



**FCC & Industry Canada Certification
Test Report**

for

NBB Controls & Components AG

Model: Pocket-A

FCC ID: SJ7TKEY96

IC ID: 2634B-TKEY96

April 28, 2005

Revision 1: September 15, 2005

Prepared for:

**NBB Controls & Components AG
Otto-Hahn-Straße 1-3
D-75248 Ölbronn-Dürrn**

Prepared By:

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



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NBB Controls & Components AG
Pocket Industrial Remote Control
FCC ID: SJ7TKEY96
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April 28, 2005

WLL JOB# 8520/1

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Documentation Specialist

Reviewed by: Gregory M. Snyder
Chief EMC Engineer

Abstract

This report has been prepared on behalf of NBB Controls & Components AG to support the attached Application for Equipment Authorization. The test report and application are submitted for a Periodic Intentional Radiator under Part 15.231 of the FCC Rules and Regulations and Spectrum Management and Telecommunications Policy RSS-210 of Industry Canada. This Federal Communication Commission (FCC) Certification Test Report documents the test configuration and test results for a NBB Controls & Components AG Pocket Industrial Remote Control.

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. The Industry Canada OATS numbers are 3035A-1 and 3035A-2 for Washington Laboratories, Ltd. Site 1 and Site 2, respectively. Washington Laboratories, Ltd. has been accepted by the FCC and approved by NIST NVLAP (NVLAP Lab Code: 200066-0) as an independent FCC test laboratory.

The NBB Controls & Components AG Pocket Industrial Remote Control complies with the limits for a Periodic Intentional Radiator device under FCC Part 15.231 and Industry Canada RSS-210.

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1 Introduction

1.1 Compliance Statement

The NBB Controls & Components AG Pocket Industrial Remote Control complies with the limits for a Periodic Intentional Radiator device under FCC Part 15.231 and Industry Canada RSS-210.

1.2 Test Scope

Tests for radiated emissions were performed. All measurements were performed according to the 2003 version of ANSI C63.4. The measurement equipment conforms to ANSI C63.2 Specifications for Electromagnetic Noise and Field Strength Instrumentation.

1.3 Contract Information

Customer: NBB Controls & Components AG
Otto-Hahn-Straße 1-3
D-75248 Ölbronn-Dürrn

Quotation Number: 61756

1.4 Test Dates

Testing was performed from January 7, 2005 to April 4, 2005.

1.5 Test and Support Personnel

Washington Laboratories, LTD	Greg Snyder, James Ritter
Client Representative	Thomas Burchard

2 Equipment Under Test

2.1 EUT Identification & Description

NBB Controls & Components AG Pocket-A is a remote control for use at industrial/construction locations for remote control of crane operations. The hand-held unit is powered via two 7.2 Volt NiCd batteries. The transmitter board is designated the S-DE96A0.

Table 1. Device Summary

ITEM	DESCRIPTION
Manufacturer:	NBB Controls & Components AG
FCC ID Number	SJ7TKEY96
Industry Canada Number	2634B-TKEY96
EUT Name:	Industrial Remote Control
Model:	Pocket-A
FCC Rule Parts:	§15.231
IC Rule Parts:	RSS-210
Frequency Range:	433.1 - 434.75 MHz
Maximum Output Power:	N/A
Modulation:	FSK
Occupied Bandwidth:	9.066 kHz
Keying:	Manual
Type of Information:	Control
Number of Channels:	66
Power Output Level	N/A
Antenna Type	Integral
Interface Cables:	None
Power Source & Voltage:	7.2Vdc

2.2 Test Configuration

The Pocket was tested in a stand-alone configuration.

2.3 Testing Algorithm

The Pocket was tested in continuous transmit.

As this is a hand-held unit the EUT was tested in three orthogonal planes. 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. The Industry Canada OATS numbers are 3035A-1 and 3035A-2 for Washington

Laboratories, Ltd. Site 1 and Site 2, respectively. Washington Laboratories, Ltd. has been accepted by the FCC and approved by NIST NVLAP (NVLAP Lab Code: 200066-0) as an independent FCC test laboratory.

2.5 Measurements

2.5.1 References

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

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

Land Mobile FM or PM Communications Equipment Measurement and Performance Standards (ANSI/TIA/EIA-603-93)

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 = $0.5 (2^2 + 1^2 + 4^2)^{1/2} = \pm 2.3$ 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

Equipment	WLL Asset #	Calibration Due
Sunol JB1 Biconilog Antenna	0382	1/06/06
ARA DRG118/A Microwave Horn Antenna	0425	4/17/05
Hewlett-Packard 8568B Spectrum Analyzer	0072	7/01/05
Hewlett-Packard 85650A Quasi-Peak Adapter	0069	7/08/05
Hewlett-Packard 85685A RF Preselector	0070	7/06/05
Hewlett-Packard 8593A Spectrum Analyzer	0074	8/17/05
Hewlett-Packard 8449B Microwave Preamp	0312	9/29/05

4 Test Results

4.1 Transmission Cessation from Time-of-Release

FCC Part 15.231 states that a periodic intentional radiator shall cease transmission within a five second period from release of manual keying of operation.

