

FCC PART 15 B TEST REPORT

For

Interglobe Connection Corp

8228 NW 30th Terrace, Doral, Florida, United States

FCC ID: 2AC7IEKOP180

Report Type: Product Name:
Original Report Mobile phone

Report Number: RDG170710015-00A

Report Date: 2017-08-14

Jerry Zhang

Reviewed By: EMC Manager

Test Laboratory:

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Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp.(Dongguan).

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GENERAL INFORMATION

Product Description for Equipment Under Test (EUT)

The *Interglobe Connection Corp*'s product, model: *Pocket P180 (FCC ID: 2AC7IEKOP180)*, which was measured approximately: $8.8 \, \mathrm{cm}$ (H) x $4.4 \, \mathrm{cm}$ (W) x $1.7 \, \mathrm{cm}$ (H), rated input voltage: DC3.7V from battery or DC 5V from adapter.

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Adapter Information:

INPUT: AC 100-240V, 50/60Hz OUTPUT: DC 5.0V, 500mA

Note: The series product, model Pocket P180, EKO Pocket are electrically identical, the difference them is the model name, we selected Pocket P180 for fully testing, the details was explained in the declaration letter.

All measurement and test data in this report was gathered from production sample serial number: 170710015 (Assigned by BACL Dongguan). The EUT was received on 2017-06-23.

Objective

This test report is prepared on behalf of *Interglobe Connection Corp* in accordance with Part 2, Subpart J, and Part 15-Subparts A and B of the Federal Communications Commission's rules.

The objective of the manufacturer is to determine the compliance of EUT with FCC Part 15 B Class B.

Related Submittal(s)/Grant(s)

FCC Part 15C DSS submissions with FCC ID: 2AC7IEKOP180 . FCC Part 22H, 24E PCE submissions with FCC ID: 2AC7IEKOP180 .

Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

All radiated and conducted emissions measurement was performed at Bay Area Compliance Laboratories Corp. (Dongguan).

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Measurement Uncertainty

Parameter	Measurement Uncertainty
Unwanted Emissions, radiated	30M~200MHz: 4.58 dB for Horizontal, 4.59 dB for Vertical 200M~1GHz: 4.83 dB for Horizontal, 5.85 dB for Vertical 1G~6GHz: 4.45 dB, 6G~18GHz: 5.23 dB
Temperature	±1℃
Humidity	±5%
AC Power Lines Conducted Emission	3.12 dB (150 kHz to 30 MHz)

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Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Dongguan) to collect test data is located on the No.69 Pulongcun, Puxinhu Industry Area, Tangxia, Dongguan, Guangdong, China

Bay Area Compliance Laboratories Corp. (Dongguan) has been accredited to ISO 17025 by CNAS(Lab code: L5662). And accredited to ISO 17025 by NVLAP(Test Laboratory Accreditation Certificate Number 500069-0), the FCC Designation No. CN5002 under the KDB 974614 D01.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 273710. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Bay Area Compliance Laboratories Corp. (Dongguan) was registered with ISED Canada under ISED Canada Registration Number 3062D.

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SYSTEM TEST CONFIGURATION

Description of Test Configuration

The system was configured for testing in a typical fashion (as normally used by a typical user).

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EUT Exercise Software

The software "winthrax.exe" was used during test.

Equipment Modifications

No modification was made to the EUT tested.

Local Support Equipment List and Details

Manufacturer	rer Description Model		Serial Number
DELL	Laptop	PP11L	QDS-BRCM1017
НР	Printer	C3941A	JPTVOB2337
DELL	Keyboard	L100	CNORH656658907BL05DC
SAST	Modem	AEM-2100	0293

