



Valued Quality. Delivered.

TEST REPORT

Report No.: 15090562HKG-001R1

Telit Communications S.p.A.

Application
For
Original Grant of 47 CFR Part 22, Part 24,
IC RSS-132 and IC RSS-133 Certification

CDMA Module

**(FCC ID: RI7CE910B-DUAL)
(IC: 5131A-CE910BDUAL)**

This report supersedes previous report with report number 15090562HKG-001 dated October 14, 2015.

Prepared and Checked by:

Approved by:

Signed On File
Lee Shui Tim
Lead Engineer

Koo Wai Ip
Assistant Supervisor
Date: November 26, 2015

- Intertek's standard Terms and Conditions can be obtained at our website <http://www.intertek.com/terms/>.
- The test report only allows to be revised within the retention period unless further standard or the requirement was noticed.
- This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Intertek Testing Services Hong Kong Ltd.

2/F., Garment Centre, 576 Castle Peak Road, Kowloon, Hong Kong.

Tel: (852) 2173 8888 Fax: (852) 2785 5487 Website: www.hk.intertek-etlsemko.com

INTERTEK TESTING SERVICES

GENERAL INFORMATION

Applicant Name:	Telit Communications S.p.A.
Applicant Address:	Via Stazione di Prosecco 5/B Trieste 34010 Italy
FCC Specification Standard:	FCC Part 22: 2014 FCC Part 24: 2014
IC Specification Standard:	IC RSS-132: 2013 IC RSS-133: 2013
FCC ID:	RI7CE910B-DUAL
FCC Model(s):	CE910B-DUAL
IC:	IC: 5131A-CE910BDUAL
Type of EUT:	CDMA 850/1900 Transceiver
Description of EUT:	CDMA Module
Serial Number:	N/A
Sample Receipt Date:	September 09, 2015
Date of Test:	September 13-30, 2015
Report Date:	November 26, 2015
Environmental Conditions:	Temperature: 25 ± 10°C Humidity: 10 to 90%

INTERTEK TESTING SERVICES

Table of Contents

1.0	Summary of Test Results	3
1.1	Statement of Compliance	3
2.0	General Description	4
2.1	Product Description	4
2.2	Test Methodology	4
2.3	Test Facility	4
3.0	System Test Configuration	5
3.1	Justification	5
3.2	Details of EUT and Description of Accessories	6
3.3	Measurement Uncertainty	6
3.4	Equipment Modification	6
4.0	Test Results	7
4.1	Channels for Cellular and Broadband PCS Services	7
4.2	RF Power Output	8
4.3	Occupied Bandwidth	9
4.4	Spurious Emissions at Antenna Terminals	10
4.5	Power of Spurious Emissions	11
4.6	Blockage at Antenna Terminals	12
4.7	Frequency Stability	13
4.8	Radio Frequency Exposure Compliance	17
4.9	Peak-to-average power ratio (PAPR)	17
5.0	Equipment List	19
Appendix – Exhibits for Application of Certification		

INTERTEK TESTING SERVICES

1.0 Summary of Test Results

Test Items	FCC Section	IC Section	Results	Details see section
Channels for Cellular and Broadband PCS Services	22.905 24.229	SRSP-503 SRSP-510	Pass	4.1
RF Output Power	2.1046 22.913 24.232	RSS-132(5.4) RSS-133(6.4)	Pass	4.2
Occupied Bandwidth	2.1049	RSS-Gen (4.6.1)	Pass	4.3
Spurious Emissions at Antenna Terminals	2.1051 2.1057 22.917 24.238	RSS-132(5.5) RSS-133(6.5)	Pass	4.4
Power of Spurious Emissions	2.1053 2.1057 22.917 24.238	RSS-132(5.5) RSS-133(6.5)	Pass	4.5
Blockage at antenna terminal	22.917 24.238	RSS-132(5.5) RSS-132(6.5)	Pass	4.6
Frequency Stability	2.1055 22.355 24.235	RSS-132(5.3) RSS-133(6.3)	Pass	4.7
RF Exposure	1.1307 2.1093	RSS-102	Pass	4.8
Peak-to-average Power Ratio(PAPR)	NA	RSS-132(5.4) RSS-133(6.4)	PASS	4.9

1.1 Statement of Compliance

The equipment under test is found to be complying with the applicable requirements of following standards:

FCC Part 22: 2014
FCC Part 24: 2014
IC RSS-132:2013
IC RSS-133:2013

Remark: Please refer TC-SP1099 Letter issued on November 26, 2015 for amendment/ supersede notification.