Testing was conducted to verify that the Pocket Industrial Remote Control stopped transmitting within the required time period. A 10 second sweep was made, during which the control toggle was activated and released, and the time to transmission end was measured. Figure 1 shows the indicated time period from un-keying the device until cessation of transmission. The measured time of transmission is 4.7 seconds and therefore complies with §15.231.

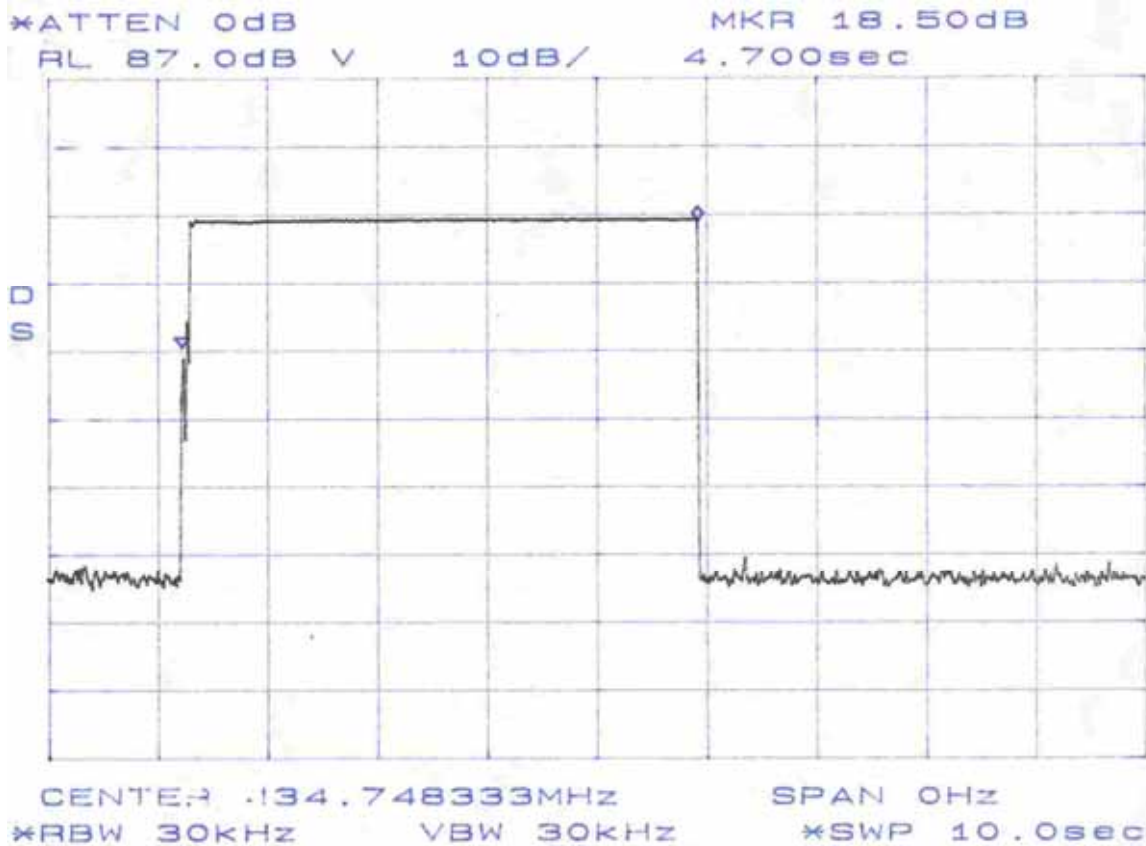


Figure 1. Time Period: Release to Termination of Transmission

4.2 Occupied Bandwidth: (FCC Part §2.1049)

Occupied bandwidth was performed by coupling the output of the EUT to the input of a spectrum analyzer. The coupling was performed by placing a receive antenna near the EUT.

FCC Part 15.231 states that the 20 dB bandwidth of the modulated carrier shall be as follows:

Frequency Range (MHz)	Occupied Bandwidth Limit
70-900 MHz	0.25%
>900 MHz	0.5%

At full modulation, the occupied bandwidth was measured as shown:

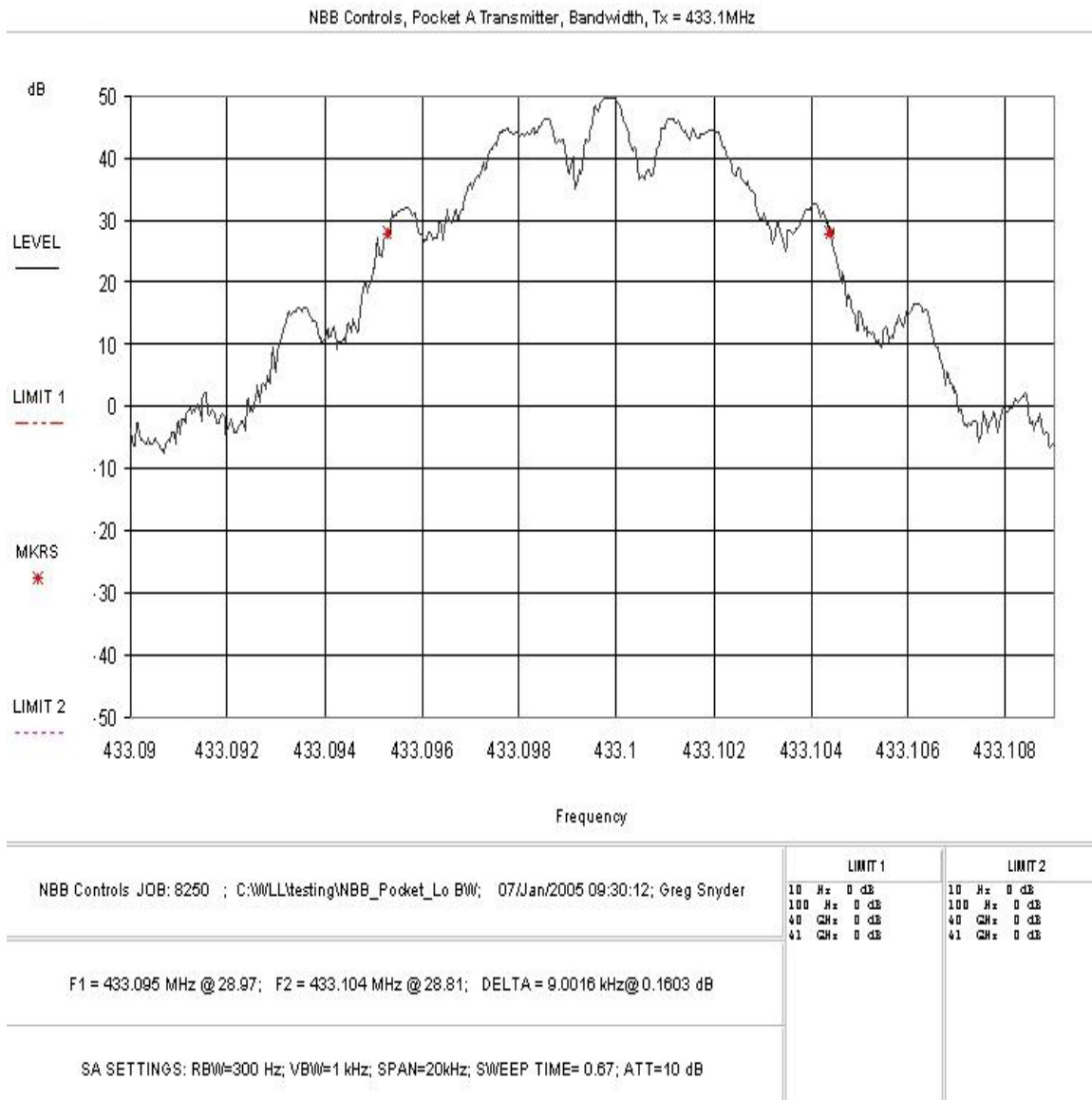


Figure 2. Occupied Bandwidth, Low Channel

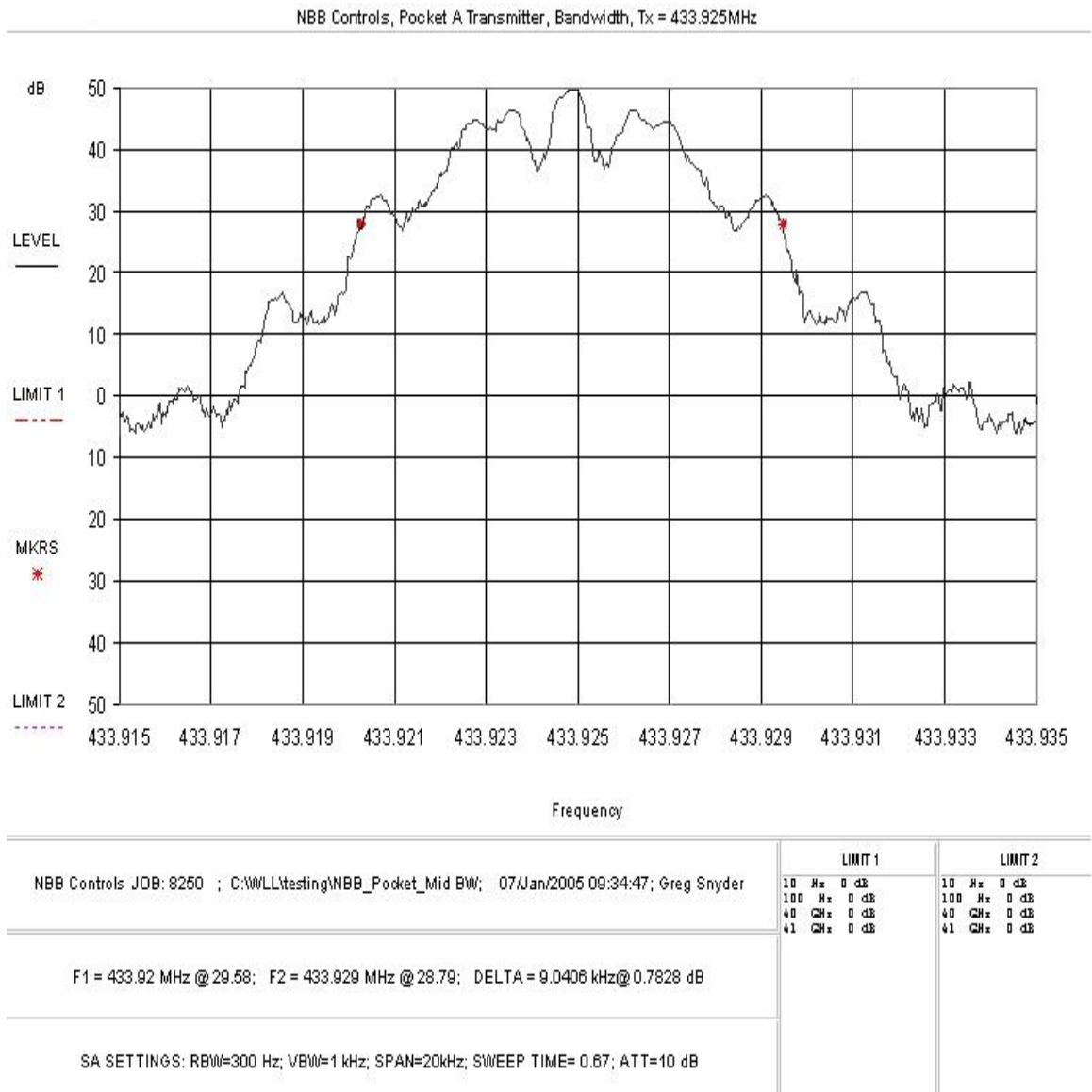


Figure 3. Occupied Bandwidth, Mid Channel

