

FCC Test Report

Product Name	USB Z-Wave dongle	
Model No.	WD6020, WD6030	
FCC ID.	SW8WD6030	

Applicant	GOODWAY TECHNOLOGY CO., LTD.	
Address	3F, No. 135, Ln. 235, Baociao Rd., Sindian Dist.,	
	New Taipei City 231, Taiwan	

Date of Receipt	Sep. 25, 2013
Issued Date	Oct. 25, 2013
Report No.	139529R-RFUSP30V01
Report Version	V1.0



The Test Results relate only to the samples tested.

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Test Report Certification

Issued Date: Oct. 25, 2013

Report No.: 139529R-RFUSP30V01



Product Name	USB Z-Wave dongle
Applicant	GOODWAY TECHNOLOGY CO., LTD.
Address	3F, No. 135, Ln. 235, Baociao Rd., Sindian Dist., New Taipei City 231,
	Taiwan
Manufacturer	GOODWAY TECHNOLOGY CO., LTD.
Model No.	WD6020, WD6030
FCC ID.	SW8WD6030
EUT Rated Voltage	DC 5V (by USB port)
EUT Test Voltage	AC 120V/60Hz
Trade Name	GOODWAY
Applicable Standard	FCC CFR Title 47 Part 15 Subpart C: 2012
	ANSI C63.4: 2003, ANSI C63.10: 2009
Test Result	Complied

The Test Results relate only to the samples tested.

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Attachment 1: EUT Test Photographs Attachment 2: EUT Detailed Photographs



1. GENERAL INFORMATION

1.1. EUT Description

Product Name	USB Z-Wave dongle
Trade Name	GOODWAY
FCC ID.	SW8WD6030
Model No.	WD6020, WD6030
Frequency Range	908.42MHz
Type of Modulation	FSK
Number of Channels	1
Channel Control	Auto
Antenna Type	Chip Antenna

Center Frequency of Each Channel:

Channel Frequency
Channel 1: 908.42MHz

- 1. The EUT is a USB Z-Wave dongle with a built-in 908.42MHz Z-Wave transceiver.
- 2. The EUT is including two models for different Institutions and circuits are the same, only the mini-USB & micro-USB connector only difference.
- 3. These tests are conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart C Paragraph 15.249.
- 4. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
- 5. The radiation measurements are performed in X, Y, Z axis positioning. Only the worst case is shown in the report.

	WD6020 (Mini USB Port)
Pre Test Mode	WD6020 (Micro USB Port)

Final Test Mode	WD6020 (Mini USB Port)	Mode 1: Transmit	



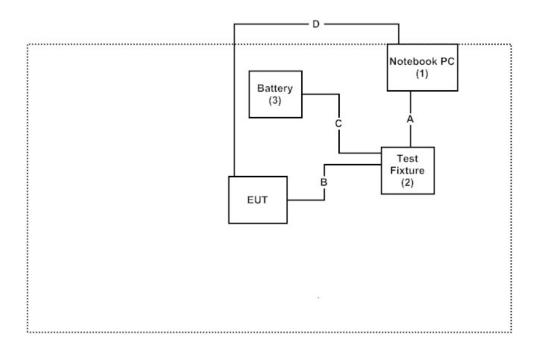
1.3. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product		Manufacturer	Model No.	Serial No.	Power Cord
1. Notebook PC		ASUS	A84P420DR-Z60XHB	40733	Non-Shielded, 0.8m
2.	Test Fixture	GOODWAY	N/A	N/A	N/A
3.	Battery	Panasonic	N/A	N/A	N/A

Signal Cable Type		Signal cable Description	
A. USB Cable		Shielded, 1.0m	
В.	Signal Cable	Non-Shielded, 0.22m	
C.	Power Cable	Shielded, 0.25m	
D.	USB Cable	Shielded, 1.3m	

1.4. Configuration of Test System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown in Section 1.4
- (2) Execute program"Z-wave programmer V.246" on the notebook PC.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Start transmits continually.
- (5) Verify that the EUT works properly.



