Select Comfort Corporation

NXT Remote

FCC 15.249:2013

Report #: SECF0009

Report Prepared By Northwest EMC Inc.

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

California – Minnesota – Oregon – New York – Washington

CERTIFICATE OF TEST

Last Date of Test: February 18, 2013
Select Comfort Corporation
Model: NXT Remote

Emissions

Test Description	Specification	Test Method	Pass/Fail
Field Strength of Fundamental	FCC 15.249:2013	ANSI C63.10:2009	Pass
Field Strength of Harmonics and Spurious Radiated Emissions	FCC 15.249:2013	ANSI C63.10:2009	Pass

Deviations From Test Standards

None

Approved By:

Don Facteau, IS 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.

NORTHWEST EMC

REV 2012.08.02

REVISION HISTORY

Revision Number	Description	Date	Page Number
00	None		

Barometric Pressure

The recorded barometric pressure has been normalized to sea level.

NORTHWEST EMC

REV 2012.05.24

ACCREDITATIONS AND AUTHORIZATIONS

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

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.

SCOPE

For details on the Scopes of our Accreditations, please visit:
http://www.nwemc.com/accreditations/

MEASUREMENT UNCERTAINTY

Measurement Uncertainty

When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

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 (K=2) for each test is on each data sheet. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-1 as applicable), and are available upon request.

The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

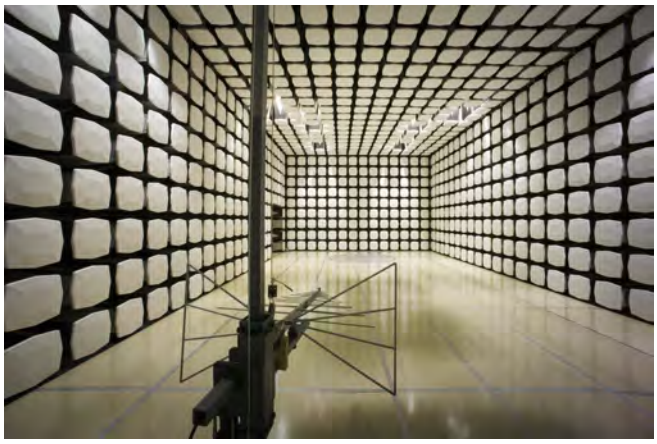
Test	+ MU	- MU
Frequency Accuracy (Hz)	0.12	-0.01
Amplitude Accuracy (dB)	0.49	-0.49
Conducted Power (dB)	0.41	-0.41
Radiated Power via Substitution (dB)	0.69	-0.68
Temperature (degrees C)	0.81	-0.81
Humidity (% RH)	2.89	-2.89
Field Strength (dB)	3.80	-3.80
AC Powerline Conducted Emissions (dB)	2.94	-2.94

