Select Comfort Corporation

Adjustable Foundation Remote

Report #: SECF0006

Report Prepared By Northwest EMC Inc.

NORTHWEST EMC – (888) 364-2378 – www.nwemc.com

California – Minnesota – Oregon – New York – Washington

22975 NW Evergreen Parkway
Suite 400
Hillsboro, Oregon 97124

Certificate of Test

Last Date of Test: May 9, 2012
Select Comfort Corporation
Model: Adjustable Foundation Remote

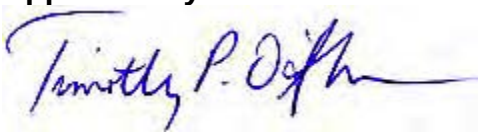
Emissions

Test Description	Specification	Test Method	Pass/Fail
Duty Cycle	FCC 15.231:2012	ANSI C63.10:2009	**Pass**
Occupied Bandwidth	FCC 15.231:2012	ANSI C63.10:2009	**Pass**
Field Strength of Fundamental	FCC 15.231:2012	ANSI C63.10:2009	**Pass**
Spurious Radiated Emissions	FCC 15.231:2012	ANSI C63.10:2009	**Pass**

Deviations From Test Standards

None

Approved By:



Tim O'Shea, Operations Manager

NVLAP Lab Code: 200881-0

Test Facility

The measurement facility used to collect the data is located at:

Northwest EMC, Inc.
9349 W Broadway Ave.
Brooklyn Park, MN 55445

Phone: (763) 425-2281 Fax: (763) 424-3469

This site has been fully described in a report filed with and accepted by the FCC (Federal Communications Commission) and Industry Canada (Site filing #2834E-1).

This report must not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government of the United States of America.

Product compliance is the responsibility of the client, therefore the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. This Report may only be duplicated in its entirety. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test.

Revision History

Revision Number	Description	Date	Page Number
00	None		

United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Accredited by A2LA to ISO / IEC Guide 65 as a product certifier. This allows Northwest EMC to certify transmitters to FCC and IC specifications.

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025. The scope includes radio, ITE, and medical standards from around the world. See: http://www.nwemc.com/accreditations/

Canada

IC - Recognized by Industry Canada as a Certification Body (CB). Certification chambers and Open Area Test Sites are filed with IC.

European Union

European Commission – Validated by the European Commission as a Conformity Assessment Body (CAB) under the EMC directive and as a Notified Body under the R&TTE Directive.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

KCC / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Hong Kong

OFTA – Recognized by OFTA as a CAB for the acceptance of test data.

Vietnam

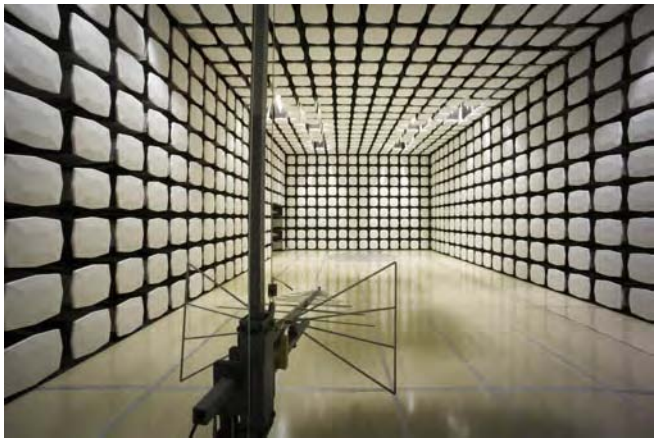
MIC – Recognized by MIC as a CAB for the acceptance of test data.

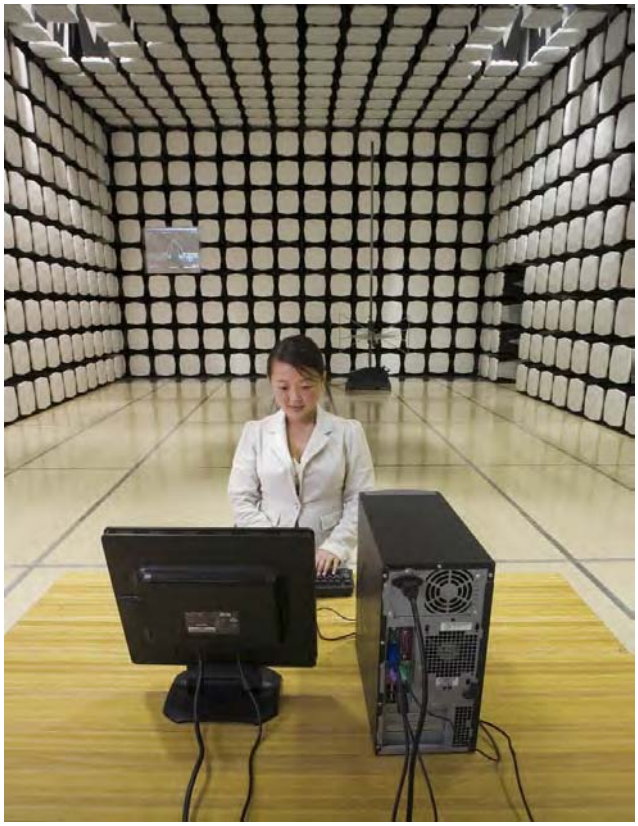
Russia

GOST – Accredited by Certinform VNIINMASH, CERTINFO, SAMTES, and Federal CHEC to perform EMC and Hygienic testing for Information Technology products to GOST standards**.**

