Excellence in Compliance Testing

Certification Exhibit

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

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

ACS Report Number: 11-0376.W06.11.A

Manufacturer: Alpha - High Theft Solutions
Model: HB CableLok

RF Exposure

General Information:

Applicant: Alpha - High Theft Solutions
ACS Project: 11-0376
Device Category: Mobile/Portable
Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: PCB trace antenna (Wiggle)
Antenna Gain: 2.15dBi
Maximum Transmitter Conducted Power: 3.94dBm, 2.48mW
Maximum System EIRP: 6.09dBm, 4.06mW

Exemption from Routine Evaluation Limits

Maximum Transmitter Power is 4.06mW.

1. Per KDB 447498 2(a)(i), a device may be used in portable exposure conditions with no restrictions on host platforms when the source-based time-averaged output power is ≤ 60/f(GHz) mW. 60/(2.46711) = 24.32 mW.

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)
2440	3.94	1.00	2.48	2.15	1.641	20	0.001