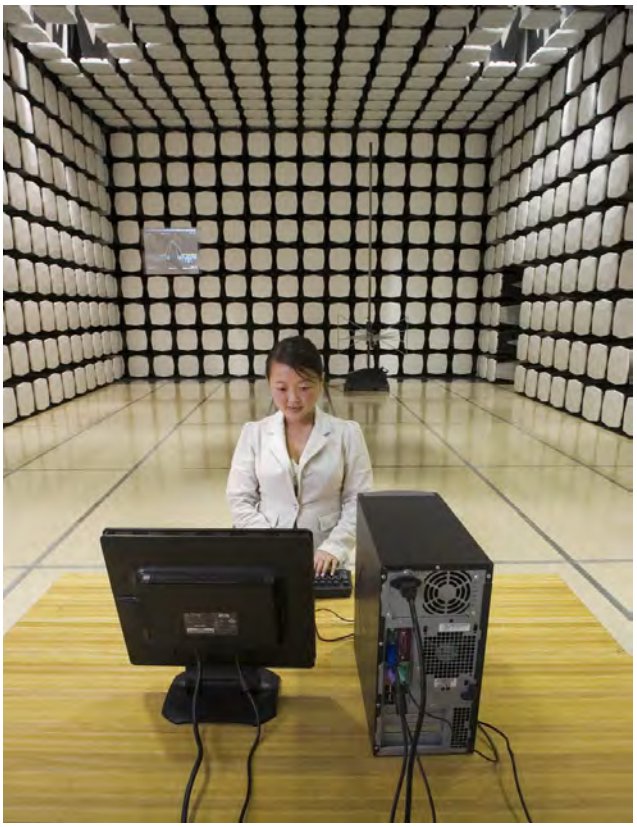
NORTHWEST EMC

REV 2013.01.07

LOCATIONS

Oregon Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066	**California** Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918	**New York** Labs WA01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 685-0796	**Minnesota** Labs MN01-08 9349 W Broadway Ave. Brooklyn Park, MN 55445 (763) 425-2281	**Washington** Labs NC01-05,SU02,SU07 19201 120th Ave. NE Bothell, WA 98011 (425) 984-6600
VCCI				
A-0108	A-0029		A-0109	A-0110
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:	NXT Remote
First Date of Test:	February 18, 2013
Last Date of Test:	February 18, 2013
Receipt Date of Samples:	February 18, 2013
Equipment Design Stage:	Prototype
Equipment Condition:	No Damage

Information Provided by the Party Requesting the Test

Functional Description of the EUT (Equipment Under Test):
2400 – 2483.5 MHz transceiver operating with a maximum output power of < 94 dBuV/m.

Testing Objective:
Seeking to demonstrate compliance under FCC 15.249 for operation in the 2400 – 2483.5 MHz band.

CONFIGURATIONS

Configuration SECF0009- 1

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
Remote	Select Comfort Corporation	LPD1023000	SC011B 00240

MODIFICATIONS

WTD 12.5.23

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	2/18/2013	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.
2	2/18/2013	Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

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, modulated, Low, Mid, High Channel at 2405, 2450, 2480 MHz (See Comments)

POWER SETTINGS INVESTIGATED

Battery

CONFIGURATIONS INVESTIGATED

SECF0009 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	2400 MHz	Stop Frequency	2483.5 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
Antenna, Horn (DRG)	ETS Lindgren	3115	AIP	6/29/2011	24 mo
MN05 Cables	ESM Cable Corp.	uble Ridge Guide Horn Cabl	MNI	5/30/2012	12 mo
Spectrum Analyzer	Agilent	E4446A	AAT	6/28/2012	24 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

TEST DESCRIPTION

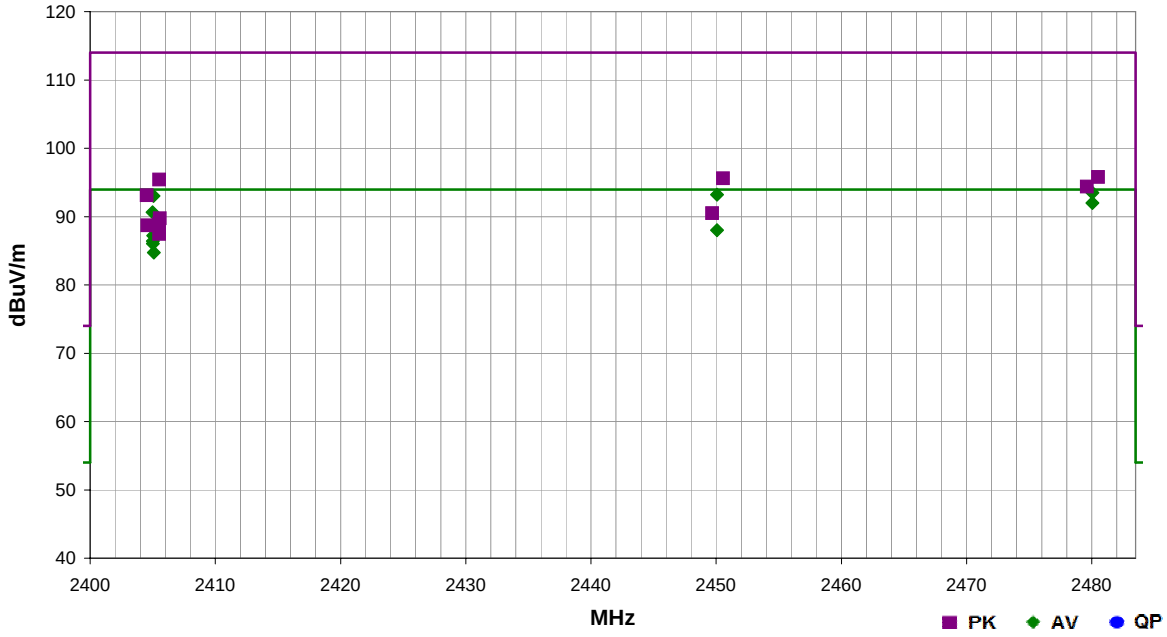
The antennas to be used with the EUT were tested. The EUT was transmitting and while set at the lowest channel, a middle channel, and the highest channel available. While scanning, emissions from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height and polarization, and manipulating the EUT and EUT antenna in 3 orthogonal planes (per ANSI C63.10:2009).