1.6. Test Facility

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual	
Temperature (°C)	15-35	20-35	
Humidity (%RH)	25-75	50-65	
Barometric pressure (mbar)	860-1060	950-1000	

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site: http://tw.quietek.com/modules/myalbum/
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site: http://www.quietek.com/

Site Description: File on

Federal Communications Commission

FCC Engineering Laboratory 7435 Oakland Mills Road Columbia, MD 21046

Registration Number: 92195

Site Name: Quietek Corporation

Site Address: No.5-22, Ruishukeng Linkou Dist., New Taipei City

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FCC Accreditation Number: TW1014



2. Conducted Emission

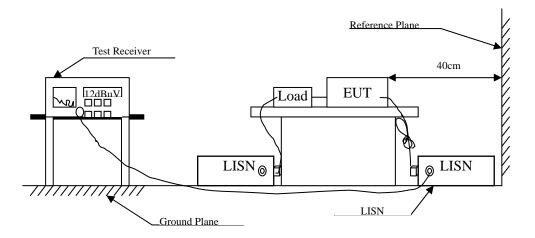
2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
X	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2013	
X	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2013	Peripherals
X	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2013	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2013	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2013	
	No.8 Shielded Room				

Note:

- 1. All equipments are calibrated every one year.
- 2. The test instruments marked by "X" are used to measure the final test results.

2.2. Test Setup





2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBuV) Limit						
Frequency	Limits					
MHz	QP	AV				
0.15 - 0.50	66-56	56-46				
0.50-5.0	56	46				
5.0 - 30	60	50				

Remarks: In the above table, the tighter limit applies at the band edges.

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2009 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

2.5. Uncertainty

± 2.26 dB



2.6. Test Result of Conducted Emission

Product : USB Z-Wave dongle
Test Item : Conducted Emission Test

Power Line : Line 1

Test Mode : Mode 1: Transmit

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV	dB	dBuV
Line 1					_
Quasi-Peak					
0.212	9.699	36.850	46.549	-17.680	64.229
0.287	9.703	28.990	38.693	-23.393	62.086
0.353	9.706	26.410	36.116	-24.084	60.200
0.423	9.709	19.550	29.259	-28.941	58.200
0.568	9.715	16.750	26.465	-29.535	56.000
0.713	9.722	17.270	26.992	-29.008	56.000
Average					
0.212	9.699	28.470	38.169	-16.060	54.229
0.287	9.703	21.640	31.343	-20.743	52.086
0.353	9.706	20.700	30.406	-19.794	50.200
0.423	9.709	11.200	20.909	-27.291	48.200
0.568	9.715	11.220	20.935	-25.065	46.000
0.713	9.722	12.140	21.862	-24.138	46.000

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor



Product : USB Z-Wave dongle
Test Item : Conducted Emission Test

Power Line : Line 2

Test Mode : Mode 1: Transmit

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV	dB	dBuV
Line 2					
Quasi-Peak					
0.212	9.679	33.890	43.569	-20.660	64.229
0.287	9.683	26.820	36.503	-25.583	62.086
0.353	9.686	25.490	35.176	-25.024	60.200
2.138	9.787	15.260	25.047	-30.953	56.000
5.271	9.830	23.070	32.900	-27.100	60.000
15.021	9.960	21.840	31.800	-28.200	60.000
Average					
0.212	9.679	27.090	36.769	-17.460	54.229
0.287	9.683	21.390	31.073	-21.013	52.086
0.353	9.686	20.290	29.976	-20.224	50.200
2.138	9.787	9.850	19.637	-26.363	46.000
5.271	9.830	15.030	24.860	-25.140	50.000
15.021	9.960	10.470	20.430	-29.570	50.000

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor



3. Radiated Emission

3.1. Test Equipment

The following test equipment are used during the radiated emission test:

Test Site	Equi	pment	Manufacturer	Model No./Serial No.	Last Cal.
⊠Site # 3	X	Loop Antenna	Teseq	HLA6120 / 26739	Jul., 2013
	X	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2013
	X	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2013
	X	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2013
	X	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2013
	X	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2013
	X	Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2013
	X	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2013
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2013
	X	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2013
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

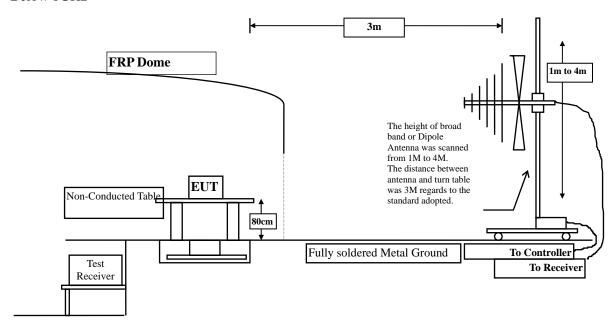
2. The test instruments marked with "X" are used to measure the final test results.

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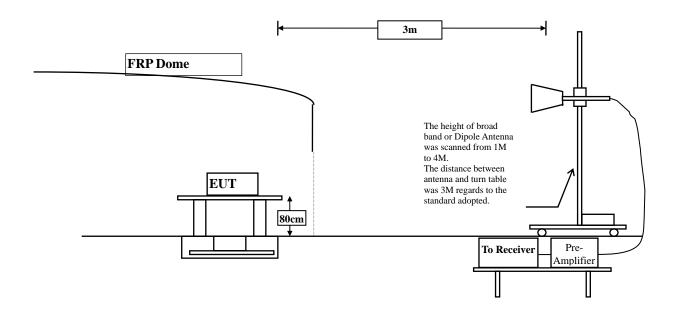


3.2. Test Setup

Below 1GHz



Above 1GHz





3.3. Limits

> Fundamental and Harmonics Emission Limits

FCC Part 15 Subpart C Paragraph 15.249 Limits							
Frequency	Field Strength of Fundamental		Field Strength of Harmonics				
MHz	(mV/m @3m)	(dBuV/m @3m)	(uV/m @3m)	(dBuV/m @3m)			
902-928	50	94	500	54			
2400-2483.5	50	94	500	54			
5725-5875	50	94	500	54			

Remarks: 1. RF Voltage $(dBuV/m) = 20 \log RF$ Voltage (uV/m)

2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.

➤ General Radiated Emission Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209 Limits					
Frequency MHz	Field strength	Measurement distance			
IVIII	(microvolts/meter)	(meter)			
0.009-0.490	2400/F(kHz)	300			
0.490-1.705	24000/F(kHz)	30			
1.705-30	30	30			
30-88	100	3			
88-216	150	3			
216-960	200	3			
Above 960	500	3			

Remarks: 1. RF Voltage $(dBuV/m) = 20 \log RF$ Voltage (uV/m)

- 2. In the Above Table, the tighter limit applies at the band edges.
- 3. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.



3.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10: 2009 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas.

The measurement is divided into the Preliminary Measurement and the Final Measurement.

The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna. The worst radiated emission is measured on the Final Measurement.

The measurement frequency range form 9KHz - 10th Harmonic of fundamental was investigated.

3.5. Uncertainty

- ± 3.9 dB above 1GHz
- ± 3.8 dB below 1GHz



3.6. Test Result of Radiated Emission

Product : USB Z-Wave dongle

Test Item : Fundamental Radiated Emission

Test Site : No.3OATS

Test Mode : Mode 1: Transmit (X-asix)

Peak Detector

	2 0000 2 000000					
	Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
				Levei		
_	MHz	dB	dBuV	dBuV/m	dB	dBuV/m
	Horizontal					
	908.420	6.293	86.440	92.732	-1.268	94.000
	Vertical					
	908.420	0.746	78.620	79.366	-14.634	94.000

Note:

- 1. All Readings below 1GHz are Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna Factor + Cable Loss PreAMP.