Locations

Oregon	California	New York	Minnesota	Washington
Labs EV01-EV12 22975 NW Evergreen Pkwy, #400 Hillsboro, OR 97124 (503) 844-4066	Labs OC01-OC13 41 Tesla Irvine, CA 92618 (949) 861-8918	Labs WA01-WA04 4939 Jordan Rd. Elbridge, NY 13060 (315) 685-0796	Labs MN01-MN08 9349 W Broadway Ave. Brooklyn Park, MN 55445 (763) 425-2281	Labs SU01-SU07 14128 339th Ave. SE Sultan, WA 98294 (360) 793-8675
VCCI				
C-1071, R-1025, G-84, C-2687, T-1658, R-2318	R-1943, G-85, C-2766, T-1659, G-548		R-3125, G-86, G-141, C-3464, T-1634	R-871, G-83, C-3265, T-1511
Industry Canada				
2834D-1, 2834D-*2*	2834B-1, 2834B-2, 2834B-3		2834E-1	2834C-1





Product Description

Client and Equipment Under Test (EUT) Information

Company Name:	Select Comfort Corporation
Address:	9800 59th Avenue North
City, State, Zip:	Minneapolis, MN 55442
Test Requested By:	Maxine Chen
Model:	Adjustable Foundation Remote
First Date of Test:	May 09, 2012
Last Date of Test:	May 09, 2012
Receipt Date of Samples:	May 09, 2012
Equipment Design Stage:	Prototype
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):
Adjustable Foundation Remote

Testing Objective:
To demonstrate compliance to FCC 15.231 specifications.

Configurations

Configuration 1 SECF0006

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Adjustable Foundation Remote	Select Comfort Corporation	None	105

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
DC Power Supply	EZ Power	GP-4303D	TPY

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Power	No	.90m	No	AC Mains	DC Power Supply
DC Power	No	1.10m	No	DC Power Supply	Adjustable Foundation Remote
PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.					

Configuration 2 SECF0006

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Adjustable Foundation Remote	Select Comfort Corporation	None	104

Modifications

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	5/9/2012	Duty Cycle	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
2	5/9/2012	Occupied Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
3	5/9/2012	Field Strength of Fundamental	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Northwest EMC following the test.
4	5/9/2012	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

Duty Cycle

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Multimeter	Fluke	114	MMU	7/8/2011	24
DC Power Supply	EZ Digital Co	GP-4303D	TPY	NCR	0
Near Field Probe Set	ETS	7405	IPO	NCR	0
Spectrum Analyzer	Agilent	E4446A	AAT	3/2/2012	12

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

For software controlled or pre-programmed devices, the manufacturer shall declare the duty cycle class or classes for the equipment under test. For manually operated or event dependant devices, with or without software controlled functions, the manufacturer shall declare whether the device once triggered, follows a pre-programmed cycle, or whether the transmission is constant until the trigger is released or manually reset. The manufacturer shall also give a description of the application for the device and include a typical usage pattern. The typical usage pattern as declared by the manufacturer shall be used to determine the duty cycle and hence the duty class.

Where an acknowledgement is required, the additional transmitter on-time shall be included and declared by the manufacturer.

To derive average emission measurements, a duty cycle correction factor per 15.35(c) was utilized:

Duty Cycle = On time/100 milliseconds (or the period, whichever is less)
Where “On time” = N1L1 +N2L2 +….

Where N1 is the number of type 1 pulses, L1 is length of type 1 pulses, N2 is the number of type 2 pulses, L2 is the length of type 2 pulses, etc.

Therefore, Duty Cycle = (N1L1 +N2L2 +…)/100mS or T, whichever is less. Where T is the period of the pulse train.

The measured values for the EUT’s pulse train are as follows:

Pulsewidth of Type 1 Pulse = 0.493 mSec
Number of Type 1 Pulses = 14

Duty Cycle = 20 log [(14)(0.493)/100] = -23.2 dB

The duty cycle correction factor of –23.2 dB was added to the peak readings to mathematically derive the average levels. Peak measurements were made with a resolution bandwidth of 100kHz and a video bandwidth of 300kHz.

The field strength of the fundamental (transmit) frequency meets the limits as defined in 47 CFR 15.231(b). It also meets the provisions in 15.35 for averaging pulsed emissions and for limiting peak emissions.

Duty Cycle

EUT:	Adjustable Foundation Remote			**Work Order:**	SECF0006
Serial Number:	105			**Date:**	05/09/12
Customer:	Select Comfort Corporation			**Temperature:**	21.2°C
Attendees:	None			**Humidity:**	41%
Project:	None			**Barometric Pres.:**	1018.6
Tested by:	Trevor Buls	**Power:**	6VDC	**Job Site:**	MN05

TEST SPECIFICATIONS	Test Method
FCC 15.231:2012	ANSI C63.10:2009

COMMENTS

Duty cycle is based on 100 ms window because the pulse train did not have identical periods.