Field Strength of Fundamental

Work Order:	SECF0009	**Date:**	02/18/13		
Project:	None	**Temperature:**	24 °C		
Job Site:	MN05	**Humidity:**	14.8% RH		
Serial Number:	SC011B 00240	**Barometric Pres.:**	1000.5 mbar	**Tested by:**	Trevor Buls
EUT:	NXT Remote				
Configuration:	1				
Customer:	Select Comfort Corporation				
Attendees:	Robert Nunn, Michael Bendzick				
EUT Power:	Battery				
Operating Mode:	Transmitting, modulated, Low, Mid, High Channel at 2405, 2450, 2480 MHz (See Comments)				
Deviations:	None				
Comments:	Customer states that the EUT is using the maximum possible duty cycle during normal operation.				

Test Specifications	**Test Method**
FCC 15.249:2013	ANSI C63.10:2009

Run #	0	**Test Distance (m)**	3	**Antenna Height(s)**	1-4m	**Results**	Pass



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
2480.050	59.5	34.0	1.2	346.0	3.0	0.0	Horz	AV	0.0	93.5	94.0	-0.5	EUT Horizontal, High Ch
2450.067	59.4	33.8	1.0	174.0	3.0	0.0	Horz	AV	0.0	93.2	94.0	-0.8	EUT Horizontal, Mid Ch
2405.067	59.5	33.5	1.6	172.0	3.0	0.0	Horz	AV	0.0	93.0	94.0	-0.9	EUT Horizontal, Low Ch
2480.050	58.0	34.0	1.0	344.0	3.0	0.0	Vert	AV	0.0	92.0	94.0	-2.0	EUT on Side, High Ch
2404.992	57.1	33.5	1.6	182.0	3.0	0.0	Vert	AV	0.0	90.6	94.0	-3.4	EUT on Side, Low Ch
2450.067	54.2	33.8	1.0	223.0	3.0	0.0	Vert	AV	0.0	88.0	94.0	-6.0	EUT on Side, Mid Ch
2405.033	53.7	33.5	1.0	160.0	3.0	0.0	Horz	AV	0.0	87.2	94.0	-6.7	EUT on Side, Low Ch
2405.008	52.9	33.5	1.0	283.0	3.0	0.0	Vert	AV	0.0	86.4	94.0	-7.6	EUT Vertical, Low Ch
2405.017	52.5	33.5	1.0	12.0	3.0	0.0	Horz	AV	0.0	86.0	94.0	-7.9	EUT Vertical, Low Ch
2405.075	51.2	33.5	2.1	210.0	3.0	0.0	Vert	AV	0.0	84.7	94.0	-9.2	EUT Horizontal, Low Ch
2480.500	61.8	34.0	1.2	346.0	3.0	0.0	Horz	PK	0.0	95.8	114.0	-18.2	EUT Horizontal, High Ch
2450.550	61.8	33.8	1.0	174.0	3.0	0.0	Horz	PK	0.0	95.6	114.0	-18.4	EUT Horizontal, Mid Ch
2405.525	61.9	33.5	1.6	172.0	3.0	0.0	Horz	PK	0.0	95.4	114.0	-18.6	EUT Horizontal, Low Ch
2479.608	60.4	34.0	1.0	344.0	3.0	0.0	Vert	PK	0.0	94.4	114.0	-19.6	EUT on Side, High Ch
2404.533	59.6	33.5	1.6	182.0	3.0	0.0	Vert	PK	0.0	93.1	114.0	-20.9	EUT on Side, Low Ch
2449.675	56.7	33.8	1.0	223.0	3.0	0.0	Vert	PK	0.0	90.5	114.0	-23.5	EUT on Side, Mid Ch
2405.575	56.2	33.5	1.0	160.0	3.0	0.0	Horz	PK	0.0	89.7	114.0	-24.3	EUT on Side, Low Ch
2405.533	55.4	33.5	1.0	283.0	3.0	0.0	Vert	PK	0.0	88.9	114.0	-25.1	EUT Vertical, Low Ch
2404.583	55.2	33.5	1.0	12.0	3.0	0.0	Horz	PK	0.0	88.7	114.0	-25.3	EUT Vertical, Low Ch
2405.515	53.9	33.5	2.1	210.0	3.0	0.0	Vert	PK	0.0	87.4	114.0	-26.6	EUT Horizontal, Low Ch

