Hideki Electronics Limited

Application
For
Certification

(FCC ID: Q9PELS915)

PowerCost Monitor (Transceiver)

HK08120042-1
BH/ sl
January 23, 2009

Intertek Testing Services Hong Kong Ltd.
2/F., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.
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LIST OF EXHIBITS

MEASUREMENT/TECHNICAL REPORT

Hideki Electronics Limited - MODEL: ELS915

FCC ID: Q9PELS915

This report concerns (check one) Original Grant __X__ Class II Change ____

Equipment Type: DSS - Part 15 Spread Spectrum Transmitter
CRR - Superregenerative Receiver

Deferred grant requested per 47 CFR 0.457(d)(1)(ii)? Yes ____ No __X__

If yes, defer until : _____
date

Company Name agrees to notify the Commission by: _____
date

of the intended date of announcement of the product so that the grant can be issued on that date.

Transition Rules Request per 15.37? Yes ____ No __X__

If no, assumed Part 15, Subpart C for intentional radiator - the new 47 CFR [10-01-07 Edition] provision.

Report prepared by: Ho Wai Kin, Ben
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Kowloon, Hong Kong.
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Fax: 852-2371-0521

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Test Report	20 dB Bandwidth Plot	20dB.pdf
Test Report	Minimum Number of Hopping Frequencies	chno.pdf
Test Report	Minimum Hopping Channel Carrier Frequency Separation	fsepa.pdf
Test Report	Average Channel Occupancy Time	avetime.pdf
Test Report	Out Band Antenna Conducted Emission Plot	obantcon.pdf
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Test Setup Photo	Conducted Emission	config photos.pdf
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Block Diagram	Block Diagram	block.pdf
Schematics	Circuit Diagram	circuit.pdf
ID Label/Location	Label Artwork and Location	label.pdf
User Manual	User Manual	manual.pdf
RF Exposure Info	RF Safety	RF exposure info.pdf
Operation Description	Technical Description	descri.pdf

EXHIBIT 1

SUMMARY OF TEST RESULTS

1.0 Summary of Test

Hideki Electronics Limited - MODEL: ELS915

FCC ID: Q9PELS915

915MHz Transmitter Portion

TEST	REFERENCE	RESULTS
Max. Output Power	15.247(b)(1)	Pass
Min. No. of Hopping Frequencies	15.247(a)(1)	Pass
Min. Hopping Channel Carrier Frequency Separation	15.247(a)(1)	Pass
Average Time of Occupancy	15.247(a)(1)	Pass
Out of Band Antenna Conducted Emission	15.247(d)	Pass
Radiated Emission in Restricted Bands	15.247(d)	Pass
AC Conducted Emission	15.207	Pass
Antenna Requirement	15.203	Pass (See Notes)

Notes: The transmitter uses permanently attached antenna. In accordance to Section 15.203, it is considered sufficient to comply with the provisions of this section.

433MHz Receiver Portion

TEST	REFERENCE	RESULTS
Radiated Emission	15.109	Pass
AC Conducted Emission	15.107	Pass

EXHIBIT 2

GENERAL DESCRIPTION

2.0 **General Description**

2.1 Product Description

The Equipment Under Test (EUT) incorporates a two-way 915MHz (Tx/ Rx) and one way 433MHz (Rx) radio capable of communication with a customers electricity meter and Temperature Sensor. The display incorporates with a touch panel LCD display. The Unit is a frequency-hopping spread spectrum device using 25 hopping frequencies between 902.8 MHz and 927.6 MHz and the channel spacing is 400 kHz. The hopping sequence follows a pseudo random ordered list of the 25 channels. The unit also receives RF signal at 433.9MHz for temperature sensor.The EUT is powered by 6.0Vdc (4 x 1.5V “AA” size batteries) and/or AC/DC adaptor 120Vac 60Hz input, 7.5Vdc 400mA output. The EUT is a power cost monitor with thermometer. During normal use, it receives power energy signal from the corresponding transmitter (meter) and the power energy will shown on the LCD display of the EUT. And the transceiver will transmit an acknowledged signal accordingly.

Antenna Type : External, Integral for 915MHz
Internal, Integral for 433MHz

The circuit description and frequency hopping algorithm is saved with filename: descri.pdf.

