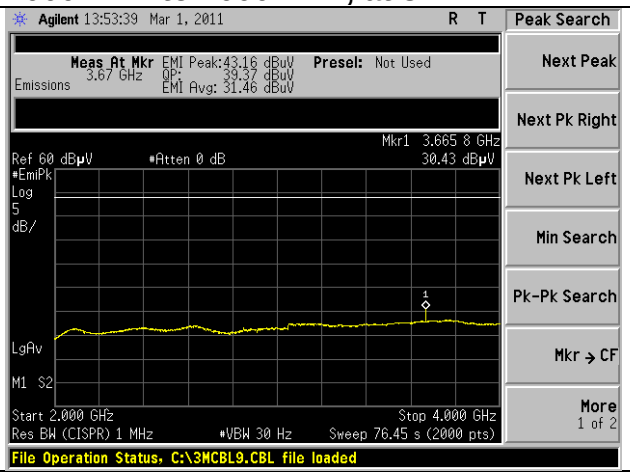
Note: Signature scan of 860 – 902 MHz and 928 – 960 MHz is in Exhibit 8 (Band-edges) of this report.

Screen Captures - Radiated Emissions Testing *(continued)*

Antenna Horizontally Polarized, 1000 MHz to 4000 MHz, at 3m

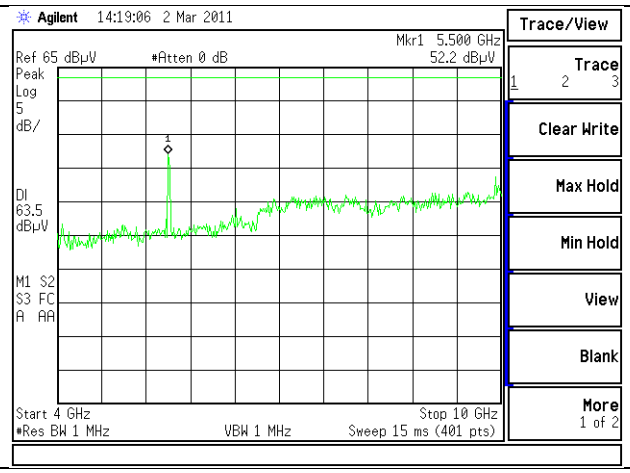


1000 to 2000 MHz

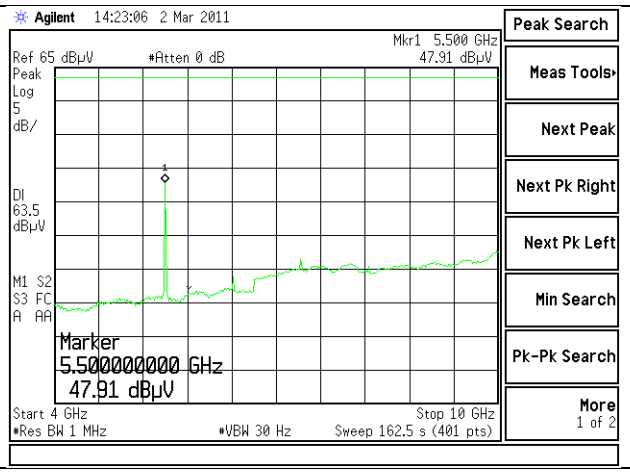


2000 to 4000 MHz

4000-10000 MHz, at 1m



Peak



Average

EXHIBIT 6. CONDUCTED EMISSIONS TEST, AC POWER LINE:

6.1 Test Setup

The test area and setup are in accordance with ANSI C63.4 and with Title 47 CFR, FCC Part 15, Industry Canada RSS-210 and RSS GEN. The EUT was placed on a non-conductive wooden table, with a height of 80 cm above the reference ground plane. The EUT was connected to a USB port of a generic laptop and set to transmit. The Generic laptop power supply was then plugged into a 50Ω (ohm), 50/250 μH Line Impedance Stabilization Network (LISN). The AC power supply of 120V was provided via an appropriate broadband EMI Filter, and then to the LISN line input. Final readings were then taken and recorded. After the EUT was setup and connected to the LISN, the RF Sampling Port of the LISN was connected to a 10 dB Attenuator-Limiter, and then to EMI receiver System. The EMCO LISN used has the ability to terminate the unused port with a 50Ω (ohm) load when switched to either L1 (line) or L2 (neutral).

