

Electromagnetic Compatibility Test Report

Tests Performed on a Herman Miller, Incorporated
Sensor Transciever, Model 1B5RX2
Radiometrics Document RP-6643A



Product Detail:

FCC ID: XWM-HMIMOTE IC: 6108A- HMIMOTE

Equipment type: 900 MHz Transceiver

Test Standards:

US CFR Title 47, Chapter I, FCC Part 15 Subpart C

FCC Part 15 CFR Title 47: 2008

Industry Canada RSS-210, Issue 7: 2007 as required for Category I Equipment

This report concerns: Original Grant for Certification

FCC Part 15.249

Tests Performed For: Test Facility:

Herman Miller, Incorporated Radiometrics Midwest Corporation

855 East Main Av., P.O. Box 302

Zeeland, MI 49464-0302

12 East Devonwood

Romeoville, IL 60446

Test Date(s): (Month-Day-Year)

September 9 thru November 11, 2009

Document RP-6643A Revisions:

Rev.	Issue Date	Affected Pages	Revised By
0	February 5, 2010		
1	February 11, 2010	1	Joseph Strzelecki

Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver

Table of Contents

1 ADMINISTRATIVE DATA	
2 TEST SUMMARY AND RESULTS	3
2.1 RF Exposure Compliance Requirements	3
3 EQUIPMENT UNDER TEST (EUT) DETAILS	4
3.1 EUT Description	
3.1.1 FCC Section 15.203 & RSS-GEN Antenna Requirements	
3.2 Related Submittals	
4 TESTED SYSTEM DETAILS	
4.1 Tested System Configuration	
4.2 Special Accessories	
4.3 Equipment Modifications	
5 TEST SPECIFICATIONS AND RELATED DOCUMENTS	
6 RADIOMETRICS' TEST FACILITIES	5
7 DEVIATIONS AND EXCLUSIONS FROM THE TEST SPECIFICATIONS	6
8 CERTIFICATION	6
9 TEST EQUIPMENT TABLE	6
10 TEST SECTIONS	6
10.1 Time of Occupancy (Dwell Time)	6
10.2 Occupied Bandwidth (20 dB)	
10.3 Band-edge Compliance of RF Emissions	
10.4 Radiated Emissions	
10.4.1 Radiated Emissions Field Strength Sample Calculation	
10.4.2 Radiated Emissions Test Results	
10.5 Receive Mode Radiated Emissions	14

Notice: This report must not be reproduced (except in full) without the written approval of Radiometrics Midwest Corporation.

RP-6643A Rev. 0 Page 2 of 14

Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver

1 ADMINISTRATIVE DATA

Equipment Under Test: A Herman Miller, Incorporated, Sensor Transceiver Model: 1B5RX2 Serial Number: None This will be referred to as the EUT in this Report								
Date EUT Received at Radiometrics: (Month-Day-Year) September 9, 2009	Test Date(s): (Month-Day-Year) September 9 thru November 11, 2009							
Test Report Written By: Joseph Strzelecki Senior EMC Engineer	Test Witnessed By: The tests were not witnessed by Herman Miller, Incorporated							
Radiometrics' Personnel Responsible for Test: Surph Stryelerbi	Chri W. Carlon							
Joseph Strzelecki Senior EMC Engineer NARTE EMC-000877-NE	Chris W. Carlson Director of Engineering NARTE EMC-000921-NE							

2 TEST SUMMARY AND RESULTS

The EUT (Equipment Under Test) is a Sensor Transceiver, Model 1B5RX2, manufactured by Herman Miller, Incorporated. The detailed test results are presented in a separate section. The following is a summary of the test results.

Emissions Tests Results

Environmental Phenomena	Frequency Range	FCC Section	RSS-210 Section	Test Result
20 dB Bandwidth Test	902-928 MHz	15.249	A2.9	Pass
Radiated Emissions	30 MHz to 25 GHz	15.249	A2.9	Pass
AC Conducted Emissions Test	0.15-30 MHz	15.207	RSS-Gen-e 7.2.2	Pass

2.1 RF Exposure Compliance Requirements

Since the power output is less than 1 mW, the EUT meets the FCC requirement for RF exposure. Since the EUT is less than 200 mW, it is exempt from RSS-102. There are no power level adjustments and the antenna is permanently attached.

