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**FCC and Industry Canada
Class II Permissive Change Test Report
(FCC Part 15.247; IC RSS210)**

For the

**SyMbol - Division of Motorola - NY
802.11a/b/g WLAN SDIO Radio Module**

FCC ID: H9P2192955

IC: 1549D-2192955

WLL JOB# 10985

July 29, 2009

Prepared for:

**SyMbol - Division of Motorola - NY
One Motorola Plaza
Holtsville, NY 11742**

Prepared By:

**Washington Laboratories, Ltd.
7560 Lindbergh Drive
Gaithersburg, Maryland 20879**



Testing Certificate 2675.01

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Prepared by: _____
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Reviewed by: _____
Michael Violette, P.E.
President

Abstract

This report has been prepared on behalf of SyMbol - Division of Motorola - NY to support Application for a Class II Permissive Change to existing certified equipment. The test report and application are submitted for a Digital Transmission System under Part 15.247 (7/2008) and Part 15.407 (7/2008) of the FCC Rules & Regulations and Industry Canada RSS210e issue7 Annex 8. This Permissive Change Test Report documents the test configuration and test results for a SyMbol - Division of Motorola - NY 802.11a/b/g WLAN SDIO Radio Module.

Testing was performed on an Open Area Test Site (OATS) of Washington Laboratories, Ltd, 7560 Lindbergh Drive, Gaithersburg, MD 20879. Site description and site attenuation data have been placed on file with the FCC's Sampling and Measurements Branch at the FCC laboratory in ColumBia, MD. Washington Laboratories, Ltd. has been accepted by the FCC and approved by the American Association for Laboratory Accreditation (A2LA) under Certificate 2675.01 as an independent FCC test laboratory.

The SyMbol - Division of Motorola - NY 802.11a/b/g WLAN SDIO Radio Module remains in compliance with the limits for a Digital Transmission System under Part 15.247 (7/2008) and Industry Canada RSS210e issue7 Annex 8.

Table of Contents

Abstract..... ii

1 Introduction.....1

 1.1 Reason for Class II Permissive Change 1

 1.2 Compliance Statement 1

 1.3 Test Scope..... 1

 1.4 Contract Information..... 1

 1.5 Test Dates 1

 1.6 Test and Support Personnel 1

 1.7 Abbreviations..... 2

2 Equipment Under Test3

 2.1 EUT Identification & Description 3

 2.2 Test Configuration 3

 2.3 Testing Algorithm..... 4

 2.4 Test Location 4

 2.5 Measurements 4

 2.5.1 References..... 4

 2.6 Measurement Uncertainty..... 4

3 Test Equipment5

4 Test Results.....6

 4.1 FCC Part15.247 (b) RF (RSS210e Issue7 annex 8.4) Power Output: (FCC Part §2.1046) 6

 4.2 Radiated Spurious Emissions: (FCC Part §15.247, IC RSS210e issue 7 Annex 8.5) 6

 4.2.1 Test Procedure 7

 4.3 Receiver Radiated Spurious Emissions: (RSS-Gen [7.2.3.2])..... 15

 4.3.1 Test Procedure 15

 4.3.2 Test Summary 15

List of Tables

Table 1. Device Summary..... 3

Table 2: Test Equipment List..... 5

Table 3. Part 15.247 RF Power Output Results 6

Table 4: Radiated Emission Test Data, Low Frequency Data (<1GHz) 8

Table 5: Radiated Emission Test Data, High Frequency Data (>1GHz) 802.11g, Low channel @ 2142 MHz 9

Table 6: Radiated Emission Test Data, High Frequency Data (>1GHz) 802.11g, Center channel @ 2437 MHz..... 10

Table 7: Radiated Emission Test Data, High Frequency Data (>1GHz) 802.11g, High channel @ 2462 MHz 11

Table 8: Radiated Emission Test Data, High Frequency Data (>1GHz) 802.11a, Low channel @ 5745 MHz 12

Table 9: Radiated Emission Test Data, High Frequency Data (>1GHz) 802.11a, Center channel @ 5785 MHz..... 13

Table 10: Radiated Emission Test Data, High Frequency Data (>1GHz) 802.11a, High channel
@ 5825MHz..... 14
Table 11: Radiated Emission Test Data (Receiver)..... 16

List of Figures

Figure 1: Test Configuration..... 3

1 Introduction

1.1 Reason for Class II Permissive Change

The addition of an internal dual-band IFA Omni directional WLAN antenna. The antenna has the following gain characteristics:

@2.4 GHz = 3 dBi

@5 GHz = -3.09 dBi

1.2 Compliance Statement

The SyMbol - Division of Motorola - NY 802.11a/b/g WLAN SDIO Radio Module remains in compliance with the limits for a Digital Transmission System under Part 15.247 (7/2008) and Industry Canada RSS210e issue7 Annex 8.

