RADIO PERFORMANCE TEST REPORT
FROM
RFI GLOBAL SERVICES LTD

(Covering FCC and Industry Canada Requirements)

Test of: Datalogic Scanning, PowerScan PBT7100 Wireless Basestation
Basestation Class: BC7010, ZP0002821
(Incorporating PS71KM *Bluetooth* Module)

To: FCC Part 15.247: 2008 (Subpart C),
RSS-210 Issue 7 June 2007 and RSS-Gen Issue 2 June 2007

Test Report Serial No:
RFI/RPT4/RP74225JD07A

Supersedes Test Report Serial No:
RFI/RPT1/RP74225JD07A and RFI/RPT2/RP74225JD07A and RFI/RPT3/RP74225JD07A

This Test Report Is Issued Under The Authority Of Brian Watson, Operations Director:  **pp**	
Checked By: 	**Report Copy No: PDF01**
Issue Date: 23 December 2008	**Test Dates: 03 December 2008 to 08 December 2008**

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1. Customer Information

1.1. Contact Information

Company Name:	Datalogic Scanning, Inc
Address:	959 Terry Street Eugene Oregon 97402-9150 USA

1.2. Manufacturer #1 Information

Company Name:	Datalogic Scanning
Address:	959 Terry Street Eugene Oregon 97402-9150 USA

1.3. Manufacturer #2 Information

Company Name:	Datalogic Scanning Slovakia s.r.o.
Address:	Priloy 588/47-919/26 Zavar Trnava Slovak Republic

2. Equipment Under Test (EUT)

2.1. Identification of Equipment Under Test (EUT)

Description:	*Bluetooth* Base Station BC7010 (IBM SurePOS) (Incorporating PS71KM *Bluetooth* module)
Brand Name:	PowerScan
Model Name or Number:	PBT7100
Serial Number:	ZP0002821
FCC ID Number:	O9N-PBT7K
Industry Canada Certification Number:	3861A-PBT7K

2.2. Description of EUT

The equipment under test was a *Bluetooth* base station for a barcode scanner incorporating the Datalogic PS71KM *Bluetooth* module.

2.3. Modifications Incorporated in the EUT

During the course of testing the EUT was not modified.

2.4. Support Equipment

The following support equipment was used to exercise the EUT during testing:

Description:	Mains power supply
Model Name or Number:	Touch Inc. SA06-12S05R-V (DLS part number 4004-0848)
Cable Length and Type:	2 metre / 2 core
Connected to Port:	Power

2.5. Additional Information Related to Testing

Power Supply Requirement:	V-Nom	120	V-Min	102	V-Max	138
Tested Temperature Range:	T-Min	-20C		T-Max	+55C	
Channel Spacing:	1 MHz					
Modulation Type:	GFSK					
Data Rate:	1 Mbit/sec					
Transmit Frequency Range:	2402 to 2480 MHz					
Transmit Channels Tested:	**Channel ID**		**Channel Number**		**Channel Frequency (MHz)**	
	Bottom		0		2402	
	Middle		39		2441	
	Top		78		2480	
Receive Frequency Range:	2402 to 2480 MHz					
Receive Channels Tested:	**Channel ID**		**Channel Number**		**Channel Frequency (MHz)**	
	Bottom		0		2402	
	Middle		39		2441	
	Top		78		2480	

3. Test Specification, Methods and Procedures

3.1. Test Specification

Reference:	FCC Part 15.247 Subpart C
Title:	Code of Federal Regulations, Part 15.247 (47CFR15) (Intentional Radiators operating within the band 2400 MHz to 2483.5 MHz)

Reference:	FCC Part 15.107 & FCC Part 15.109 Subpart B
Title:	Code of Federal Regulations (47CFR15) (Unintentional Radiators)

Reference:	RSS-210 Issue 7 June 2007
Title:	Low-power Licence-exempt Radio communication Devices (All Frequency Bands): Category I Equipment.

Reference:	RSS-Gen Issue 2 June 2007
Title:	General Requirements and Information for the Certification of Radio communication Equipment.

3.2. Methods and Procedures

The methods and procedures used were as detailed in:

ANSI C63.2 (1996)
Title: American National Standard for Instrumentation - Electromagnetic Noise and Field Strength Instrumentation, 10 Hz to 40 GHz.

ANSI C63.4 (2003)
Title: American National Standard Methods of Measurement of Electromagnetic Emissions from Low Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.

ANSI C63.5 (1988)
Title: American National Standard for the Calibration of antennas used for Radiated Emission measurements in Electromagnetic Interference (EMI) control.

ANSI C63.7 (1988)
Title: American National Standard Guide for Construction of Open Area Test Sites for performing Radiated Emission Measurements.

CISPR 16-1: (1999)
Title: Specification For Radio Disturbance and Immunity Measuring Apparatus and Methods. Part 1: Radio Disturbance and Immunity Measuring Apparatus.

DA00-705 (2000)
Title: Filing and Frequency Measurement Guidelines for Frequency Hopping Spread Spectrum Systems.

3.3. Definition of Measurement Equipment

The measurement equipment used complied with the requirements of the standards referenced in the methods & procedures section above. Appendix 1 contains a list of the test equipment used.

4. Deviations from the Test Specification

There were no deviations from the test specification.

5. Operation and Configuration of the EUT during Testing

5.1. Operating Modes

The EUT was tested in the following operating modes, unless otherwise stated:

- In *Bluetooth* basic rate test mode connected to and controlled by a *Bluetooth* tester.
- Configured to transmit full power on Bottom, Middle and Top channels.
- Packet size transmitted was DH5.

5.2. Configuration and Peripherals

The EUT was tested in the following configuration:

- Connected to, and powered from a mains power supply.

6. Summary of Test Results

Range of Measurements	FCC Part 15 Reference	IC RSS Reference	Port Type	Result
Idle Mode AC Conducted Emissions	15.107	RSS-Gen 7.2.2	AC Mains	Complied
Idle Mode Radiated Spurious Emissions	15.109	-	Antenna	Complied
Transmitter AC Conducted Emissions	15.207	RSS-Gen 7.2.2	AC Mains	Complied
Transmitter 20 dB Bandwidth	2.1049	RSS-Gen 4.6.1 RSS-210 A8.1(a)	Antenna	Complied
Transmitter Carrier Frequency Separation	15.247(a)(1)	RSS-210 A8.1(b)	Antenna	Complied
Transmitter Average Time of Occupancy	15.247(a)(1)(iii)	RSS-210 A8.1(d)	Antenna	Complied
Transmitter Maximum Peak Output Power	15.247(b)(1)	-	Antenna	Complied
Transmitter Radiated Emissions	15.247(d) & 15.209(a)	-	Antenna	Complied
Transmitter Band Edge Radiated Emissions	15.247(d) & 15.209(a)	-	Antenna	Complied

6.1. Location of Tests

All the measurements described in this report were performed at the premises of RFI Global Services Ltd, Wade Road, Basingstoke, Hampshire, RG24 8AH.

6.2. Site Registration Numbers

FCC: 209735

7. Measurements, Examinations and Derived Results

7.1. General Comments

This section contains test results only.

Measurement uncertainties are evaluated in accordance with current best practice. Our reported expanded uncertainties are based on standard uncertainties, which are multiplied by an appropriate coverage factor to provide a statistical confidence level of approximately 95%. Please refer to section 8 for details of measurement uncertainties.