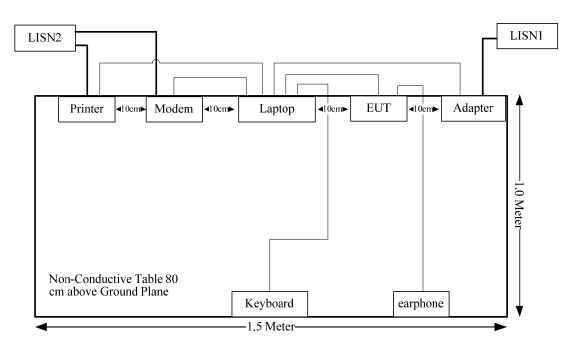
Support Cable List and Details

Cable Description	Shielding Type	Ferrite Core	Length (m)	From Port	То
Serial Cable	yes	No	1.2	Serial Port of Laptop	Modem
Parallel Cable	yes	No	1.2	Parallel Port of Laptop	Printer
Keyboard Cable	yes	No	1.8	USB Port of Laptop	Keyboard
USB Cable	Yes	No	0.8	EUT	Laptop
Earphone Cable	No	No	0.8	EUT	Earphone

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Configuration of Test Setup



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SUMMARY OF TEST RESULTS

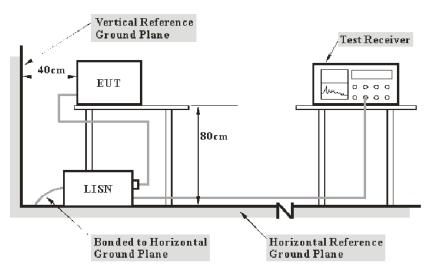
FCC Rules	Description of Test	Results
§15.107	Conducted Emissions	Compliance
§15.109	Radiated Emissions	Compliance

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FCC§15.107 - CONDUCTED EMISSIONS

EUT Setup



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Note: 1. Support units were connected to second LISN.

2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15 B Class B limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

The adapter was connected to the Main LISN with 120V/60Hz AC power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W	
150 kHz – 30 MHz	9 kHz	

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Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCS 30	830245/006	2016-12-08	2017-12-08
R&S	L.I.S.N	ESH2-Z5	892107/021	2016-09-01	2017-09-01
R&S	Two-line V-network	ENV 216	3560.6550.12	2016-12-08	2017-12-08
R&S	Test Software	EMC32	Version8.53.0	N/A	N/A
N/A	Coaxial Cable	2m	N/A	2016-09-01	2017-09-01

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Test Procedure

During the conducted emission test, the adapter was connected to the outlet of the first LISN, the other support equipments were connected to the outlet of the second LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All data was recorded in the Quasi-peak and average detection mode.

Corrected Amplitude & Margin Calculation

The basic equation is as follows:

 $V_C = V_R + A_C + VDF$

Herein,

V_C: corrected voltage amplitude

V_R: reading voltage amplitude

A_c: attenuation caused by cable loss

VDF: voltage division factor of AMN or ISN

The "Margin" column of the following data tables indicates the degree of compliance within the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin = Limit – Corrected Amplitude

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^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15 B Class B.

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Test Data

Environmental Conditions

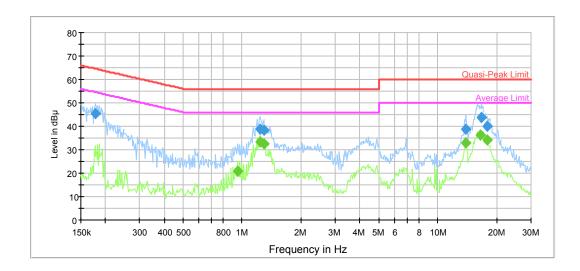
Temperature:	26.2 °C
Relative Humidity:	61 %
ATM Pressure:	100 kPa

The testing was performed by Gaochao Gong on 2017-07-24.