1.3 Test Scope

Tests for radiated emissions and conducted Peak Power (at antenna terminal) were performed. All measurements were performed in accordance with Knowledge Data Base (KDB) publication number 558074 entitled "Measurement of Digital Transmission Systems operating under Section 15.247". The measurement equipment conforms to ANSI C63.2 Specifications for Electromagnetic Noise and Field Strength Instrumentation.

1.4 Contract Information

Customer:	SyMbol - Division of Motorola - NY One Motorola Plaza Holtsville, NY 11742
Purchase Order Number:	NP4795393
Quotation Number:	64938B

1.5 Test Dates

Testing was performed on the following date(s): 6/1/2009 to 7/29/2009

1.6 Test and Support Personnel

Washington Laboratories, LTD	James Ritter
Client Representative	Mark Luksich

1.7 Abbreviations

A	Ampere
ac	alternating current
AM	Amplitude Modulation
Amps	Amperes
b/s	bits per second
BW	BandWidth
CE	Conducted Emission
cm	centimeter
CW	Continuous Wave
dB	deciBel
dc	direct current
EMI	Electromagnetic Interference
EUT	Equipment Under Test
FM	Frequency Modulation
G	giga - prefix for 10⁹ multiplier
Hz	Hertz
IF	Intermediate Frequency
k	kilo - prefix for 10³ multiplier
LISN	Line Impedance Stabilization Network
M	Mega - prefix for 10⁶ multiplier
m	meter
μ	micro - prefix for 10⁻⁶ multiplier
NB	Narrowband
QP	Quasi-Peak
RE	Radiated Emissions
RF	Radio Frequency
rms	root-mean-square
SN	Serial NuMber
S/A	Spectrum Analyzer
V	Volt

2 Equipment Under Test

2.1 EUT Identification & Description

The SyMbol device is a 802.11a/b/g WLAN SDIO Radio Module.

Table 1. Device Summary

ITEM	DESCRIPTION
Manufacturer:	SyMbol - Division of Motorola - NY
FCC ID:	H9P2192955
Industry Canada NuMber	1549D-2192955
Model:	802.11a/b/g WLAN SDIO Radio Module
FCC Rule Parts:	§15.247
Industry Canada Rule Parts:	RSS210e issue7 annex 8
Frequency Range:	2412-2462MHz, 5745-5825MHz
Maximum Output Power:	101.2mW (20.05dBm)@ 2.4GHz band, 77.1mW (18.9dBm)@ 5GHz band
Antenna Connector	Integral
Antenna Type	dual-band IFA Omni directional
Antenna Gain	@ 2.4 GHz = 3 dBi, 5 GHz = -3.09 dBi (max gain)
Power Source & Voltage:	3.7VDC LIon Battery
Highest TX spurious level	11570MHz- 447.9uV/m @3m
Highest RX spurious level	4803.98MHz- 105.7uV/m @3m

2.2 Test Configuration

The 802.11a/b/g WLAN SDIO Radio Module was configured using a SyMbol MT2090 base unit with all host shielding and enclosure elements removed around the module to fully expose the EUT. The module was programmed to the desired channels from a support laptop using active sync to access the test program. Conducted power tests were performed on a second unit with the antenna replaced by a cable.