3 EQUIPMENT UNDER TEST (EUT) DETAILS

3.1 EUT Description

The EUT is a Sensor Transceiver, Model 1B5RX2, manufactured by Herman Miller, Incorporated. The EUT was in good working condition during the tests, with no known defects.

RP-6643A Rev. 0 Page 3 of 14

Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver

3.1.1 FCC Section 15.203 & RSS-GEN Antenna Requirements

The antenna is permanently attached to the PCB via a trace on the circuit board. The antenna is internal to the EUT and it is not readily available to be modified by the end user. Therefore, it meets the 15.203 Requirement.

3.2 Related Submittals

The associated transceiver also is operated under 15.249. It is subject to the FCC requirements pursuant to the Certification equipment authorization under Part 15 Subpart C, and is being submitted as FCC ID: XWM-HMIRADIO.

The associated transceiver is subject to the IC requirements pursuant to the Certification equipment authorization under RSS-210. The associated receiver is subject to the IC requirements pursuant to the Certification equipment authorization under RSS-210.

4 TESTED SYSTEM DETAILS

4.1 Tested System Configuration

The system was configured for testing in a typical fashion. The EUT was placed on an 80-cm high, nonconductive test stand. The testing was performed in conditions as close as possible to installed conditions. Wiring was consistent with manufacturer's recommendations.

The EUT was tested as a stand-alone device. Power was supplied with a new battery.

The identification for all equipment, used in the tested system, are:

Tested System Configuration List

Item	Description	Type*	Manufacturer	Model Number	Serial Number
1	Sensor Transceiver	Е	Herman Miller, Incorporated	1B5RX2	None

^{*} Type: E = EUT, P = Peripheral, S = Support Equipment; H = Host Computer

4.2 Special Accessories

No special accessories were used during the tests in order to achieve compliance.

4.3 Equipment Modifications

No modifications were made to the EUT at Radiometrics' test facility in order to comply with the standards listed in this report.

RP-6643A Rev. 0 Page 4 of 14

Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver

5 TEST SPECIFICATIONS AND RELATED DOCUMENTS

Document	Date	Title
FCC CFR Title 47	2008	Code of Federal Regulations Title 47, Chapter 1, Federal Communications Commission, Part 15 - Radio Frequency Devices
ANSI C63.4-2003	2003	Methods of Measurement of Radio Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
IC RSS-210 Issue 7	2007	Low Power Licence-Exempt Radiocommunication Devices (All Frequency Bands) Category I Equipment
IC RSS-Gen Issue 2	2007	General Requirements and Information for the Certification of Radiocommunication Equipment (RSS-Gen)

The test procedures used are in accordance with the Industry Canada RSS-212 and ANSI document C63.4-2003, "Methods of Measurement of Radio Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz". The specific procedures are described herein. Radiated testing was performed at an antenna to EUT distance of 3 meters. The antenna was raised and lowered from 1 to 4 meters.

6 RADIOMETRICS' TEST FACILITIES

The results of these tests were obtained at Radiometrics Midwest Corp. in Romeoville, Illinois, USA. Radiometrics is accredited by A2LA (American Association for Laboratory Accreditation) to conform to ISO/IEC 17025: 2005 "General Requirements for the Competence of Calibration and Testing Laboratories". Radiometrics' Lab Code is 121191 and Certification Number is 1495.01. Radiometrics' scope of accreditation includes all of the test methods listed herein. A copy of the accreditation can be accessed on our web site (www.radiomet.com). Radiometrics accreditation status can be verified at A2LA's web site (www.a2la2.org).

The following is a list of shielded enclosures located in Romeoville, Illinois used during the tests:

- Chamber A: Is an anechoic chamber that measures 24' L X 12' W X 12' H. The walls and ceiling are fully lined with ferrite absorber tiles. The floor has a 10' x 10' section of ferrite absorber tiles located in the center. Panashield of Rowayton, Connecticut manufactured the chamber. The enclosure is NAMAS certified.
- Chamber E: Is a custom made anechoic chamber that measures 52' L X 30' W X 18' H. The walls and ceiling are fully lined with RF absorber. Pro-shield of Collinsville, Oklahoma manufactured the chamber.
- Test Station F: Is an area that measures 10' D X 12' W X 10' H. The floor and back wall are metal shielded. This area is used for conducted emissions measurements.