DEVIATIONS FROM TEST STANDARD

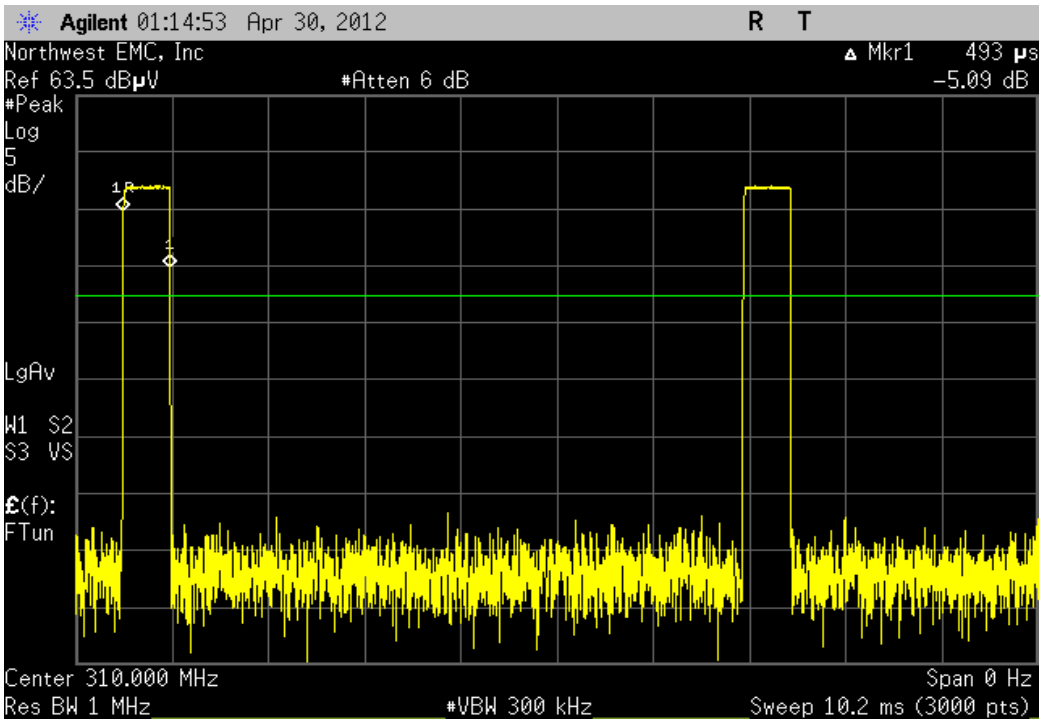
None

Configuration #	1	Signature Trevor Buls

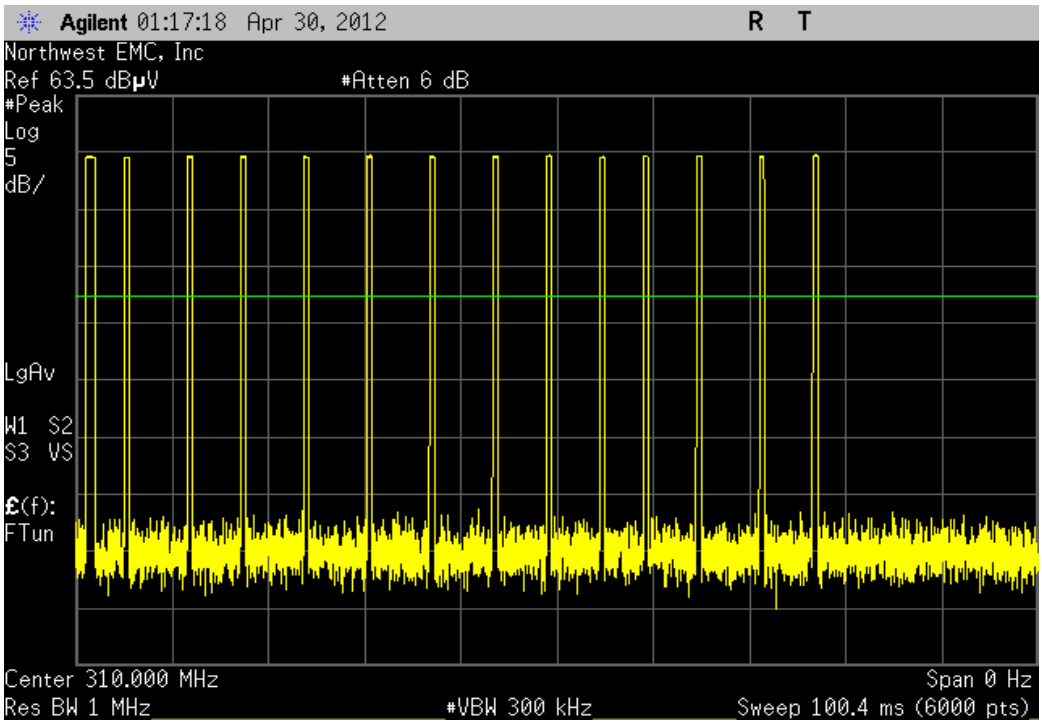
	Value	Limit	Result
Pulse Width	493 µS	N/A	N/A
Pulse Train - 100ms	14 Pulses	N/A	N/A
Pulse Train - 1s	N/A	N/A	N/A
Pulse Train - 5s	N/A	N/A	N/A

