



**FCC OET BULLETIN 65 SUPPLEMENT C 01-01  
IEEE STD 1528:2003**

**SAR EVALUATION REPORT**

*For*  
**802.11bgn 2x2 HT20 & HT40 PCIe Mini Card Transceiver  
(Tested inside of Panasonic Tablet PC CF-H2)**

**MODEL NUMBER: WL11E  
FCC ID: ACJ9TGWL11E**

**REPORT NUMBER: 11J13970-1  
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**NVLAP LAB CODE 200065-0**

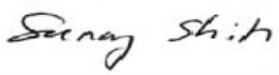

Revision History

Rev.	Issue Date	Revisions	Revised By
--	August 30, 2011	Initial Issue	--

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### 1. Attestation of Test Results

Applicant name:	Panasonic Corporation Of North America		
EUT description:	802.11bgn HT20 & HT40 2x2 PCIe Minicard Transceiver (Tested inside of Panasonic Tablet PC, Model CF-H2)		
Model number:	WL11E		
Device category:	Portable		
Exposure category:	General Population/Uncontrolled Exposure		
Date tested:	August 9, 2011		
FCC Rule Parts	Freq. Range [MHz]	Highest 1g SAR (W/kg)	Limit (W/kg)
15.247	2412 – 2462	0.761 W/kg (Primary Portrait)	1.6
Applicable Standards			Test Results
OET Bulletin 65 Supplement C 01-01, IEEE STD 1528: 2003			Pass
<p>Compliance Certification Services, Inc. (UL CCS) tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL CCS based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.</p> <p><b>Note:</b> The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL CCS will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government (NIST Handbook 150, Annex A). This report is written to support regulatory compliance of the applicable standards stated above.</p>			
Approved & Released For CCS By:		Tested By:	
			
Sunny Shih Engineering Team Leader Compliance Certification Services (UL CCS)		Tomochika Sato SAR Engineer Compliance Certification Services (UL CCS)	

## 2. Test Methodology

The tests documented in this report were performed in accordance with FCC OET Bulletin 65 Supplement C Edition 01-01, IEEE STD 1528:2003, and the following KDB Procedures.

- 248227 SAR measurement procedures for 802.11a/b/g transmitters
- 447498 D01 Mobile Portable RF Exposure v04

## 3. Facilities and Accreditation

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

UL CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://www.ccsemc.com>

## 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 recognized national standards.

Name of Equipment	Manufacturer	Type/Model	Serial No.	Cal. Due date		
				MM	DD	Year
Robot - Six Axes	Stäubli	TX90 XL	N/A	N/A		
Robot Remote Control	Stäubli	CS8C	N/A	N/A		
DASY5 Measurement Server	SPEAG	SEUMS014AA	1064	N/A		
Probe Alignment Unit	SPEAG	LB5 / 80	N/A	N/A		
Oval Flat Phantom (ELI v5.0 (A))	SPEAG	QD OVA001 BB	1117	N/A		
Oval Flat Phantom (ELI v5.0 (B))	SPEAG	QD OVA001 BB	1121	N/A		
Dielectric Probe Kit	HP	85070C	N/A	N/A		
S-Parameter Network Analyzer	Agilent	8753ES-6	8753ES-6	11	22	2011
Signal Generator	Agilent	8753ES-6	8753ES-6	11	22	2011
E-Field Probe	SPEAG	EX3DV4	3772	5	3	2012
Thermometer	ERTCO	639-1S	1718	7	19	2012
Data Acquisition Electronics	SPEAG	DAE4	1257	5	3	2012
System Validation Dipole	SPEAG	*D2450V2	706	4	19	2012
Amplifier	Mini-Circuits	ZVE-8G	90606	N/A		
Amplifier	Mini-Circuits	ZHL-42W	D072701-5	N/A		
Simulating Liquid	SPEAG	M2450	N/A	Within 24 hrs of first test		

#### Note(s):

\*Per KDB 450824 D02 requirements for dipole calibration, UL CCS has adopted two years calibration intervals. On annual basis, each measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole
2. System validation with specific dipole is within 10% of calibrated value.
3. Return-loss is within 20% of calibrated measurement. (Verification data include with D2450V2 calibration certificate)
4. Impedance is within 5Ω of calibrated measurement. (Verification data include with dipole D2450V2 calibration certificate)