6.2 Test Procedure

The EUT was investigated in continuous modulated transmit mode for this portion of the testing. The appropriate frequency range and bandwidths were selected on the EMI Receiver, and measurements were made. The bandwidth used for these measurements is 9 kHz, as specified in CISPR 16-1, Section 1, Table 1, for Quasi-Peak and Average detectors in the frequency range of 150 kHz to 30 MHz. Final readings were then taken and recorded.

6.3 Test Equipment Utilized

A list of the test equipment and accessories utilized for the Conducted Emissions test is provided in Appendix A. This list includes calibration information and equipment descriptions. All equipment is calibrated and used according to the operation manuals supplied by the manufacturers. Calibrations of the LISN and Limiter were performed at an IEC/ISO 17025 accredited calibration laboratory, traceable to the SI standard. All cables are calibrated and checked periodically for conformance. The emissions are measured on the EMI System, which has automatic correction for all factors stored in memory and allows direct readings to be taken.

6.4 Test Results

The EUT was found to **MEET** the Conducted Emission requirements of FCC Part 15.207 and RSS GEN 7.2.2 for Conducted Emissions for an Intentional Radiator. See the Data Charts and Graphs for more details of the test results.

6.5 FCC Limits of Conducted Emissions at the AC Mains Ports

Frequency Range (MHz)	Class B Limits (dBµV)		Measuring Bandwidth
	Quasi-Peak	Average	
0.150 -0.50 *	66-56	56-46	RBW = 9 kHz VBW ≥ 9 kHz for QP VBW = 1 Hz for Average
0.5 – 5.0	56	46	
5.0 – 30	60	50	
* The limit decreases linearly with the logarithm of the frequency in this range.			

6.6 CONDUCTED EMISSIONS TEST DATA CHART

Frequency Range inspected: 150 KHz to 30 MHz

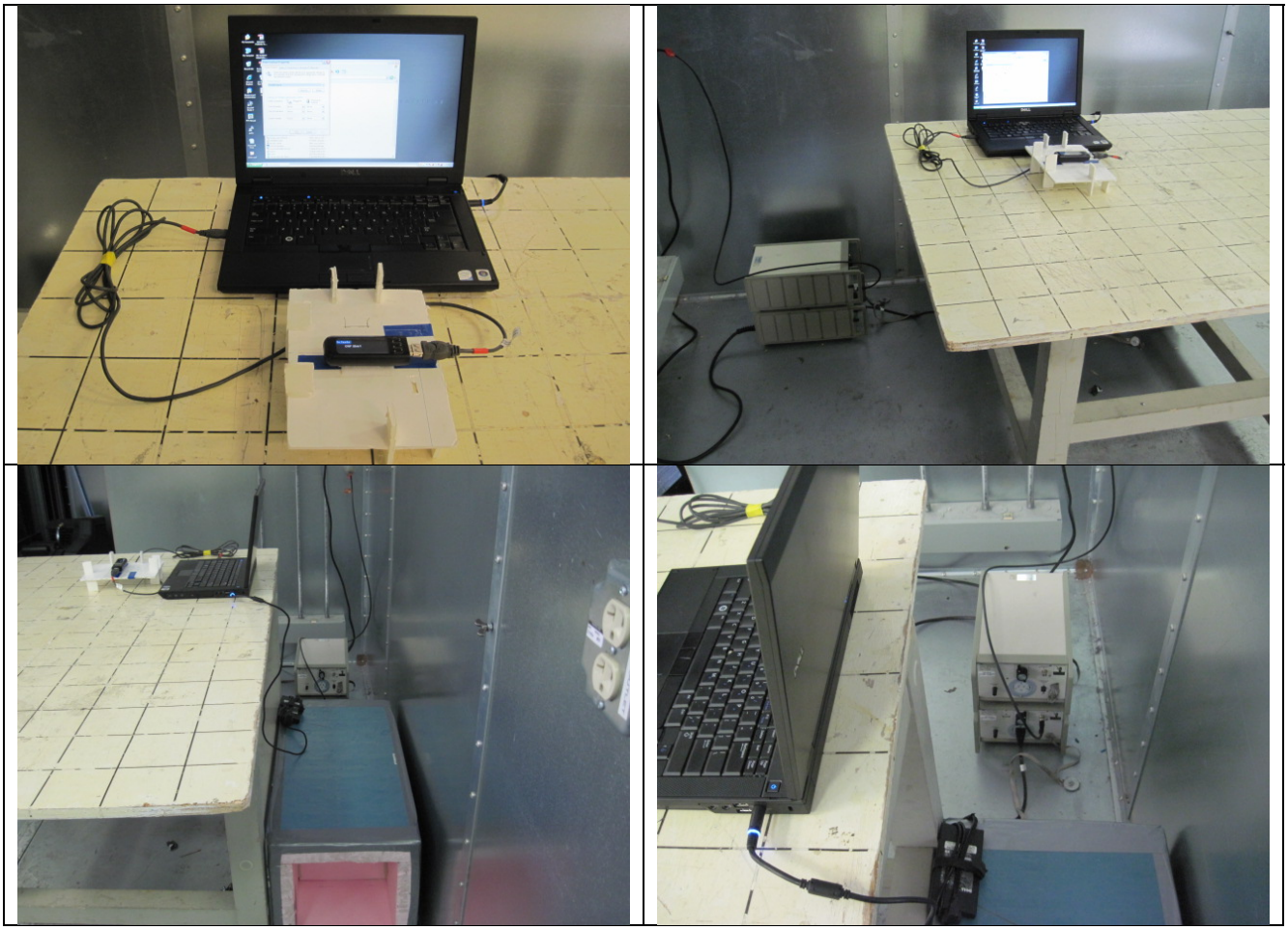
Manufacturer:	Bayer Healthcare, LLC.					
Date(s) of Test:	March 1st 2011					
Project Engineer:	Khairul Aidi Zainal					
Test Engineer:	Khairul Aidi Zainal					
Voltage:	120 VAC					
Operation Mode:	Continuous transmit, modulated					
Environmental Conditions in the Lab:	Temperature: 71° F Relative Humidity: 34 %					
Test Location:	X	AC Mains Test area				Chamber
EUT Placed On:	X	40cm from Vertical Ground Plane				10cm Spacers
	X	80cm above Ground Plane				Other:
Measurements:		Pre-Compliance		Preliminary	X	Final
Detectors Used:		Peak	X	Quasi-Peak	X	Average