7.2. Test Results

7.2.1. Idle Mode Conducted Emissions - Quasi-Peak Detector Measurements (CFR 47 Clause 15.107 and Industry Canada RSS-Gen 7.2.2)

Ambient Temperature: 23ºC Relative Humidity: 35%

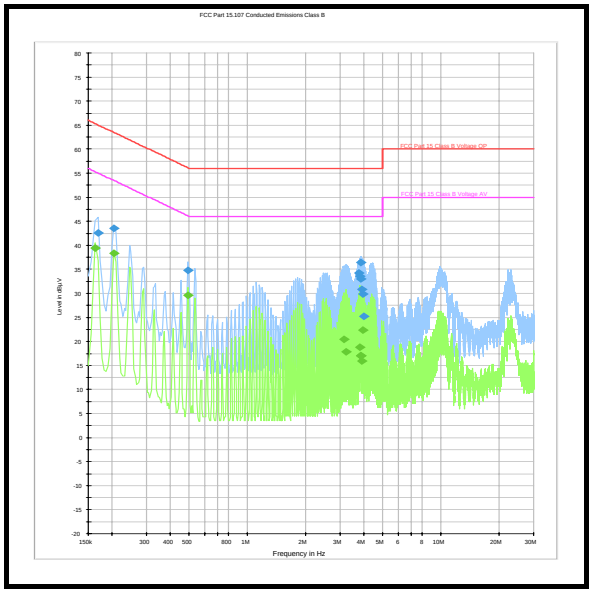
Tests were performed using the test methods detailed in ANSI C63.4 Section 7.

Frequency (MHz)	Line	Level (dBµV)	Limit (dBµV)	Margin (dB)	Result
0.168000	Neutral	42.6	65.1	22.5	Complied
0.204000	Neutral	43.5	63.4	19.9	Complied
0.492000	Live 1	34.8	56.1	21.3	Complied
3.736500	Live 1	34.3	56.0	21.7	Complied
3.777000	Live 1	33.5	56.0	22.5	Complied
3.822000	Live 1	36.4	56.0	19.6	Complied
3.858000	Live 1	33.0	56.0	23.0	Complied
3.898500	Live 1	30.8	56.0	25.2	Complied
3.939000	Live 1	29.9	56.0	26.1	Complied
3.975000	Live 1	42.6	56.0	30.7	Complied

7.2.2. Idle Mode Conducted Emissions - Average Detector Measurements

Frequency (MHz)	Line	Level (dBµV)	Limit (dBµV)	Margin (dB)	Result
0.163500	Live 1	39.5	55.3	15.8	Complied
0.204000	Live 1	38.4	53.4	15.0	Complied
0.492000	Live 1	29.5	46.1	16.6	Complied
3.160500	Live 1	20.4	46.0	25.6	Complied
3.201000	Live 1	17.8	46.0	28.2	Complied
3.777000	Live 1	18.7	46.0	27.3	Complied
3.817500	Live 1	17.0	46.0	29.0	Complied
3.858000	Live 1	17.0	46.0	29.0	Complied
3.898500	Live 1	15.9	46.0	30.1	Complied
3.943500	Live 1	22.4	46.0	23.6	Complied

Idle Mode Conducted Emissions (Continued)



Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

7.2.3. Idle Mode Radiated Spurious Emissions (CFR 47 Clause 15.109)

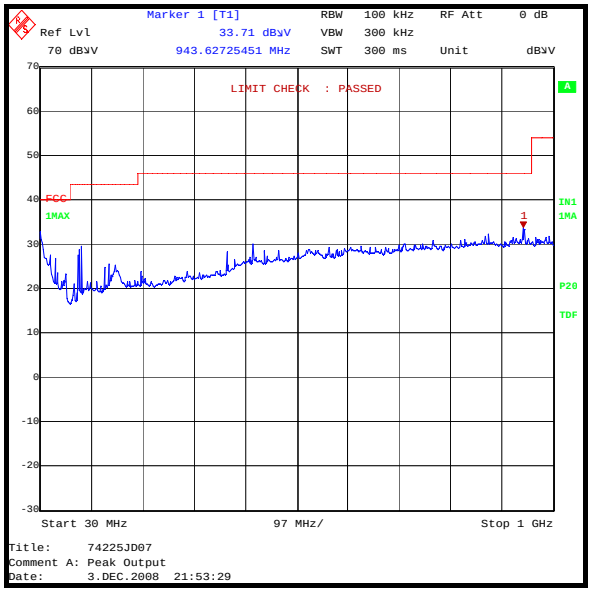
Ambient Temperature: 25ºC Relative Humidity: 21%

Tests were performed using the test methods detailed in ANSI C63.4 Section 8.

Electric Field Strength Measurements (Frequency Range: 30 MHz to 1000 MHz)

Frequency (MHz)	Antenna Polarity	Quasi-Peak Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
103.000	Vertical	28.6	43.5	14.9	Complied.
107.756	Vertical	30.3	43.5	10.2	Complied
943.627	Vertical	33.7	47.0	13.3	Complied

Idle Mode Radiated Spurious Emissions (Continued)



Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying tables.

7.2.4. Idle Mode Radiated Spurious Emissions (CFR 47 Clause 15.109) (Continued)

Electric Field Strength Measurements (Frequency Range: 1 GHz to 12.75 GHz)

Highest Peak Level:

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
7.751	Vertical	49.1	-1.6	47.5	74.0	26.5	Complied

Highest Average Level:

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
7.751	Vertical	49.1	-1.6	47.5	54.0	26.5	Complied

Test of: **Datalogic Scanning, PowerScan PBT7100 Wireless Basestation**
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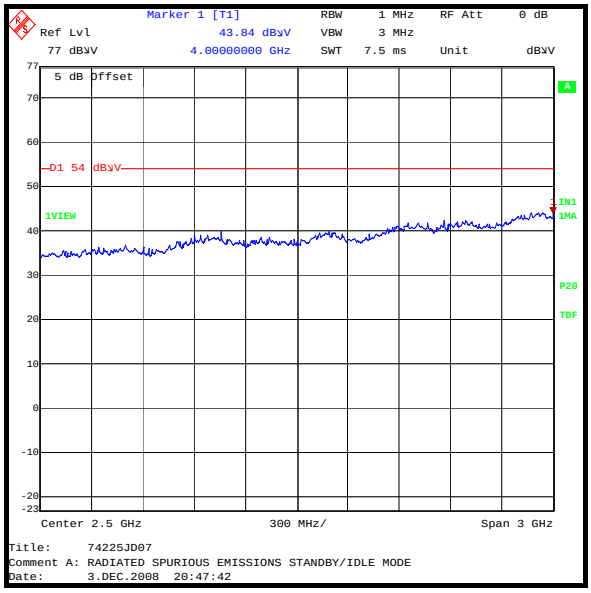
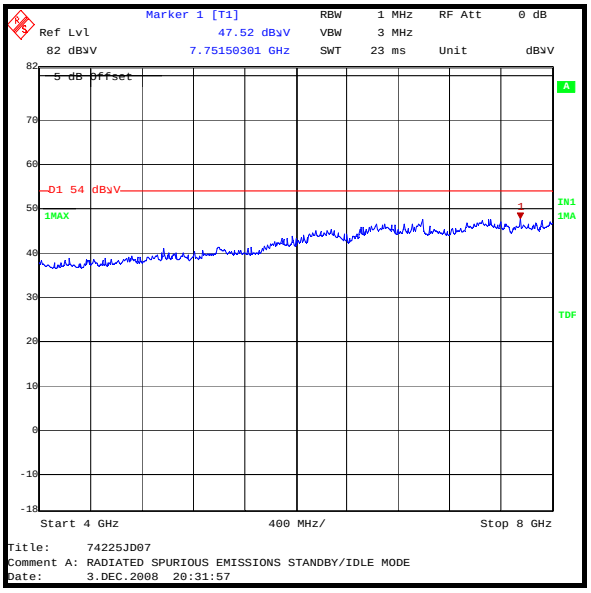
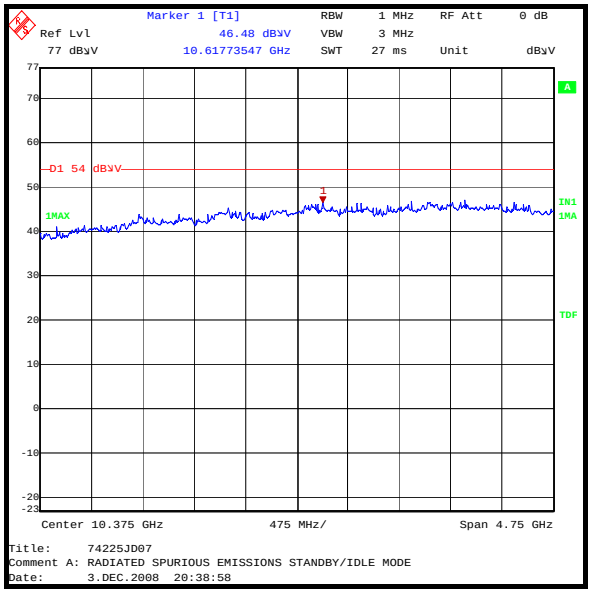
Idle Mode Radiated Spurious Emissions (Continued)







Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

7.2.5. Transmitter AC Conducted Spurious Emissions (CFR 47 Clause 15.207 and Industry Canada RSS-Gen 7.2.2)

Ambient Temperature: 23ºC Relative Humidity: 35%

Tests were performed using the test methods detailed in ANSI C63.4 Section 7.