A separate ten-foot long, brass plated, steel ground rod attached via a 6 inch copper braid grounds each of the above chambers. Each enclosure is also equipped with low-pass power line filters.

The FCC has accepted these sites as test site number US1065. The FCC test site Registration Number is 732175. Details of the site characteristics are on file with the Industry Canada as site number IC3124A-1.

RP-6643A Rev. 0 Page 5 of 14

Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver

A complete list of the test equipment is provided herein. The calibration due dates are indicated on the equipment list. The equipment is calibrated in accordance to ANSI/NCSL Z540-1 with traceability to the National Institute of Standards and Technology (NIST).

7 DEVIATIONS AND EXCLUSIONS FROM THE TEST SPECIFICATIONS

There were no deviations or exclusions from the test specifications.

8 CERTIFICATION

Radiometrics Midwest Corporation certifies that the data contained herein was taken under conditions that meet or exceed the requirements of the test specification. The results relate only to the EUT listed herein. Any modifications made to the EUT subsequent to the indicated test date will invalidate the data and void this certification.

9 TEST EQUIPMENT TABLE

					Frequency	Cal	Cal
RMC ID	Manufacturer	Description	Model No.	Serial No.	Range	Period	Date
AMP-05	RMC/Celeritek	Pre-amplifier	MW110G	1001	1.0-12GHz	12 Mo.	02/01/09
AMP-22	Anritsu	Pre-amplifier	MH648A	M23969	0.1-1200MHz	12 Mo.	02/03/09
ANT-13	EMCO	Horn Antenna	3115	2502	1.0-18GHz	24 Mo.	10/22/08
ANT-44	Impossible	Super Log Antenna	SL-20M2G	1002	20-2000MHz	24 Mo.	11/25/09
	Machine						
REC-01	Hewlett	Spectrum Analyzer	8566A	2106A02115,	30Hz-22GHz	24 Mo.	10/23/08
	Packard			2209A01349			
REC-03	Anritsu	Spectrum Analyzer	MS2601B	MT94589	0.01-2200MHz	12 Mo.	03/09/09
REC-07	Anritsu	Spectrum Analyzer	MS2601A	MT53067	0.01-2200MHz	12 Mo.	03/09/09
THM-01	Extech Inst.	Temp/Humid Meter	4465CF	001106557	N/A	24 Mo.	01/18/08

Note: All calibrated equipment is subject to periodic checks.

10 TEST SECTIONS

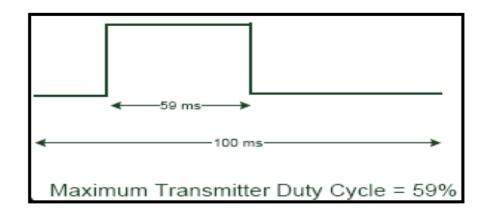
10.1 Time of Occupancy (Dwell Time)

The maximum On-time for any 100mSec period is 59 mSeconds. Therefore, the peak to average factor is 20*Log(59/100) = -4.6 dB