		QUASI-PEAK			AVERAGE		
Frequency (MHz)	Line	Q-Peak Reading (dBµV)	Q-Peak Limit (dBµ V)	Quasi-Peak Margin (dB)	Average Reading (dBµV)	Average Limit (dBµ V)	Average Margin (dB)
0.154	**1.0**	**59.4**	**65.8**	**6.4**	**43.1**	**55.8**	**12.7**
0.188	**1.0**	**45.6**	**64.1**	**18.5**	**33.0**	**54.1**	**21.1**
1.329	**1.0**	**39.5**	**56.0**	**16.6**	**22.5**	**46.0**	**23.5**
16.946	**1.0**	**40.3**	**60.0**	**19.7**	**33.4**	**50.0**	**16.6**
0.150	**2.0**	**59.0**	**66.0**	**7.0**	**41.4**	**56.0**	**14.7**
0.159	**2.0**	**54.0**	**65.5**	**11.5**	**34.2**	**55.5**	**21.3**
16.440	**2.0**	**43.4**	**60.0**	**16.6**	**34.4**	**50.0**	**15.6**

Notes:

1) The emissions listed are characteristic of the power supply used, and did not change by the EUT.

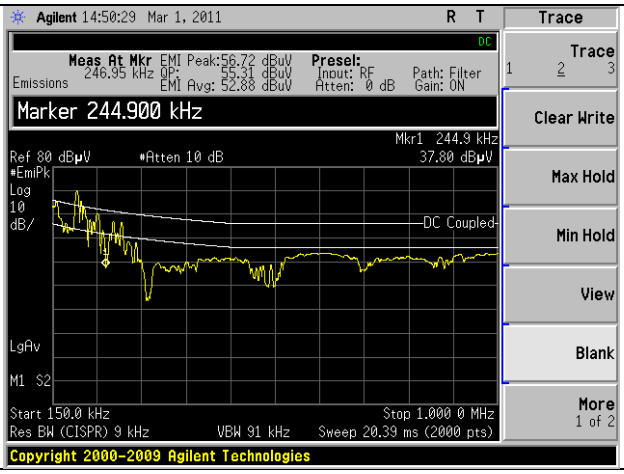
6.7 Test Setup Photo(s) – Conducted Emissions Test