Quasi-Peak Detector Measurements on Live and Neutral Lines

Top Channel

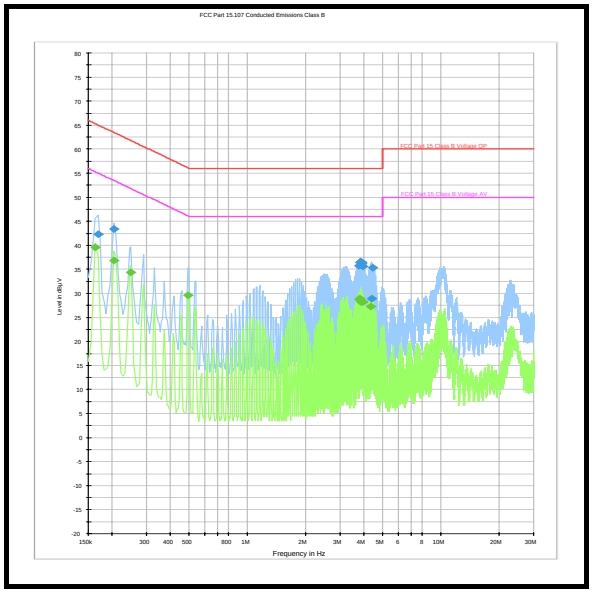
Frequency (MHz)	Line	Level (dBµV)	Limit (dBµV)	Margin (dB)	Result
0.168000	Neutral	42.3	65.1	22.8	Complied
0.204000	Neutral	43.4	63.4	20.0	Complied
3.745500	Live 1	35.7	56.0	20.3	Complied
3.781500	Live 1	36.5	56.0	19.5	Complied
3.826500	Live 1	36.5	56.0	19.5	Complied
3.867000	Live 1	36.5	56.0	19.5	Complied
3.907500	Live 1	36.2	56.0	19.8	Complied
3.943500	Live 1	35.5	56.0	20.5	Complied
4.344000	Live 1	28.9	56.0	27.1	Complied
4.402500	Live 1	35.3	56.0	20.7	Complied

Average Detector Measurements on Live and Neutral Lines

Top Channel

Frequency (MHz)	Line	Level (dBµV)	Limit (dBµV)	Margin (dB)	Result
0.163500	Live 1	39.5	55.3	15.8	Complied
0.204000	Neutral	36.8	53.4	16.6	Complied
0.249000	Live 1	34.4	51.8	17.4	Complied
0.492000	Live 1	29.6	46.1	16.5	Complied
3.741000	Live 1	28.8	46.0	17.2	Complied
3.781500	Live 1	28.9	46.0	17.1	Complied
3.826500	Live 1	28.3	46.0	17.7	Complied
3.907500	Live 1	28.2	46.0	17.8	Complied
3.948000	Live 1	28.3	46.0	17.7	Complied
4.317000	Live 1	27.3	46.0	18.7	Complied

Transmitter AC Conducted Spurious Emissions (Continued)



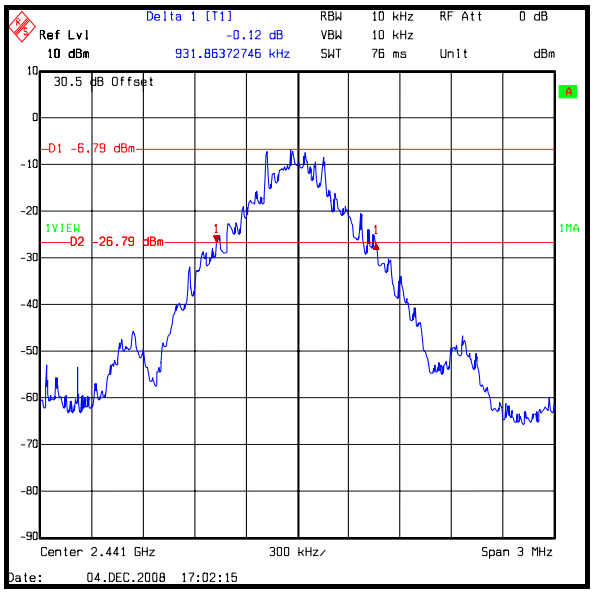
Note: This plot is a pre-scan and for indication purposes only. For final measurements, see accompanying tables.

7.2.6. Transmitter 20 dB Bandwidth (CFR 47 Clause 2.1049 and Industry Canada RSS-Gen 4.6.1 and RSS-210 A8.1 (a))

Ambient Temperature: 24ºC Relative Humidity: 23%

Tests were performed using the test methods detailed in Public Notice DA 00-705 (March 30, 2000).

Transmitter 20 dB Bandwidth (kHz)	Limit (kHz)
931.863	None specified

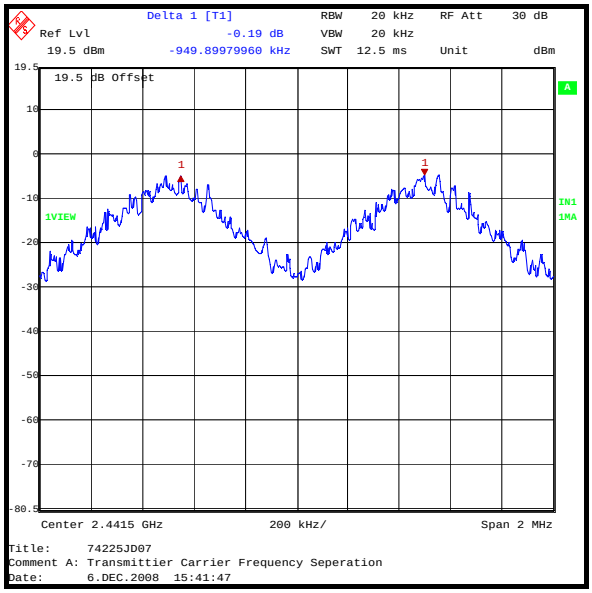


7.2.7. Transmitter Carrier Frequency Separation (CFR 47 Clause 15.247(a)(1) and Industry Canada RSS-210 A8.1 (b)

Ambient Temperature: 21ºC Relative Humidity: 31%

Tests were performed using the test methods detailed in Public Notice DA 00-705 (March 30, 2000).

Transmitter Carrier Frequency Separation (kHz)	Limit ($^2/_3$ of 20 dB BW) (kHz)	Margin (kHz)	Result
949.900	621.242	328.658	Complied



7.2.8. Transmitter Average Time of Occupancy (CFR 47 Clause 15.247(a)(1)(iii)and Industry Canada RSS-210 A8.1 (d)

Ambient Temperature: 22ºC Relative Humidity: 28%

Tests were performed using the test methods detailed in Public Notice DA 00-705 (March 30, 2000).

Emission Width (μs)	Number of Hops in 31.6 Seconds	Average Time of Occupancy (s)	Limit (s)	Margin (s)	Result
2.935	55	0.161	0.4	0.239	Complied.