INTERTEK TESTING SERVICES

2.0 General Description

2.1 Product Description

The CE910B-DUAL is a CDMA modular supports (BC0, BC1 & BC10) 850/1900MHz.

The Cellular radiotelephone service and personal communications services frequency ranges of the EUT are as below:

CDMA BC 0:

Tx: 824.70- 848.31MHz (at intervals of 1.25MHz)

Rx: 869.70 - 893.31MHz (at intervals of 1.25MHz)

CDMA BC 1:

Tx: 1851.25 - 1908.75MHz (at intervals of 1.25MHz)

Rx: 1931.25 - 1988.75MHz (at intervals of 1.25MHz)

CDMA BC10: (FCC only)

Tx: 817.90- 822.75MHz (at intervals of 1.25MHz)

Rx: 862.90 – 867.750MHz (at intervals of 1.25MHz)

The EUT is powered by a DC power supply (3.8VDC).

The antenna used in the EUT is external, and the test sample is a prototype.

The circuit description is attached in the Appendix and saved with filename: descri.pdf.

2.2 Test Methodology

Preliminary radiated scans and all radiated measurements were performed in semi-anechoic chamber. 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 measurements were made in accordance with the procedures in 47 CFR Part 2, Part 22, Part 24, TIA-603-C, IC RSS-132 and IC RSS-133.

2.3 Test Facility

The facilities used to collect the radiated data and conducted data are in **Interterk Testing Services Taiwan Ltd** and located at 11, Ln. 275, Ko Nan 1st st. Shiang-Shan District, Hsinchu 300 Taiwan. This test facility and site measurement data have been fully placed on file with the FCC and IC.

INTERTEK TESTING SERVICES

3.0 System Test Configuration

3.1 Justification

For radiated emissions testing, the equipment under test (EUT) was controlled by communication tester to produce maximum power. Care was taken to ensure proper power supply voltages during testing. During testing, all cables (if any) were manipulated to produce worst case emissions.

The EUT was powered by DC power supply(3.8VDC).

For the measurements, the EUT is attached to a plastic stand if necessary and placed on the wooden turntable. If the EUT attaches to peripherals, they are connected and operational to simulate typical use.

The signal is maximized through rotation and placement in the three orthogonal axes. The antenna polarization are varied during the search for maximum signal level. Only the worst-case polarization is reported. For each spurious, raise and lower the test antenna from 1m to 4m to obtain a maximum reading on the spectrum analyzer. Radiated emissions are taken at three meters. If necessary, a pre-amplifier is used and/or the test is conducted at a closer distance.

The power level of EUT is set by the communication tester to achieve the maximum power levels emitted by the EUT.

For the 800MHz band, according to FCC 22.917 and IC RSS-132, compliance with the rule is based on the use of instrumentation employing a resolution bandwidth of 100 kHz or greater. In the 1MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter is employed. The 26dB emission bandwidth taken in section 4.3 is used for calculating the resolution bandwidth.

For the 1900MHz band, according to FCC 24.238 and IC RSS-133, compliance with the rule is based on the use of instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter is employed. The 26dB emission bandwidth taken in section 4.3 is used for calculating the resolution bandwidth.

Emission that are directly caused by digital circuits in the transmit path and transmitter portion are measured, and the limit are according to FCC Part 15 Section 15.109.

Detector function for radiated emissions is in peak mode.

All relevant operation modes have been tested, and the worst case data is included in this report.

INTERTEK TESTING SERVICES

3.2 Details of EUT and Description of Accessories

Details of EUT:

DC power supply (provided with Intertek) was used to power the device. Their description are listed below.

- (1) NA

Description of Accessories:

- (1) 1.2 m antenna with SMA connector. (Provided by client)

3.3 Measurement Uncertainty

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

Uncertainty and Compliance - Unless the standard specifically states that measured values are to be extended by the measurement uncertainty in determining compliance, all compliance determinations are based on the actual measured value.

3.4 Equipment Modification

Any modifications installed previous to testing by Telit Communications S.p.A. will be incorporated in each production model sold/leased in the United States.

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

INTERTEK TESTING SERVICES

4.0 Test Results

Data is included of the worst case configuration (the configuration which resulted in the highest emission levels). Configuration photographs and data tables of the emissions are included.