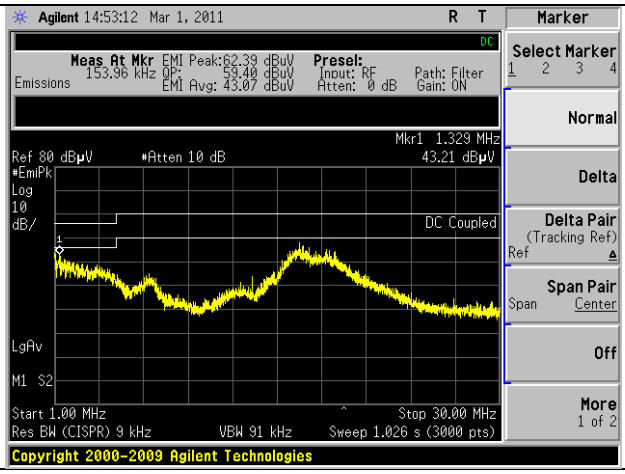
6.8 Screen Captures – Conducted Emissions Test

These screen captures represent Peak Emissions. For conducted emission measurements, both a Quasi-Peak detector function and an Average detector function are utilized. The emissions must meet both the Quasi-peak limit and the Average limit as described in 47 CFR 15.207 and RSS GEN 7.2.2 (Table 2).

Line 1

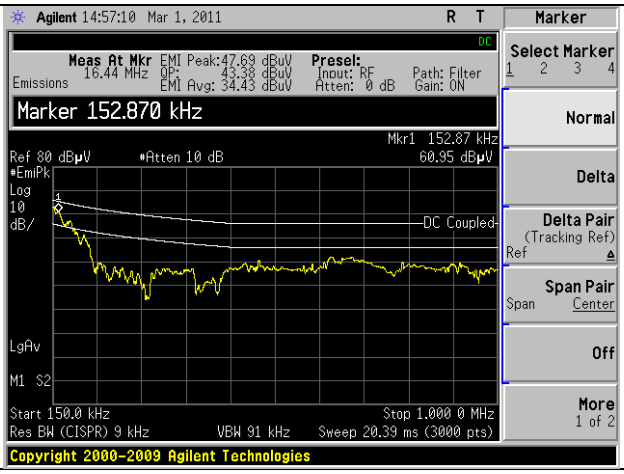


150 kHz to 1 MHz

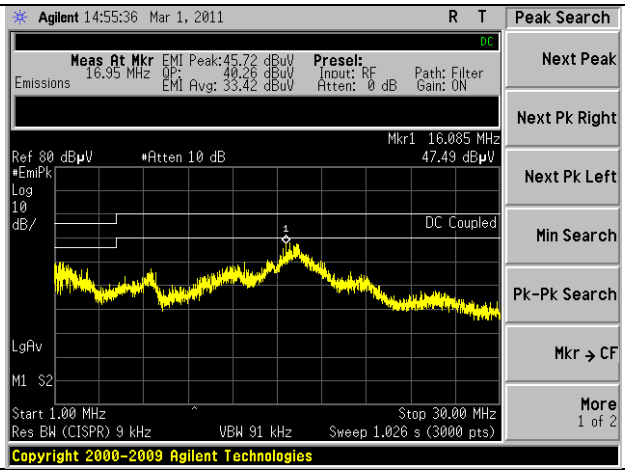


1 MHz to 30 MHz

Line 2



150 kHz to 1 MHz



1 MHz to 30 MHz

EXHIBIT 7. OCCUPIED BANDWIDTH:

7.1 Limits

There are no limits specified. The occupied bandwidth need only be reported.

7.2 Method of Measurements

This test was performed radiated in a 3-meter semi-anechoic chamber. The bandwidth measurement function of the spectrum analyzer was used to measure the 99 % bandwidth of the signal.

The resolution bandwidth was then set to a value that was greater than or equal to 1% of the span.