Duty Cycle

Pulse Width							
					Value	Limit	Result
					493 µS	N/A	N/A

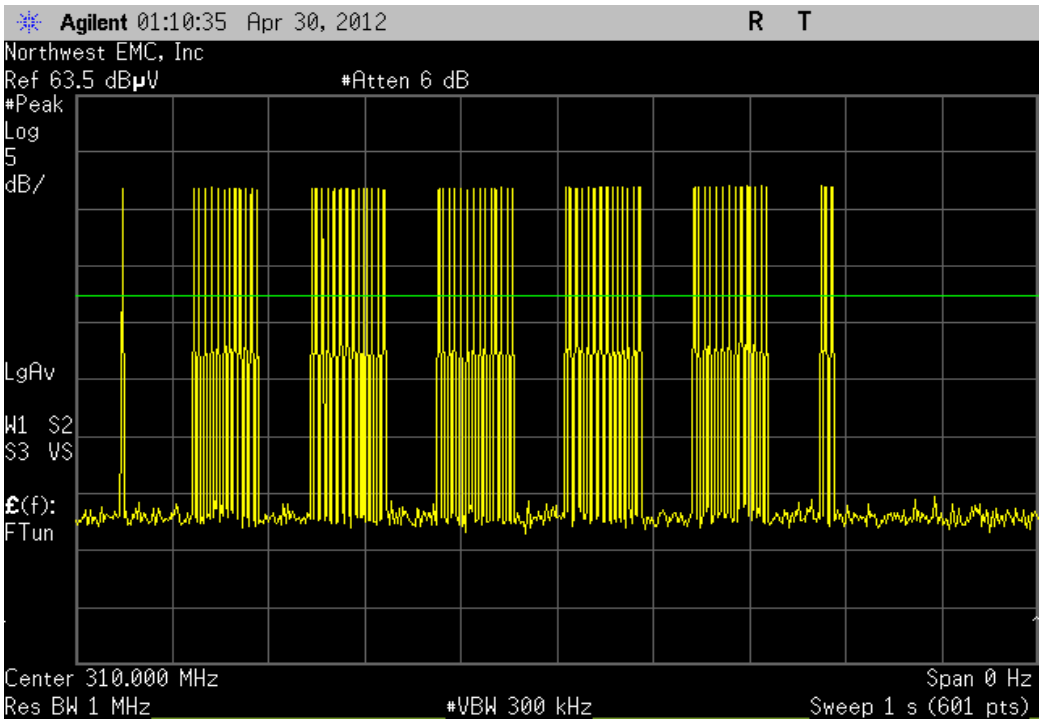


Pulse Train - 100ms							
					Value	Limit	Result
					14 Pulses	N/A	N/A

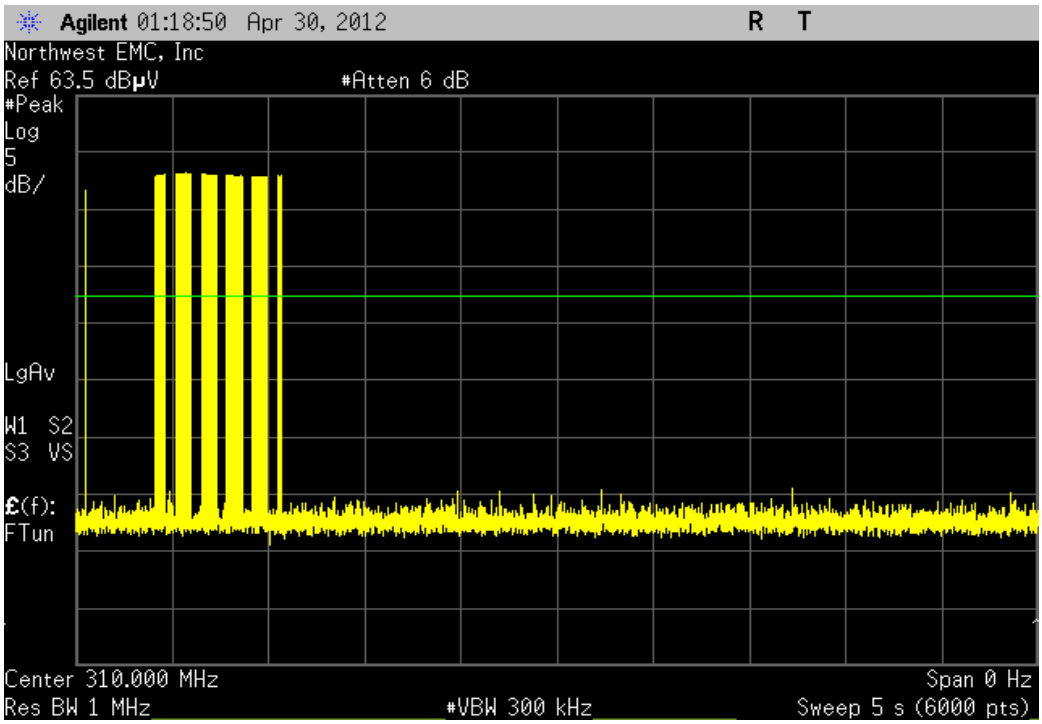


Duty Cycle

Pulse Train - 1s							
					Value	Limit	Result
					N/A	N/A	N/A



Pulse Train - 5s							
					Value	Limit	Result
					N/A	N/A	N/A



Occupied Bandwidth

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Multimeter	Fluke	114	MMU	7/8/2011	24
DC Power Supply	EZ Digital Co	GP-4303D	TPY	NCR	0
Near Field Probe Set	ETS	7405	IPO	NCR	0
Spectrum Analyzer	Agilent	E4446A	AAT	3/2/2012	12

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

The occupied bandwidth was measured with the EUT configured for continuous modulated operation at its single transmit frequency. The spectrum analyzer's resolution bandwidth was >= 1% of the 20dB bandwidth and the video bandwidth was greater than or equal to the resolution bandwidth.

The 20 dB bandwidth of the transmit frequency is less than 0.25% of the center frequency.

Occupied Bandwidth

EUT:	Adjustable Foundation Remote			**Work Order:**	SECF0006
Serial Number:	105			**Date:**	05/09/12
Customer:	Select Comfort Corporation			**Temperature:**	21.2°C
Attendees:	None			**Humidity:**	41%
Project:	None			**Barometric Pres.:**	1018.6
Tested by:	Trevor Buls	**Power:**	6VDC	**Job Site:**	MN05