NORTHWEST EMC

Field Strength of Harmonics and 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, modulated, Low, Mid, High Channel at 2405, 2450, 2480 MHz (See Comments)

POWER SETTINGS INVESTIGATED

Battery

CONFIGURATIONS INVESTIGATED

SECF0009 - 1

FREQUENCY RANGE INVESTIGATED

Start Frequency	30 MHz	Stop Frequency	25 GHz

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
High Pass Filter	Micro-Tronics	HPM50111	HGQ	6/1/2012	24 mo
Low Pass Filter	Micro-Tronics	LPM50004	HGK	5/31/2012	24 mo
Attenuator, 20 dB, 'SMA'	SM Electronics	SA6-20	REO	5/31/2012	12 mo
Pre-Amplifier	Miteq	JSD4-18002600-26-8P	APU	10/5/2012	12 mo
MN05 Cables	N/A	18-26GHz Standard Gain Horn Cable	MNP	10/5/2012	12 mo
Antenna, Horn	ETS	3160-09	AHG	NCR	0 mo
Antenna, Horn	ETS Lindgren	3160-08	AIQ	NCR	0 mo
Antenna, Horn	ETS	3160-07	AXP	NCR	0 mo
Pre-Amplifier	Miteq	AMF-6F-12001800-30-10P	AVW	5/30/2012	12 mo
Pre-Amplifier	Miteq	AMF-6F-08001200-30-10P	AVV	5/30/2012	12 mo
MN05 Cables	ESM Cable Corp.	Standard Gain Horn Cables	MNJ	5/30/2012	12 mo
MN05 Cables	ESM Cable Corp.	Double Ridge Guide Horn Cables	MNI	5/30/2012	12 mo
Antenna, Horn (DRG)	ETS Lindgren	3115	AIP	6/29/2011	24 mo
Pre-Amplifier	Miteq	AMF-3D-00100800-32-13P	AVX	5/30/2012	12 mo
Pre-Amplifier	Miteq	AM-1616-1000	PAD	8/28/2012	12 mo
MN05 Cables	ESM Cable Corp.	Bilog Cables	MNH	5/31/2012	12 mo
Antenna, Bilog	Teseq	CBL 6141B	AYD	12/17/2012	12 mo
Spectrum Analyzer	Agilent	E4446A	AAT	6/28/2012	24 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