7.3 Test Data

Center Frequency (MHz)	Measured 99% BW (kHz)
916.5	198.9

7.4 Screen Captures - 99% BANDWIDTH

99% Bandwidth

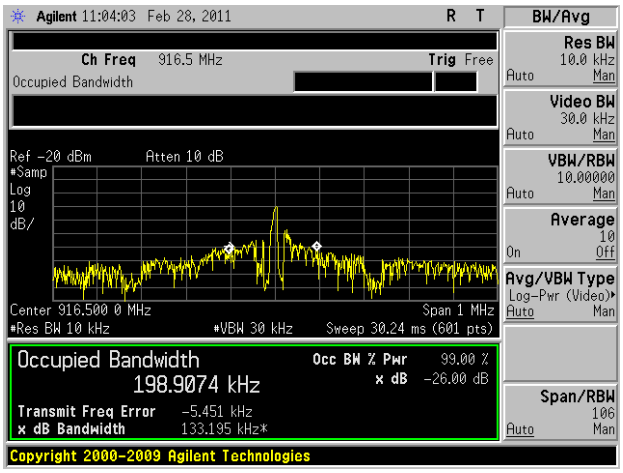


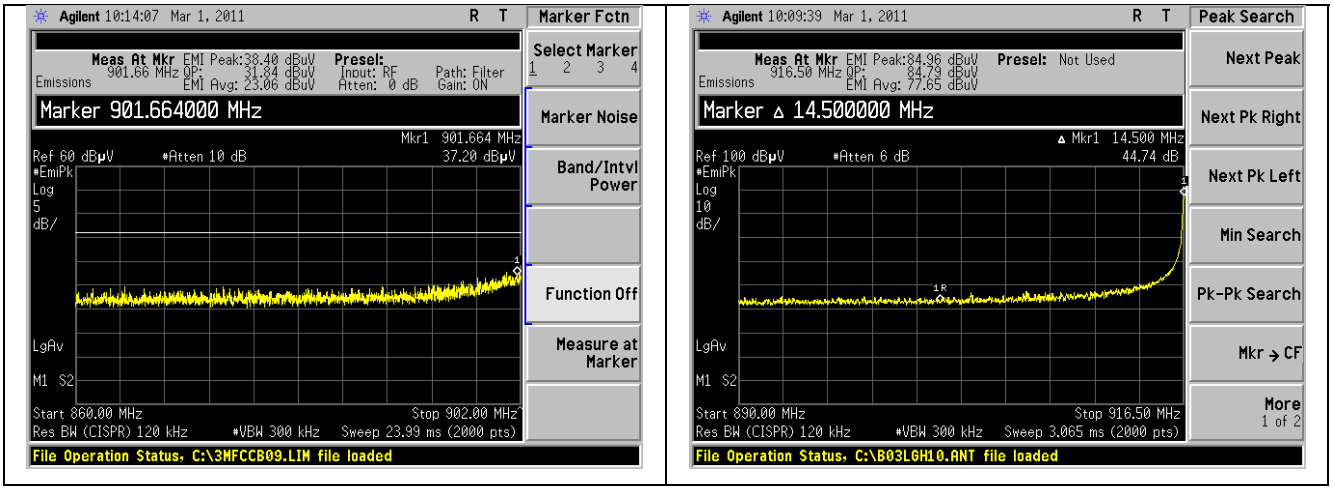
EXHIBIT 8. BAND-EDGE MEASUREMENTS

8.1 Method of Measurements

FCC 15.209(b) and 15.249(d) require a measurement of spurious emission levels to be at least 20 dB lower than the fundamental emission level, in particular at the Band-Edges where the intentional radiator operates. Also, RSS 210 Section 2.2 requires that unwanted emissions meet limits listed in tables 2 and 3 of the same standard and also to the limits in the applicable annex. The following screen captures demonstrate compliance of the intentional radiator at the 902-928 MHz Band-Edges. The EUT was operated in continuous transmit mode with continuous modulation, with internally generated data as the modulating source. The EUT was operated at the lowest channel for the investigation of the lower Band-Edge, and at the highest channel for the investigation of the higher Band-Edge.

Screen Capture Demonstrating Compliance at the **Band-Edges**

Lower Band Edge.