RP-6643A Rev. 0 Page 6 of 14

Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver

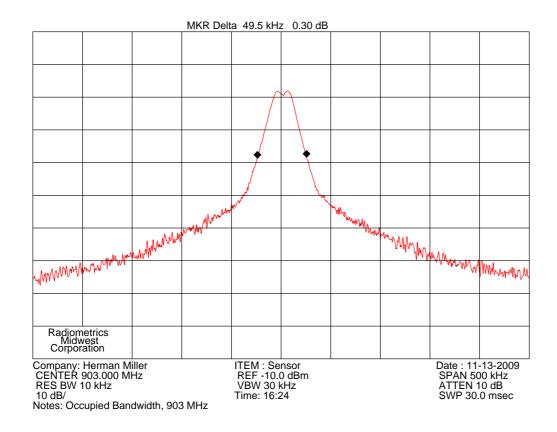
Figure 1. Duty cycle plots



10.2 Occupied Bandwidth (20 dB)

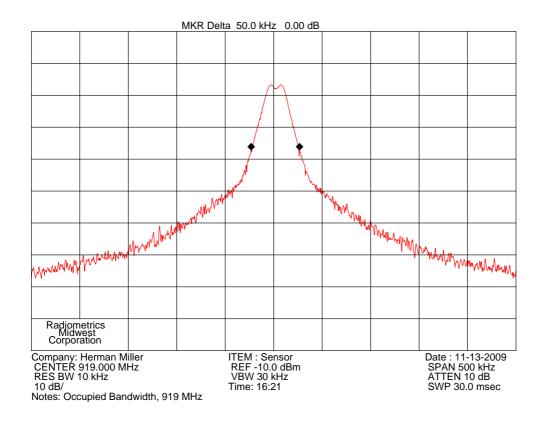
The spectrum analyzer was set to the MAX HOLD mode to record the worst case of the modulation. The EUT was transmitting at its maximum data rate. The trace was allowed to stabilize.

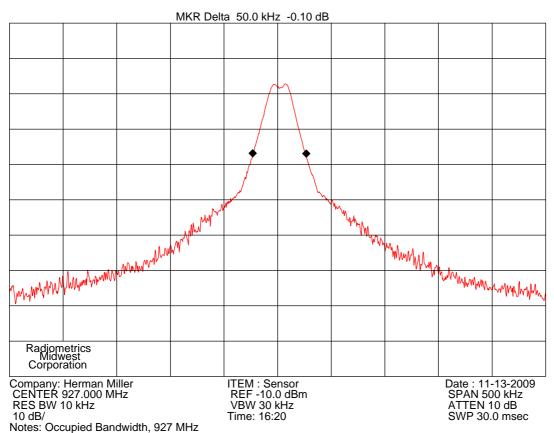
The marker-to-peak function was set to the peak of the emission. Then the marker-delta function was used to measure 20 dB down one side of the emission. The marker-delta function was reset and then moved to the other side of the emission, until it is (as close as possible to) even with the reference marker level. The marker-delta reading at this point is the 20 dB bandwidth of the emission.



RP-6643A Rev. 0 Page 7 of 14

Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver





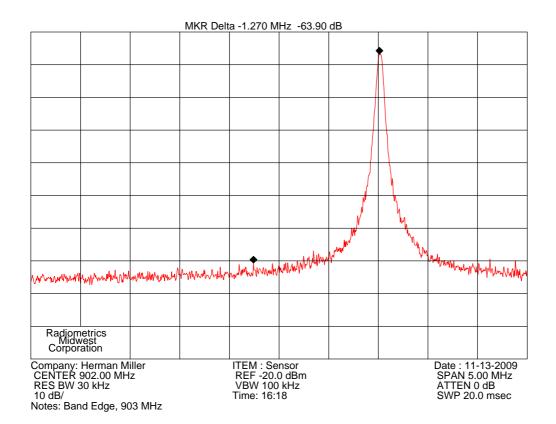
RP-6643A Rev. 0 Page 8 of 14

Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver

10.3 Band-edge Compliance of RF Emissions

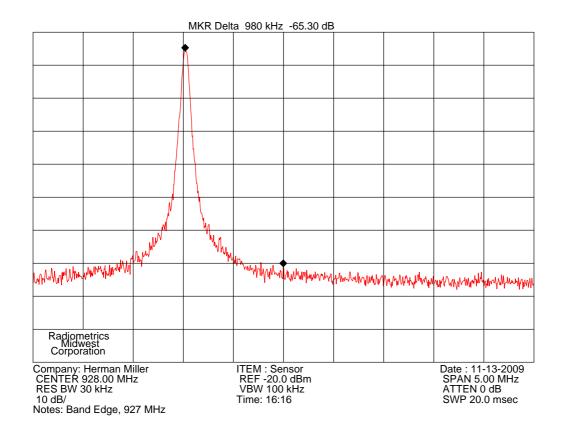
The spectrum analyzer was set to the MAX HOLD mode to record the worst case of the modulation at the band-edge, with the EUT set to the lowest frequency. The trace was allowed to stabilize.

	Band Edge Delta Readings in dB						
	Sensor Minimum Allowe						
Channel	Band Edge	dB					
903 Lower Band edge	63.9	20					
927 Upper Band edge	65.3	20					



RP-6643A Rev. 0 Page 9 of 14

Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver



10.4 Radiated Emissions

Radiated emission measurements were performed with linearly polarized broadband antennas. The results obtained with these antennas can be correlated with results obtained with a tuned dipole antenna. The radiated emission measurements were performed with a spectrum analyzer. The bandwidth used from 150 kHz to 30 MHz is 9 or 10 kHz and the bandwidth from 30 MHz to 1000 MHz is 100 or 120 kHz. Above 1 GHz, a 1 MHz bandwidth is used. A 10 dB linearity check is performed prior to start of testing in order to determine if an overload condition exists.

