



Date(s) of Evaluation
July 20-28, 2015

Test Report Serial No.
071515AMW-T1331-
MPE

Test Report Revision No.
Rev. 1.3 (4th Release)

Test Report Issue Date
27 Aug 2015

Description of Test(s)
Specific Absorption Rate

RF Exposure Category
General Population



Test Lab Certificate No. 2470.01

Prediction of MPE Limit
47 CFR § 2.1091/ § 2.1093

$$S_{20} = \frac{P_A G_N}{4\pi R_{20}^2}$$

$$S_C = \frac{P_A G_N}{4\pi R_C^2}$$

$$R_C = \sqrt{\frac{P_A G_N}{4\pi S_L}}$$

$$S_L = \frac{180}{f^2} \text{ (mW/cm}^2)$$

S₂₀ = Power Density of the Device at 20cm

S_L = Power Density Limit

S_C = Power Density of the Device at the Compliance Distance R_C

R₂₀ = 20cm

R_C = Minimum Distance to the Radiating Element to Meet Compliance

P_T = Power Input to Antenna

P_A = Adjust Power

G_N = Numeric Gain of the Antenna

f = Transmit Frequency

Transmit Duty Cycle = 50% Push-To-Talk Transmit Duty Cycle

Use Group = General Population

Transmit Duty Cycle:	50.00	(%)
Tx Frequency (f):	27.40	(MHz)
RF Power at Antenna Input Port (P _T):	4000.00	(mW)
Antenna Gain:	3.00	(dBi)
Numeric Antenna Gain (G _N):	2.00	(numeric)
Cable or Other Loss:	0.00	(dB)
Duty Cycle/Loss Adjusted Power (P _A):	2000.00	(mW)
S _L =	0.240	(mW/cm ²)
S ₂₀ at 20cm =	0.794	(mW/cm ²)
R _C =	36.4 (37)	(cm)
S _C at 37cm =	0.233	(mW/cm ²)

The Applicant's User's Manual must indicate a minimum separation distance of: **37cm**

Art Voss

Senior Engineer

Celltech Labs Inc.

Applicant:	Uniden America Corp	FCC ID:	AMWUT407	IC:	513C-UT407	
DUT Type:	Mobile AM CB Transceiver		Model:	PC78LTD	26.965-27.405 MHz	
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