Upper Band Edge

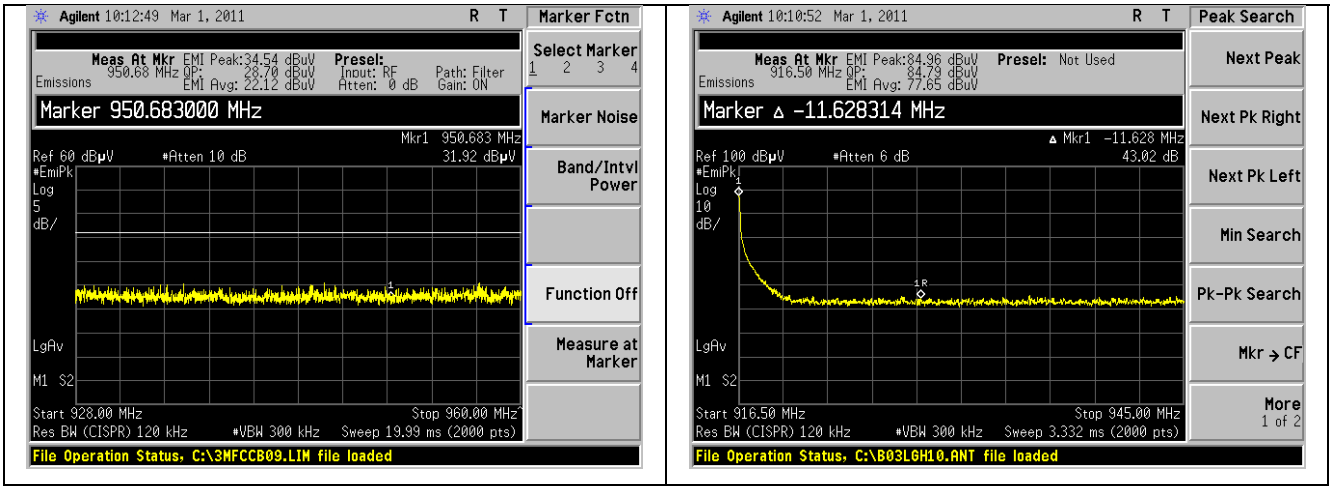


EXHIBIT 9. FREQUENCY & POWER STABILITY OVER VOLTAGE VARIATIONS

The stability of the device was examined as a function of the input voltage available to the EUT. A Spectrum Analyzer was used to measure the frequency at the appropriate frequency markers.

In this case, the EUT is powered via batteries. Therefore, using a variable DC power supply, the voltage was varied between 3.6 and 4.2 VDC as per the specification of the EUT.

A spectrum analyzer was used to measure the frequency at the appropriate frequency markers. For this test, the EUT was placed in continuous transmit CW mode.

	3.6		3.90		4.2		
Channel	Frequency (Hz)	Power (dBm)	Frequency (Hz)	Power (dBm)	Frequency (Hz)	Power (dBm)	Deviation (Hz)
Low	916503825	0.285	916503875	0.278	916503825	0.287	50

The power was then cycled On/Off to observe system response. No unusual response was observed, the emission characteristics were well behaved, and the system returned to the same state of operation as before the power cycle.

The supply voltage was also lowered to a point where the EUT stopped transmitting (2.0 VDC), no unusual response was observed, the emission characteristics were well behaved.

No anomalies were noted in the measured transmit power and the frequency stability was better than 100 ppm during the voltage variation tests.

EXHIBIT 10. MPE CALCULATIONS

The following MPE calculations are based on a PCB trace antenna, with a measured ERP of 87.7dBµV/m (at 3 meters).

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

$$S = \frac{PG}{4\pi R^2}$$

where: S = power density
P = power input to the antenna
G = power gain of the antenna in the direction of interest relative to an isotropic radiator
R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	-7.53	(dBm)
Maximum peak output power at antenna input terminal:	0.177	(mW)
Antenna gain(typical):	0	(dBi)
Maximum antenna gain:	1.000	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	916.5	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	0.6	(mW/cm^2)
Power density at prediction frequency:	0.000035	(mW/cm^2)

Margin of Compliance at 20 cm = 42.3 dB

APPENDIX A

LS RESEARCH LLC
Wireless Product Development
Equipment Calibration

Date : 23-Feb-2011 Type Test : FUNDAMENTAL Job # : C-1117

Prepared By: AIDI Customer : Bayer Healthcare Quote #: 311043

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	AA 960078	Log Periodic Antenna	EMCO	93146	9701-4855	10/19/2010	10/19/2011	Active Calibration
2	EE 960157	3Hz-13.2GHz Spectrum Analyzer	Agilent	E4445A	MY48250225	6/7/2010	6/7/2011	Active Calibration
3	EE 960158	RF Preselecter	Agilent	N9039A	MY46520110	6/7/2010	6/7/2011	Active Calibration