From 30 to 1000 MHz, an Anritsu spectrum analyzer was used. For tests from 1 to 25 GHz, an HP 8566 spectrum analyzer was used. For tests from 1 to 10 GHz, a high pass filter was used to reduce the fundamental emission. A harmonic mixer was used from 18 to 25 GHz. Figure 4 herein lists the details of the test equipment used during radiated emissions tests.

The was device was rotated through three orthogonal axis as per 13.1.4.1 of ANSI C63.4 during the prescans and during final radiated tests.

Final radiated emissions measurements were performed inside of an anechoic chamber at a test distance of 3 meters. The anechoic chamber is designated as Chamber E. This Chamber meets the Site Attenuation requirements of ANSI C63.4 and CISPR 16-1. Chamber E is located at 12 East Devonwood Ave. Romeoville, Illinois EMI test lab.

RP-6643A Rev. 0 Page 10 of 14

Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver

The entire frequency range from 30 to 9300 MHz was slowly scanned with particular attention paid to those frequency ranges which appeared high. Measurements were performed using two antenna polarizations, (vertical and horizontal). The worst case emissions were recorded. All measurements may be performed using either the peak, average or quasi-peak detector functions. If the peak detector data exceeds or is marginally close to the limits, the measurements are repeated using a quasi-peak detector or average function as required by the specification for final determination of compliance.

The detected emission levels were maximized by rotating the EUT, adjusting the positions of all cables, and by scanning the measurement antenna from 1 to 4 meters above the ground.

10.4.1 Radiated Emissions Field Strength Sample Calculation

The field strength is calculated by adding the Antenna Factor and Cable Loss, and by subtracting the Amplifier Gain from the measured reading. The basic equation is as follows:

FS = RA + AF + CF - AG

Where: FS = Field Strength

RA = Receiver Amplitude AF = Antenna Factor

CF = Cable Attenuation Factor

AG = Amplifier Gain

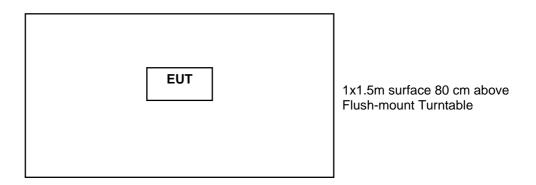
PKA = Peak to Average Factor (This is zero for non-average measurements)

The Peak to average factor is used when average measurements are required. It is calculated by the highest duty cycle in percent over any 100mS transmission. The factor in dB is 20 * Log(Duty cycle/100).

RP-6643A Rev. 0 Page 11 of 14

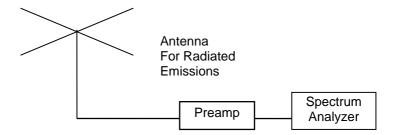
Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver

Figure 2. Drawing of Radiated Emissions Setup



Notes:

- AC outlet with low-pass filter at the base of the turntable
- Antenna height varied from 1 to 4 meters
- Distance from antenna to tested system is 3 meters
- Not to Scale



10.4.2 Radiated Emissions Test Results

The following spectrum analyzer settings were used.

Span = wide enough to fully capture the emission being measured

RBW = 1 MHz for $f \ge 1$ GHz, 100 kHz for f < 1 GHz

VBW ≥ RBW; Sweep = auto

A Video Bandwidth of 10 Hz was used for Average measurements above 1 GHz.