4.1 Channels for Cellular and Broadband PCS Services

(FCC Part 22.905, Part 24.229 IC SRSP-503, IC SRSP-510)

The following frequency bands are allocated for assignment to service providers in the Cellular Radiotelephone and Broadband PCS Services by FCC and IC:

800MHz band

(a) Channel Block A:

869 - 880 MHz paired with 824 - 835 MHz

890 - 891.5 MHz paired with 845 - 846.5 MHz

(b) Channel Block B:

880 - 890 MHz paired with 835 - 845 MHz

891.5 - 894 MHz paired with 846.5 - 849 MHz

1900MHz band

The following frequency blocks are available for assignment on a Major Trading Areas (MTA) basis:

Block A: 1850 - 1865 MHz paired with 1930 - 1975 MHz; and

Block B: 1870 - 1885 MHz paired with 1950 - 1965 MHz.

The following frequency blocks are available for assignment on a Basic Trading Areas (BTA) basis:

Block C: 1895 - 1910 MHz paired with 1975 - 1990 MHz Block D: 1865 - 1870 MHz

paired with 1945 - 1950 MHz Block E: 1885 - 1890 MHz paired with 1965 - 1970 MHz

Block F: 1890 - 1895 MHz paired with 1970 - 1975 MHz

The frequency range of the EUT is as below:

CDMA BC 0:

Tx: 824.70- 848.31MHz (at intervals of 1.25MHz) Rx: 869.70 - 893.31MHz (at intervals of 1.25MHz)

CDMA BC 1:

Tx: 1851.25 - 1908.75MHz (at intervals of 1.25MHz) Rx: 1931.25 - 1988.75MHz (at intervals of 1.25MHz)

As a result, the frequency range of the EUT fits into the allocated frequency blocks.

INTERTEK TESTING SERVICES

4.2 RF Power Output

(FCC Part 2.1046, 22.913 & 24.232, IC RSS-132(5.4), IC RSS-133(6.4))

The RF power output is measured at the RF output terminal. The limit is as follows:

FCC Part 22.913 (for 800MHz band):

≤ 7W ERP (38.5dBm) for mobile and auxiliary test transmitters

FCC Part 24.232 (for 1900MHz band):

≤ 2W EIRP. (33dBm) peak output power for portable mobile

IC RSS-132 (for 800MHz band):

≤ 11.5W EIRP (40.6dBm) for mobile and auxiliary test transmitters

IC RSS-132 (for 1900MHz band):

≤ 100 W EIRP (50.0dBm) for mobile and auxiliary test transmitters

Test results:

CDMA : BC0

Channel Number	Frequency (MHz)	Measured RF conduct Power (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Calculated ERPs (dBm)	Calculated EIRP (dBm)	Verdict
777	848.31	28.57(Peak)	5.12	0	31.54	33.69	Pass
384	836.52	28.73(Peak)	5.12	0	31.70	33.85	Pass
1013	824.7	28.73(Peak)	5.12	0	31.70	33.85	Pass
777	848.31	24.53(Average)	5.12	0	27.50	29.65	Pass
384	836.52	24.56(Average)	5.12	0	27.53	29.68	Pass
1013	824.7	24.55(Average)	5.12	0	27.52	29.67	Pass

CDMA : BC1

Channel Number	Frequency (MHz)	Measured RF conduct Power (dBm)	Antenna Gain (dBi)	Cable Loss (dB)	Calculated EIRP (dBm)	Verdict
1175	1908.75	26.33(Peak)	6.12	0	32.45	Pass
600	1880.00	26.78(Peak)	6.12	0	32.90	Pass
25	1851.25	26.33(Peak)	6.12	0	32.45	Pass
1175	1908.75	24.20(Average)	6.12	0	30.32	Pass
600	1880.00	24.40(Average)	6.12	0	30.52	Pass
25	1851.25	24.53(Average)	6.12	0	30.65	Pass

*ERP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi) - 2.15dB

#EIRP (dBm) = Conducted Power (dBm) + Antenna Gain (dBi)

INTERTEK TESTING SERVICES

4.3 Occupied Bandwidth (FCC Part 2.104, IC RSS-Gen 4.6.1)

From FCC part 2.1049 and IC RSS-Gen 4.6.1, occupied bandwidth is defined as the measured spectral width of an emission. The measurement determines occupied bandwidth as the difference between upper and lower frequencies where 0.5% of the emission power is above the upper frequency and 0.5% of the emission power is below the lower frequency.