TEST DESCRIPTION

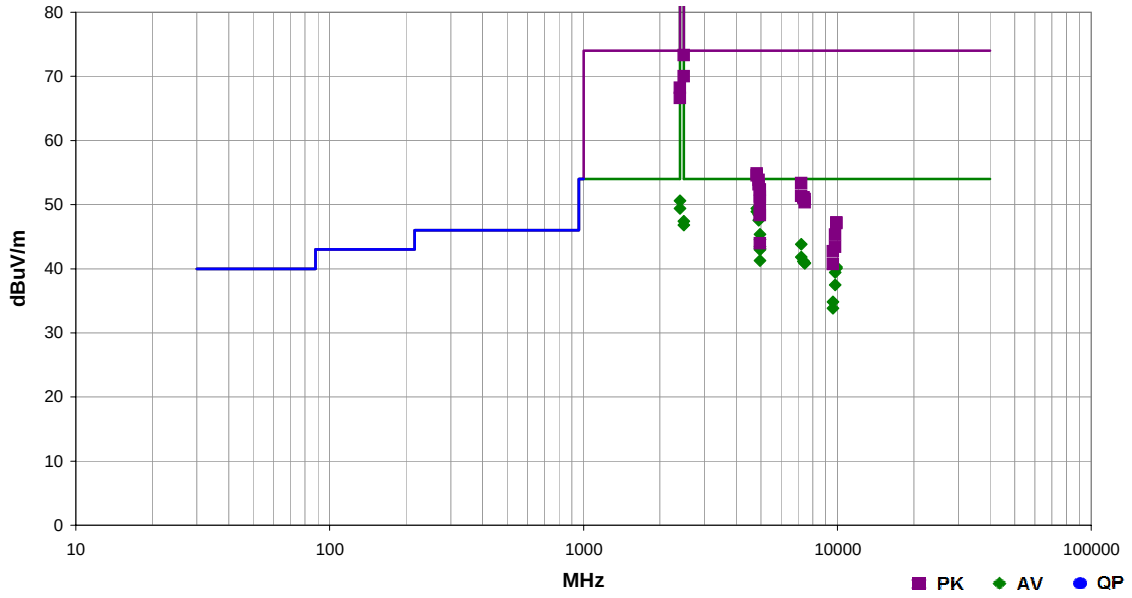
The antennas to be used with the EUT were tested. The EUT was transmitting and receiving while set at the lowest channel, a middle channel, and the highest channel available. While scanning, emissions from the EUT were maximized by rotating the EUT, adjusting the measurement antenna height and polarization, and manipulating the EUT antenna 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.

Field Strength of Harmonics and Spurious Radiated Emissions

Work Order:	SECF0009	**Date:**	02/18/13	Trevor Buls	
Project:	None	**Temperature:**	24 °C		
Job Site:	MN05	**Humidity:**	14.8% RH		
Serial Number:	SC011B 00240	**Barometric Pres.:**	1000.5 mbar	**Tested by:**	Trevor Buls
EUT:	NXT Remote				
Configuration:	1				
Customer:	Select Comfort Corporation				
Attendees:	Michael Bendzick				
EUT Power:	Battery				
Operating Mode:	Transmitting, modulated, Low, Mid, High Channel at 2405, 2450, 2480 MHz (See Comments)				
Deviations:	None				
Comments:	Customer states that the EUT is using the maximum possible duty cycle during normal operation.				