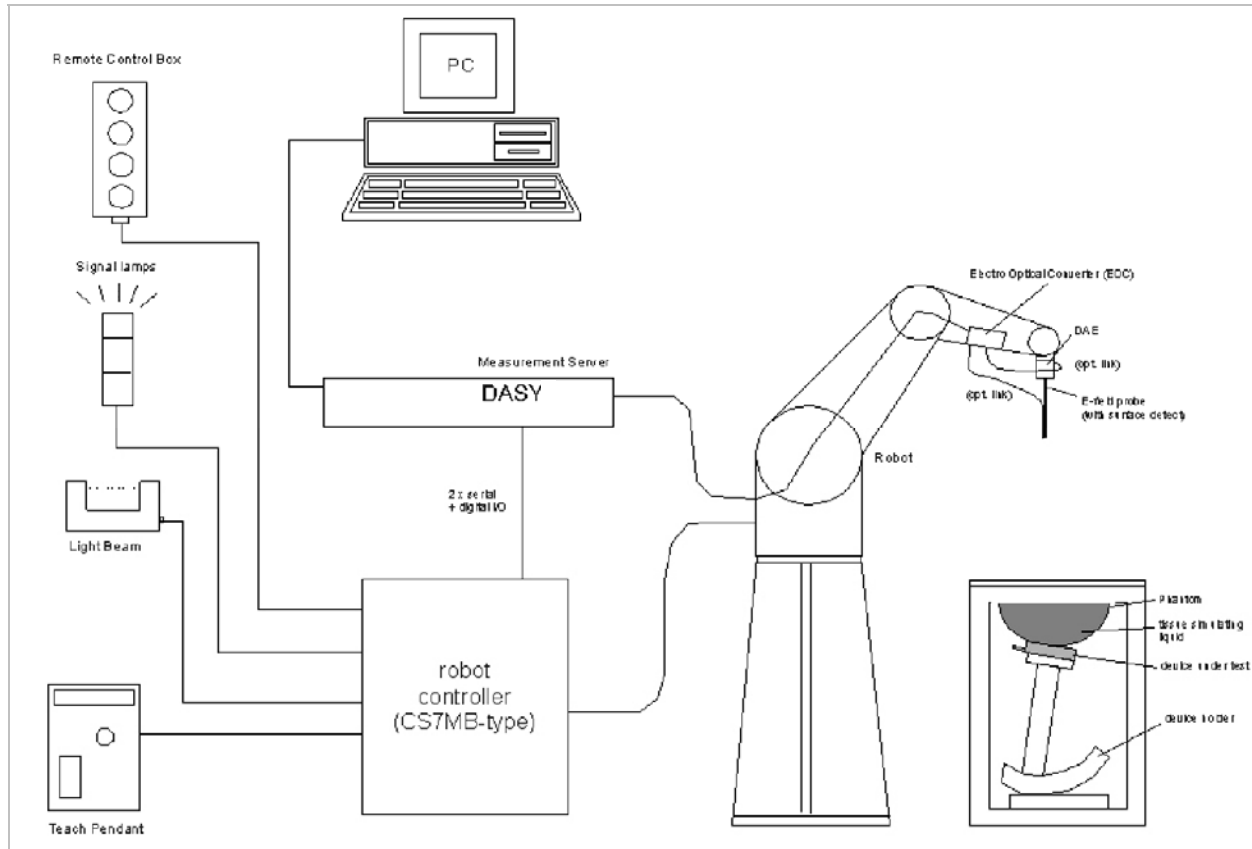
## 4.2. Measurement Uncertainty

Measurement uncertainty for 300 MHz to 3 GHz averaged over 1 gram					
Component	error, %	Probe Distribution	Divisor	Sensitivity	U (X), %
<b>Measurement System</b>					
Probe Calibration (k=1)	5.50	Normal	1	1	5.50
Axial Isotropy	1.15	Rectangular	1.732	0.7071	0.47
Hemispherical Isotropy	2.30	Rectangular	1.732	0.7071	0.94
Boundary Effect	0.90	Rectangular	1.732	1	0.52
Probe Linearity	3.45	Rectangular	1.732	1	1.99
System Detection Limits	1.00	Rectangular	1.732	1	0.58
Readout Electronics	0.30	Normal	1	1	0.30
Response Time	0.80	Rectangular	1.732	1	0.46
Integration Time	2.60	Rectangular	1.732	1	1.50
RF Ambient Conditions - Noise	3.00	Rectangular	1.732	1	1.73
RF Ambient Conditions - Reflections	3.00	Rectangular	1.732	1	1.73
Probe Positioner Mechanical Tolerance	0.40	Rectangular	1.732	1	0.23
Probe Positioning with respect to Phantom	2.90	Rectangular	1.732	1	1.67
Extrapolation, Interpolation and Integration	1.00	Rectangular	1.732	1	0.58
<b>Test Sample Related</b>					
Test Sample Positioning	2.90	Normal	1	1	2.90
Device Holder Uncertainty	3.60	Normal	1	1	3.60
Output Power Variation - SAR Drift	5.00	Rectangular	1.732	1	2.89
<b>Phantom and Tissue Parameters</b>					
Phantom Uncertainty (shape and thickness)	4.00	Rectangular	1.732	1	2.31
Liquid Conductivity - deviation from target	5.00	Rectangular	1.732	0.64	1.85
Liquid Conductivity - measurement	3.93	Normal	1	0.64	2.52
Liquid Permittivity - deviation from target	5.00	Rectangular	1.732	0.6	1.73
Liquid Permittivity - measurement	3.06	Normal	1	0.6	1.84
Combined Standard Uncertainty U <sub>c</sub> (y) =					9.94
Expanded Uncertainty U, Coverage Factor = 2, > 95 % Confidence =				19.88	%
Expanded Uncertainty U, Coverage Factor = 2, > 95 % Confidence =				1.58	dB

## 5. Equipment Under Test

802.11n 2x2 PCIe Minicard Transceiver, Model WL11E (Tested inside of Panasonic Tablet PC, Model CF-H2)					
Normal operation:	Multiple display orientations supporting both portrait and landscape configurations.				
Antenna tested:	<table border="0"><tr><td><u>Manufactured</u></td><td><u>Part number</u></td></tr><tr><td>Panasonic</td><td>Main (Chain A): DFUP2070ZA(1) Aux (Chain B): DFUP2070ZA(2)</td></tr></table>	<u>Manufactured</u>	<u>Part number</u>	Panasonic	Main (Chain A): DFUP2070ZA(1) Aux (Chain B): DFUP2070ZA(2)