TEST SPECIFICATIONS	Test Method
FCC 15.231:2012	ANSI C63.10:2009

COMMENTS

None

DEVIATIONS FROM TEST STANDARD

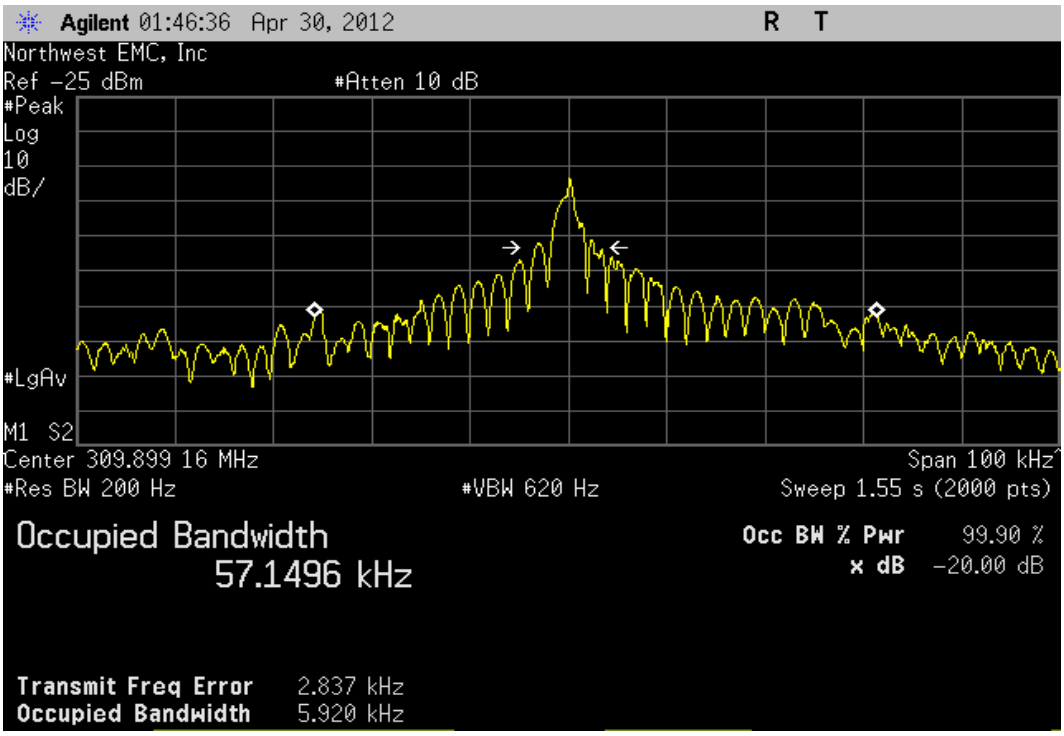
None

Configuration #	1	Signature Trevor Buls

Channel	Value	Limit	Result
Mid	5.92 kHz	< 77.5 MHz	Pass

Occupied Bandwidth

Mid							
					Value	Limit	Result
					5.92 kHz	< 77.5 MHz	Pass



Field Strength of Fundamental

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting 310 MHz continuous CW signal, power level 7.

POWER SETTINGS INVESTIGATED

6VDC

CONFIGURATIONS INVESTIGATED

SECF0006 - 2

FREQUENCY RANGE INVESTIGATED

Start Frequency	300 MHz	Stop Frequency	320 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4446A	AAT	3/2/2012	12 mo
Pre-Amplifier	Miteq	AM-1616-1000	AVY	7/1/2011	12 mo
MN05 Cables	ESM Cable Corp.	Bilog Cables	MNH	1/24/2012	12 mo
Antenna X-Wing Bilog 30MHZ-	Teseq	CBL 6141B	AYD	12/19/2011	12 mo

MEASUREMENT BANDWIDTHS

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

The antennas to be used with the EUT were tested. The EUT was configured for continuous modulated operation at its single transmit frequency. The field strength of the transmit frequency was maximized by rotating the EUT, adjusting the measurement antenna height and polarization, and manipulating the EUT in 3 orthogonal planes (per ANSI C63.10:2009).

To derive average emission measurements, a duty cycle correction factor per 15.35(c) was utilized:

Duty Cycle = On time/100 milliseconds (or the period, whichever is less)

Where “On time” = N1L1 +N2L2 +….

Where N1 is the number of type 1 pulses, L1 is length of type 1 pulses, N2 is the number of type 2 pulses, L2 is the length of type 2 pulses, etc.

Therefore, Duty Cycle = (N1L1 +N2L2 +…)/100mS or T, whichever is less. Where T is the period of the pulse train.

The measured values for the EUT’s pulse train are as follows:

Pulsewidth of Type 1 Pulse = 0.493 mSec
Number of Type 1 Pulses = 14

Duty Cycle = 20 log [(14)(0.493)/100] = -23.2 dB

The duty cycle correction factor of –23.2 dB was added to the peak readings to mathematically derive the average levels. Peak measurements were made with a resolution bandwidth of 100kHz and a video bandwidth of 300kHz.

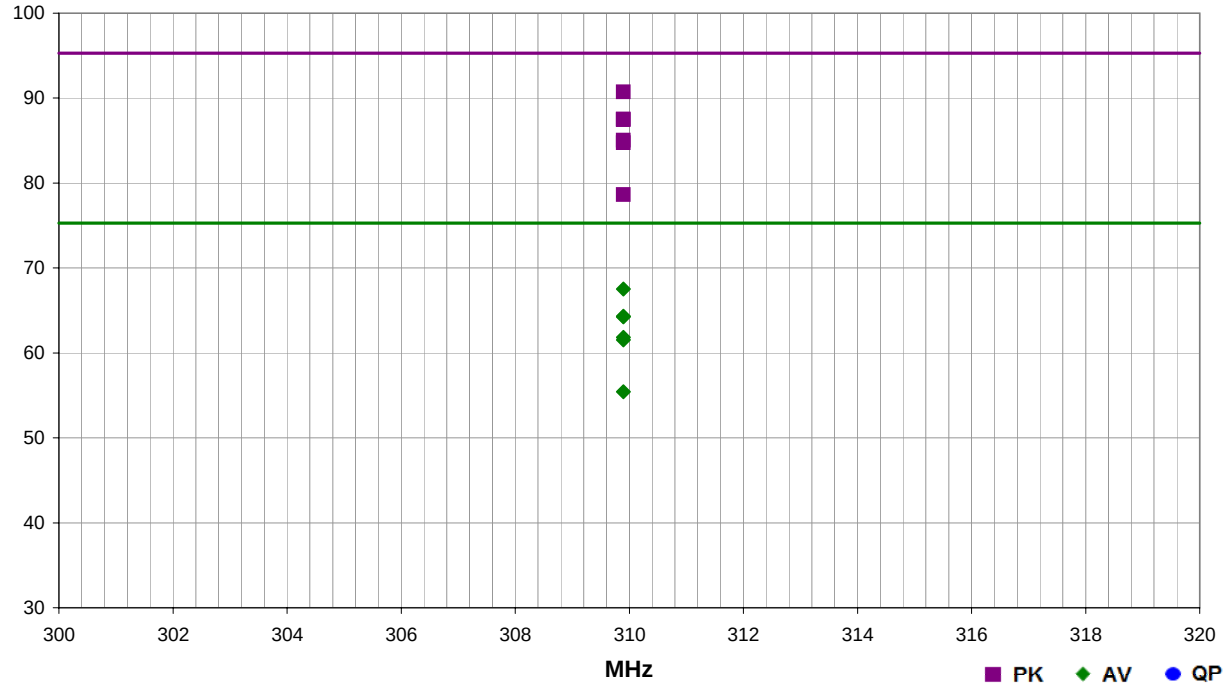
The field strength of the fundamental (transmit) frequency meets the limits as defined in 47 CFR 15.231(b). It also meets the provisions in 15.35 for averaging pulsed emissions and for limiting peak emissions