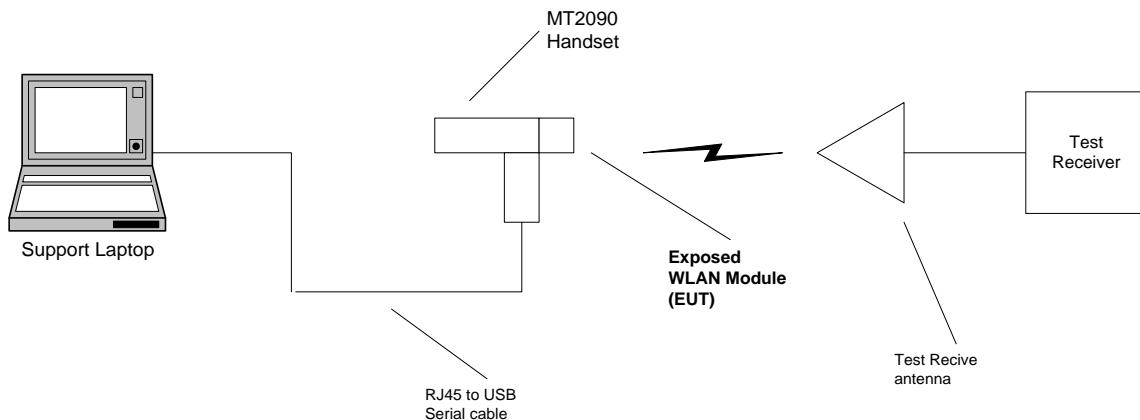


Figure 1: Test Configuration

2.3 Testing Algorithm

The 802.11a/b/g WLAN SDIO Radio Module was programmed for operation via a serial cable connected to a laptop that accessed the test programs loaded into the unit via Active sync.

Worst case emission levels are provided in the test results data.

2.4 Test Location

All measurements herein were performed at Washington Laboratories, Ltd. test center in Gaithersburg, MD. Site description and site attenuation data have been placed on file with the FCC's Sampling and Measurements Branch at the FCC laboratory in Columbia, MD. Washington Laboratories, Ltd. has been accepted by the FCC and approved by the American Association for Laboratory Accreditation (A2LA) under Certificate 2675.01 as an independent FCC test laboratory.

2.5 Measurements

2.5.1 References

ANSI C63.2 Specifications for Electromagnetic Noise and Field Strength Instrumentation

KDB558074: "Measurement of Digital Transmission Systems operating under Section 15.247."

2.6 Measurement Uncertainty

All results reported herein relate only to the equipment tested. For the purposes of the measurements performed by Washington Laboratories, the measurement uncertainty is ± 2.3 dB. This has been calculated for a *worst-case situation* (radiated emissions measurements performed on an open area test site).

The following measurement uncertainty calculation is provided:

$$\text{Total Uncertainty} = (A^2 + B^2 + C^2)^{1/2}/(n-1)$$

where:

A = Antenna calibration uncertainty, in dB = 2 dB

B = Spectrum Analyzer uncertainty, in dB = 1 dB

C = Site uncertainty, in dB = 4 dB

n = nuMber of factors in uncertainty calculation = 3

Thus, Total Uncertainty = $0.5 (2^2 + 1^2 + 4^2)^{1/2} = \pm 4.55$ dB.

3 Test Equipment

Table 2 shows a list of the test equipment used for measurements along with the calibration information.

Table 2: Test Equipment List

Conducted Power tests

Test Name: Radiated Emissions			
Asset #	Manufacturer/Model	Description	Cal. Due
605	Agilent N1911A	Wideband Power Meter	4/10/2010
606	Agilent Wideband Power sensor N1921A	Wideband Power sensor	4/10/2010

Radiated emissions testing

Test Name: Radiated Emissions			
Asset #	Manufacturer/Model	Description	Cal. Due
66	HP, 8449B	Pre-Amplifier, RF. 1-26.5GHz	07/21/2010
627	Agilent 8449B	Amplifier 1-26GHz	05/13/2010
528	Agilent, E4446A	Analyzer, Spectrum	06/10/2010
283	ITC, 21KU-3A1	Waveguide; 9.8-20.5GHz	02/19/2010
281	ITC, 21A-3A1	Waveguide 4.51-10.0GHz	02/19/2010
425	ARA, DRG-118/A	Antenna, DRG, 1-18GHz	08/08/2009
4000	R&S, SMR 40	Sig Gen 1-40GHz	10/16/2009
80	HP, 8672A	Generator, RF Signal	10/28/2009
257	HP, 8672A-K22	Frequency Extention Unit	10/28/2009
1	A.H., Systems, SAS-200/518	Antenna, LP, 1-18GHz	04/29/2010
453	A.H., Systems, PAM1840	Pre-Amplifier, 18GHz-40 GHz	06/19/2010
626	ARA, DRG-118/A	Antenna, Horn	06/03/2011
382	Sunol, JB1	Antenna, Biconlog	01/27/2010
209	NARDA V637	Horn, Standard, Gain	12/14/2012
210	Narda, V638	Horn, Standard, Gain	12/14/2012

4 Test Results

4.1 FCC Part 15.247 (b) RF (RSS210e Issue 7 annex 8.4) Power Output: (FCC Part §2.1046)

To measure the output power the output from the transmitter was connected to the input of a wideband power meter. The original grant RF power levels and the original report filing levels are reported in the below tables along with the measured RF power levels.