<u>Manufactured</u>	<u>Part number</u>				
Panasonic	Main (Chain A): DFUP2070ZA(1) Aux (Chain B): DFUP2070ZA(2)				
Antenna-to-antenna/user separation distances:	See Section 15 for details of antenna locations and separation distances.				
Assessment for SAR evaluation for Simultaneous transmission:	WiFi can transmit simultaneously with Bluetooth. Due to Bluetooth's (FCC ID: ACJ9TGBT11A; IC: 216A-CFBT11A) maximum output < 60/f(GHz) mW and stand-alone SAR is not required, thus WiFi and Bluetooth are not considered as co-located transmitters each other WWAN co-located RF exposure assessment will be addressed in a separate FCC application filed under WWAN application.				

## 6. System Specification



### The DASY system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot (Stäubli RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
- A computer operating Windows 2000 or Windows XP.
- DASY software.
- Remote controls with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
- The SAM twin phantom enabling testing left-hand and right-hand usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- Validation dipole kits allowing validating the proper functioning of the system.

## 7. Composition of Ingredients for Tissue Simulating Liquids

The following tissue formulations are provided for reference only as some of the parameters have not been thoroughly verified. The composition of ingredients may be modified accordingly to achieve the desired target tissue parameters required for routine SAR evaluation.

Ingredients (% by weight)	Frequency (MHz)									
	450		835		915		1900		2450	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	38.56	51.16	41.45	52.4	41.05	56.0	54.9	40.4	62.7	73.2
Salt (NaCl)	3.95	1.49	1.45	1.4	1.35	0.76	0.18	0.5	0.5	0.04
Sugar	56.32	46.78	56.0	45.0	56.5	41.76	0.0	58.0	0.0	0.0
HEC	0.98	0.52	1.0	1.0	1.0	1.21	0.0	1.0	0.0	0.0
Bactericide	0.19	0.05	0.1	0.1	0.1	0.27	0.0	0.1	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.8	0.0
DGBE	0.0	0.0	0.0	0.0	0.0	0.0	44.92	0.0	0.0	26.7
Dielectric Constant	43.42	58.0	42.54	56.1	42.0	56.8	39.9	54.0	39.8	52.5
Conductivity (S/m)	0.85	0.83	0.91	0.95	1.0	1.07	1.42	1.45	1.88	1.78