2.2 Related Submittal(s) Grants

This is an application for Certification of a DSS - Part 15 Spread Spectrum Transmitter for 915MHz transmitter and CRR - Superregenerative Receiver for 433MHz receiver. 915MHz receiver is subject to FCC Part 15 Verification.

The transmitter, associated with the 433MHz receiver, has been granted with FCC ID: Q9PTS13-C.

2.3 Test Methodology

Both AC mains line-conducted and radiated emission measurements were performed according to the procedures in ANSI C63.4 (2003). All measurements were performed in Open Area Test Sites. Preliminary scans were performed in the Open Area Test Sites only to determine worst case modes. All Radiated tests were performed at an antenna to EUT distance of 3 meters, unless stated otherwise in the "**Justification Section**" of this Application. All other measurements were made in accordance with the procedures in 47 CFR Part 2.

2.4 Test Facility

The open area test site and conducted measurement facility used to collect the radiated data is located at Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong. This test facility and site measurement data have been fully placed on file with the FCC.

EXHIBIT 3

SYSTEM TEST CONFIGURATION

3.0 **System Test Configuration**

3.1 Justification

For emissions testing, the equipment under test (EUT) was setup to transmit/receive continuously to simplify the measurement methodology. Care was taken to ensure proper power supply voltages during testing. During testing, all cables were manipulated to produce worst case emissions. The EUT was powered by a fully charged battery and AC/DC adaptor.

The signal is maximized through rotation and placement in the edge of turntable. The antenna height and polarization are varied during the search for maximum signal level. The antenna height is varied from 1 to 4 meters. Radiated emissions are taken at three meters unless the signal level is too low for measurement at that distance. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance.

All readings are extrapolated back to the equivalent three meter reading using inverse scaling with distance. Analyzer resolution is 100 kHz or greater for frequencies below 1000 MHz. The resolution is 1 MHz or greater for frequencies above 1000 MHz. The spurious emissions more than 20 dB below the permissible value are not reported.

Radiated emission measurement were performed the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or to 40 GHz, whichever is lower.

3.2 EUT Exercising Software

The EUT exercise program (provided by client) used during radiated and conducted testing was designed to exercise the various system components in a manner similar to a typical use.

3.3 Support Equipment List and Description

The FCC ID's for all equipment, plus descriptions of all cables used in the tested system (included inserted cards, which have grants) are:

HARDWARE:

The unit was operated standalone. An AC/DC adapter and battery were used to power the device. Their descriptions are listed below.

(1) AC/DC adaptor (120Vac 60Hz input, 7.5Vdc 400mA output, Model: U075040D)
(2) 6.0Vdc (4 x 1.5V “AA” size batteries)

CABLES:

Not Applicable.

OTHERS:

Not Applicable.

3.4 Measurement Uncertainty

When determining of the test conclusion, the Measurement Uncertainty of test has been considered.

3.5 Equipment Modification

Any modifications installed previous to testing by Hideki Electronics Limited will be incorporated in each production model sold/leased in the United States.

No modifications were installed by Intertek Testing Services Hong Kong Ltd.

All the items listed under section 3.0 of this report are confirmed by:

Confirmed by:

Ho Wai Kin, Ben
Senior Supervisor
Intertek Testing Services Hong Kong Ltd.
Agent for Hideki Electronics Limited

Signature

January 23, 2009 Date

EXHIBIT 4

MEASUREMENT RESULTS

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.0 Measurement Results

4.1 Maximum Conducted Output Power at Antenna Terminals, FCC Rules 15.247(b)(1) :

[ ] The antenna power of the EUT was connected to the input of a power meter. Power was read directly and cable loss correction was added to the reading to obtain power at the EUT antenna terminals.

[×] The antenna port of the EUT was connected to the input of a spectrum analyzer. The analyzer was set for RBW>20dB bandwidth and power was read directly in dBm. External attenuation and cable loss were compensated for using the OFFSET function of the analyser.

For antennas with gains of 6 dBi or less, maximum allowed transmitter output is 0.063 watt (+18 dBm).