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Test Mode: Downloading

AC120V, 60Hz, Line:



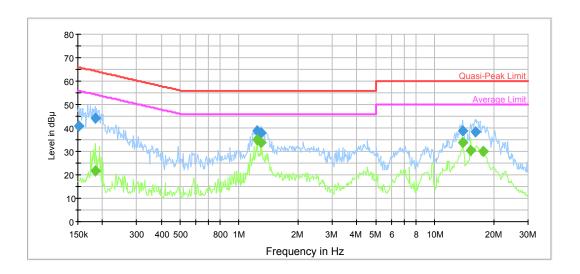
Report No.: RDG170710015-00A

Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.178741	45.6	9.000	L1	10.8	19.1	64.5	Compliance
1.239175	38.9	9.000	L1	9.7	17.1	56.0	Compliance
1.289541	38.2	9.000	L1	9.7	17.8	56.0	Compliance
13.968003	38.6	9.000	L1	9.9	21.4	60.0	Compliance
16.777473	43.8	9.000	L1	10.0	16.2	60.0	Compliance
17.881783	40.0	9.000	L1	10.0	20.0	60.0	Compliance

Frequency (MHz)	Average (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.952654	20.9	9.000	L1	9.8	25.1	46.0	Compliance
1.239175	33.1	9.000	L1	9.7	12.9	46.0	Compliance
1.289541	32.4	9.000	L1	9.7	13.6	46.0	Compliance
13.968003	32.9	9.000	L1	9.9	17.1	50.0	Compliance
16.512221	36.2	9.000	L1	10.0	13.8	50.0	Compliance
17.881783	34.1	9.000	L1	10.0	15.9	50.0	Compliance

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AC120V, 60Hz, Neutral:



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Frequency (MHz)	QuasiPeak (dBµV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.151200	40.9	9.000	N	11.1	25.0	65.9	Compliance
0.184529	44.2	9.000	N	10.7	20.1	64.3	Compliance
1.239175	38.6	9.000	N	9.7	17.4	56.0	Compliance
1.289541	37.8	9.000	N	9.7	18.2	56.0	Compliance
13.857146	38.8	9.000	N	9.9	21.2	60.0	Compliance
16.122185	38.4	9.000	N	9.9	21.6	60.0	Compliance

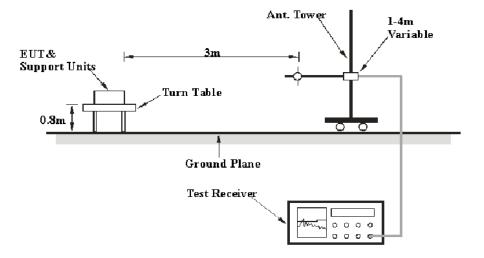
Frequency (MHz)	Average (dBμV)	Bandwidth (kHz)	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.184529	21.9	9.000	N	10.7	32.4	54.3	Compliance
1.239175	35.0	9.000	N	9.7	11.0	46.0	Compliance
1.289541	33.7	9.000	N	9.7	12.3	46.0	Compliance
13.857146	33.6	9.000	N	9.9	16.4	50.0	Compliance
15.247554	30.3	9.000	N	9.9	19.7	50.0	Compliance
17.739864	30.0	9.000	N	10.0	20.0	50.0	Compliance

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FCC §15.109 - RADIATED SPURIOUS EMISSIONS

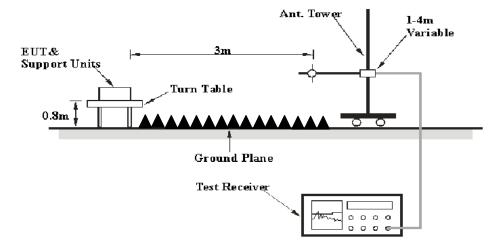
EUT Setup

Below 1GHz:



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Above 1GHz:



The radiated emission tests were performed in the 10 meters chamber test site for the range 30MHz to 1GHz and the 3 meters chamber test site for above 1GHz, using the setup accordance with the ANSI C63.4-2014. The specification used was the FCC Part 15.109 Class B limits.

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EMI Test Receiver Setup

The system was investigated from 30 MHz to 13 GHz.