Test of: Datalogic Scanning, PowerScan PBT7100 Wireless Basestation
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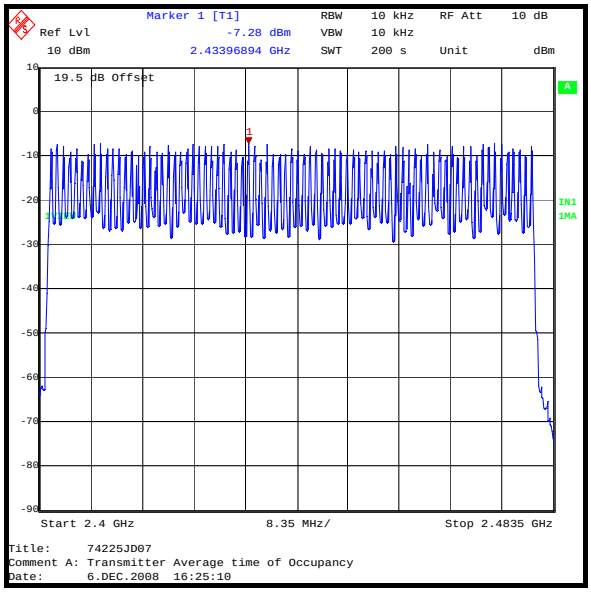
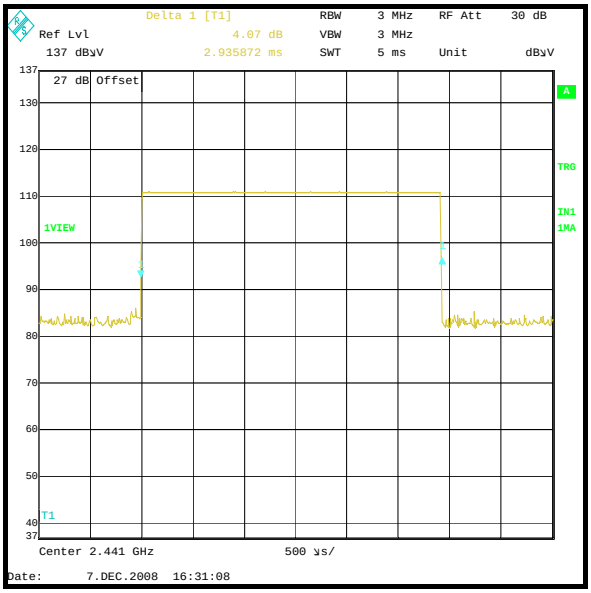
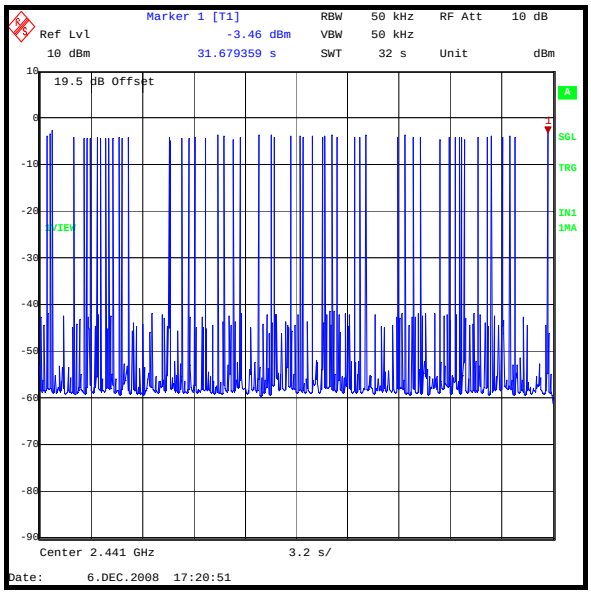
Transmitter Average Time of Occupancy (Continued)







7.2.9. Transmitter Maximum Peak Output Power: (EIRP) (CFR 47 Clause 15.247(b)(1)

Ambient Temperature: 24ºC Relative Humidity: 22%

Tests were performed using the test methods detailed in Public Notice DA 00-705 (March 30, 2000), ANSI TIA-603-C-2004 and FCC CFR Part 2.

AC Powered Devices

Channel	Input Voltage (AC)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Result
Bottom	102	14.7	30.0	15.3	Complied
Bottom	120	14.7	30.0	15.3	Complied
Bottom	138	14.7	30.0	15.3	Complied
Middle	102	14.9	30.0	15.1	Complied
Middle	120	14.9	30.0	15.1	Complied
Middle	138	14.9	30.0	15.1	Complied
Top	102	14.3	30.0	14.7	Complied
Top	120	14.3	30.0	14.7	Complied
Top	138	14.3	30.0	14.7	Complied

Note(s):

1. These tests were performed radiated; therefore the EUT antenna gain is encompassed in the final result and not measurable.

Test of: Datalogic Scanning, PowerScan PBT7100 Wireless Basestation
Basestation Class: BC7010, ZP0002821

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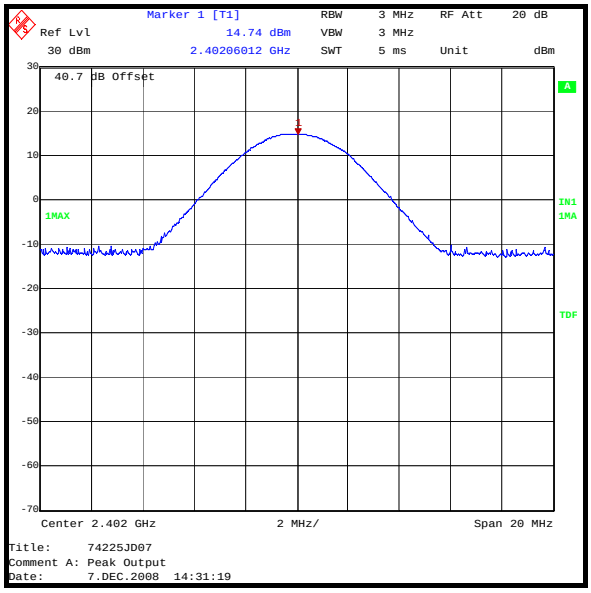
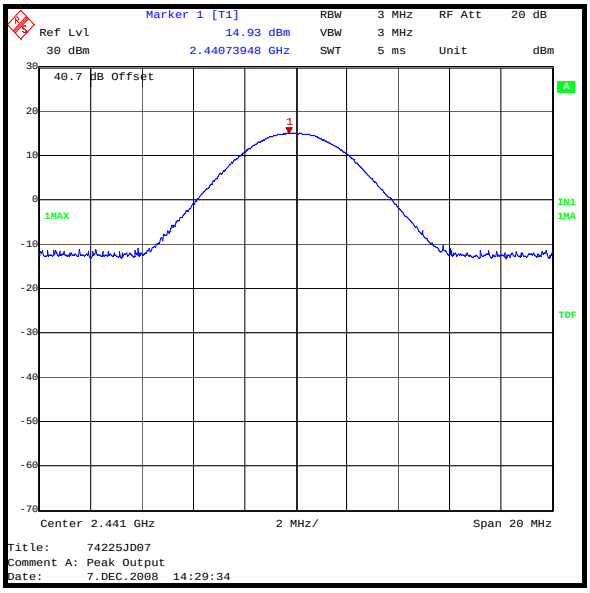
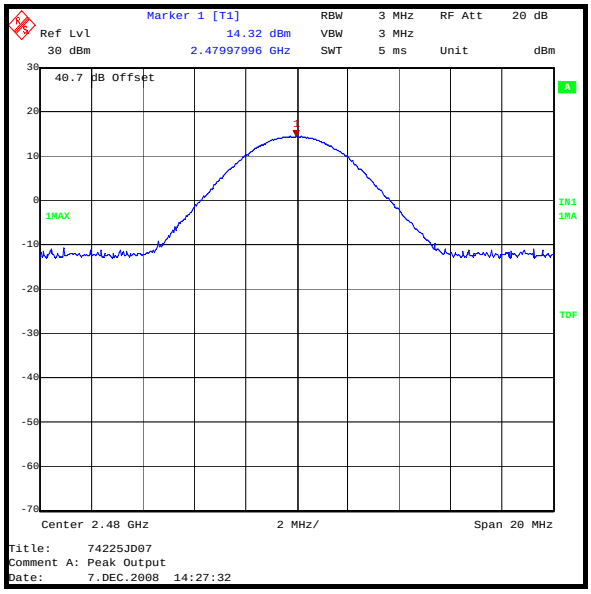
Transmitter Maximum Peak Output Power: (EIRP) (Continued)







7.2.10. Transmitter Radiated Emissions (CFR 47 15.247(d) & 15.209(a))

Ambient Temperature: 25ºC Relative Humidity: 22%

Tests were performed using the test methods detailed in ANSI C63.4 Section 8 and Public Notice DA 00-705 (March 30, 2000).