Antenna Gain = 2.16 dBi			
Frequency (MHz)		Output in dBm	Output in mWatt
Low Channel:	902.768	-4.02	0.396
Middle Channel:	914.748	-3.96	0.402
High Channel:	927.648	-4.41	0.362

Cable loss : 0.5 dB External Attenuation : N/A dB

Cable loss, external attenuation: [x] included in OFFSET function
[ ] added to SA raw reading

dBm max. output level = -3.96 dBm (18 dBm or less)

Please refer to the attached plots for details:

Plot B1A: Low Channel Output Power
Plot B1B: Middle Channel Output Power
Plot B1C: High Channel output Power

For electronic filing, the above plots are saved with filename: maxop.pdf

For RF Safety, the information is saved with filename: RF exposure info.pdf

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.2 Maximum 20 dB RF Bandwidth, FCC Rule 15.247(a)(1) :

The antenna port of the EUT was connected to the input of a spectrum analyzer. Analyzer RES BW was chosen so that the display was a result of the hopping channel modulation. For each RF output channel investigated, the spectrum analyzer center frequency was set to the channel carrier. A PEAK output reading was taken, a DISPLAY line was drawn 20 dB lower than PEAK level. The 20 dB bandwidth was determined from where the channel output spectrum intersected the display line.

Frequency (MHz)	20 dB Bandwidth (kHz)
927.603	315

Refer to the following plots for 20 dB bandwidth sharp:

Plot B2A: Low Channel 20 dB RF Bandwidth
Plot B2B: Middle Channel 20 dB RF Bandwidth
Plot B2C: High Channel 20 dB RF Bandwidth

For electronic filing, the above plots are saved with filename: 20dB.pdf

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.3 Minimum Number of Hopping Frequencies, FCC Rule 15.247(a)(1) :

The RF passband of the EUT was divided into 5 approximately equal bands. With the analyzer set to MAX HOLD readings were taken for 2-3 minutes in each band. The channel peaks so recorded were added together, and the total number compared to the minimum number of channels required in the regulation.

No. of hopping channels	25

Minimum Requirements: at least 25 non-overlapping channels for 902MHz-928MHz and the 20dB bandwidth of the hopping channel is 250kHz or greater.

For electronic filing, the above plots are saved with filename: chno.pdf

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.4 Minimum Hopping Channel Carrier Frequency Separation, FCC Ref: 15.247(a)(1) :

Using the DELTA MARKER function of the analyzer, the frequency separation between two adjacent channels was measured and compared against the limit.

[ ] 25 kHz [x] 20 dB bandwidth of hopping channel: 315 kHz

Channel Separation	402 kHz

Plot B4: Channel 4 and Channel 5

Requirement: The frequency separation is more than 20dB bandwidth of hopping channel.

For electronic filing, the above plots are saved with filename: fsepa.pdf

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.5 Average Channel Occupancy Time, FCC Ref: 15.247(a)(1) :

The spectrum analyzer center frequency was set to one of the known hopping channels. The SWEEP was set to 10ms, the SPAN was set to ZERO SPAN, and the TRIGGER was set to VIDEO. The time duration of the transmission so captured was measured with the MARKER DELTA function.

The SWEEP was then set to the time required by the regulation (20 seconds for 902-928 MHz devices, if the 20dB bandwidth is less than 250kHz, 10 seconds for 902-928 MHz if the 20dB bandwidth is or greater than 250kHz, "0.4 seconds x Number of hopping channels employed" seconds for 2400-2483.5 MHz, 30 seconds for 5725-5850 MHz). The analyzer was set to SINGLE SWEEP, the total ON time was added and compared against the limit (0.4 seconds).

Average 0.4 seconds maximum occupancy in 10 seconds.

Average Occupancy Time = 100ms x 4	400 ms

Refer to attached spectrum analyzer plots B5A-B

For electronic filing, the above plots are saved with filename: avetime.pdf.

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.6 Out of Band Conducted Emissions, FCC Rule 15.247(d) :

In any 100 kHz bandwidth outside the EUT passband, the RF power produced by the modulation products of the spreading sequence, the information sequence, and the carrier frequency shall be at least 20 dB below that of the maximum in-band 100 kHz emission, or else shall meet the general limits for radiated emissions at frequencies outside the passband, whichever results in lower attenuation.