During the radiated emission test, the EMI test receiver was set with the following configurations:

Frequency Range	RBW	Video B/W	IF B/W	Detector
30 MHz – 1000 MHz	120 kHz	300 kHz	120 kHz	QP
Above 1 GHz	1 MHz	3 MHz	/	Peak
ADOVE I GHZ	1 MHz	10 Hz	/	AVG

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Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

The data was recorded in the Quasi-peak detection mode for below 1 GHz, peak and average detection mode above 1 GHz.

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
R&S	EMI Test Receiver	ESCI	100224	2016-09-01	2017-08-31
Sunol Sciences	Antenna	JB3	A060611-1	2014-11-06	2017-11-05
HP	Amplifier	8447E	2434A02181	2016-09-01	2017-09-01
R&S	Spectrum Analyzer	FSU 26	200256	2016-12-08	2017-12-08
ETS-Lindgren	Horn Antenna	3115	000 527 35	2016-01-05	2019-01-04
Mini-Circuit	Amplifier	ZVA-213-S+	SN054201245	2017-02-19	2018-02-19
Unknown	Coaxial Cable	Chamber 10-1	0.75m	2016-09-01	2017-09-01
Unknown	Coaxial Cable	Chamber B-1	0.75m	2016-09-01	2017-09-01
Unknown	Coaxial Cable	Chamber 10-2	14m	2016-09-01	2017-09-01
Unknown	Coaxial Cable	Chamber B-2	8m	2016-09-01	2017-09-01
Farad	Test Software	EZ-EMC	V1.1.4.2	N/A	N/A

^{*} Statement of Traceability: Bay Area Compliance Laboratories Corp. (Dongguan) attests that all calibrations have been performed, traceable to National Primary Standards and International System of Units (SI).

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Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

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Corrected Amplitude = Meter Reading + Antenna factor + Cable Loss - Amplifier Gain

The "Margin" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7 dB means the emission is 7 dB below the limit. The equation for margin calculation

is as follows:

Margin = Limit – Corrected Amplitude

Test Results Summary

According to the data in the following table, the EUT complied with the FCC Part 15 B Class B.

Test Data

Environmental Conditions

Temperature:	25.4 °C		
Relative Humidity:	64 %		
ATM Pressure:	99.1 kPa		

^{*} The testing was performed by Sunny Cen on 2017-07-31.

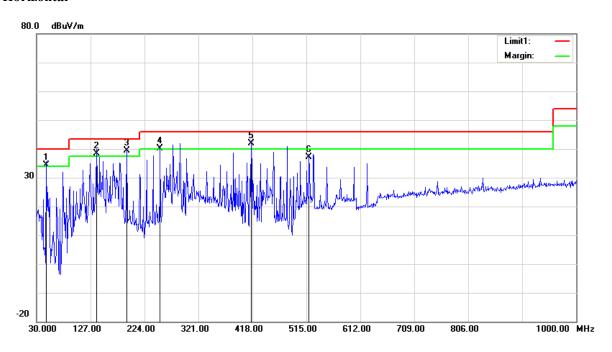
Test Result: Compliance

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Test Mode: Downloading

1) Below 1GHz:

Horizontal

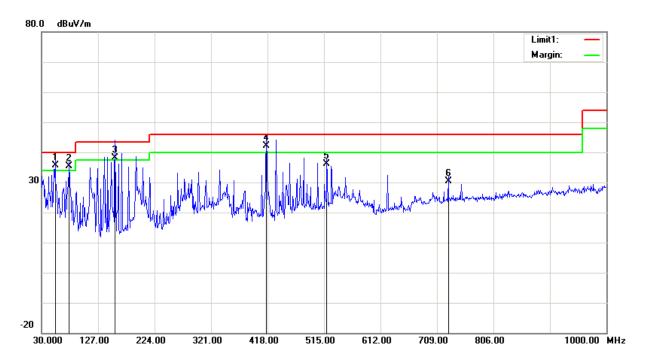


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Frequency (MHz)	Receiver Reading (dBµV)	Detector	Correction Factor (dB/m)	Cord. Amp. (dBµV/m)	Limit (dBμV/m)	Margin (dB)
47.4600	44.92	QP	-10.42	34.50	40.00	5.50
137.6700	44.40	QP	-6.02	38.38	43.50	5.12
191.9900	46.63	QP	-7.33	39.30	43.50	4.20
252.1300	47.32	QP	-7.22	40.10	46.00	5.90
416.0600	44.24	QP	-2.34	41.90	46.00	4.10
519.8500	37.78	QP	-0.58	37.20	46.00	8.80