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Test Item : Fundamental Radiated Emission

Test Site : No.3OATS

Test Mode : Mode 1: Transmit (Y-asix)

Peak Detector

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
908.420	6.293	86.410	92.702	-1.298	94.000
Vertical					
908.420	0.746	77.770	78.516	-15.484	94.000

Note:

- 1. All Readings below 1GHz are Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna Factor + Cable Loss PreAMP.

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Test Item : Fundamental Radiated Emission

Test Site : No.3OATS

Test Mode : Mode 1: Transmit (Z-asix)

Peak Detector

I can Detector					
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
908.420	6.293	85.160	91.452	-2.548	94.000
Vertical					
908.420	0.746	79.910	80.656	-13.344	94.000

- 1. All Readings below 1GHz are Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Measurement Level = Reading Level + Correct Factor.
- 3. Correct Factor = Antenna Factor + Cable Loss PreAMP.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					_
Peak Detector:					
1816.840	-1.680	45.100	43.420	-30.580	74.000
2725.260	-3.757	55.180	51.423	-22.577	74.000
3633.680	5.241	45.660	50.901	-3.099	54.000
4542.100	5.479	46.730	52.209	-1.791	54.000
5450.520	5.925	41.190	47.115	-6.885	54.000
6358.940	6.170	45.740	51.910	-2.090	54.000
7267.360	6.697	39.670	46.367	-7.633	54.000
8175.780	7.132	41.240	48.372	-5.628	54.000
9084.200	7.665	39.900	47.565	-6.435	54.000

Average Detector:

__

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : Harmonic Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit

Correct	Reading	Measurement	Margin	Limit
Factor	Level	Level		
dB	dBuV	dBuV/m	dB	dBuV/m
				_
-0.879	44.070	43.192	-30.808	74.000
-4.605	50.440	45.835	-28.165	74.000
-3.380	44.070	40.691	-33.309	74.000
0.552	45.710	46.261	-27.739	74.000
1.557	41.240	42.797	-31.203	74.000
1.346	44.760	46.106	-27.894	74.000
5.720	38.730	44.450	-29.550	74.000
6.578	41.590	48.167	-25.833	74.000
9.943	40.480	50.423	-23.577	74.000
	Factor dB -0.879 -4.605 -3.380 0.552 1.557 1.346 5.720 6.578	Factor Level dB dBuV -0.879 44.070 -4.605 50.440 -3.380 44.070 0.552 45.710 1.557 41.240 1.346 44.760 5.720 38.730 6.578 41.590	Factor Level Level dBuV/m -0.879	Factor Level dBuV dBuV/m dB -0.879

Average Detector:

--

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.



Test Item : General Radiated Emission Data

Test Site : No.3 OATS

Test Mode : Mode 1: Transmit

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
117.300	-7.350	24.931	17.581	-25.919	43.500
206.540	-10.529	40.652	30.123	-13.377	43.500
293.840	-4.940	29.435	24.495	-21.505	46.000
414.120	-0.195	30.406	30.211	-15.789	46.000
608.120	3.925	27.208	31.133	-14.867	46.000
800.180	6.417	24.951	31.368	-14.632	46.000
Vertical					
88.200	-4.076	24.309	20.233	-23.267	43.500
206.540	-5.509	35.684	30.175	-13.325	43.500
346.220	-0.527	26.447	25.920	-20.080	46.000
544.100	1.503	22.758	24.261	-21.739	46.000
617.820	0.958	27.759	28.717	-17.283	46.000
844.800	2.462	23.238	25.700	-20.300	46.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.