Test Specifications	**Test Method**
FCC 15.249:2013	ANSI C63.10:2009

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



Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
2483.658	57.1	-3.8	1.9	156.0	3.0	20.0	Horz	PK	0.0	73.3	74.0	-0.7	EUT Horizontal, High Ch
2398.142	34.7	-4.1	1.7	350.0	3.0	20.0	Horz	AV	0.0	50.6	54.0	-3.4	EUT Horizontal, Low Ch
2483.783	53.8	-3.8	1.0	156.0	3.0	20.0	Vert	PK	0.0	70.0	74.0	-4.0	EUT on Side, High Ch
4809.225	45.4	4.0	1.0	326.0	3.0	0.0	Vert	AV	0.0	49.4	54.0	-4.6	EUT on Side, Low Ch
2398.325	33.5	-4.1	1.3	340.0	3.0	20.0	Vert	AV	0.0	49.4	54.0	-4.6	EUT on Side, Low Ch
4809.167	44.9	4.0	1.2	235.0	3.0	0.0	Horz	AV	0.0	48.9	54.0	-5.1	EUT Vertical, Low Ch
4899.250	44.1	4.3	1.1	140.0	3.0	0.0	Vert	AV	0.0	48.4	54.0	-5.6	EUT on Side, Mid Ch
2399.767	52.3	-4.1	1.7	350.0	3.0	20.0	Horz	PK	0.0	68.2	74.0	-5.8	EUT Horizontal, Low Ch
4899.192	43.2	4.3	1.3	224.0	3.0	0.0	Horz	AV	0.0	47.5	54.0	-6.5	EUT Vertical, Mid Ch
2483.508	31.2	-3.8	1.9	157.0	3.0	20.0	Horz	AV	0.0	47.4	54.0	-6.6	EUT Horizontal, High Ch -AV(10Hz)
2483.508	30.6	-3.8	1.0	156.0	3.0	20.0	Vert	AV	0.0	46.8	54.0	-7.2	EUT on Side, High Ch -AV(10Hz)
2399.800	50.7	-4.1	1.3	340.0	3.0	20.0	Vert	PK	0.0	66.6	74.0	-7.4	EUT on Side, Low Ch
4959.225	40.8	4.6	1.0	309.0	3.0	0.0	Vert	AV	0.0	45.4	54.0	-8.6	EUT on Side, High Ch
4959.158	40.0	4.6	1.2	40.0	3.0	0.0	Horz	AV	0.0	44.6	54.0	-9.4	EUT Vertical, High Ch
7213.683	32.4	11.4	1.0	232.0	3.0	0.0	Horz	AV	0.0	43.8	54.0	-10.2	EUT Vertical, Low Ch
4959.200	38.9	4.6	1.0	187.0	3.0	0.0	Horz	AV	0.0	43.5	54.0	-10.5	EUT Horizontal, High Ch
4958.992	38.6	4.6	1.0	253.0	3.0	0.0	Vert	AV	0.0	43.2	54.0	-10.8	EUT Horizontal, High Ch
4959.208	38.4	4.6	1.0	308.0	3.0	0.0	Horz	AV	0.0	43.0	54.0	-11.0	EUT on Side, High Ch
7216.550	30.4	11.4	1.0	218.0	3.0	0.0	Vert	AV	0.0	41.8	54.0	-12.2	EUT on Side, Low Ch
4959.267	36.7	4.6	1.0	324.0	3.0	0.0	Vert	AV	0.0	41.3	54.0	-12.7	EUT Vertical, High Ch
7348.283	29.0	12.2	3.8	328.0	3.0	0.0	Horz	AV	0.0	41.2	54.0	-12.8	EUT Vertical, Mid Ch
7351.608	28.9	12.2	3.9	66.0	3.0	0.0	Vert	AV	0.0	41.1	54.0	-12.9	EUT on Side, Mid Ch
7441.275	28.2	12.7	1.0	315.0	3.0	0.0	Horz	AV	0.0	40.9	54.0	-13.1	EUT Vertical, High Ch
7440.350	28.2	12.6	1.0	239.0	3.0	0.0	Vert	AV	0.0	40.8	54.0	-13.2	EUT on Side, High Ch
9922.148	49.3	-9.0	1.2	281.0	3.0	0.0	Vert	AV	0.0	40.3	54.0	-13.7	EUT on Side, High Ch
9922.207	49.1	-9.0	1.5	5.0	3.0	0.0	Horz	AV	0.0	40.1	54.0	-13.9	EUT Vertical, High Ch
9802.197	48.5	-9.1	1.1	146.0	3.0	0.0	Vert	AV	0.0	39.4	54.0	-14.6	EUT on Side, Mid Ch
9798.331	46.6	-9.1	1.7	188.0	3.0	0.0	Horz	AV	0.0	37.5	54.0	-16.5	EUT Vertical, Mid Ch