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Vertical



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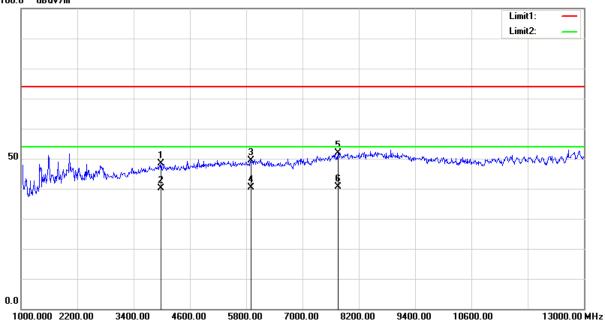
Frequency (MHz)	Receiver Reading (dBµV)	Detector	Correction Factor (dB/m)	Cord. Amp. (dBµV/m)	Limit (dBμV/m)	Margin (dB)
53.2800	47.81	QP	-12.11	35.70	40.00	4.30
77.5300	46.40	QP	-11.10	35.30	40.00	4.70
156.1000	44.76	QP	-6.66	38.10	43.50	5.40
416.0600	44.44	QP	-2.34	42.10	46.00	3.90
519.8500	36.68	QP	-0.58	36.10	46.00	9.90
728.4000	28.28	QP	2.12	30.40	46.00	15.60

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2) Above 1GHz:

Horizontal



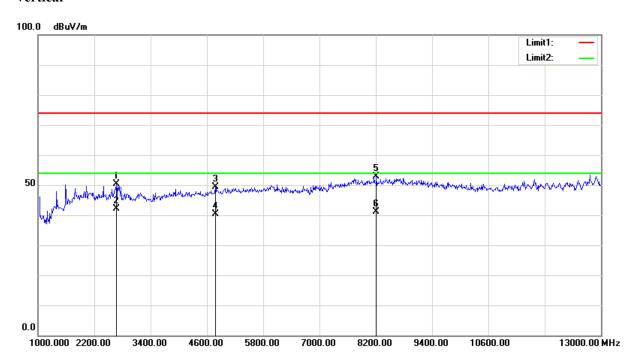


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Frequency (MHz)	Receiver Reading (dBµV)	Detector	Correction Factor (dB/m)	Cord. Amp. (dBµV/m)	Limit (dBμV/m)	Margin (dB)
3994.000	47.46	peak	0.96	48.42	74.00	25.58
3994.000	39.12	AVG	0.96	40.08	54.00	13.92
5902.000	46.42	peak	3.05	49.47	74.00	24.53
5902.000	37.23	AVG	3.05	40.28	54.00	13.72
7762.000	45.31	peak	6.51	51.82	74.00	22.18
7762.000	34.06	AVG	6.51	40.57	54.00	13.43

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Vertical



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Frequency (MHz)	Receiver Reading (dBµV)	Detector	Correction Factor (dB/m)	Cord. Amp. (dBµV/m)	Limit (dBμV/m)	Margin (dB)
2674.000	53.57	peak	-3.24	50.33	74.00	23.67
2674.000	45.37	AVG	-3.24	42.13	54.00	11.87
4786.000	47.41	peak	1.87	49.28	74.00	24.72
4786.000	38.45	AVG	1.87	40.32	54.00	13.68
8218.000	46.19	peak	6.59	52.78	74.00	21.22
8218.000	34.50	AVG	6.59	41.09	54.00	12.91

***** END OF REPORT *****

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