Field Strength of Fundamental

Work Order:	SECF0006	**Date:**	05/09/12	Bryan Weller	
Project:	None	**Temperature:**	23.7 °C		
Job Site:	MN05	**Humidity:**	34.9% RH		
Serial Number:	104	**Barometric Pres.:**	1018.6 mbar	**Tested by:**	Bryan Weller
EUT:	Adjustable Foundation Remote				
Configuration:	2				
Customer:	Select Comfort Corporation				
Attendees:	None				
EUT Power:	6VDC				
Operating Mode:	Transmitting 310 MHz continuous CW signal, power level 7.				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.231:2012	ANSI C63.10:2009

Run #	4	**Test Distance (m)**	3	**Antenna Height(s)**	1-4m	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Duty Cycle Correction Factor (dB)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
309.898	71.7	19.0	1.0	25.0		0.0	Horz	PK	0.0	90.7	95.3	-4.6	EUT Horizontal
309.898	71.7	19.0	1.0	25.0	23.2	0.0	Horz	AV	0.0	67.5	75.3	-7.8	EUT Horizontal
309.897	68.5	19.0	1.0	173.0		0.0	Horz	PK	0.0	87.5	95.3	-7.8	EUT on side
309.898	68.4	19.0	1.0	355.0		0.0	Horz	PK	0.0	87.4	95.3	-7.9	EUT Vertical
309.895	66.0	19.0	2.3	253.0		0.0	Vert	PK	0.0	85.0	95.3	-10.3	EUT Vertical
309.897	65.7	19.0	2.4	71.0		0.0	Vert	PK	0.0	84.7	95.3	-10.6	EUT on side
309.897	68.5	19.0	1.0	173.0	23.2	0.0	Horz	AV	0.0	64.3	75.3	-11.0	EUT on side
309.898	68.4	19.0	1.0	355.0	23.2	0.0	Horz	AV	0.0	64.2	75.3	-11.1	EUT Vertical
309.895	66.0	19.0	2.3	253.0	23.2	0.0	Vert	AV	0.0	61.8	75.3	-13.5	EUT Vertical
309.897	65.7	19.0	2.4	71.0	23.2	0.0	Vert	AV	0.0	61.5	75.3	-13.8	EUT on side
309.895	59.6	19.0	1.2	107.0		0.0	Vert	PK	0.0	78.6	95.3	-16.7	EUT Horizontal
309.895	59.6	19.0	1.2	107.0	23.2	0.0	Vert	AV	0.0	55.4	75.3	-19.9	EUT Horizontal

Spurious Radiated Emissions

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

MODES OF OPERATION

Transmitting 310 MHz continuous CW signal, power level 7.

POWER SETTINGS INVESTIGATED

6VDC

CONFIGURATIONS INVESTIGATED

SECF0006 - 2

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	3200 MHz

SAMPLE CALCULATIONS

Radiated Emissions: Field Strength = Measured Level + Antenna Factor + Cable Factor - Amplifier Gain + Distance Adjustment Factor + External Attenuation

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
Spectrum Analyzer	Agilent	E4446A	AAT	3/2/2012	12 mo
Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVX	7/1/2011	12 mo
MN05 Cables	ESM Cable Corp.	Double Ridge Guide Horn Cables	MNI	10/18/2011	12 mo
Antenna, Horn (DRG)	ETS Lindgren	3115	AIP	6/29/2011	24 mo
Pre-Amplifier	Miteq	AM-1616-1000	AVY	7/1/2011	12 mo
MN05 Cables	ESM Cable Corp.	Bilog Cables	MNH	1/24/2012	12 mo
Antenna X-Wing Bilog 30MHZ-2GHz	Teseq	CBL 6141B	AYD	12/19/2011	12 mo

MEASUREMENT BANDWIDTHS

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

The single, integral antenna to be used with the EUT was tested. The EUT was configured for un-modulated, CW operation at its single transmit frequency. The field strength of the transmit frequency was maximized by rotating the EUT, adjusting the measurement antenna height and polarization, and manipulating the EUT in 3 orthogonal planes (per ANSI C63.10:2009).

A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

To derive average emission measurements, a duty cycle correction factor per 15.35(c) was utilized:

Duty Cycle = On time/100 milliseconds (or the period, whichever is less)

Where “On time” = N1L1 +N2L2 +….

Where N1 is the number of type 1 pulses, L1 is length of type 1 pulses, N2 is the number of type 2 pulses, L2 is the length of type 2 pulses, etc.

Therefore, Duty Cycle = (N1L1 +N2L2 +…)/100mS or T, whichever is less. Where T is the period of the pulse train.

