March 1, 2013

BABT FCB
Forsyth House,
Churchfield Road,
Walton-on-Thames,
Surrey, KT12 2TD

Attention: Director of Certification
RE: Prediction of MPE limit at a given distance as per KDB 447498 D01 Mobile Portable RF Exposure V05 for Class II Permissive Change Reassessment (Hughes Networks Systems multiband antenna)

IC: 7089A-W2CBW0015
FCC ID: U9R-W2CBW0015

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

where: S = power density
        P = power input to the antenna
        G = power gain of the antenna in the direction of interest relative to isotropic
        R = distance to the center of radiation of the antenna

Maximum peak output power at antenna input terminal:	15.89	(dBm)
Maximum peak output power at antenna input terminal:	38.82	(mW)
Antenna gain (typical):	3.5	(dBi)
Maximum antenna gain:	2.239	(numeric)
Prediction distance:	20	(cm)
Source Based Time Average Duty Cycle:	100	(%)
Prediction frequency:	2437.00	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1.000	(mW/cm2)
Power density at prediction frequency:	0.0173	(mW/cm2)
Power density at prediction frequency:	0.173	(W/m2)
Margin of Compliance:	-17.62	(dB)

Sincerely,

Ferdie S. Custodio
Name
Authorized Signatory
Title: EMC/Wireless Test Engineer