This is applicable for the 2412-2462MHz and 5745-5825MHz bands of this device.

Table 3. Part 15.247 RF Power Output Results

Grant listed as 0.107 Watts for 2412-2462 MHz

Channel and/or Frequency	Peak Measured Level (dBm)	Peak Measured Level (mWatts)	Original Grant Report Level (dBm)	Original Grant Report Level (mWatts)	Limit (dBm)
2412 MHz – 1Mb rate	15.67	36.9	16.4	43.652	30
2437 MHz– 1Mb rate	15.65	36.7	16.4	43.652	30
2462 MHz– 1Mb rate	15.67	36.9	16.5	44.658	30
2412 MHz– 6Mb rate	18.20	66.1	17.80	60.256	30
2437 MHz– 6Mb rate	20.05	101.2	20.30	107.652	30
2462 MHz– 6Mb rate	18.16	65.5	17.70	58.884	30

Grant listed as 0.105 Watts for 5745-5825 MHz

Channel and/or Frequency	Peak Measured Level (dBm)	Peak Measured Level (mWatts)	Original Grant Report Level (dBm)	Original Grant Report Level (mWatts)	Limit (dBm)
5745 MHz – 6Mb rate	18.90	77.1	20.1	102.329	30
5785 MHz– 6Mb rate	18.23	66.5	20.2	104.713	30
5825 MHz– 6Mb rate	18.12	64.86	20.1	102.329	30

4.2 Radiated Spurious Emissions: (FCC Part §15.247, IC RSS210e issue 7 Annex 8.5)

The EUT must comply with the requirements for radiated spurious emissions that fall within the restricted bands. These emissions must meet the limits specified in §15.209 and §15.35(b) for peak measurements.

4.2.1 Test Procedure

The EUT was placed on motorized turntable for radiated testing on a 3-meter open field test site. The emissions from the EUT were measured continuously at every azimuth by rotating the turntable. Receiving antennas were mounted on an antenna mast to determine the height of maximum emissions. The height of the antenna was varied between 1 and 4 meters. The peripherals were placed on the table in accordance with ANSI C63.4-2003. Cables were varied in position to produce maximum emissions. Both the horizontal and vertical field components were measured.

3 Orthogonals of the EUT were scanned in the restricted bands up to the 10th harmonic with the worst case readings shown.

The unit was tested in the 802.11g mode (6Mbps) and the 802.11a (6Mbps) (non UNII channels) as these were the worse case scenarios.

The emissions were measured using the following resolution bandwidths:

Frequency Range	Resolution Bandwidth	Video Bandwidth
30MHz-1000 MHz	120kHz	>100 kHz
>1000 MHz	1 MHz	10 Hz (Avg.) 1MHz (Peak)

Table 4: Radiated Emission Test Data, Low Frequency Data (<1GHz)

Frequency (MHz)	Polarity H/V	Azimuth (Degree)	Ant. Height (m)	SA Level (dBuV)	Corr Factors (dB)	Corr. Level (uV/m)	Limit (uV/m)	Margin (dB)
133.51	V	112.00	1.06	10.30	14.2	16.8	150.0	-19.0
55.26	V	31.00	1.30	17.30	8.0	18.3	100.0	-14.7
83.25	V	356.00	1.47	9.80	8.6	8.4	100.0	-21.6
200.09	V	158.00	2.80	4.80	13.1	7.8	150.0	-25.6
268.91	V	226.00	1.82	5.50	14.2	9.7	200.0	-26.3
533.23	V	8.00	1.88	6.90	20.5	23.5	200.0	-18.6
55.26	H	193.00	3.70	10.30	8.0	8.2	100.0	-21.7
75.18	H	16.00	2.77	10.28	8.8	9.0	100.0	-20.9
133.51	H	230.00	4.00	8.60	14.2	13.8	150.0	-20.7
200.09	H	90.00	2.80	6.20	13.1	9.2	150.0	-24.2
268.91	H	16.00	3.41	7.87	14.2	12.7	200.0	-23.9
533.23	H	99.00	2.40	8.30	20.5	27.7	200.0	-17.2