Salt: 99+% Pure Sodium Chloride

Sugar: 98+% Pure Sucrose

Water: De-ionized, 16 MΩ+ resistivity

HEC: Hydroxyethyl Cellulose

DGBE: 99+% Di(ethylene glycol) butyl ether, [2-(2-butoxyethoxy)ethanol]

Triton X-100 (ultra pure): Polyethylene glycol mono [4-(1,1, 3, 3-tetramethylbutyl)phenyl]ether

### Simulating Liquids for 5 GHz, Manufactured by SPEAG

Ingredients	(% by weight)
Water	78
Mineral oil	11
Emulsifiers	9
Additives and Salt	2

## 8. Tissue Dielectric Parameters

The simulating liquids are checked at the beginning of a series of SAR measurements to determine if the dielectric parameters are within the tolerances of the specified target values. For frequencies in 300 MHz to just under 2 GHz, the measured conductivity and relative permittivity were within  $\pm 5\%$  of the target values. For frequencies above 2 GHz the measured conductivity was within  $\pm 5\%$  of the target values. The measured relative permittivity tolerance was within  $\pm 10\%$  of the target value.

### Reference Values of Tissue Dielectric Parameters for Head & Body Phantom

The body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations and extrapolated according to the head parameters specified in IEEE Standard 1528.

Target Frequency (MHz)	Head		Body	
	$\epsilon_r$	$\sigma$ (S/m)	$\epsilon_r$	$\sigma$ (S/m)
150	52.3	0.76	61.9	0.8
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.9	55.2	0.97
900	41.5	0.97	55	1.05
915	41.5	0.98	55	1.06
1450	40.5	1.2	54	1.3
1610	40.3	1.29	53.8	1.4
1800 – 2000	40	1.4	53.3	1.52
2450	39.2	1.8	52.7	1.95
3000	38.5	2.4	52	2.73
5800	35.3	5.27	48.2	6

( $\epsilon_r$  = relative permittivity,  $\sigma$  = conductivity and  $\rho = 1000 \text{ kg/m}^3$ )

### Reference Values of Tissue Dielectric Parameters for Body Phantom (for 3000 MHz – 5800 MHz)

In the current guidelines and draft standards for compliance testing of mobile phones (i.e., IEEE P1528, OET 65 Supplement C), the dielectric parameters suggested for head and body tissue simulating liquid are given only at 3.0 GHz and 5.8 GHz. As an intermediate solution, dielectric parameters for the frequencies between 5 to 5.8 GHz were obtained using linear interpolation (see table below).

SPEAG has developed suitable head and body tissue simulating liquids consisting of the following ingredients: de-ionized water, salt and a special composition including mineral oil and an emulsifier. Dielectric parameters of these liquids were measured using an HP 8570C Dielectric Probe Kit in conjunction with an HP 8753ES Network Analyzer (30 kHz – 6G Hz). The differences with respect to the interpolated values were well within the desired  $\pm 5\%$  for the whole 5 to 5.8 GHz range.

f (MHz)	Body Tissue		Reference
	rel. permittivity	conductivity	
3000	52.0	2.73	Standard
5100	49.1	5.18	Interpolated
5200	49.0	5.30	Interpolated
5300	48.9	5.42	Interpolated
5400	48.7	5.53	Interpolated
5500	48.6	5.65	Interpolated
5600	48.5	5.77	Interpolated
5700	48.3	5.88	Interpolated
5800	48.2	6.00	Standard

( $\epsilon_r$  = relative permittivity,  $\sigma$  = conductivity and  $\rho = 1000 \text{ kg/m}^3$ )

### 8.1. Liquid Check Results

Measured by: Tomochika Sato

Date	Freq. (MHz)	Liquid Parameters		Measured	Target	Delta (%)	Limit ±(%)	
8/9/2011	Body 2450	e'	50.6315	Relative Permittivity (ε <sub>r</sub> ):	50.63	52.70	-3.93	5
		e''	14.7523	Conductivity (σ):	2.01	1.95	3.06	5