Electric Field Strength Measurements: 30 MHz to 1000 MHz
(Emissions Occurring Outside the Restricted Bands)

Top Channel Static Mode

Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	-20 dBc Limit (dBμV/m)	Margin (dB)	Result
103.868	Vertical	29.3	73.4	44.1	Complied
107.755	Vertical	30.1	73.4	43.3	Complied
902.806	Vertical	35.5	73.4	37.9	Complied

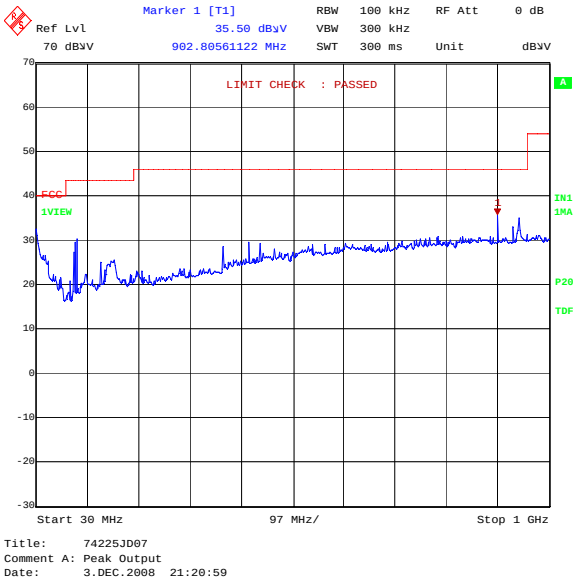
Hopping Mode

Frequency (MHz)	Antenna Polarity	Peak Level (dBμV/m)	-20 dBc Limit (dBμV/m)	Margin (dB)	Result
107.756	Vertical	30.4	73.4	43.0	Complied
432.384	Vertical	30.8	73.4	42.6	Complied
902.806	Vertical	36.4	73.4	37.0	Complied

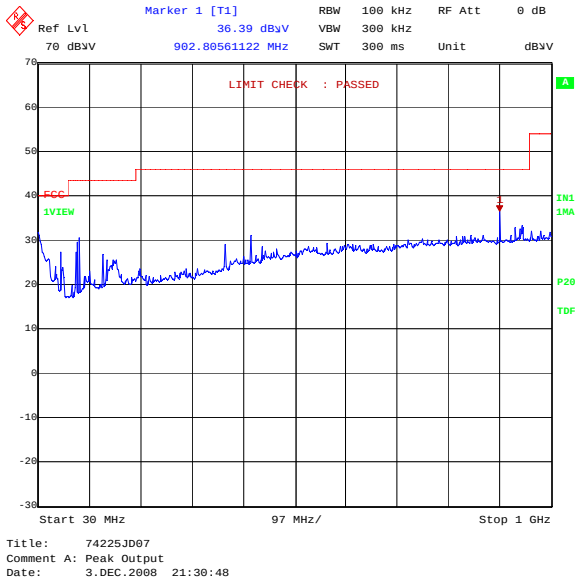
Note(s):

1. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore final radiated emissions measurements were performed with the EUT set to the top channel only.

Transmitter Radiated Emissions (Continued)



Static



Hoping

Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

Transmitter Radiated Emissions (CFR 47 15.247(d) & 15.209(a)) (Continued)

Electric Field Strength Measurements: (Frequency Range: 1 GHz to 26.5 GHz)
(Emissions in the Restricted Bands)

Highest Peak Level: Bottom Channel

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.803	Vertical	54.2	-10.1	44.1	74.0	29.9	Complied

Highest Average Level: Bottom Channel

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.803	Vertical	54.2	-10.1	44.1	54.0	9.9	Complied

Highest Peak Level: Middle Channel

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.882	Vertical	61.9	-10.1	51.8	74.0	22.2	Complied

Highest Average Level: Middle Channel

Frequency (GHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
4.882	Vertical	61.9	-10.1	51.8	54.0	2.2	Complied

Note(s):

1. The preliminary scans showed similar emission levels below 1 GHz, for each channel of operation. Therefore final radiated emissions measurements were performed with the EUT set to the top channel only.

Transmitter Radiated Emissions (CFR 47 15.247(d) & 15.209(a)) (Continued)

Electric Field Strength Measurements (Frequency Range: 1 GHz to 26.5 GHz) (Emissions Occurring in the Restricted Bands)

Highest Peak Level: Top Channel

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
4.9960	Vertical	62.5	-10.1	52.4	74.0	21.6	Complied

Highest Average Level: Top Channel

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
4.9960	Vertical	62.5	-10.1	52.4	54.0	1.6	Complied

Highest Peak Level: Hopping Mode

Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
4.937	Vertical	63	-10.1	51.9	74.0	22.1	Complied

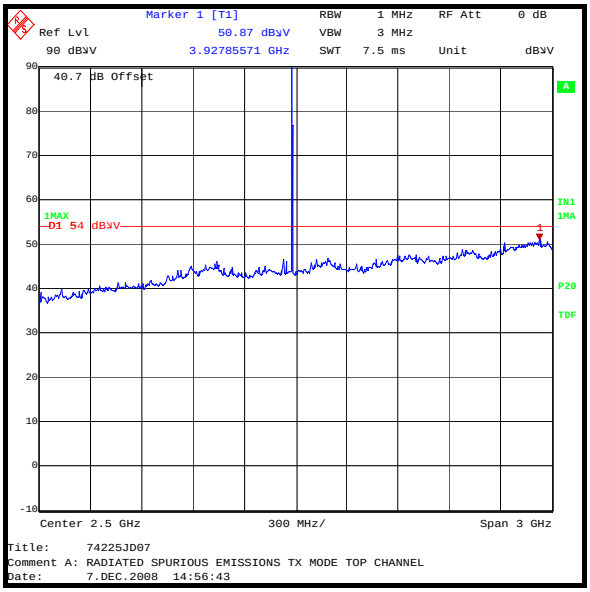
Highest Average Level: Hopping Mode

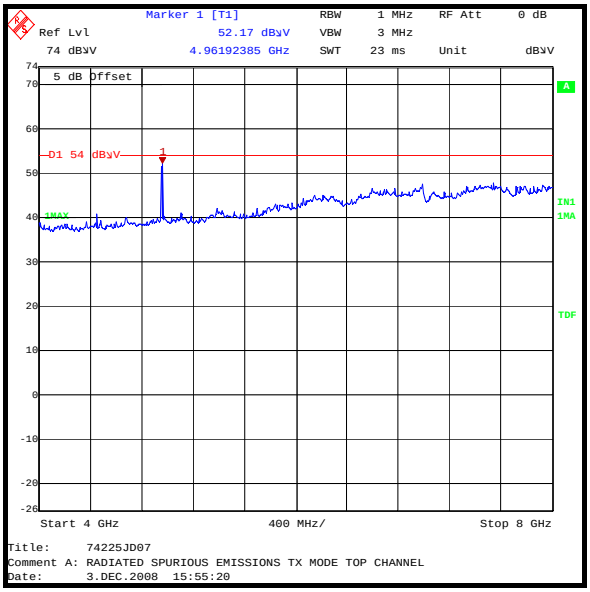
Frequency (GHz)	Antenna Polarity	Detector Level (dBµV)	Transducer Factor (dB)	Actual Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Result
4.937	Vertical	63	-10.1	51.9	54.0	2.1	Complied