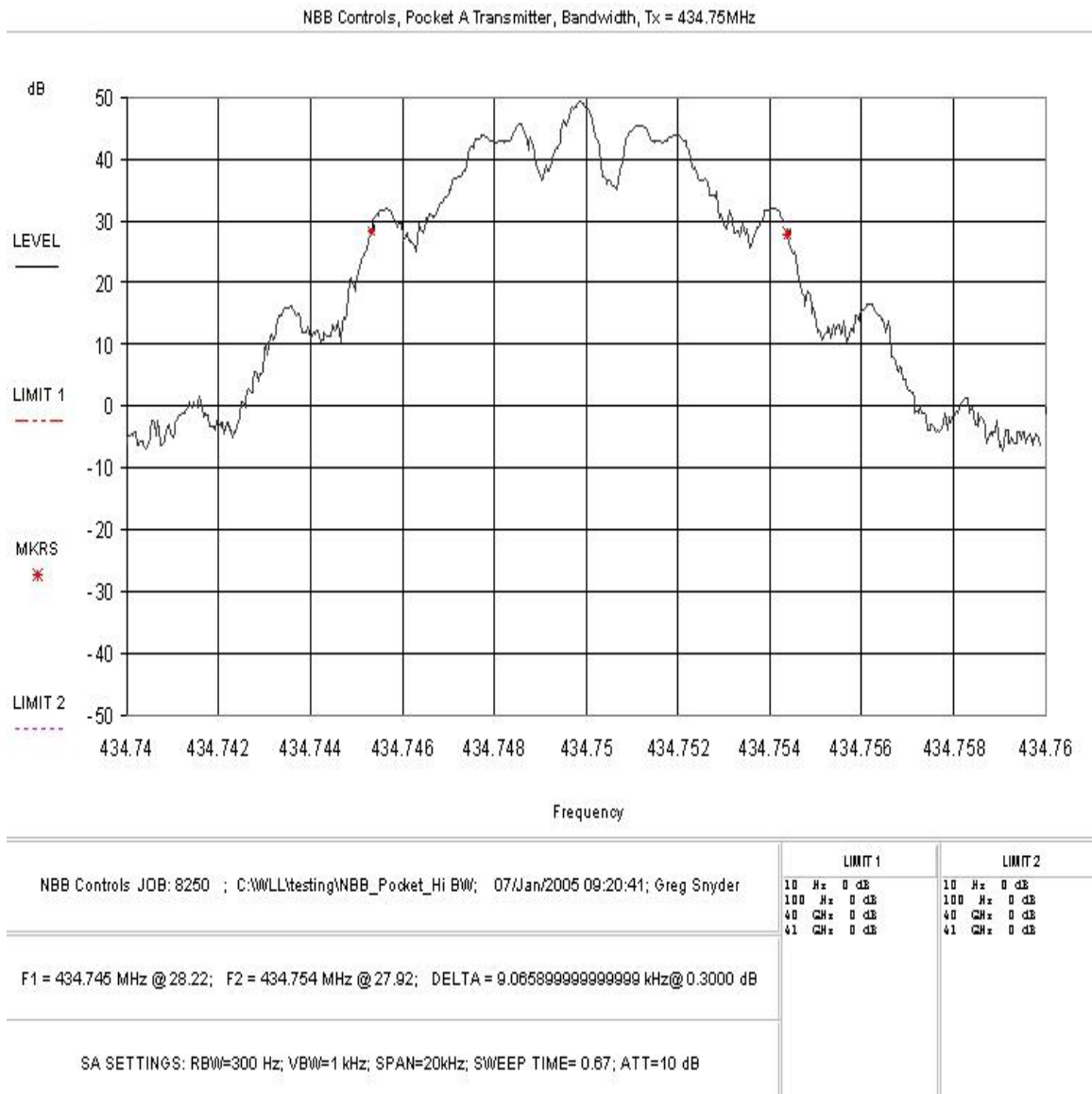


Figure 4. Occupied Bandwidth, High Channel

Table 3 provides a summary of the Occupied Bandwidth Results.