**Liquid Check**

Ambient temperature: 24 deg. C; Liquid temperature: 23 deg. C; Relative humidity = 41%  
 August 09, 2011 10:36 AM

Frequency	e'	e''
2400000000.	50.6404	14.6279
2405000000.	50.6233	14.6615
2410000000.	50.6111	14.6900
2415000000.	50.6025	14.7149
2420000000.	50.6018	14.7327
2425000000.	50.6049	14.7465
2430000000.	50.6125	14.7545
2435000000.	50.6190	14.7612
2440000000.	50.6283	14.7610
2445000000.	50.6329	14.7594
<b>2450000000.</b>	<b>50.6315</b>	<b>14.7523</b>
2455000000.	50.6245	14.7490
2460000000.	50.6102	14.7458
2465000000.	50.5906	14.7494
2470000000.	50.5628	14.7610
2475000000.	50.5293	14.7794
2480000000.	50.4917	14.8083
2485000000.	50.4532	14.8435
2490000000.	50.4127	14.8881
2495000000.	50.3758	14.9361
2500000000.	50.3443	14.9864

The conductivity (σ) can be given as:

$$\sigma = \omega \epsilon_0 e'' = 2 \pi f \epsilon_0 e''$$

where  $f = \text{target } f * 10^6$

$$\epsilon_0 = 8.854 * 10^{-12}$$

## 9. System Verification

The system performance check is performed prior to any usage of the system in order to verify SAR system accuracy. The system performance check verifies that the system operates within its specifications of  $\pm 10\%$ .

### System Performance Check Measurement Conditions

- The measurements were performed in the flat section of the SAM twin phantom filled with Body simulating liquid of the following parameters.
- The DASY5 system with an Isotropic E-Field Probe EX3DV4-SN: 3772 was used for the measurements.
- The dipole was mounted on the small tripod so that the dipole feed point was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 10 mm (above 1 GHz) and 15 mm (below 1 GHz) from dipole center to the simulating liquid surface.
- The coarse grid with a grid spacing of 15 mm was aligned with the dipole.  
 For 5 GHz band - The coarse grid with a grid spacing of 10 mm was aligned with the dipole.
- Special 7x7x7 (2.4 GHz) fine cube was chosen for cube integration and Special 8x8x10 (5 GHz) fine cube was chosen for cube integration
- Distance between probe sensors and phantom surface was set to 2.5 mm.  
 For 5 GHz band - Distance between probe sensors and phantom surface was set to 2.5 mm
- The dipole input powers (forward power) were 100 mW.
- The results are normalized to 1 W input power.

Reference SAR Values for HEAD & BODY-tissue from calibration certificate of SPEAG.

System validation dipole	Cal. certificate #	Cal. date	SAR Avg (mW/g)			
			Tissue:	Freq.	Head	Body
D2450V2 SN 706	D2450V2-706_Apr10	4/19/10	1g SAR:	2.4 GHz	51.6	52.4
			10g SAR:		24.4	24.5

### 9.1. System Check Results

System validation dipole	Date Tested	Measured (Normalized to 1 W)		Target	Delta (%)	Tolerance (%)
		Tissue:	Body			
D2450V2	08/09/11	1g SAR:	55.0	52.4	4.96	$\pm 10$
		10g SAR:	25.3	24.5	3.27	

## 10. SAR Measurement Procedures

### Step 1: Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The Minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. The minimum distance of probe sensors to surface is 2.1 mm. This distance cannot be smaller than the Distance of sensor calibration points to probe tip as defined in the probe properties (for example, 1.2 mm for an EX3DV3 probe type).

### Step 2: Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY5 software can find the maximum locations even in relatively coarse grids. When an Area Scan has measured all reachable points, it computes the field maximal found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE Standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan). If only one Zoom Scan follows the Area Scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of Zoom Scans has to be increased accordingly.

### Step 3: Zoom Scan

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The Zoom Scan measures  $\geq 7 \times 7 \times 9$  (above 4.5 GHz) or  $5 \times 5 \times 7$  (below 3 GHz) points within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1 g and 10 g and displays these values next to the job's label.

### Step 4: Power drift measurement

The Power Drift Measurement measures the field at the same location as the most recent power reference measurement within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement. This allows a user to monitor the power drift of the device under test within a batch process. The measurement procedure is the same as Step 1.