Project Engineer: Aidi Quality Assurance: Mike

LS RESEARCH LLC
Wireless Product Development
Equipment Calibration

Date : 23-Feb-2011 Type Test : Spurious Emissions Job # : C-1117

Prepared By: AIDI Customer : Bayer Healthcare Quote #: 311043

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	AA 960078	Log Periodic Antenna	EMCO	93146	9701-4855	10/19/2010	10/19/2011	Active Calibration
2	EE 960157	3Hz-13.2GHz Spectrum Analyzer	Agilent	E4445A	MY48250225	6/7/2010	6/7/2011	Active Calibration
3	EE 960158	RF Preselecter	Agilent	N9039A	MY46520110	6/7/2010	6/7/2011	Active Calibration
4	AA 960150	Bicon Antenna	ETS	3110B	0003-3346	10/19/2010	10/19/2011	Active Calibration
5	AA 960007	Double Ridge Horn Antenna	EMCO	3115	9311-4138	11/9/2010	11/9/2011	Active Calibration
6	AA 960158	Double Ridge Horn Antenna	EMCO	3117	109300	8/19/2010	8/19/2011	Active Calibration
7	EE 960159	0.8 - 21GHz LNA	Mini-Circuits	ZVA-213X-S+	740411007	8/19/2010	8/19/2011	Active Calibration
8	AA 960156	900MHz High Pass Filter	KWM	HPF-L-14185	unknow n	6/4/2010	6/4/2011	Active Calibration
9	ee 960073	Spectrum Analyzer	Agilent	E4446A	US45300564	9/22/2010	9/22/2011	Active Calibration
10	aa 960144	Phaseflex	Gore	EKD01D010720	5800373	6/4/2010	6/4/2011	Active Calibration

Project Engineer: Aidi Quality Assurance: Peter

LS RESEARCH LLC
Wireless Product Development
Equipment Calibration

Date : 23-Feb-2011 Type Test : Power Spectral Density Job # : C-1117

Prepared By: Aidi Customer : Bayer Healthcare Quote #: 311043

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	aa 960144	Phaseflex	Gore	EKD01D010720	5800373	6/4/2010	6/4/2011	Active Calibration
2	cc 000221c	Spectrum Analyzer	HP	E4407B	US39160256	3/15/2010	3/15/2011	Active Calibration

Project Engineer: Aidi Quality Assurance: Mike

LS RESEARCH LLC
Wireless Product Development
Equipment Calibration

Date : 23-Feb-2011 Type Test : Occupied Bandwidth (6dB & 20dB) Job # : C-1117

Prepared By: AIDI Customer : Bayer Healthcare Quote #: 311043

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	AA 960078	Log Periodic Antenna	EMCO	93146	9701-4855	10/19/2010	10/19/2011	Active Calibration
2	EE 960157	3Hz-13.2GHz Spectrum Analyzer	Agilent	E4445A	MY48250225	6/7/2010	6/7/2011	Active Calibration
3	EE 960158	RF Preselecter	Agilent	N9039A	MY46520110	6/7/2010	6/7/2011	Active Calibration

Project Engineer: Aidi Quality Assurance: Peter

LS RESEARCH LLC
Wireless Product Development
Equipment Calibration

Date : 23-Feb-2011 Type Test : Conducted Emissions Job # : C-1117

Prepared By: AIDI Customer : Bayer Healthcare Quote #: 311043

No.	Asset #	Description	Manufacturer	Model #	Serial #	Cal Date	Cal Due Date	Equipment Status
1	EE 960157	3Hz-13.2GHz Spectrum Analyzer	Agilent	E4445A	MY48250225	6/7/2010	6/7/2011	Active Calibration
2	EE 960158	RF Preselecter	Agilent	N9039A	MY46520110	6/7/2010	6/7/2011	Active Calibration
3	AA 960072	Transient Limiter	HP	11947A	3107A02515	10/8/2010	10/8/2011	Active Calibration
4	AA 960008	LISN	EMCO	3816/2NM	9701-1057	1/4/2011	1/4/2012	Active Calibration