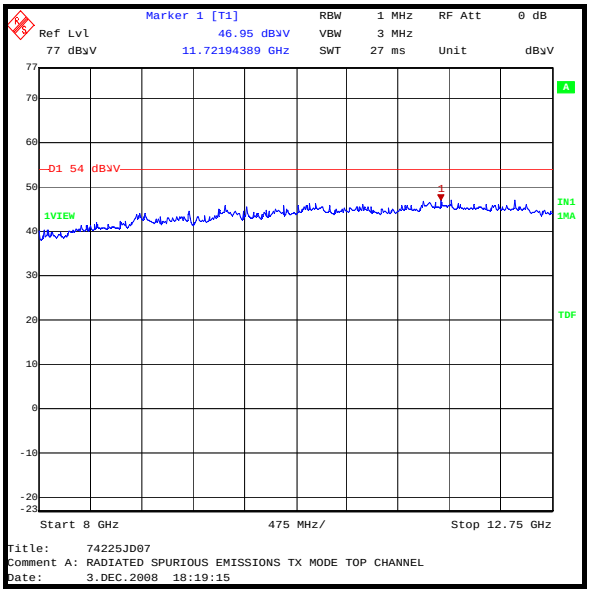
Test of: **Datalogic Scanning, PowerScan PBT7100 Wireless Basestation**
Basestation Class: BC7010, ZP0002821

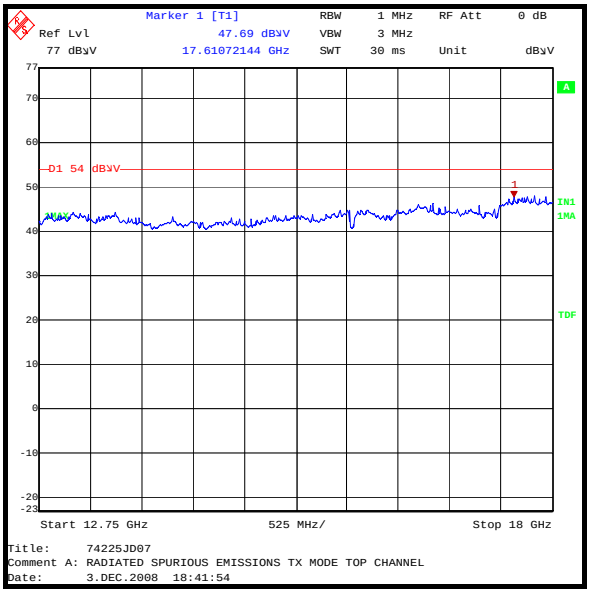
To: **FCC Part 15.247: 2008 (Subpart C),**
RSS-210 Issue 7 June 2007 and RSS-Gen Issue 2 June 2007

Transmitter Radiated Emissions – Static Mode (Continued)







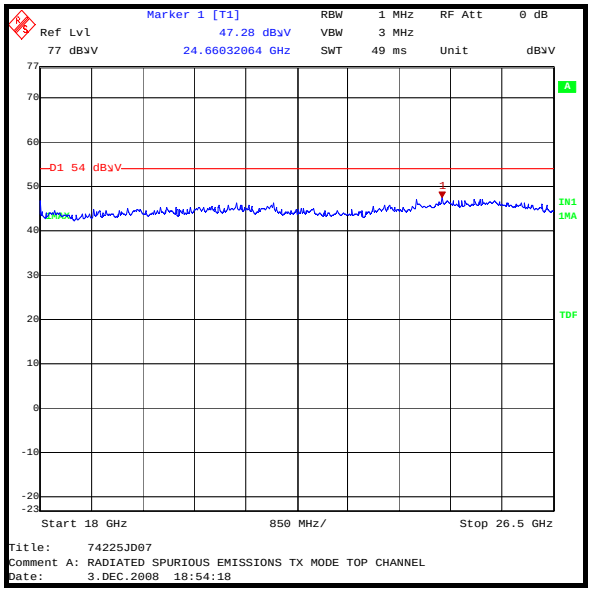


Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

Test of: **Datalogic Scanning, PowerScan PBT7100 Wireless Basestation**
Basestation Class: BC7010, ZP0002821

To: **FCC Part 15.247: 2008 (Subpart C),**
RSS-210 Issue 7 June 2007 and RSS-Gen Issue 2 June 2007

Transmitter Radiated Emissions – Static Mode (Continued)

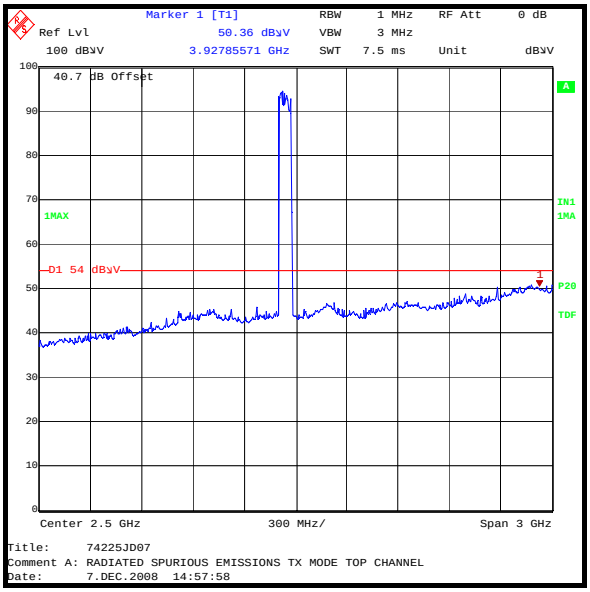


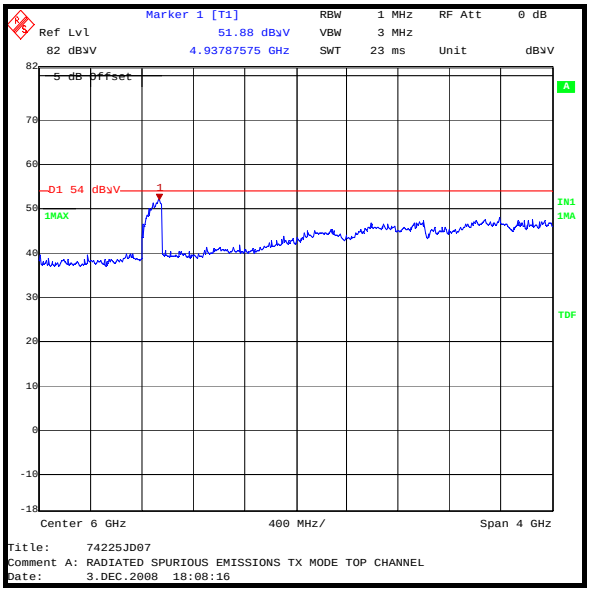
Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

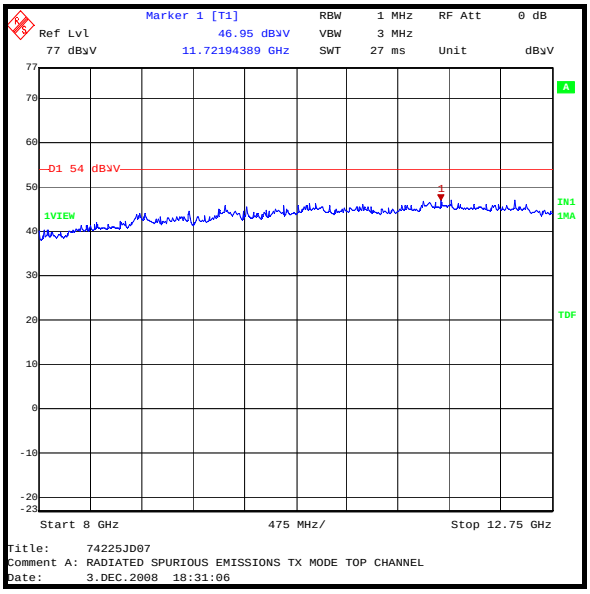
Test of: **Datalogic Scanning, PowerScan PBT7100 Wireless Basestation**
Basestation Class: BC7010, ZP0002821

