RF Exposure Evaluation Declaration

Product Name : GPS Locator

Model No. : GV55

FCC ID : YQD-GV55

Applicant : Queclink Wireless Solutions Co., Ltd

Address : Room 501, Building 9, No 99, TianZhou Road, Shanghai, China

Date of Receipt : 30/07/2012

Issued Date : 09/08/2012

Report No. : UL126F2202

Report Version : V1.0

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Unilab

Product Name : GPS Locator
Applicant : Queclink Wireless Solutions Co., Ltd
Address : Room 501, Building 9, No 99, TianZhou Road, Shanghai,China
Manufacturer : Queclink Wireless Solutions Co., Ltd
Address : Room 501, Building 9, No 99, TianZhou Road, Shanghai,China
Model No. : GV55
FCC ID : YQD-GV55
EUT Voltage : MIN: 8V, NOR: 12V, MAX: 32V
Brand Name : Queclink
Applicable Standard : FCC CFR Title 47 Part 2,TIA/EIA 603-C
FCC Part22 Subpart H, FCC Part24 Subpart E
Test Result : Complied
Performed Location : Unilab (Shanghai) Co.,Ltd.
No.1350 Lianxi Rd., Pudong., Shanghai, China
TEL:+86-21-5027-5125/FAX:+86-21-5027-5126-801
FCC Registration Number: 714465

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1. RF Exposure Evaluation

1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2)	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500			F/300	6
1500-100,000			5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500			F/1500	6
1500-100,000			1	30

F= Frequency in MHz

Friis Formula

Friis transmission formula: $Pd = (Pout*G)/(4*pi*r^2)$

Where

Pd = power density in mW/cm2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

Pd id the limit of MPE, 1 mW/cm2 . If we know the maximum gain of the antenna and the total

power input to the antenna, through the calculation, we will know the distance r where the

MPE limit is reached.

1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.
The temperature and related humidity: 25℃and 62% RH.

1.3. Test Result of RF Exposure Evaluation

Product	:	GPS Locator
Test Item	:	RF Exposure Evaluation
Test Site	:	FACT-3

Antenna Gain:

Antenna Gain: The maximum Gain measured in fully anechoic chamber is -3dBi for 824~894MHz band; -1dBi for 1850~1990MHz band.

Output Power into Antenna & RF Exposure Evaluation Distance:

Test Mode	Frequency Band (MHz)	Maximum Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm2)	Limit Power Density (mW/cm2)
GSM850	824~849	1832.314	0.1827	0.55
PCS1900	1850~1910	1037.528	0.1640	1

END OF THE REPORT