All other types of emissions from the EUT shall meet the general limits for radiated frequencies outside the passband.

Refer to the following plots for out of band conducted emissions data:

Plot B6A1 - B6A2: Low Channel Emissions
Plot B6B1 - B6B2: Middle Channel Emissions
Plot B6C1 - B6C2: High Channel Emissions

The plots showed the harmonic at the band edges of 902 MHz and 928 MHz. In addition, all spurious emission and up to the tenth harmonic was measured and they were found to be at least 20 dB below the highest level of the desired power in the passband.

Furthermore, delta measurement technique for measuring bandedge emissions was incorporated in the test of the edge at 928 MHz.

For electronic filing, the above plots are saved with filenames: obantcon.pdf

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.7 Out of Band Radiated Emissions (for emissions in 4.6 above that are less than 20 dB below carrier), FCC Rule 15.247(d) :

For out of band emissions that are close to or that exceed the 20dB attenuation requirement described in the specification, radiated measurements were performed at a 3m separation distance to determine whether these emissions complied with the general radiated emission requirement.

[×] Not required, all emissions more than 20dB below fundamental
[ ] See attached data sheet

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.8 Transmitter Radiated Emissions in Restricted Bands, FCC Rule 15.35(b), (c) :

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). A sample calculation, configuration photographs and data tables of the emissions are included. All measurements were performed with peak detection unless otherwise specified.

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.9 Field Strength Calculation

The field strength is calculated by adding the reading on the Spectrum Analyzer to the factors associated with preamplifiers (if any), antennas, cables, pulse desensitization and average factors (when specified limit is in average and measurements are made with peak detectors). A sample calculation is included below.

FS = RA + AF + CF - AG + PD + AV

where FS = Field Strength in dBμV/m
RA = Receiver Amplitude (including preamplifier) in dBμV
CF = Cable Attenuation Factor in dB
AF = Antenna Factor in dB
AG = Amplifier Gain in dB
PD = Pulse Desensitization in dB
AV = Average Factor in -dB

In the radiated emission table which follows, the reading shown on the data table may reflect the preamplifier gain. An example of the calculations, where the reading does not reflect the preamplifier gain, follows:

FS = RA + AF + CF - AG + PD + AV

Example
Assume a receiver reading of 62.0 dBμV is obtained. The antenna factor of 7.4 dB and cable factor of 1.6 dB is added. The amplifier gain of 29 dB is subtracted. The pulse desensitization factor of the spectrum analyzer was 0 dB, and the resultant average factor was -10 dB. The net field strength for comparison to the appropriate emission limit is 32 dBμV/m. This value in dBμV/m was converted to its corresponding level in μV/m.

RA = 62.0 dBμV
AF = 7.4 dB
CF = 1.6 dB
AG = 29.0 dB
PD = 0 dB
AV = -10 dB
FS = 62 + 7.4 + 1.6 - 29 + 0 + (-10) = 32 dBμV/m

Level in mV/m = Common Antilogarithm [(32 dBμV/m)/20] = 39.8 μV/m

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.10 Radiated Emission Configuration Photograph

Worst Case Radiated Emission
at
5488.800 MHz

For electronic filing, the worst case radiated emission configuration photographs are saved with filename: config photos.pdf.

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.11 Radiated Emission Data

The data on the following pages list the significant emission frequencies, the limit and the margin of compliance.

Judgement : Passed by 0.9 dB margin compare with the peak limit

TEST PERSONNEL:

Tester Signature

Mark Cheung, Lead Engineer
Typed/Printed Name

January 23, 2009
Date

Applicant: Hideki Electronics Limited
Model: ELS915
Mode : TX-Channel Lower

Date of Test: December 05, 2008

Table 1 - 2

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dBµV)	Antenna Factor (dB)	Pre-Amp Gain (dB)	Average Factor (-dB)	Calculated at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	1805.600	53.8	27.2	33	0	48.0	54.0	-6.0
V	2708.400	50.8	30.4	33	0	48.2	54.0	-5.8
V	3611.200	48.1	33.3	33	0	48.4	54.0	-5.6
V	4514.000	47.7	34.9	33	0	49.6	54.0	-4.4
V	5416.800	50.3	35.7	33	0	53.0	54.0	-1.0
V	6319.600	46.3	36.9	33	0	50.2	54.0	-3.8