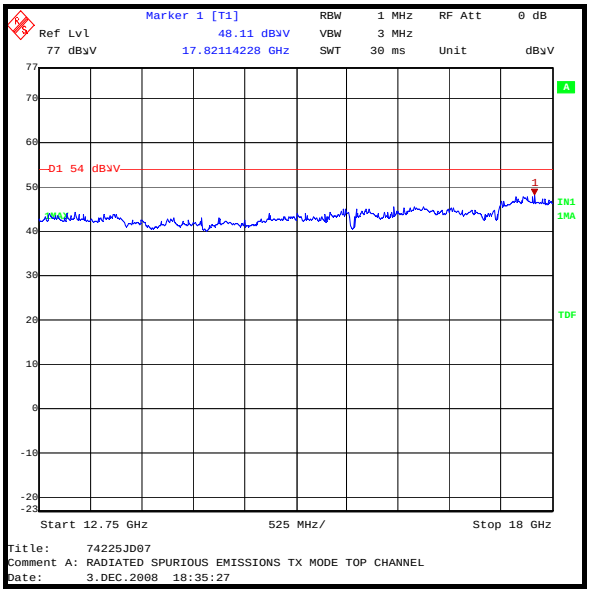
To: **FCC Part 15.247: 2008 (Subpart C),**
RSS-210 Issue 7 June 2007 and RSS-Gen Issue 2 June 2007

Transmitter Radiated Emissions – Hopping Mode (Continued)







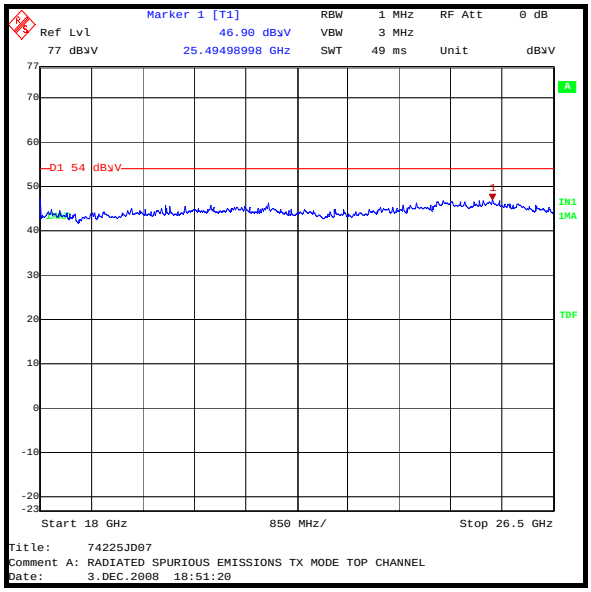


Note: These plots are pre-scans and for indication purposes only. For final measurements, see accompanying tables.

Test of: Datalogic Scanning, PowerScan PBT7100 Wireless Basestation
Basestation Class: BC7010, ZP0002821

To: FCC Part 15.247: 2008 (Subpart C),
RSS-210 Issue 7 June 2007 and RSS-Gen Issue 2 June 2007

Transmitter Radiated Emissions – Hopping Mode (Continued)



7.2.11. Transmitter Band Edge Radiated Emissions (CFR 47 15.247(d) & 15.209(a))

Ambient Temperature: 22ºC Relative Humidity: 25%

Tests were performed using the test methods detailed in ANSI C63.4 Section 8 and Public Notice DA 00-705 (March 30, 2000).

Electric Field Strength Measurements

Peak Power Level Hopping Mode:

Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2400.0	2.4000	Vertical	56.2	-7.7	48.5	90.6	42.1
2483.5	2.4835	Vertical	69.5	-7.7	61.8	74.0	12.2

Average Power Level Hopping Mode:

Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2.4835	Vertical	51.1	-7.7	43.4	54.0	9.6	Complied

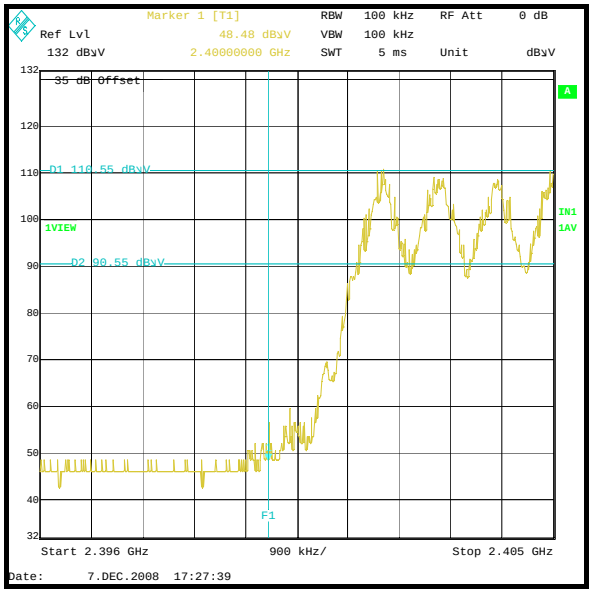
Note(s):

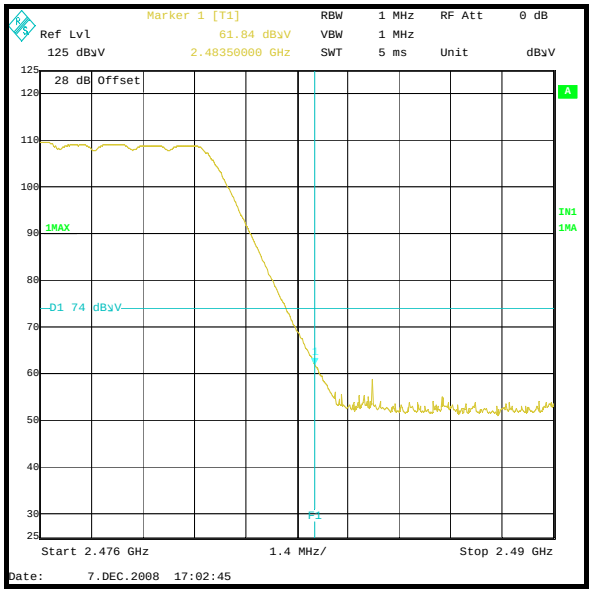
1. * -20 dBc limit

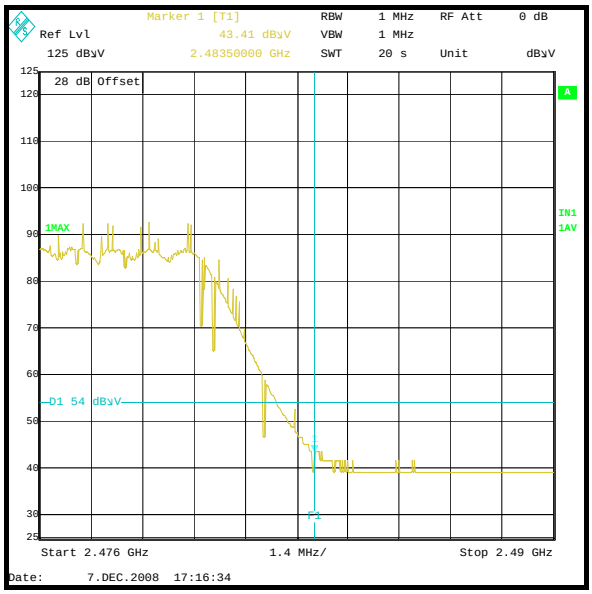
Test of: Datalogic Scanning, PowerScan PBT7100 Wireless Basestation
Basestation Class: BC7010, ZP0002821