**Table 5: Radiated Emission Test Data, High Frequency Data (>1GHz) 802.11g, Low channel @ 2142 MHz
(Restricted Bands)**

Frequency (MHz)	Polarity H/V	Azimuth (Degree)	Ant. Height (m)	SA Level (dBuV)	Corr Factors (dB)	Corr. Level (uV/m)	Limit (uV/m)	Margin (dB)	Comments
Peak									
2412.00	H	180.00	2.70	98.90	-2.4	66492.8	NA	NA	Fundamental
4824.00	H	270.00	2.70	49.50	2.4	395.1	5000.0	-22.0	
12060.00	H	90.00	3.00	42.10	10.6	433.1	5000.0	-21.2	
14472.00	H	90.00	2.80	42.60	17.4	996.9	5000.0	-14.0	
						100640.9	NA	NA	
2412.00	V	190.00	3.00	102.50	-2.4	9	NA	NA	Fundamental
4824.00	V	90.00	2.90	50.40	2.4	438.3	5000.0	-21.1	
12060.00	V	270.00	2.30	42.00	10.6	428.2	5000.0	-21.3	
14472.00	V	270.00	2.80	41.30	17.4	858.3	5000.0	-15.3	
AVG									
2412.00	H	180.00	3.20	92.30	-2.4	31101.0	NA	NA	Fundamental
4824.00	H	90.00	2.70	42.80	2.4	182.7	500.0	-8.7	
12060.00	H	260.00	2.60	31.00	10.6	120.7	500.0	-12.3	
14472.00	H	260.00	2.50	30.67	17.4	252.4	500.0	-5.9	
							NA	NA	
2412.00	V	180.00	3.00	94.90	-2.4	41954.1	NA	NA	Fundamental
4824.00	V	270.00	2.90	43.90	2.4	207.4	500.0	-7.6	
12060.00	V	270.00	2.30	32.10	10.6	137.0	500.0	-11.2	
14472.00	V	270.00	2.80	32.80	17.4	322.6	500.0	-3.8	
Non Harmonics									
2390.00	H	90.00	2.98	44.67	-2.5	128.4	500.0	-11.8	Restricted Bandedge
2390.00	V	180.00	2.04	41.83	-2.5	92.6	500.0	-14.6	Restricted Bandedge

Table 6: Radiated Emission Test Data, High Frequency Data (>1GHz) 802.11g, Center channel @ 2437 MHz

Frequency (MHz)	Polarity H/V	Azimuth (Degree)	Ant. Height (m)	SA Level (dBuV)	Corr Factors (dB)	Corr. Level (uV/m)	Limit (uV/m)	Margin (dB)	Comments
Peak									
2437.00	H	210.00	3.10	108.00	-2.4	190832.6	NA	NA	Fundamental
4874.00	H	100.00	3.30	53.33	2.5	621.6	5000.0	-18.1	
7311.00	H	270.00	2.87	46.50	8.3	551.5	5000.0	-19.1	
12185.00	H	270.00	2.87	41.00	11.2	405.2	5000.0	-21.8	
2437.00	V	0.00	3.00	106.33	-2.4	157453.6	NA	NA	Fundamental
4874.00	V	25.00	2.98	55.00	2.5	753.3	5000.0	-16.4	
7311.00	V	0.00	2.63	46.50	8.3	551.5	5000.0	-19.1	
12185.00	V	90.00	3.20	43.83	11.2	561.2	5000.0	-19.0	
AVG									
2437.00	H	210.00	3.10	97.67	-2.4	58096.8	NA	NA	Fundamental
4874.00	H	100.00	3.30	41.33	2.5	156.1	500.0	-10.1	
7311.00	H	270.00	2.87	32.50	8.3	110.0	500.0	-13.1	
12185.00	H	270.00	2.87	30.17	11.2	116.4	500.0	-12.7	
2437.00	V	0.00	3.00	96.00	-2.4	47935.0	NA	NA	Fundamental
4874.00	V	25.00	2.98	43.60	2.5	202.8	500.0	-7.8	
7311.00	V	0.00	2.63	32.85	8.3	114.6	500.0	-12.8	
12185.00	V	90.00	3.20	30.50	11.2	121.0	500.0	-12.3	
Non Harmonics									
None									