Transmitter emissions and Emissions above 1 GHz

- i a i i	Tarioffilite Chinosiono ana Emilosiono above i One															
			Spectrum Analyzer Readings							EUT	Peak	Ave	Peak	Ave	Margin	
hrm	Tx	Peak			Ave	e Peak Ave			Corr.	Emission	Tot. FS		Lim	nit	Under	
		Ver	tical P	olariza	tion	Horiz	Horizontal Polarization				Freq	Freq				
#	Freq	Χ	Υ	Z	Max	Χ	Υ	Z	Max	Fact.	MHz	dBu	V/m	dBu\	//m	Limit
1	903	58.6	59.0	64.3	59.7	67.4	67.6	59.4	63.0	25.0	903	92.6	88.0	94	94	1.4
2	903	44.0	47.5	52.0	47.4	54.6	55.7	42.9	51.1	1.8	1806	57.5	52.9	74	54	1.1
3	903	44.8	42.1	45.9	41.3	47.3	50.6	45.2	46.0	4.9	2709	55.5	50.9	74	54	3.1
4	903	36.9	39.0	37.6	34.4	36.8	37.5	38.7	34.1	9.0	3612	48.0	43.4	74	54	10.6

RP-6643A Rev. 0 Page 12 of 14

Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver

		Spectrum Analyzer Readings							EUT	Peak	Ave	Peak	Ave	Margin		
hrm	Tx	Peak			Ave	Peak			Ave	Corr.	Emission	Tot.	FS	Lim	nit	Under
		Ver	tical P	olariza	tion	Horiz	ontal I	Polariz	ation		Freq					
#	Freq	Χ	Υ	Z	Max	Χ	Υ	Z	Max	Fact.	MHz	dBu	V/m	dBu∖	//m	Limit
5	903	34.7	35.0	35.3	30.7	33.5	34.0	33.4	29.4	11.5	4515	46.8	42.2	74	54	11.8
6	903	35.3	34.6	37.1	32.5	33.2	35.5	35.5	30.9	12.9	5418	50.0	45.4	74	54	8.6
7	903	32.1	32.3	31.3	27.7	32.8	33.1	33.0	28.5	14.0	6321	47.1	42.5	74	54	11.5
1	919	57.6	59.3	64.9	60.3	67.0	67.6	60.9	63.0	25.0	919	92.6	88.0	94	94	1.4
2	919	44.7	46.6	51.2	46.6	54.4	55.1	41.8	50.5	2.0	1838	57.1	52.5	74	54	1.5
3	919	45.4	41.5	46.6	42.0	48.3	50.9	45.7	46.3	5.0	2757	55.9	51.3	74	54	2.7
4	919	38.0	38.5	38.0	33.9	34.9	37.4	37.3	32.8	9.3	3676	47.8	43.2	74	54	10.8
5	919	34.7	36.0	34.7	31.4	34.3	34.7	34.4	30.1	11.7	4595	47.7	43.1	74	54	10.9
6	919	34.1	36.0	35.9	31.4	35.2	37.6	36.8	33.0	13.2	5514	50.8	46.2	74	54	7.8
7	919	34.0	33.2	33.4	29.4	34.7	33.9	33.2	30.1	13.7	6433	48.4	43.8	74	54	10.2
1	927	58.1	59.8	65.6	61.0	67.3	67.8	60.7	63.2	25.0	927	92.8	88.2	94	94	1.2
2	927	43.1	45.4	50.5	45.9	55.6	55.4	43.0	50.9	2.1	1854	57.6	53.0	74	54	1.0
3	927	46.1	43.9	49.2	44.6	47.5	51.1	46.6	46.5	5.0	2781	56.1	51.5	74	54	2.5
4	927	36.7	37.5	38.4	33.8	34.1	36.8	36.0	32.2	9.4	3708	47.8	43.2	74	54	10.8
5	927	34.3	36.2	35.0	31.6	33.6	34.0	34.9	30.3	11.7	4635	47.9	43.3	74	54	10.7
6	927	34.7	35.9	36.0	31.4	34.6	37.4	37.7	33.1	13.2	5562	50.9	46.3	74	54	7.7
7	927	32.8	33.6	33.5	29.0	33.8	34.0	33.7	29.4	13.8	6489	47.8	43.2	74	54	10.8
					Col	umn n	umber	s (see	below	for ex	planations)				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

Judgment: Passed by 1.0 dB

No other emissions were detected from 900 MHz to 10 GHz. No Band edge emissions detected.