To: FCC Part 15.247: 2008 (Subpart C),
RSS-210 Issue 7 June 2007 and RSS-Gen Issue 2 June 2007

Transmitter Band Edge Radiated Emissions (Continued)







Transmitter Band Edge Radiated Emissions (CFR 47 15.247(d) & 15.209(a)) (Continued)

Peak Power Level Static Mode:

Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2400.0	Vertical	64.6	-7.7	56.9	*90.3	33.4	Complied
2483.5	Vertical	70.9	-7.7	63.2	74	10.8	Complied

Average Power Level Static Mode:

Frequency (MHz)	Antenna Polarity	Detector Level (dBμV)	Transducer Factor (dB)	Actual Level (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Result
2.4835	Vertical	60.1	-7.7	52.4	54.0	1.6	Complied

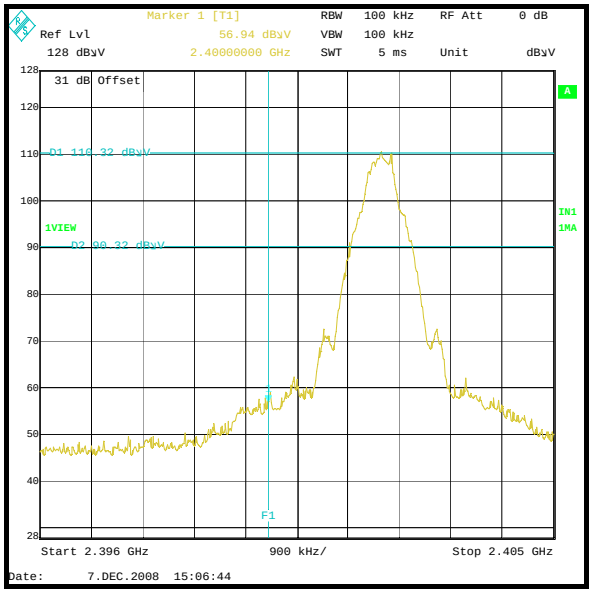
Note(s):

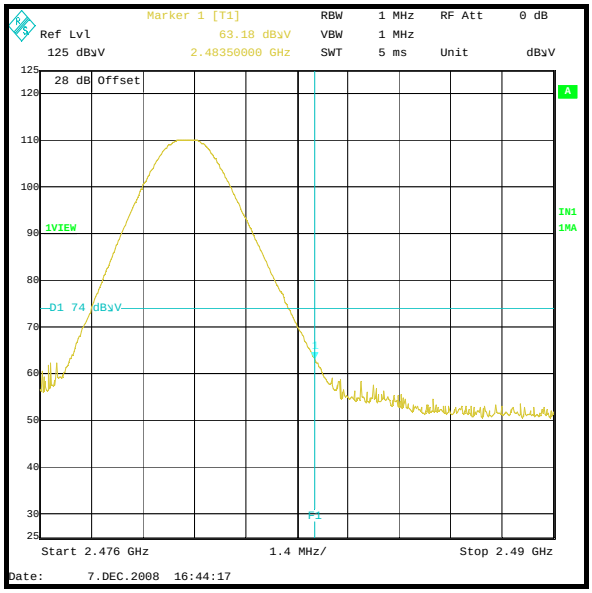
1. * -20 dBc limit

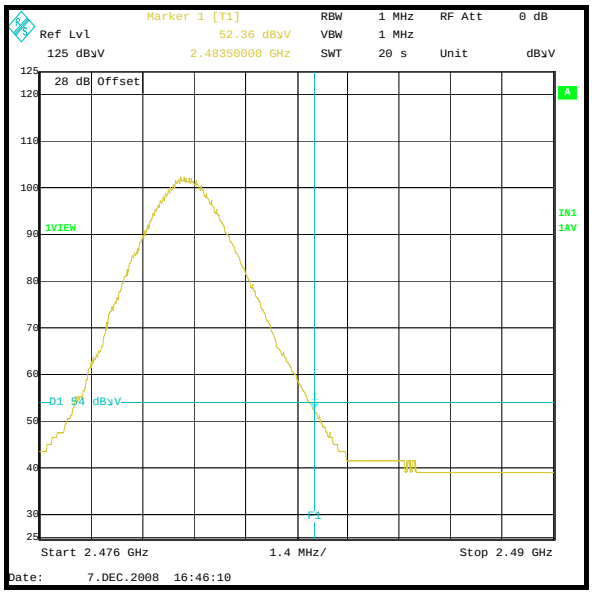
Test of: Datalogic Scanning, PowerScan PBT7100 Wireless Basestation
Basestation Class: BC7010, ZP0002821

To: FCC Part 15.247: 2008 (Subpart C),
RSS-210 Issue 7 June 2007 and RSS-Gen Issue 2 June 2007

Transmitter Band Edge Radiated Emissions (Continued)







8. Measurement Uncertainty

No measurement or test can ever be perfect and the imperfections give rise to error of measurement in the results. Consequently, the result of a measurement is only an approximation to the value of the measurand (the specific quantity subject to measurement) and is only complete when accompanied by a statement of the uncertainty of the approximation.

The expression of uncertainty of a measurement result allows realistic comparison of results with reference values and limits given in specifications and standards.

The uncertainty of the result may need to be taken into account when interpreting the measurement results.

The reported expanded uncertainties below are based on a standard uncertainty multiplied by an appropriate coverage factor, such that a confidence level of approximately 95% is maintained. For the purposes of this document “approximately” is interpreted as meaning “effectively” or “for most practical purposes”.

Measurement Type	Range	Confidence Level (%)	Calculated Uncertainty
AC Conducted Spurious Emissions	0.15 MHz to 30 MHz	95%	±4.05 dB
Transmitter Maximum Peak Output Power	Not Applicable	95%	±2.94 dB
Conducted Emissions Antenna Port	30 MHz to 40 GHz	95%	±0.28 dB
Transmitter Carrier Frequency Separation	Not Applicable	95%	±11.4 ppm
Transmitter Average Time of Occupancy	Not Applicable	95%	±0.3 ns
20 dB Bandwidth	Not Applicable	95%	±11.4 ppm
Radiated Spurious Emissions	30 MHz to 1000 MHz	95%	±4.68 dB
Radiated Spurious Emissions	1 GHz to 40 GHz	95%	±2.94 dB

The methods used to calculate the above uncertainties are in line with those recommended within the various measurement specifications. Where measurement specifications do not include guidelines for the evaluation of measurement uncertainty, the published guidance of the appropriate accreditation body is followed.

Appendix 1. Test Equipment Used

RFI No.	Instrument	Manufacturer	Type No.	Serial No.	Date Last Calibrated	Cal. Interval (Months)
A1227	Pre Amplifier	Agilent	8449B	3008A01566	01 Oct 2008	12
A1299	Antenna	Schaffner	CBL6143	5094	28 Jul 2008	12
A1818	Antenna	EMCO	3115	00075692	25 Oct 2008	12
C1164	Cable	Rosenberger Micro-Coax	FA210A1015007070	43188-1	20 Apr 2008	12
C1297	10m Cable	Rosenberger	FA210A0100005050	58941-01	10 Jul 2008	12
C1298	10m Cable	Rosenberger	FA210A0100005050	58941-02	Calibrated before use	-
K0002	Site Reference 4421	Rainford EMC	N/A	N/A	26 August 2008	12
M1124	Spectrum Analyser	Rohde & Schwarz	ESIB26	100046K	19 Feb 2008	12
M1239	N4010A	Agilent	N4010A	GB45140361	Calibration not required	-
M1379	Test Receiver	Rohde and Schwarz	ESIB7	100330	14 Aug 2008	12
M1447	CBT	Rohde and Schwarz	1153.9000.35	100329	24 Jan 2008	12

NB In accordance with UKAS requirements, all the measurement equipment is on a calibration schedule.