The measured values for the EUT’s pulse train are as follows:

Pulsewidth of Type 1 Pulse = 0.493 mSec
Number of Type 1 Pulses = 14

Duty Cycle = 20 log [(14)(0.493)/100] = -23.2 dB

The duty cycle correction factor of –23.2 dB was added to the peak readings to mathematically derive the average levels. Peak measurements were made with a resolution bandwidth of 100kHz and a video bandwidth of 300kHz for measurements at or below 1GHz. Above 1GHz, a resolution bandwidth of 1MHz and a video bandwidth of 3MHz was used.

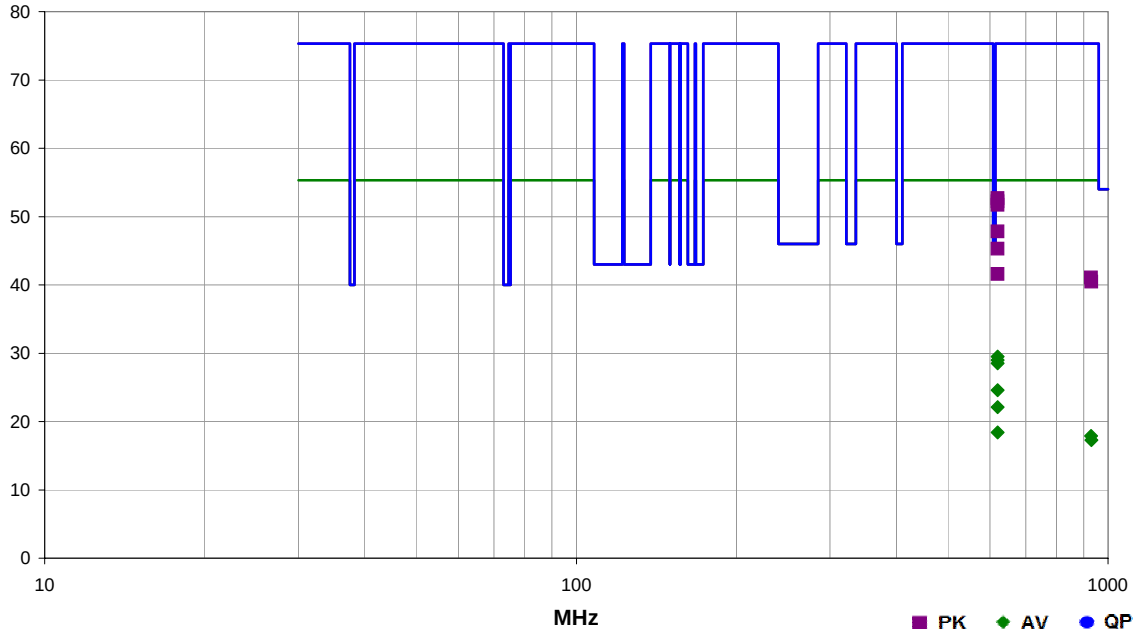
The field strength of the spurious emissions meet the limits as defined in 47 CFR 15.231(b). The spurious emissions also meet the provisions in 15.35 for averaging pulsed emissions and for limiting peak emissions. Further, spurious emissions meet the provisions of 15.205 using the measurement instrumentation specified in that section.

Spurious Radiated Emissions

Work Order:	SECF0006	**Date:**	05/09/12	Bryan Weller	
Project:	None	**Temperature:**	23.7 °C		
Job Site:	MN05	**Humidity:**	34.9% RH		
Serial Number:	104	**Barometric Pres.:**	1018.6 mbar	**Tested by:**	Bryan Weller
EUT:	Adjustable Foundation Remote				
Configuration:	2				
Customer:	Select Comfort Corporation				
Attendees:	None				
EUT Power:	6VDC				
Operating Mode:	Transmitting 310 MHz continuous CW signal, power level 7.				
Deviations:	None				
Comments:	None				