Table 7: Radiated Emission Test Data, High Frequency Data (>1GHz) 802.11g, High channel @ 2462 MHz

Frequency (MHz)	Polarity H/V	Azimuth (Degree)	Ant. Height (m)	SA Level (dBuV)	Corr Factors (dB)	Corr. Level (uV/m)	Limit (uV/m)	Margin (dB)	Comments
Peak						152581.1			
2462.00	H	90.00	3.08	106.00	-2.3	1	NA	NA	Fundamental
4924.00	H	100.00	3.10	54.33	2.6	705.8	5000.0	-17.0	
7386.00	H	270.00	2.60	42.67	8.4	359.7	5000.0	-22.9	
12310.00	H	180.00	2.80	41.50	11.7	455.4	5000.0	-20.8	
2462.00	V	90.00	3.03	100.83	-2.3	84139.7	NA	NA	Fundamental
4924.00	V	90.00	2.98	51.70	2.6	521.4	5000.0	-19.6	
7386.00	V	90.00	3.03	45.83	8.4	517.5	5000.0	-19.7	
12310.00	V	265.00	2.70	44.00	11.7	607.3	5000.0	-18.3	
AVG									
2462.00	H	90.00	3.08	96.67	-2.3	52119.6	NA	NA	Fundamental
4924.00	H	100.00	3.10	42.17	2.6	174.1	500.0	-9.2	
7386.00	H	270.00	2.60	31.33	8.4	97.5	500.0	-14.2	
12310.00	H	180.00	2.80	31.00	11.7	136.0	500.0	-11.3	
2462.00	V	90.00	3.03	90.83	-2.3	26607.3	NA	NA	Fundamental
4924.00	V	90.00	2.98	38.70	2.6	116.7	500.0	-12.6	
7386.00	V	90.00	3.03	31.90	8.4	104.1	500.0	-13.6	
12310.00	V	265.00	2.70	30.83	11.7	133.3	500.0	-11.5	
Non Harmonics									
2483.50	H	270.00	2.83	46.17	-2.3	156.5	500.0	-10.1	Restricted Bandedge
2483.50	V	0.00	2.93	44.00	-2.3	121.9	500.0	-12.3	Restricted Bandedge

Table 8: Radiated Emission Test Data, High Frequency Data (>1GHz) 802.11a, Low channel @ 5745 MHz

Frequency (MHz)	Polarity H/V	Azimuth (Degree)	Ant. Height (m)	SA Level (dBuV)	Corr Factors (dB)	Corr. Level (uV/m)	Limit (uV/m)	Margin (dB)	Comments
Peak									
5745.00	H	290.00	2.80	92.83	3.2	63108.1	NA	NA	Fundamental
11490.00	H	90.00	2.70	55.00	10.0	1786.1	5000.0	-8.9	
5745.00	V	245.00	2.53	93.00	3.2	64355.5	NA	NA	Fundamental
11490.00	V	90.00	2.88	54.33	10.0	1653.5	5000.0	-9.6	
AVG									
5745.00	H	290.00	2.80	83.33	3.2	21139.0	NA	NA	Fundamental
11490.00	H	90.00	2.70	42.53	10.0	425.0	500.0	-1.4	
5745.00	V	245.00	2.53	83.67	3.2	21982.9	NA	NA	Fundamental
11490.00	V	90.00	2.88	41.33	10.0	370.2	500.0	-2.6	
Non Harmonics									
None									

Table 9: Radiated Emission Test Data, High Frequency Data (>1GHz) 802.11a, Center channel @ 5785 MHz

Frequency (MHz)	Polarity H/V	Azimuth (Degree)	Ant. Height (m)	SA Level (dBuV)	Corr Factors (dB)	Corr. Level (uV/m)	Limit (uV/m)	Margin (dB)	Comments
Peak									
5785.00	H	290.00	2.80	92.17	3.3	59246.6	NA	NA	Fundamental
11570.00	H	90.00	2.70	55.67	9.9	1888.6	5000.0	-8.5	
5785.00	V	0.00	2.55	94.67	3.3	79006.6	NA	NA	Fundamental
11570.00	V	90.00	2.88	55.33	9.9	1816.1	5000.0	-8.8	
AVG									
5785.00	H	290.00	2.80	81.83	3.3	18016.2	NA	NA	Fundamental
11570.00	H	90.00	2.70	43.17	9.9	447.9	500.0	-1.0	
5785.00	V	0.00	2.55	84.33	3.3	24025.0	NA	NA	Fundamental
11570.00	V	90.00	2.88	41.83	9.9	383.8	500.0	-2.3	
Non Harmonics									
None									