4. Band Edge

4.1. Test Equipment

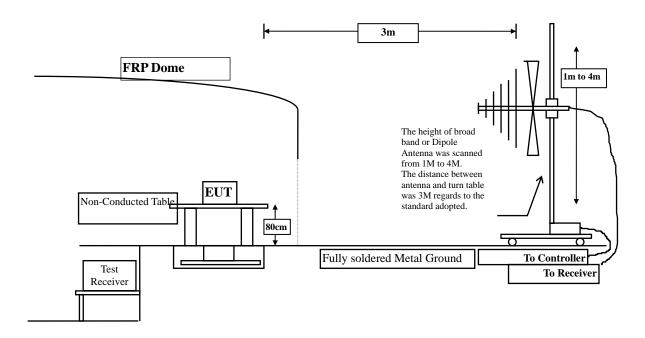
The following test equipments are used during the band edge tests:

Test Site	Equipment		Manufacturer	Model No./Serial No.	Last Cal.
⊠Site # 3	X Bilog Antenna		Schaffner Chase	CBL6112B/2673	Sep., 2013
		Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2013
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2013
	X Pre-Amplifier Pre-Amplifier		QTK	QTK-AMP-03 / 0003	May, 2013
			QTK	AP-180C / CHM_0906076	Sep., 2012
		Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar, 2013
		Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2013
	X	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2012
X		Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2013
	X	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	X	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

- 1. All equipments are calibrated every one year.
- 2. The test equipments marked by "X" are used to measure the final test results.



4.2. Test Setup



4.3. Limit

Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a) (see Section 15.205(c)).



4.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2009 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter (R&S Test Receiver ESCS 30)is 120 kHz, above 1GHz are 1 MHz.

4.5. Uncertainty

Radiated is ± 3.9 dB.



4.6. Test Result of Band Edge

Product : USB Z-Wave dongle
Test Item : Band Edge Data
Test Site : No.3 OATS

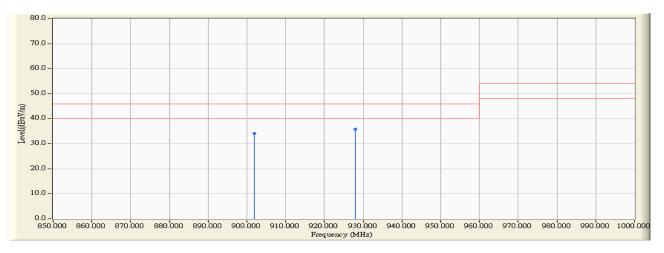
Test Mode : Mode 1: Transmit

RF Radiated Measurement (Horizontal):

No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
01(Quasi-Peak)	902.000	5.907	28.223	34.130	46.000	Pass
02(Quasi-Peak)	928.000	7.185	28.534	35.719	46.000	Pass

Figure Channel 01:

Horizontal (Quasi-Peak)



- 1. Quasi-Peak measurements: RBW=100kHz,VBW=1MHz,Sweep: Auto.
- 2. "*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



Product : USB Z-Wave dongle
Test Item : Band Edge Data
Test Site : No.3 OATS

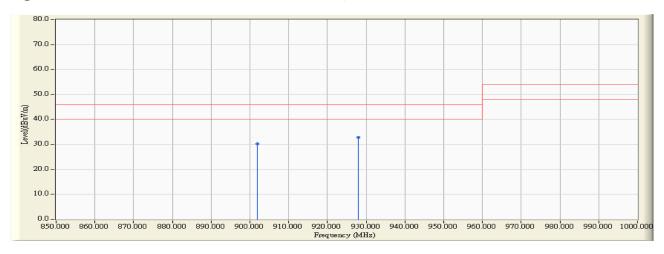
Test Mode : Mode 1: Transmit

RF Radiated Measurement (Vertical):

No.	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBuV)	Emission Level (dBuV/m)	Quasi-Peak Limit (dBuV/m)	Result
01(Quasi-Peak)	902.000	1.645	28.650	30.295	46.000	Pass
02(Quasi-Peak)	928.000	3.606	29.182	32.788	46.000	Pass

Figure Channel 01:

Vertical (Quasi-Peak)



- 1. Quasi-Peak measurements: RBW=100kHz,VBW=1MHz,Sweep: Auto.
- 2. "*", means this data is the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor.



5. EMI Reduction Method During Compliance Testing

No modification was made during testing.

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Attachment 1 : EUT Test Photographs



Attachment 2 : EUT Detailed Photographs