Table 3. Occupied Bandwidth Results

Frequency	Bandwidth	Limit	Pass/Fail
Low Channel: 433.1MHz	9 kHz	1.082 MHz	Pass
Mid Channel: 433.925MHz	9.04 kHz	1.084 MHz	Pass
High Channel: 434.75MHz	9.065 kHz	1.086 MHz	Pass

4.3 Radiated Spurious Emissions

The EUT must comply with requirements for radiated spurious emissions per the limits given in §15.231(a). In addition, any emissions appearing in the restricted bands listed in §15.205 must comply with the general emission limits of 15.209.

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. Both the horizontal and vertical field components were measured.

The emissions were measured using the following resolution bandwidths:

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

Emissions were measured to the 10th harmonic of the transmit frequency. The controller was tested in three orthogonal planes. Worst case emission levels are reported.

The following is a sample calculation used in the data tables for calculating the final field strength of spurious emissions and comparing these levels to the specified limits.

Sample Calculation:

Spectrum Analyzer Voltage (SA Level): V dBμV (Peak)

Antenna Factor (Ant Corr): AFdB/m

Cable Loss Correction (Cable Corr): CCdB

Amplifier Gain: GdB

Electric Field (Corr Level): EdBμV/m = VdBμV + AFdB/m + CCdB +
DCCdB - GdB

Table 4. Radiated Emissions Test Data, Low Channel: Peak Data

CLIENT: NBB Controls DATE: 1/7/2005
TESTER: Greg Snyder JOB #: 8520
EUT Information:
EUT: Pocket-A
CONFIGURATION: Flat, Upright, Horz. Worst Case TEST STANDARD: FCC Part 15.231
Channel: Low channel, 433.1MHz DISTANCE: 3m
CLASS: B
Low Frequency Test Equipment/Limit:
ANTENNA: A_00007
CABLE: CSITE2_3m
LIMIT: LFCC_3m_Class_B
Test Requirements:
ANTENNA: A_00004
CABLE: CSITE2_HF
AMPLIFIER: 0066

Frequency (MHz)	Polarity H/V	Az Deg	Ant. Hgh t (m)	SA Level Peak (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB	Notes
433.10	V	292.5	1.2	56.2	16.9	2.7	0.0	75.7	6124.1	10962.5	-5.1	
433.10	H	180.0	2.0	53.1	16.9	2.7	0.0	72.6	4285.9	10962.5	-8.2	
866.20	V	315.0	2.5	15.2	22.1	3.7	0.0	41.0	111.8	1096.3	-19.8	
866.20	H	180.0	1.0	13.3	22.1	3.7	0.0	39.1	89.8	1096.3	-21.7	
1299.30	H	270.0	1.0	50.2	25.9	2.3	36.1	42.3	130.0	1096.3	-18.5	
1299.30	V	180.0	1.0	53.3	25.9	2.3	36.1	45.4	185.8	1096.3	-15.4	
1732.40	H	135.0	1.0	50.8	27.3	2.4	35.7	44.8	173.8	1096.3	-16.0	
1732.40	V	180.0	1.0	50.7	27.3	2.4	35.7	44.7	171.8	1096.3	-16.1	
2165.50	H	202.5	1.0	50.6	28.4	2.7	35.5	46.2	204.3	1096.3	-14.6	
2165.50	V	202.5	1.0	49.7	28.4	2.7	35.5	45.3	184.2	1096.3	-15.5	
2598.60	H	180.0	1.0	49.5	29.3	3.1	35.6	46.2	205.3	1096.3	-14.6	
2598.60	V	180.0	1.0	48.5	29.3	3.1	35.6	45.2	182.9	1096.3	-15.6	
3031.70	H	0.0	1.0	42.7	30.0	3.4	35.7	40.4	105.1	1099.7	-20.4	amb
3031.70	V	0.0	1.0	42.7	30.0	3.4	35.7	40.4	105.1	1099.7	-20.4	amb
3464.80	H	180.0	1.0	52.3	30.6	3.6	35.5	50.9	351.9	1096.3	-9.9	
3464.80	V	180.0	1.0	52.3	30.6	3.6	35.5	51.0	353.1	1096.3	-9.8	
3897.90	H	247.5	1.0	50.8	31.0	3.8	35.4	50.2	323.0	5000.0	-23.8	
3897.90	V	22.5	1.0	49.2	31.0	3.8	35.4	48.6	268.7	5000.0	-25.4	
4331.00	H	180.0	1.0	50.7	31.7	3.9	35.6	50.7	343.3	5000.0	-23.3	
4331.00	V	202.5	1.0	48.0	31.7	3.9	35.6	48.0	251.5	5000.0	-26.0	

Table 5: Radiated Emission Test Data, Low Channel: Average Data

CLIENT: NBB Controls
TESTER: Greg Snyder

DATE: 1/7/2005
JOB #: 8520

EUT Information:

EUT: Pocket-A
CONFIGURATION: Upright
Channel: Low channel, 433.1MHz

Test Requirements:

TEST STANDARD: FCC Part 15.231
DISTANCE: 3m
CLASS: B

Low Frequency Test Equipment/Limit:

ANTENNA: A_00007
CABLE: CSITE2_3m
LIMIT: LFCC_3m_Class_B

High Frequency Test Equipment/Limit:

ANTENNA: A_00004
CABLE: CSITE2_HF
AMPLIFIER: 0066

Frequency (MHz)	Polarity H/V	Az Deg	Ant. Hght (m)	SA Level Avg. (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB	Notes
1299.30	V	180.0	1.0	48.8	25.9	2.3	36.1	40.9	110.7	1096.3	-19.9	
1299.30	H	270.0	1.0	40.8	25.9	2.3	36.1	32.9	44.1	1096.3	-27.9	
1732.40	V	180.0	1.0	45.7	27.3	2.4	35.7	39.7	96.6	1096.3	-21.1	
1732.40	H	135.0	1.0	44.5	27.3	2.4	35.7	38.5	84.2	1096.3	-22.3	
2165.50	V	202.5	1.0	42.2	28.4	2.7	35.5	37.8	77.7	1096.3	-23.0	
2165.50	H	202.5	1.0	44.2	28.4	2.7	35.5	39.8	97.8	1096.3	-21.0	
2598.60	V	180.0	1.0	46.2	29.3	3.1	35.6	42.9	140.4	1096.3	-17.9	
2598.60	H	180.0	1.0	42.8	29.3	3.1	35.6	39.5	94.9	1096.3	-21.3	
3031.70	V	0.0	1.0	32.3	30.0	3.4	35.7	30.0	31.7	1099.7	-30.8	amb
3031.70	H	0.0	1.0	32.3	30.0	3.4	35.7	30.0	31.7	1099.7	-30.8	amb
3464.80	V	180.0	1.0	48.3	30.6	3.6	35.5	46.9	222.0	1096.3	-13.9	
3464.80	H	180.0	1.0	48.0	30.6	3.6	35.5	46.6	214.5	1096.3	-14.2	
3897.90	V	22.5	1.0	41.7	31.0	3.8	35.4	41.1	113.3	1096.3	-19.7	
3897.90	H	247.5	1.0	45.7	31.0	3.8	35.4	45.1	179.6	500.0	-8.9	
4331.00	V	202.5	1.0	41.3	31.7	3.9	35.6	41.3	116.3	500.0	-12.7	
4331.00	H	180.0	1.0	45.8	31.7	3.9	35.6	45.8	195.3	500.0	-8.2	

Table 6. Radiated Emissions Test Data, Mid Channel: Peak Data

CLIENT: NBB Controls DATE: 1/7/2005
TESTER: Greg Snyder JOB #: 8520

EUT Information:

EUT: Pocket-A
CONFIGURATION: Flat
Channel: Mid channel, 433.925MHz

Test Requirements:

TEST STANDARD: FCC Part 15.231
DISTANCE: 3m
CLASS: B

Low Frequency Test Equipment/Limit:

ANTENNA: A_00007
CABLE: CSITE2_3m
LIMIT: LFCC_3m_Class_B

High Frequency Test Equipment/Limit:

ANTENNA: A_00004
CABLE: CSITE2_HF
AMPLIFIER: 0066

Frequency (MHz)	Polarity H/V	Az Deg	Ant. Hght (m)	SA Level Peak (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB	Note s
433.93	V	212.5	1.5	55.4	15.4	3.1	0.0	73.9	4953.9	10996.9	-6.9	
433.93	H	0.0	1.0	55.5	15.4	3.1	0.0	74.0	5011.3	10996.9	-6.8	
867.85	V	45.0	1.0	10.2	20.4	4.4	0.0	35.0	56.0	1099.7	-25.9	
867.85	H	180.0	1.0	10.2	20.4	4.4	0.0	35.0	56.0	1099.7	-25.9	
1301.78	V	112.5	1.0	56.8	26.7	2.3	36.1	49.7	304.0	5000.0	-24.3	
1301.78	H	180.0	1.0	50.3	25.9	2.3	36.1	42.4	131.7	5000.0	-31.6	
1735.70	V	270.0	1.0	58.5	28.4	2.4	35.7	53.6	477.1	1099.7	-7.3	
1735.70	H	225.0	1.0	52.3	27.3	2.4	35.7	46.3	206.9	1099.7	-14.5	
2169.63	V	180.0	1.0	53.3	29.5	2.7	35.5	50.0	316.9	1099.7	-10.8	
2169.63	H	225.0	1.0	53.2	28.4	2.7	35.5	48.8	276.0	1099.7	-12.0	
2603.55	H	180.0	1.0	49.0	29.3	3.1	35.6	45.8	194.0	1099.7	-15.1	
2603.55	V	180.0	1.0	52.3	30.2	3.1	35.6	49.9	313.8	1099.7	-10.9	
3037.48	V	0.0	1.0	51.0	30.7	3.4	35.7	49.4	295.2	1099.7	-11.4	Amb
3037.48	H	0.0	1.0	42.7	30.0	3.4	35.7	40.4	105.1	1099.7	-20.4	Amb
3471.40	V	270.0	1.0	57.0	31.0	3.6	35.5	56.0	633.6	1099.7	-4.8	
3471.40	H	180.0	1.0	52.7	30.6	3.6	35.5	51.3	369.0	1099.7	-9.5	
3905.33	V	0.0	1.0	52.0	31.2	3.8	35.4	51.5	377.8	5000.0	-22.4	
3905.33	H	247.5	1.0	50.3	31.0	3.8	35.4	49.7	305.3	5000.0	-24.3	
4339.25	V	180.0	1.0	55.3	32.1	3.9	35.6	55.7	610.6	5000.0	-18.3	
4339.25	H	180.0	1.0	51.3	31.7	3.9	35.6	51.3	368.3	5000.0	-22.7	

