HCT CO.,LTD
74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Korea
TEL: +82-31-645-6300 FAX: +82-31-645-6401

MPE TEST REPORT

Applicant Name:
GigaLane

Address:
1-1, Seokwoo-dong, Hwaseong-si,
Gyeonggi-do Korea (445-170)

Date of Issue:
September 19, 2014

Test Site/Location:
HCT CO., LTD., 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Korea
Report No.: HCT-R-1409-E007
HCT FRN: 0005866421

FCC ID	**: 2AC72GIGASEM**
APPLICANT	**: GigaLane**

FCC Model(s):	Giga-SEM
EUT Type:	Bluetooth communication terminal
Peak RF Output Power:	0.414 dBm (1.100 mW)
Frequency Range:	2402 MHz -2480 MHz(BT 4.0_Low Energy Mode)

Engineering Statement:

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998,21 U.S. C.853(a)

Report prepared by	**Approved by**
: Seul Ki Lee	**: Chang Seok Choi**
Test Engineer of RF Team	**Manager of RF Team**

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-R-1409-E007	September 19, 2014	- First Approval Report

RF Exposure Statement

1. LIMITS

According to 47 CFR §2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
0.3 - 1.34.....	614	1.63	*(100)	30
1.34 - 30.....	824/f	2.19/f	*(180/ f^2)	30
30 - 300.....	27.5	0.073	0.2	30
300 - 1500.....	.....	.....	f/1500	30
1500 - 100.000.....	.....	.....	1.0	30

F = frequency in MHz
* = Plane-wave equivalent power density

2. MAXIMUM PERMISSIBLE EXPOSURE Prediction

$S = PG/4\pi R^2$

S = Power density

P = power input to antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

3. RESULTS

3-1.

Max Peak output Power at antenna input terminal (dBm)	0.4140
Max Peak output Power at antenna input terminal (mW)	1.1000
Prediction distance (cm)	20.000
Prediction frequency (MHz)	2402.000
Antenna Gain(typical) (dBi)	2.420
Antenna Gain(numeric)	1.7458
Power density at prediction frequency (mW/cm²)	0.0004
MPE limit for uncontrolled exposure at prediction frequency (mW/cm²)	1.0000

4. RESULTS

The power density level at 20 cm **is 0.0004 mW/cm²**, which is below the uncontrolled exposure limit of **1.0 mW/cm² at Buletooth**