Table 10: Radiated Emission Test Data, High Frequency Data (>1GHz) 802.11a, High channel @ 5825MHz

Frequency (MHz)	Polarity H/V	Azimuth (Degree)	Ant. Height (m)	SA Level (dBuV)	Corr Factors (dB)	Corr. Level (uV/m)	Limit (uV/m)	Margin (dB)	Comments
Peak						95104.			
5825.00	H	270.00	2.90	96.17	3.4	9	NA	NA	Fundamental
11650.00	H	90.00	2.60	55.17	9.7	1745.7	5000.0	-9.1	
5825.00	V	0.00	2.41	94.67	3.4	80020.	NA	NA	Fundamental
11650.00	V	90.00	2.89	53.83	9.7	1496.1	5000.0	-10.5	
AVG						27523.			
5825.00	H	270.00	2.90	85.40	3.4	5	NA	NA	Fundamental
11650.00	H	90.00	2.60	42.67	9.7	414.0	500.0	-1.6	
5825.00	V	0.00	2.41	85.00	3.4	26284.	NA	NA	Fundamental
11650.00	V	90.00	2.89	41.67	9.7	368.9	500.0	-2.6	
Non Harmonics									
None									

4.3 Receiver Radiated Spurious Emissions: (RSS-Gen [7.2.3.2])

The EUT must comply with the requirements for radiated spurious emissions from the receiver. These emissions must meet the limits specified in RSS-Gen.

4.3.1 Test Procedure

The EUT was placed on motorized turntable for radiated testing on a 3-meter open field test site. The emissions from the EUT were measured continuously at every azimuth by rotating the turntable. Receiving antennas were mounted on an antenna mast to determine the height of maximum emissions. The height of the antenna was varied between 1 and 4 meters. Additionally, as the device is portable, the emissions were checked in three orthogonal with the worst case being reported. The emissions were measured using the following resolution bandwidths:

Frequency Range	Resolution Bandwidth	Video Bandwidth
30MHz-1000 MHz	100kHz	>100 kHz
>1000 MHz	1 MHz	10 Hz (Avg.)

4.3.2 Test Summary

The EUT complied with the requirements for receiver radiated emissions IC RSS-Gen.

Table 11: Radiated Emission Test Data (Receiver)

Frequency (MHz)	Polarity H/V	Azimuth (Degree)	Ant. Height (m)	SA Level (dBuV)	Corr Factors (dB)	Corr. Level (uV/m)	Limit (uV/m)	Margin (dB)
55.26	V	45.00	1.00	16.80	8.0	17.3	100.0	-15.2
83.25	V	0.00	1.40	10.00	8.6	8.5	100.0	-21.4
133.51	V	120.00	1.00	10.20	14.2	16.6	150.0	-19.1
200.09	V	210.00	2.30	5.10	13.1	8.1	150.0	-25.3
268.91	V	250.00	2.00	7.20	14.2	11.8	200.0	-24.6
305.15	V	190.00	1.90	11.10	15.0	20.3	200.0	-19.9
371.91	V	270.00	1.97	9.30	17.3	21.3	200.0	-19.4
533.23	V	20.00	3.10	7.00	20.5	23.8	200.0	-18.5
4803.98	V	210.00	2.80	37.40	0.7	80.2	500.0	-15.9
55.26	H	210.00	3.90	11.00	8.0	8.9	100.0	-21.0
75.18	H	25.00	3.80	9.20	8.8	8.0	100.0	-22.0
133.51	H	230.00	4.00	7.90	14.2	12.7	150.0	-21.4
200.09	V	90.00	3.00	6.00	13.1	9.0	150.0	-24.4
268.91	H	10.00	3.40	7.10	14.2	11.7	200.0	-24.7
305.15	H	230.00	2.70	7.20	15.0	12.9	200.0	-23.8
371.91	H	140.00	1.58	5.20	17.3	13.3	200.0	-23.5
533.23	H	120.00	1.80	8.90	20.5	29.6	200.0	-16.6
4803.98	H	180.00	1.95	39.80	0.7	105.7	500.0	-13.5