Project Engineer: Aidi Quality Assurance: Mike

APPENDIX B

TEST STANDARDS – CURRENT PUBLICATION DATES RADIO

STANDARD #	DATE	Am. 1	Am. 2
ANSI C63.4	2009		
ANSI C63.10	2009		
CISPR 11	2009-05	2009-12 P	
CISPR 12	2007-05		
CISPR 14-1	2005-11	2008-11	
CISPR 14-2	2001-11	2001-11	2008-05
CISPR 16-1-1 Note 1	2010-01		
CISPR 16-1-2 Note 1	2003	2004-04	2006-07
CISPR 22	2008-09		
CISPR 24	1997-09	2001-07	2002-10
EN 55011	2007-05		
EN 55014-1	2006		
EN 55014-2	1997		
EN 55022	2006	2007	
EN 60601-1-2	2007-03		
EN 61000-3-2	2006-05		
EN 61000-3-3	2008-12		
EN 61000-4-2	2009-05		
EN 61000-4-3	2006-07	2008-05	
EN 61000-4-4	2004		
EN 61000-4-5	2006-12		
EN 61000-4-6	2009-05		
EN 61000-4-8	1994	2001	
EN 61000-4-11	2004-10		
EN 61000-6-1	2007-02		
EN 61000-6-2	2005-12		
EN 61000-6-3	2007-02		
EN 61000-6-4	2007-02		
FCC 47 CFR, Parts 0-15, 18, 90, 95	2010-10		
FCC Public Notice DA 00-1407	2000		
FCC ET Docket # 99-231	2002		
FCC Procedures	2007		
ICES 001	2006-06		
ICES 002	2009-08		
ICES 003	2004-02		
IEC 60601-1-2 Note 1	2007-03		
IEC 61000-3-2	2005-11	2008-03	2009-02
IEC 61000-3-3	2008-06		
IEC 61000-4-2	2008-12		
IEC 61000-4-3	2008-04	incl in 2008-04	2009-12 FD

STANDARD #	DATE	Am. 1	Am. 2
IEC 61000-4-4	2004-07	2010-10	
IEC 61000-4-5	2005-11		
IEC 61000-4-6	2008-10		
IEC 61000-4-8	2009-09		
IEC 61000-4-11	2004-03		
IEC 61000-6-1	2005-03		
IEC 61326-1	2006-06		
ISO 14982	1998-07		
MIL Std. 461E	1999-08		
RSS GEN	2010-12		
RSS 119	2007-06		
RSS 123	1999-11		
RSS 125	2000-03		
RSS 131	2003-07		
RSS 136	2002-10		
RSS 137	2009-02		
RSS 210	2010-12		
RSS 213	2005-12		
RSS 243	2005-11		
RSS 310	2007-06		

Note 1: Test not on LSR Scope of Accreditation.

APPENDIX C
Uncertainty Statement

This uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level, using a coverage factor of k=2.

Table of Expanded Uncertainty Values, (K=2) for Specified Measurements

Measurement Type	Particular Configuration	Uncertainty Values
Radiated Emissions	3 – Meter chamber, Biconical Antenna	4.24 dB
Radiated Emissions	3-Meter Chamber, Log Periodic Antenna	4.8 dB
Radiated Emissions	10-Meter OATS, Biconical Antenna	4.18 dB
Radiated Emissions	10-Meter OATS, Log Periodic Antenna	3.92 dB
Conducted Emissions	Shielded Room/EMCO LISN	1.60 dB
Radiated Immunity	3 Volts/Meter in 3-Meter Chamber	1.128 Volts/Meter
Conducted Immunity	3 Volts level	1.0 V

Appendix D

EUT Programming Instructions.

In order to start the RF eval tests:

1. Power up with ‘Menu’ button
2. Select ‘Setup’
3. Scroll down to ‘Customer Service’
4. Press ‘OK’
5. Input the necessary code.
6. Verify blue screen header reads “ Customer Service * ”
7. Scroll down to RF Eval Test, Press ‘O.K’
8. Choose either ‘Tx’ for transmit tests options, or ‘Rx’ for receive test options.
9. In ‘Tx’ option, choose CW for continuous un-modulated transmit or CWP for continuous modulated (OOK) transmit.