Polarization	Frequency (MHz)	Reading (dBµV)	Antenna Factor (dB)	Pre-Amp Gain (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	1805.600	53.8	27.2	33	48.0	74.0	-26.0
V	2708.400	50.8	30.4	33	48.2	74.0	-25.8
V	3611.200	48.1	33.3	33	48.4	74.0	-25.6
V	4514.000	47.7	34.9	33	49.6	74.0	-24.4
V	5416.800	50.3	35.7	33	53.0	74.0	-21.0
V	6319.600	46.3	36.9	33	50.2	74.0	-23.8

NOTES: 1. Peak detector is used for the emission measurement.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

Test Engineer: Mark Cheung

Applicant: Hideki Electronics Limited
Model: ELS915
Mode : TX-Channel Mid

Date of Test: December 05, 2008

Table 3 - 4

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dBµV)	Antenna Factor (dB)	Pre-Amp Gain (dB)	Average Factor (-dB)	Calculated at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	1829.600	54.0	27.2	33	0	48.2	54.0	-5.8
V	2744.400	50.9	30.4	33	0	48.3	54.0	-5.7
V	3659.200	48.2	33.3	33	0	48.5	54.0	-5.5
V	4574.000	47.6	34.9	33	0	49.5	54.0	-4.5
V	5488.800	50.4	35.7	33	0	53.1	54.0	-0.9
V	6403.600	46.5	36.9	33	0	50.4	54.0	-3.6

Polarization	Frequency (MHz)	Reading (dBµV)	Antenna Factor (dB)	Pre-Amp Gain (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	1829.600	54.0	27.2	33	48.2	74.0	-25.8
V	2744.400	50.9	30.4	33	48.3	74.0	-25.7
V	3659.200	48.2	33.3	33	48.5	74.0	-25.5
V	4574.000	47.6	34.9	33	49.5	74.0	-24.5
V	5488.800	50.4	35.7	33	53.1	74.0	-20.9
V	6403.600	46.5	36.9	33	50.4	74.0	-23.6

NOTES: 1. Peak detector is used for the emission measurement.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

Test Engineer: Mark Cheung

Applicant: Hideki Electronics Limited
Model: ELS915
Mode : TX-Channel High

Date of Test: December 05, 2008

Table 5 - 6

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dBµV)	Antenna Factor (dB)	Pre-Amp Gain (dB)	Average Factor (-dB)	Calculated at 3m (dBµV/m)	Average Limit at 3m (dBµV/m)	Margin (dB)
V	1855.200	54.3	27.2	33	0	48.5	54.0	-5.5
V	2782.800	51.8	30.4	33	0	49.2	54.0	-4.8
V	3710.400	48.1	33.3	33	0	48.4	54.0	-5.6
V	4638.000	46.7	34.9	33	0	48.6	54.0	-5.4
V	5565.600	49.4	36.6	33	0	53.0	54.0	-1.0
V	6493.200	45.7	36.9	33	0	49.6	54.0	-4.4

Polarization	Frequency (MHz)	Reading (dBµV)	Antenna Factor (dB)	Pre-Amp Gain (dB)	Net at 3m - Peak (dBµV/m)	Peak Limit at 3m (dBµV/m)	Margin (dB)
V	1855.200	54.3	27.2	33	48.5	74.0	-25.5
V	2782.800	51.8	30.4	33	49.2	74.0	-24.8
V	3710.400	48.1	33.3	33	48.4	74.0	-25.6
V	4638.000	46.7	34.9	33	48.6	74.0	-25.4
V	5565.600	49.4	36.6	33	53.0	74.0	-21.0
V	6493.200	45.7	36.9	33	49.6	74.0	-24.4

NOTES:
1. Peak detector is used for the emission measurement.
2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.
3. Negative value in the margin column shows emission below limit.
4. Horn antenna used for the emission over 1000MHz.