Test Specifications	**Test Method**
FCC 15.231:2012	ANSI C63.10:2009

Run #	6	**Test Distance (m)**	3	**Antenna Height(s)**	1-4m	**Results**	Pass



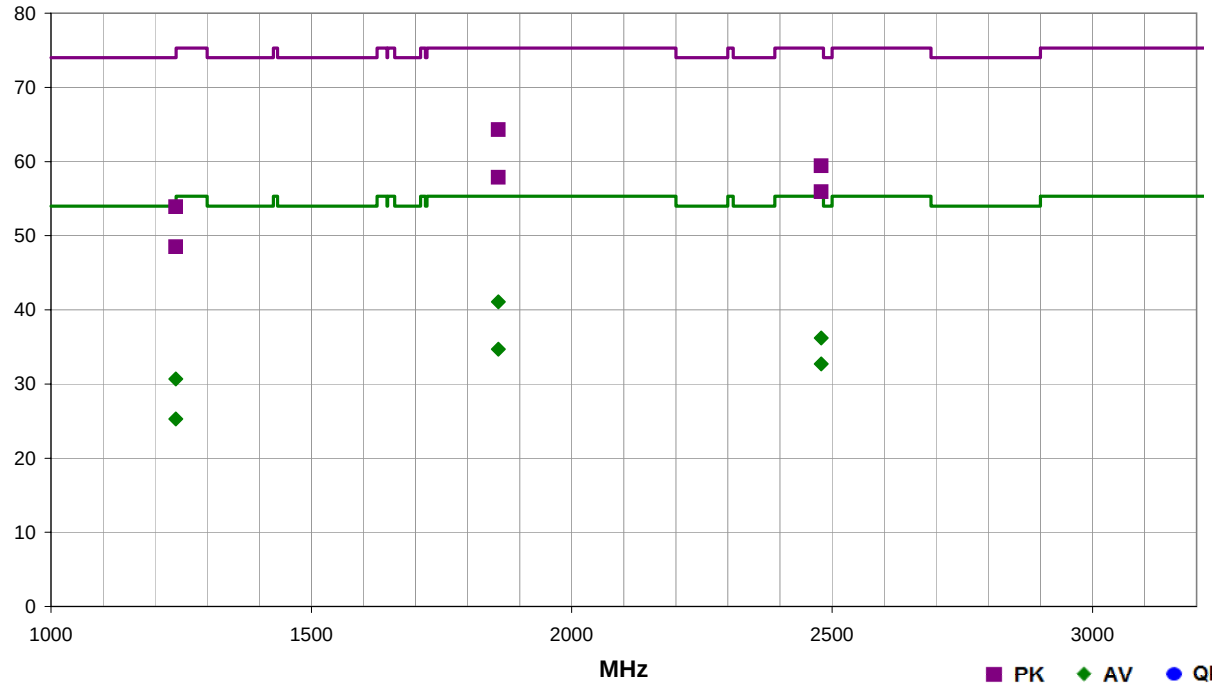
Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Duty Cycle Correction Factor (dB)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
619.785	38.9	3.8	1.3	189.0		10.0	Horz	PK	0.0	52.7	75.3	-22.6	EUT on side
619.787	38.4	3.8	1.5	246.0		10.0	Horz	PK	0.0	52.2	75.3	-23.1	EUT horizontal
619.790	37.9	3.8	1.0	164.0		10.0	Vert	PK	0.0	51.7	75.3	-23.6	EUT vertical
619.785	38.9	3.8	1.3	189.0	23.2	10.0	Horz	AV	0.0	29.5	55.3	-25.8	EUT on side
619.787	38.4	3.8	1.5	246.0	23.2	10.0	Horz	AV	0.0	29.0	55.3	-26.3	EUT horizontal
619.790	37.9	3.8	1.0	164.0	23.2	10.0	Vert	AV	0.0	28.5	55.3	-26.8	EUT vertical
619.785	34.0	3.8	1.0	4.0		10.0	Vert	PK	0.0	47.8	75.3	-27.5	EUT horizontal
619.787	31.5	3.8	1.3	287.0		10.0	Vert	PK	0.0	45.3	75.3	-30.0	EUT on side
619.785	34.0	3.8	1.0	4.0	23.2	10.0	Vert	AV	0.0	24.6	55.3	-30.7	EUT horizontal
619.787	31.5	3.8	1.3	287.0	23.2	10.0	Vert	AV	0.0	22.1	55.3	-33.2	EUT on side
619.788	27.8	3.8	1.0	78.0		10.0	Horz	PK	0.0	41.6	75.3	-33.7	EUT vertical
929.700	22.0	9.1	1.0	256.0		10.0	Horz	PK	0.0	41.1	75.3	-34.2	EUT on side
929.863	21.4	9.1	3.5	172.0		10.0	Vert	PK	0.0	40.5	75.3	-34.8	EUT on side
619.788	27.8	3.8	1.0	78.0	23.2	10.0	Horz	AV	0.0	18.4	55.3	-36.9	EUT vertical
929.700	22.0	9.1	1.0	256.0	23.2	10.0	Horz	AV	0.0	17.9	55.3	-37.4	EUT on side
929.863	21.4	9.1	3.5	172.0	23.2	10.0	Vert	AV	0.0	17.3	55.3	-38.0	EUT on side

Spurious Radiated Emissions

Work Order:	SECF0006	**Date:**	05/09/12	Bryan Weller	
Project:	None	**Temperature:**	23.7 °C		
Job Site:	MN05	**Humidity:**	34.9% RH		
Serial Number:	104	**Barometric Pres.:**	1018.6 mbar	**Tested by:**	Bryan Weller
EUT:	Adjustable Foundation Remote				
Configuration:	2				
Customer:	Select Comfort Corporation				
Attendees:	None				
EUT Power:	6VDC				
Operating Mode:	Transmitting 310 MHz continuous CW signal, power level 7.				
Deviations:	None				
Comments:	EUT on side.				

Test Specifications	**Test Method**
FCC 15.231:2012	ANSI C63.10:2009

Run #	8	**Test Distance (m)**	3	**Antenna Height(s)**	1-4m	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Duty Cycle Correction Factor (dB)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)
1859.353	68.8	-4.5	2.0	251.0		0.0	Horz	PK	0.0	64.3	75.3	-11.0
1859.353	68.8	-4.5	2.0	251.0	23.2	0.0	Horz	AV	0.0	41.1	55.3	-14.2
2479.220	62.9	-3.5	1.4	355.0		0.0	Horz	PK	0.0	59.4	75.3	-15.9
1859.380	62.4	-4.5	1.0	219.0		0.0	Vert	PK	0.0	57.9	75.3	-17.4
2479.220	62.9	-3.5	1.4	355.0	23.2	0.0	Horz	AV	0.0	36.2	55.3	-19.1
2479.213	59.4	-3.5	1.1	301.0		0.0	Vert	PK	0.0	55.9	75.3	-19.4
1239.653	60.9	-7.0	1.0	247.0		0.0	Horz	PK	0.0	53.9	74.0	-20.1
1859.380	62.4	-4.5	1.0	219.0	23.2	0.0	Vert	AV	0.0	34.7	55.3	-20.6
2479.213	59.4	-3.5	1.1	301.0	23.2	0.0	Vert	AV	0.0	32.7	55.3	-22.6
1239.653	60.9	-7.0	1.0	247.0	23.2	0.0	Horz	AV	0.0	30.7	54.0	-23.3
1239.480	55.5	-7.0	3.6	311.0		0.0	Vert	PK	0.0	48.5	74.0	-25.5
1239.480	55.5	-7.0	3.6	311.0	23.2	0.0	Vert	AV	0.0	25.3	54.0	-28.7