Table 7: Radiated Emission Test Data, Mid Channel: Average Data

CLIENT:	NBB Controls	DATE:	1/7/2005
TESTER:	Greg Snyder	JOB #:	8520
<u>EUT Information:</u>			
EUT:	Pocket-A	<u>Test Requirements:</u>	
CONFIGURATION:	Horizontal	TEST STANDARD: FCC Part 15.231	
Channel:	Mid channel, 433.925MHz	DISTANCE:	3m
		CLASS:	B
<u>Low Frequency Test Equipment/Limit:</u>		<u>High Frequency Test Equipment/Limit:</u>	
ANTENNA:	A_00007	ANTENNA:	A_00004
CABLE:	CSITE2_3m	CABLE:	CSITE2_HF
LIMIT:	LFCC_3m_Class_B	AMPLIFIER:	0066

Frequency (MHz)	Polarity H/V	Az Deg	Ant. Hght (m)	SA Level Avg. (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB	Notes
1301.78	V	112.5	1.0	49.5	26.7	2.3	36.1	42.4	131.2	500.0	-11.6	
1301.78	H	180.0	1.0	42.0	25.9	2.3	36.1	34.1	50.7	500.0	-19.9	
1735.70	V	270.0	1.0	51.2	28.4	2.4	35.7	46.3	205.9	1099.7	-14.6	
1735.70	H	225.0	1.0	47.2	27.3	2.4	35.7	41.2	115.0	1099.7	-19.6	
2169.63	H	225.0	1.0	48.2	28.4	2.7	35.5	43.8	155.2	1099.7	-17.0	
2169.63	V	180.0	1.0	45.4	29.5	2.7	35.5	42.1	127.6	1099.7	-18.7	
2603.55	V	180.0	1.0	46.5	29.3	3.1	35.6	43.3	145.5	1099.7	-17.6	
2603.55	H	180.0	1.0	40.8	29.3	3.1	35.6	37.6	75.5	1099.7	-23.3	
3037.48	V	0.0	1.0	41.3	30.7	3.4	35.7	39.7	96.6	1099.7	-21.1	Amb
3037.48	H	0.0	1.0	32.3	30.0	3.4	35.7	30.0	31.7	1099.7	-30.8	Amb
3471.40	V	270.0	1.0	51.2	31.0	3.6	35.5	50.2	325.0	1099.7	-10.6	
3471.40	H	270.0	1.0	48.5	30.6	3.6	35.5	47.1	227.5	1099.7	-13.7	
3905.33	H	225.0	1.0	45.3	31.0	3.8	35.4	44.7	171.7	500.0	-9.3	
3905.33	V	225.0	1.0	43.3	31.0	3.8	35.4	42.7	136.4	500.0	-11.3	
4339.25	V	45.0	1.0	48.2	31.7	3.9	35.6	48.2	257.7	500.0	-5.8	
4339.25	H	45.0	1.0	47.3	31.7	3.9	35.6	47.3	232.4	500.0	-6.7	

Table 8: Radiated Emission Test Data, High Channel: Peak Data

CLIENT: NBB Controls
TESTER: Greg Snyder

DATE: 1/7/2005
JOB #: 8520

EUT Information:

EUT: Pocket-A
CONFIGURATION: Upright
Channel: High channel, 434.75MHz

Test Requirements:

TEST STANDARD: FCC Part 15.231
DISTANCE: 3m
CLASS: B

Low Frequency Test Equipment/Limit:

ANTENNA: A_00007
CABLE: CSITE2_3m
LIMIT: LFCC_3m_Class_B

High Frequency Test Equipment/Limit:

ANTENNA: A_00004
CABLE: CSITE2_HF
AMPLIFIER: 0066

Frequency (MHz)	Polarity H/V	Az Deg	Ant. Hght (m)	SA Level Peak (dBuV)	Ant. Corr. (dB/m)	Cable Corr. (dB)	Amp (dB)	Corr. Level (dBuV/m)	Corr. Level (uV/m)	Limit (uV/m)	Margin dB	Notes
434.75	V	270.0	1.2	55.0	16.9	2.7	0.0	74.5	5333.9	11031.3	-6.3	
434.75	H	180.0	1.0	53.0	16.9	2.7	0.0	72.5	4236.8	11031.3	-8.3	
869.50	V	90.0	1.5	14.5	22.1	3.7	0.0	40.3	103.2	1103.1	-20.6	
869.50	H	225.0	1.0	13.6	22.1	3.7	0.0	39.4	93.0	1103.1	-21.5	
1304.25	H	270.0	1.0	48.2	25.9	2.3	36.1	40.3	103.6	5000.0	-33.7	
1304.25	V	180.0	1.0	52.5	25.9	2.3	36.1	44.6	169.9	5000.0	-29.4	
1739.00	H	135.0	1.0	51.2	27.3	2.4	35.7	45.2	182.5	1103.1	-15.6	
1739.00	V	180.0	1.0	52.3	27.3	2.4	35.7	46.3	207.2	1103.1	-14.5	
2173.75	H	202.5	1.0	51.2	28.4	2.7	35.5	46.8	219.5	1103.1	-14.0	
2173.75	V	202.5	1.0	50.2	28.4	2.7	35.5	45.8	195.6	1103.1	-15.0	
2608.50	H	180.0	1.0	48.5	29.3	3.1	35.6	45.3	183.4	1103.1	-15.6	
2608.50	V	180.0	1.0	49.8	29.3	3.1	35.6	46.6	213.1	1103.1	-14.3	
3043.25	H	0.0	1.0	42.7	30.0	3.4	35.7	40.4	105.1	1099.7	-20.4	amb
3043.25	V	0.0	1.0	42.7	30.0	3.4	35.7	40.4	105.1	1099.7	-20.4	amb
3478.00	H	180.0	1.0	52.7	30.6	3.6	35.5	51.4	369.6	1103.1	-9.5	
3478.00	V	180.0	1.0	51.0	30.6	3.6	35.5	49.7	303.9	1103.1	-11.2	
3912.75	H	247.5	1.0	50.0	31.0	3.8	35.4	49.4	295.4	5000.0	-24.6	
3912.75	V	22.5	1.0	48.5	31.0	3.8	35.4	47.9	248.5	5000.0	-26.1	
4347.50	H	180.0	1.0	50.8	31.7	3.9	35.6	50.8	348.1	5000.0	-23.1	
4347.50	V	202.5	1.0	51.8	31.7	3.9	35.6	51.8	390.6	5000.0	-22.1	

Table 9. Radiated Emissions Test Data, High Channel: Average Data

CLIENT: NBB Controls DATE: 1/7/2005
TESTER: Greg Snyder JOB #: 8520

EUT Information:

EUT: Pocket-A
CONFIGURATION: Flat
Channel: Hi channel, 434.75MHz

Test Requirements:

TEST STANDARD: FCC Part 15.231
DISTANCE: 3m
CLASS: B

Low Frequency Test Equipment/Limit:

ANTENNA: A_00007
CABLE: CSITE2_3m
LIMIT: LFCC_3m_Class_B

High Frequency Test Equipment/Limit:

ANTENNA: A_00004
CABLE: CSITE2_HF
AMPLIFIER: 0066

Frequency	Polarity	Az	Ant. Hght	SA Level Avg.	Ant. Corr.	Cable Corr.	Amp	Corr. Level	Corr. Level	Limit	Margin	Notes
(MHz)	H/V	Deg	(m)	(dBuV)	(dB/m)	(dB)	(dB)	(dBuV/m)	(uV/m)	(uV/m)	dB	
1304.25	V	180.0	1.0	47.8	25.9	2.3	36.1	39.9	98.9	1103.1	-20.9	
1304.25	H	270.0	1.0	37.8	25.9	2.3	36.1	29.9	31.3	500.0	-24.1	
1739.00	V	180.0	1.0	44.5	27.3	2.4	35.7	38.5	84.4	500.0	-15.5	
1739.00	H	135.0	1.0	43.7	27.3	2.4	35.7	37.7	77.0	1103.1	-23.1	
2173.75	V	202.5	1.0	42.3	28.4	2.7	35.5	37.9	78.8	1103.1	-22.9	
2173.75	H	202.5	1.0	43.8	28.4	2.7	35.5	39.4	93.6	1103.1	-21.4	
2608.50	V	180.0	1.0	46.0	29.3	3.1	35.6	42.8	137.6	1103.1	-18.1	
2608.50	H	180.0	1.0	41.2	29.3	3.1	35.6	38.0	79.2	1103.1	-22.9	
3043.25	V	0.0	1.0	32.3	30.0	3.4	35.7	30.0	31.7	1099.7	-30.8	amb
3043.25	H	0.0	1.0	32.3	30.0	3.4	35.7	30.0	31.7	1099.7	-30.8	amb
3478.00	V	180.0	1.0	46.2	30.6	3.6	35.5	44.9	174.9	1103.1	-16.0	
3478.00	H	180.0	1.0	49.3	30.6	3.6	35.5	48.0	249.9	1103.1	-12.9	
3912.75	V	22.5	1.0	41.0	31.0	3.8	35.4	40.4	104.8	1103.1	-20.4	
3912.75	H	247.5	1.0	43.0	31.0	3.8	35.4	42.4	131.9	500.0	-11.6	
4347.50	V	202.5	1.0	48.3	31.7	3.9	35.6	48.3	261.1	500.0	-5.6	
4347.50	H	180.0	1.0	45.5	31.7	3.9	35.6	45.5	189.1	500.0	-8.4	