Test Engineer: Mark Cheung

Applicant: Hideki Electronics Limited
Model: ELS915
Mode : Rx (433MHz)

Date of Test: December 05, 2008

Table 7

Radiated Emissions

Polarization	Frequency (MHz)	Reading (dBµV)	Antenna Factor (dB)	Pre-Amp Gain (dB)	Net at 3m (dBµV/m)	Limit at 3m (dBµV/m)	Margin (dB)
V	421.086	23.4	25.0	16	32.4	46.0	-13.6
V	425.249	23.8	25.0	16	32.8	46.0	-13.2
V	429.251	25.2	25.0	16	34.2	46.0	-11.8
V	432.306	25.8	25.0	16	34.8	46.0	-11.2
V	435.482	22.6	26.0	16	32.6	46.0	-13.4
V	866.786	17.4	31.0	16	32.4	46.0	-13.6
V	868.439	18.6	31.0	16	33.6	46.0	-12.4
V	871.541	15.6	32.0	16	31.6	46.0	-14.4
V	1208.628	45.5	26.1	33	38.6	54.0	-15.4
V	1211.730	46.3	26.1	33	39.4	54.0	-14.6
V	1215.729	45.1	26.1	33	38.2	54.0	-15.8

NOTES: 1. Peak detector is used for the emission measurement.

2. All measurements were made at 3 meters. Radiated emissions not detected at the 3-meter distance were measured at 0.3-meter and an inverse proportional extrapolation was performed to compare the signal level to the 3-meter limit. No other radiated emissions than those reported were detected at a test distance of 0.3-meter.

3. Negative value in the margin column shows emission below limit.

4. Horn antenna used for the emission over 1000MHz.

Test Engineer: Mark Cheung

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.12 AC Line Conducted Emission, FCC Rule 15.207:

[ ] Not required; battery operation only

[×] Test data attached

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.13 Line Conducted Configuration Photograph

Worst Case Line-Conducted Configuration

For electronic filing, the worst case line conducted configuration photographs are saved with filename: config photos.pdf.

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.14 Line Conducted Emission Data

The data on the following pages list the significant emission frequencies, the limit, and the margin of compliance.

Judgement : Passed by more than 20 dB margin

For electronic filing, the worst case line conducted emission data are saved with filename: conduct.pdf

TEST PERSONNEL:

Tester Signature

Mark Cheung, Lead Engineer
Typed/Printed Name

January 23, 2009
Date

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.15 Radiated Emissions from Digital Section of Transceiver, FCC Ref: 15.109

[ ] Not required - No digital part

[ ] Test results are attached

[x] Included in the separated Part 15 Verification report.

Applicant: Hideki Electronics Limited Date of Test: December 05, 2008
Model: ELS915

4.16 Transmitter Duty Cycle Calculation and Measurements, FCC Rule 15.35(b), (c) :

The EUT antenna output port was connected to the input of the spectrum analyzer. The analyzer center frequency was set to EUT RF channel carrier. The SWEP function on the analyzer was set to ZERO SPAN. The transmitter ON time was determined from the resultant time-amplitude display:

	See attached spectrum analyzer chart (s) for transmitter timing
	See transmitter timing diagram provided by manufacturer
X	Not applicable, duty cycle was not used.

EXHIBIT 5

EQUIPMENT PHOTOGRAPHS

5.0 **Equipment Photographs**

For electronic filing, the photographs are saved with filename: external photos.pdf & internal photos.pdf

EXHIBIT 6

PRODUCT LABELLING

6.0 **Product Labelling**

For electronic filing, the FCC ID label artwork and location is saved with filename: label.pdf

EXHIBIT 7

TECHNICAL SPECIFICATIONS

7.0 **Technical Specifications**

For electronic filing, the block diagram and circuit diagram are saved with filename: block.pdf and circuit.pdf respectively.

EXHIBIT 8

INSTRUCTION MANUAL

8.0 I**nstruction Manual**

For electronic filing, a preliminary copy of the Instruction Manual is saved with filename: manual.pdf.

Please note that the required FCC Information to the User is attached in the P.25 of the Instruction Manual.

This manual will be provided to the end-user with each unit sold/leased in the United States.

EXHIBIT 9

CONFIDENTIALITY REQUEST

9.0 **Confidentiality Request**

For electronic filing, a preliminary copy of the confidentiality request is saved with filename: request.pdf.