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Antenna Height (meters)	Azimuth (degrees)	Test Distance (meters)	External Attenuation (dB)	Polarity/ Transducer Type	Detector	Distance Adjustment (dB)	Adjusted (dBuV/m)	Spec. Limit (dBuV/m)	Compared to Spec. (dB)	Comments
9618.310	44.1	-9.3	1.4	226.0	3.0	0.0	Horz	AV	0.0	34.8	54.0	-19.2	EUT Vertical, Low Ch
4808.933	50.8	4.0	1.0	326.0	3.0	0.0	Vert	PK	0.0	54.8	74.0	-19.2	EUT on Side, Low Ch
4809.292	50.5	4.0	1.2	235.0	3.0	0.0	Horz	PK	0.0	54.5	74.0	-19.5	EUT Vertical, Low Ch
9622.301	43.1	-9.3	1.1	98.0	3.0	0.0	Vert	AV	0.0	33.8	54.0	-20.2	EUT on Side, Low Ch
4899.333	49.5	4.3	1.1	140.0	3.0	0.0	Vert	PK	0.0	53.8	74.0	-20.2	EUT on Side, Mid Ch
7216.667	41.9	11.4	1.0	232.0	3.0	0.0	Horz	PK	0.0	53.3	74.0	-20.7	EUT Vertical, Low Ch
4899.167	48.8	4.3	1.3	224.0	3.0	0.0	Horz	PK	0.0	53.1	74.0	-20.9	EUT Vertical, Mid Ch
4961.258	47.8	4.6	1.0	309.0	3.0	0.0	Vert	PK	0.0	52.4	74.0	-21.6	EUT on Side, High Ch
7216.958	39.9	11.4	1.0	218.0	3.0	0.0	Vert	PK	0.0	51.3	74.0	-22.7	EUT on Side, Low Ch
4959.075	46.7	4.6	1.2	40.0	3.0	0.0	Horz	PK	0.0	51.3	74.0	-22.7	EUT Vertical, High Ch
7350.975	38.9	12.2	3.7	66.0	3.0	0.0	Vert	PK	0.0	51.1	74.0	-22.9	EUT on Side, Mid Ch
7349.608	38.9	12.2	3.7	328.0	3.0	0.0	Horz	PK	0.0	51.1	74.0	-22.9	EUT Vertical, Mid Ch
7438.350	38.2	12.6	1.0	315.0	3.0	0.0	Horz	PK	0.0	50.8	74.0	-23.2	EUT Vertical, High Ch
4959.097	46.0	4.6	1.0	253.0	3.0	0.0	Vert	PK	0.0	50.6	74.0	-23.4	EUT Horizontal, High Ch
7437.608	37.7	12.6	1.0	239.0	3.0	0.0	Vert	PK	0.0	50.3	74.0	-23.7	EUT on Side, High Ch
4959.108	44.1	4.6	1.0	324.0	3.0	0.0	Vert	PK	0.0	48.7	74.0	-25.3	EUT Vertical, High Ch
4961.517	43.8	4.6	1.0	308.0	3.0	0.0	Horz	PK	0.0	48.4	74.0	-25.6	EUT on Side, High Ch
9922.073	56.2	-9.0	1.2	281.0	3.0	0.0	Vert	PK	0.0	47.2	74.0	-26.8	EUT on Side, High Ch
9922.407	56.1	-9.0	1.5	5.0	3.0	0.0	Horz	PK	0.0	47.1	74.0	-26.9	EUT Vertical, High Ch
9802.405	54.4	-9.1	1.1	146.0	3.0	0.0	Vert	PK	0.0	45.3	74.0	-28.7	EUT on Side, Mid Ch
4958.042	39.4	4.6	1.0	187.0	3.0	0.0	Horz	PK	0.0	44.0	74.0	-30.0	EUT Horizontal, High Ch
9798.390	52.5	-9.1	1.7	188.0	3.0	0.0	Horz	PK	0.0	43.4	74.0	-30.6	EUT Vertical, Mid Ch
9618.435	52.0	-9.3	1.4	226.0	3.0	0.0	Horz	PK	0.0	42.7	74.0	-31.3	EUT Vertical, Low Ch
9622.092	50.0	-9.3	1.1	98.0	3.0	0.0	Vert	PK	0.0	40.7	74.0	-33.3	EUT on Side, Low Ch