The 26dB bandwidth is also recorded to determine the resolution bandwidth used in measurements, as specified in FCC part 22.917, FCC part 24.238, IC RSS-132(5.5) and IC RSS-133(6.5).

Test results:

BC0:

Channel	Frequency (MHz)	99 % Occupied BW (MHz)	26dB Emission BW (MHz)	Verdict
777	848.31	1.28	1.424	PASS
384	836.52	1.28	1.424	PASS
1013	824.70	1.28	1.440	PASS

BC1:

Channel	Frequency (MHz)	99 % Occupied BW (MHz)	26dB Emission BW (MHz)	Verdict
1175	1908.75	1.296	1.560	PASS
600	1880.00	1.296	1.624	PASS
25	1851.25	1.304	1.608	PASS

The plots of 99% bandwidth are saved in the file 99% bw.pdf.

INTERTEK TESTING SERVICES

4.4 Spurious Emissions at Antenna Terminals (FCC Part 2.1051, 2.1057, 22.917, 24.238, IC RSS-132(5.5), IC RSS-133(6.5))

The conducted spurious emissions is measured from 9kHz up to the 10th harmonic of fundamental emission.

According to FCC part 22.917, 24.238, IC RSS-132(5.5) and IC RSS-133(6.5), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB, i.e. at or below -13dBm.

Test results:

The plots are saved in the file cspurious.pdf.

INTERTEK TESTING SERVICES

4.5 Power of Spurious Emissions

(FCC Part 2.1051, 2.1057, 22.917, 24.238, IC RSS-132(5.5), IC RSS-133(6.5))

The radiated spurious emissions are measured from 30MHz up to the 10th harmonic of fundamental emission.

According to FCC Part 22.917 and IC RSS-132(5.5), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB, i.e. at or below -13dBm.

The magnitude of spurious emissions which are attenuated more than 20 dB below the permissible value are not reported.

Pursuant to FCC Part 22.917 and IC RSS-132(5.5): Emissions Requirement

Frequency (MHz)	E.R.P at 3m (dBm)	E.I.R.P at 3m (dBm)	Limit	Margin (dB)
1673.04	-47.70	-45.55	-13.00	32.55
2509.56	-52.22	-50.07	-13.00	37.07
3346.08	-54.94	-52.79	-13.00	39.79
4182.60	-51.29	-49.14	-13.00	36.14
5019.12	-50.24	-48.09	-13.00	35.09
5855.64	-49.95	-47.80	-13.00	34.80
6692.16	-50.48	-48.33	-13.00	35.33
7528.68	-50.15	-48.00	-13.00	35.00
8365.20	-48.45	-46.30	-13.00	33.30
9201.72	-50.45	-48.30	-13.00	35.30
10038.24	-52.15	-50.00	-13.00	37.00

Pursuant to FCC Part 24.238 and IC RSS-133(6.5): Emissions Requirement

Frequency (MHz)	E.R.P at 3m (dBm)	E.I.R.P at 3m (dBm)	Limit	Margin (dB)
3760.00	-50.85	-48.70	-13.00	35.70
5640.00	-44.95	-42.80	-13.00	29.80
7520.00	-44.55	-42.40	-13.00	29.40
9400.00	-47.85	-45.70	-13.00	32.70
11280.00	-48.15	-46.00	-13.00	33.00
13160.00	-49.05	-46.90	-13.00	33.90
15040.00	-50.05	-47.90	-13.00	34.90
16920.00	-48.75	-46.60	-13.00	33.60
18800.00	-48.05	-45.90	-13.00	32.90
20680.00	-47.25	-45.10	-13.00	32.10
22560.00	-46.15	-44.00	-13.00	31.00

*Positive sign in the margin column shows value below limit.

INTERTEK TESTING SERVICES

4.6 Blockedge at Antenna Terminals (FCC Part 22.917, 24.238, IC RSS-132(5.5), IC RSS-133(6.5))

In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter is employed. The 26dB emission bandwidth taken in section 4.4 is used for calculating the resolution bandwidth.

The power of any emission at the blockedge must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB, i.e. at or below -13dBm.

Test results:

The plots are saved in the file be.pdf.

INTERTEK TESTING SERVICES

4.7 Frequency Stability

(FCC Part 2.1055, 22.355, 24.235, IC RSS-132(5.3), IC RSS-133(6.3))

The frequency stability is measured with the temperature variation range of -30°C to +50°C (10°C increment), and voltage supply variation range of 90% to 110% of nominal DC supply voltage, and/or nominal to battery end points for hand-carried battery-powered supplies.