- Column #1. hrm = Harmonic; BE = Band Edge emissions
- Column #2. Frequency of Transmitter.
- Column #3. Uncorrected readings from the spectrum analyzer with First Axis Rotation.
- Column #4. Uncorrected readings from the spectrum analyzer with Second Axis Rotation.
- Column #5. Uncorrected readings from the spectrum analyzer with Third Axis Rotation.
- Column #6. Average Reading based on peak reading reduced by the Duty cylce correction. This is based on the highest of the Three readings
- Column #7. Uncorrected readings from the spectrum analyzer with First Axis Rotation.
- Column #8. Uncorrected readings from the spectrum analyzer with Second Axis Rotation.
- Column #9. Uncorrected readings from the spectrum analyzer with Third Axis Rotation.
- Column #10. Average Reading based on peak reading reduced by the Duty cylce correction. This is based on the highest of the Three readings
- Column #11. Corr. Factors = Cable Loss Preamp Gain + Antenna Factor
- Column #12. Frequency of Tested Emission
- Column #13. Highest peak field strength at listed frequency.
- Column #14. Highest Average field strength at listed frequency.
- Column #15. Peak Limit.
- Column #16. Average Limit.
- Column #17. The margin (last column) is the worst case margin under the peak or average limits for that row.

RP-6643A Rev. 0 Page 13 of 14

Testing of the Herman Miller, Incorporated, Model 1B5RX2, Sensor Transceiver

Spurious Emissions Below 1 GHz

Transmit Mode

Manufacturer	Herman Miller, Incorporated	Specification	FCC Part 15 Subpart C & RSS-210						
Model	1B5RX2	Test Date	11/11/2009						
Serial Number	None	Test Distance	3 Meters						
Abbreviations	Pol = Antenna Polarization; V	Pol = Antenna Polarization; V = Vertical; H = Horizontal; BC = Biconical (ANT-3);							
	LP = Log-Periodic (ANT-6); HN = Horn (ANT-13) P = peak; Q = QP								
Notes	Corr. Factors = Cable Loss – Preamp Gain								

	Meter Reading	Ante Factor	Antenna Corr. Field Strength Factor Pol/ Factors dBuV/m		0	Margin Under Limit	
Freq. MHz	dBu√	dB	Type	dB	EUT	Limit	dB
33.6	29.4 P	17.6	H/44	-28.4	18.6	40.0	21.4
133.6	31.5 P	13.7	H/44	-27.8	17.4	43.5	26.1
183.6	28.2 P	9.4	H/44	-27.6	10.0	43.5	33.5
214.8	28.5 P	11.5	H/44	-27.6	12.5	43.5	31.0
54.8	31.0 P	12.4	V/44	-28.2	15.2	40.0	24.8
114.4	30.1 P	14.3	V/44	-27.9	16.5	43.5	27.0
128.8	33.6 P	15.1	V/44	-27.8	20.8	43.5	22.7
133.2	29.9 P	13.9	V/44	-27.8	16.0	43.5	27.5
148.8	33.6 P	10.7	V/44	-27.8	16.5	43.5	27.0
187.6	31.6 P	9.8	V/44	-27.6	13.8	43.5	29.7
309.6	33.7 P	13.7	V/44	-27.4	20.0	46.0	26.0
400.3	29.6 P	15.5	V/44	-27.1	17.9	46.0	28.1
636.0	31.6 P	18.9	V/44	-26.5	24.0	46.0	22.0
724.0	31.5 P	20.0	V/44	-26.2	25.3	46.0	20.7
876.7	29.6 P	21.3	V/44	-25.1	25.8	46.0	20.2

Judgment: Passed by 20.2 dB

10.4.3 Receive Mode Radiated Emissions

	Meter Reading	Antenna Factor Pol/		Corr. Factors	Field Strength dBuV/m		Margin Under Limit
Freq. MHz	dBuV	dB	Type	dB	EUT	Limit	dB
38.8	26.1 P	16.8	H/44	-28.4	14.5	40.0	25.5
180.8	25.8 P	9.3	H/44	-27.6	7.5	43.5	36.0
338.6	28.2 P	14.8	H/44	-27.3	15.8	46.0	30.2
580.8	32.4 P	19.0	H/44	-26.3	25.0	46.0	21.0
64.4	24.8 P	8.5	V/44	-28.2	5.1	40.0	34.9
222.0	25.8 P	11.6	V/44	-27.6	9.9	46.0	36.1
357.0	27.5 P	14.9	V/44	-27.4	15.1	46.0	30.9
494.0	25.6 P	16.8	V/44	-26.6	15.8	46.0	30.2

Judgment: Passed by 21.0 dB

RP-6643A Rev. 0 Page 14 of 14