### Step 5: Z-Scan

The Z Scan measures points along a vertical straight line. The line runs along the Z-axis of a one-dimensional grid. In order to get a reasonable extrapolation, the extrapolated distance should not be larger than the step size in Z-direction.

## 11. RF Output Power Verification

### 11.1. RF Output Power for 2.4 GHz

2.4 GHz Band							
Mode	Rate	Ch. #	Freq. (MHz)	Target Pwr (dBm)		Actual Measured Pwr	
				Chain A	Chain B	Chain A	Chain B
802.11b	1 Mbps	1	2412	17.0			
		6	2437	<b>20.0</b>		<b>20.18</b>	
		11	2462	17.0			
		1	2412		17.0		
		6	2437		<b>20.0</b>		<b>20.17</b>
		11	2462		17.0		
802.11g	6 Mbps	1	2412	14.0			
		6	2437	<b>20.0</b>		<b>20.46</b>	
		11	2462	14.0			
		1	2412		14.0		
		6	2437		<b>20.0</b>		<b>20.25</b>
802.11n HT20	MCS 0	1	2412	10.0	10.0		
		6	2437	16.0	16.0	16.50	16.44
		11	2462	10.0	10.0		
802.11n HT40	MCS0	3	2422	8.0	8.0		
		6	2437	14.0	14.0	14.11	14.39
		9	2450	8.0	8.0		

**Note(s):**

1. The modes with highest output power channel were chosen for the conducted output power.
2. Refer to original report (FCC ID: ACJ9TGWL11E) for target average power information as documented in 8/24/2011 original filing.

## 12. Summary of Test Configurations

Configuration	Antenna-to-User distance	SAR Require	Comments
<b>(1) Bottom Face</b>	62.28 mm From Main (Chain A) to user.	Yes	
	14.37 mm From Aux (Chain B) to user.	Yes	
Primary Landscape	200 mm From Main (Chain A) to user.	No	This is not the most conservative antenna to user distance at edge mode.
	30 mm From Aux (Chain B) to user.	No	This is not the most conservative antenna to user distance at edge mode.
Secondary Landscape	48 mm From Main (Chain A) to user.	No	This is not the most conservative antenna to user distance at edge mode.
	190 mm From Sub (Chain B) to user.	No	This is not the most conservative antenna to user distance at edge mode.
<b>(2) Secondary Portrait</b>	21 mm From Main (Chain A) to user.	Yes	
<b>(3) Primary Portrait</b>	10.5 mm From Main (Chain B) to user.	Yes	

### 13. Summary of Test Results

#### 13.1. SAR Test Results for 2.4 GHz

##### (1) Bottom Face (Chain A & B)

Mode	Channel	f (MHz)	Avg. Output Power (dBm)		Measured Result (mW/g)	
			Chain A	Chain B	1g-SAR	10g-SAR
802.11b	1	2412				
	6	2437	20.18		0.052	0.032
	11	2462				
	1	2412				
	6	2437		20.17	0.062	0.038
	11	2462				
802.11g	1	2412				
	6	2437	20.46		0.231	0.131
	11	2462				
	1	2412				
	6	2437		20.25	0.237	0.135
	11	2462				

##### (2) Secondary Portrait (Chain A)

Mode	Channel	f (MHz)	Avg. Output Power (dBm)		Measured Result (mW/g)	
			Chain A	Chain B	1g-SAR	10g-SAR
802.11b	1	2412				
	6	2437	20.18		0.203	0.114
	11	2462				
802.11g	1	2412				
	6	2437	20.46		0.243	0.134
	11	2462				

##### (3) Primary Portrait (Chain B)

Mode	Channel	f (MHz)	Avg. Output Power (dBm)		Measured Result (mW/g)	
			Chain A	Chain B	1g-SAR	10g-SAR
802.11b	1	2412				
	6	2437		20.17	0.667	0.340
	11	2462				
802.11g	1	2412				
	6	2437		20.25	0.761	0.381
	11	2462				

**Note(s):**

The modes with highest output power channel were chosen for the conducted output power.

## **14. Appendixes**

- 14.1. Appendix A: System Check Plots**
- 14.2. Appendix B: SAR Test Plots**
- 14.3. Appendix C: Calibration Certificate for EX3DV4 SN 3772**
- 14.4. Appendix D: Calibration Certificate for D2450V2 SN 706 with extended cal. data**