[] AC nominal supply voltage: 120VAC

[✓] DC nominal voltage: 3.8VDC; End point: 3.42

20°C is taken as temperature in normal condition.

For the 850MHz band, according to FCC part 22.355 and IC RSS-132(5.3), the stability requirements are: ± 1.5 ppm for mobile units and ± 2.5 ppm for portable units.

For the 1900MHz band, according to FCC part 24.235 and IC RSS-133(6.3), the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

Test results: BC0

Channel : 777 (848.31MHz)

Voltage (VDC)	Temperature (°C)	Channel Number	Designed Frequency (MHz)	Measured Deviated Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)	Verdict
3.8	25	777	848.31	-69	-0.008	± 2.5	Pass
3.42	25	777	848.31	-64	-0.008	± 2.5	Pass
4.18	25	777	848.31	-61	-0.007	± 2.5	Pass

Channel : 1013 (824.7MHz)

Voltage (VDC)	Temperature (°C)	Channel Number	Design ed Freque ncy (MHz)	Measured Deviated Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)	Verdict
3.8	25	1013	824.7	-65	-0.008	± 2.5	Pass
3.42	25	1013	824.7	-66	-0.008	± 2.5	Pass
4.18	25	1013	824.7	-64	-0.008	± 2.5	Pass

INTERTEK TESTING SERVICES

Channel : 777 (848.31MHz)

Voltage (VDC)	Temperature (°C)	Channel Number	Designed Frequency (MHz)	Measured Deviated Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)	Verdict
3.8	50	777	848.31	-59	-0.007	±2.5	Pass
	40		848.31	-60	-0.007	±2.5	Pass
	30		848.31	-67	-0.008	±2.5	Pass
	20		848.31	-70	-0.008	±2.5	Pass
	10		848.31	74	0.009	±2.5	Pass
	0		848.31	76	0.009	±2.5	Pass
	-10		848.31	-80	-0.009	±2.5	Pass
	-20		848.31	13	0.002	±2.5	Pass
	-30		848.31	14	0.002	±2.5	Pass

Channel : 1013 (824.7MHz)

Voltage (VDC)	Temperature (°C)	Channel Number	Designed Frequency (MHz)	Measured Deviated Frequency (Hz)	Frequency Error (ppm)	Limit (ppm)	Verdict
3.8	50	1013	824.7	-7	-0.001	±2.5	Pass
	40		824.7	-9	-0.001	±2.5	Pass
	30		824.7	-9	-0.001	±2.5	Pass
	20		824.7	-69	-0.008	±2.5	Pass
	10		824.7	-69	-0.008	±2.5	Pass
	0		824.7	-76	-0.009	±2.5	Pass
	-10		824.7	-80	-0.010	±2.5	Pass
	-20		824.7	-13	-0.002	±2.5	Pass
	-30		824.7	-11	-0.001	±2.5	Pass

INTERTEK TESTING SERVICES

Test result: BC1

Channel : 1175 (1908.75MHz)

Voltage (VDC)	Temperature (°C)	Measured Frequency (MHz)	Limit (MHz)	Verdict
3.8	25	1908.750018	1850-1910	Pass
3.42	25	1908.750019	1850-1910	Pass
4.18	25	1908.750022	1850-1910	Pass

Channel : 25 (1851.25MHz)

Voltage (VDC)	Temperature (°C)	Measured Frequency (MHz)	Limit (MHz)	Verdict
3.8	25	1851.250030	1850-1910	Pass
3.42	25	1851.250033	1850-1910	Pass
4.18	25	1851.250029	1850-1910	Pass

Regarding to 24.235: For the 1900MHz band, according to 24.235, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block.

INTERTEK TESTING SERVICES

Channel : 1175 (1908.75MHz)

Voltage(VDC)	Temperature (°C)	Measured Frequency (MHz)	Limit (MHz)	Verdict
3.8	50	1908.749990	1850-1910	Pass
	40	1908.749994	1850-1910	Pass
	30	1908.750021	1850-1910	Pass
	20	1908.750018	1850-1910	Pass
	10	1908.750015	1850-1910	Pass
	0	1908.750018	1850-1910	Pass
	-10	1908.750015	1850-1910	Pass
	-20	1908.750036	1850-1910	Pass
	-30	1908.750042	1850-1910	Pass

Channel : 25 (1851.25MHz)

