

Date(s) of Evaluation Nov 3-4, 2013

Test Report Issue Date
Nov 12, 2013

Test Report Serial No. 111113AQZ-1267-S90M

11113AQZ-1267-S90M Rev. 1.0 (1st Release)

Description of Test(s) RF Exposure Category

Test Report Revision No.

Occupational (Controlled)



37cm

Prediction of MPE Limit 47 CFR § 2.1091/ § 2.1093

Specific Absorption Rate

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

$$S_{C} = \frac{P_{A}G_{N}}{4\pi R_{C}^{2}}$$

$$R_{C} = \sqrt{\frac{P_{A}G_{N}}{4\pi S_{I}}}$$

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

 S_{20} = 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

 $R_{20} = 20 \text{cm}$

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%

Use Group = General Popuation

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	(cm)
S _c =	0.24	(mW/cm ²)

User's Manual must indicate a minimum separation distance of:

Art Voss Senior Engineer Celltech Labs Inc.

Applicant:	HARF	RIS Corporation	FCC ID:	FCC ID: AQZ-XG-100P00 IC:			122D-XG100P00	HARRIS	
DUT Type:	e: Portable Multi-band PTT Radio Transceiver				Model:	Unity)	(G-100P	UHF Band 406-512 MHz	7
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