Certification Exhibit

FCC ID: YWZ-S3I0004
IC: 3356F-S3I0004

FCC Rule Part: 15.247
IC Radio Standards Specification: RSS-210

ACS Project Number: 14-2070

Manufacturer: Alpha - High Theft Solutions
Model: S3I-0004

RF Exposure

General Information:
Applicant: Alpha - High Theft Solutions
ACS Project: 14-2070
Device Category: Mobile/Portable
Environment: General Population/Uncontrolled Exposure

Technical Information:
Antenna Type: PCB Wiggle Trace Antenna
Antenna Gain: 2.15 dBi
Maximum Transmitter Conducted Power: 3.92dBm, 2.466mW
Maximum System EIRP: 6.07 dBm, 4.0458 mW

Exemption from Routine Evaluation Limits
1. Per KDB 447498 D01 General RF Exposure Guidance v05r02 the equipment qualifies for exemption to the routine evaluation if the thresholds of 3.0 for 1-g SAR and 7.5 for 10-g extremity SAR are not exceeded. The 1-g and 10-g SAR test exclusion thresholds for 100 MHz – 6 GHz at test separation distances ≤ 50 mm are determined by:

   [(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)]*[√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR

   Minimum Test Distance: 5mm
   Highest Operating Frequency: 2480 MHz
   Maximum Conducted Power: 2.466 mW

   (2.466/5)*(√2.48)
   0.4932 * 1.575
   0.8

2. Per IC Radio Standards Specification RSS-102 Issue 4, March 2010, SAR evaluation is required except when the device operates above 2.2 GHz and up to 3 GHz inclusively, and with output power (i.e. the higher of the conducted or radiated (e.i.r.p.) source-based, time-averaged output power) that is less than or equal to 20 mW for general public use.

In addition, an MPE calculation is provided below.

MPE Calculation

The Power Density (mW/cm^2) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. mW/cm2)

P = power input to the antenna (in appropriate units, e.g., mW)

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 (appropriate units, e.g., cm)

MPE Calculator for Mobile Equipment Limits for General Population/Uncontrolled Exposure*							
Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm^2)
2480	3.92	1.00	2.47	2.15	1.641	20	0.001

Conclusion

This device complies with the MPE requirements by providing adequate separation between the device, any radiating structure and the general population.