Voltage(VDC)	Temperature (°C)	Measured Frequency (MHz)	Limit (MHz)	Verdict
3.8	50	1851.249948	1850-1910	Pass
	40	1851.250008	1850-1910	Pass
	30	1851.250006	1850-1910	Pass
	20	1851.250010	1850-1910	Pass
	10	1851.249984	1850-1910	Pass
	0	1851.249981	1850-1910	Pass
	-10	1851.249987	1850-1910	Pass
	-20	1851.249985	1850-1910	Pass
	-30	1851.249978	1850-1910	Pass

INTERTEK TESTING SERVICES

4.8 Radio Frequency Exposure Compliance

EUT is subject to the radio frequency exposure requirements specified in FCC Rule §§ 1.1307(b), 2.1093 and IC RSS-102. It shall be considered to operate in a “general population / uncontrolled” environment.

[] Portable unit: EUT was evaluated for Specific Absorption Rate (SAR) evaluation compliance according to OET Bulletin 65, Supplement C (Edition 01-01) SAR Evaluation and IC RSS-102(2.5.1) It is in compliance with the SAR evaluation requirements. The caution statement is saved as filename: RF exposure info.pdf. A SAR test report was submitted at same time and saved as SAR Report.pdf.

[×] Mobile unit: EUT was evaluated for Maximum Permissible Exposure (MPE) evaluation compliance according to OET Bulletin 65(Edition 97-01) and RF exposure Evaluation IC RSS-102(2.5.2). The evaluation calculation results are saved as filename: RF exposure info.pdf.

INTERTEK TESTING SERVICES

4.9 Peak-to-average Power Ratio (PAPR) (IC RSS-132(5.4) and IC RSS-133(6.4))

Regarding to IC RSS-132 (5.4) and RSS-133(6.4), the peak-to-average power ratio (PAPR) of the transmitter shall not exceed 13dB for more than 0.1% of the time using a signal corresponding to the highest PAPR during periods of continuous transmission.

Test results:

BC 0

Channel Number	Frequency (MHz)	Peak Power (dBm)	*Average Power (dBm)	PAPR (dB)	Limit (dB)	Verdict
777	848.31	28.57	24.53	4.04	<13	Pass
384	836.52	28.73	24.56	4.17	<13	Pass
1013	824.70	28.73	24.55	4.18	<13	Pass

*The average power is measured power by communication tested.

BC 1

Channel Number	Frequency (MHz)	Peak Power (dBm)	*Average Power (dBm)	PAPR (dB)	Limit (dB)	Verdict
1175	1908.75	26.33	24.20	2.13	<13	Pass
600	1880.00	26.78	24.40	2.38	<13	Pass
25	1851.25	26.33	24.53	1.80	<13	Pass

*The average power is measured power by communication tested.

INTERTEK TESTING SERVICES

5.0 Equipment List

Equipment	EMI Test Receiver	Spectrum Analyzer	Signal Generator
Equipment No.	EC1468	EC1353	EC1354
Brand	Rohde & Schwarz	Rohde & Schwarz	Rohde & Schwarz
Model No	ESR-7	FSP30	SMR27
Calibration Date	01/12/2014	18/08/2015	03/11/2014
Calibration Due Date	30/11/2015	16/08/2016	02/11/2015

Equipment	Horn Antenna (1-18G)	Broadband Antenna	Active Loop Antenna
Equipment No.	EC1332	EC1347	EC1471
Brand	EMCO	SCHWARZBECK	SCHWARZBECK
Model No	3115	VULB 9168	FMZB1519
Calibration Date	05/06/2017	08/08/2013	30/04/2015
Calibration Due Date	03/06/2017	06/08/2016	28/04/2016

Equipment	Pre-Amplifier(1-26.5G)	966-2_3m Semi-Anechoic Chamber	966-2(A) Cable
Equipment No.	EC1373	EC1350	EC1447
Brand	EMCO	966_2	SUHNER
Model No	EMC12635SE	CEM-966_2	SMA/EX100
Calibration Date	07/10/2015	24/02/2015	06/05/2015
Calibration Due Date	05/10/2016	23/02/2016	04/05/2016

Equipment	966-2(B) Cable	Universal Radio Communication Tester
Equipment No.	EC1448	EC1501
Brand	JUNFLON	Rohde & Schwarz
Model No	SMA/J12J100880-00	CMU200
Calibration Date	09/05/2015	28/04/2015
Calibration Due Date	07/05/2016	27/04/2016

END OF TEST REPORT