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IDENTIFICATION OF THE EQUIPMENT UNDER TEST (EUT)NAME AND ADDRESS OF APPLICANT:

Comtek Communications Technology, Inc.  
357 W. 2700 South  
Salt Lake City, UTAH 84115

MANUFACTURER:

Applicant

FCC ID:

C6ZBST25-216

MODEL NO:

BST-25

DESCRIPTION:VHF Low Power  
Communications TransmitterTYPE OF EMISSION:

16K0F3E

FREQUENCY RANGE, MHz:

216 to 217

POWER RATING, Watts:

0.100

 Switchable     Variable     N/AMODULATION: AMPS  
 TDMA  
 CDMA  
 FMANTENNA: HELICAL  
 MONOPOLE  
 INTEGRAL

NOTE: For RF Safety test antenna gain taken at the upper range of expected gain (i.e.  $0 \text{ dBi} \pm 1 \text{ dB} = +1 \text{ dBi}$ ) and RF Power set nominal (i.e. 0.100 W across all channels).

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Name of test:

Environmental Assessment

EUT Description: See Page 2.

Power, Conducted [W] = 0.1

Test Frequency, MHz = 216.510

Ant. Model Screw in Whip Antenna

Ant. Gain[dB] = 0 db or less

Rated Probe: Narda 8761D Probe = 10  $\mu$ W/cm<sup>2</sup> to 20 mW/cm<sup>2</sup>

47 CFR 1.1210	0.3-1.234 MHz:	Limit [mW/cm <sup>2</sup> ] = 100
Table 1, (B)	1.34-300 MHz:	Limit [mW/cm <sup>2</sup> ] = (180/f <sup>2</sup> )
	30-300 MHz:	Limit [mW/cm <sup>2</sup> ] = 0.2
	300-1500 MHz	Limit [mW/cm <sup>2</sup> ] = f/1500
	1500-100,000 MHz:	Limit [mW/cm <sup>2</sup> ] = 1.0

Power[W EIRP] (P[Watts,Conducted] + G) = 0.10 W

Limit [mW/cm<sup>2</sup>] = 0.2Limit [W/m<sup>2</sup>] = 2.0Theoretical safe distance:  $R[m] = [(P[W \text{ EIRP}]) / (4\pi \times \text{Limit}[W/m^2])]^{1/2}$  $R[m] = 0.007$  $R[inches] = 2.8$ 

Measurement Distance = 10 cm

Results: at tested distance	Probe Height, m	Power Density, mW/cm <sup>2</sup>
	2.0	0.02
	1.8	0.02
	1.6	0.07
	1.4	0.10
	1.2	0.18
	1.0	0.17
	0.8	0.04
	0.6	0.02
	0.4	0.01
	0.2	0.01

Calculations:

The measured power density readings were summed and the results divided by the number of readings to calculate the average.

For whole body: Average of 0.2 to 2.0 m, mW/cm<sup>2</sup> = 0.087For lower body: Average of 0.2 to 0.8 m, mW/cm<sup>2</sup> = 0.020For upper body: Average of 1.0 to 2.0 m, mW/cm<sup>2</sup> = 0.132

SUPERVISED BY:



Morton Flom, P. Eng.

Addendum AMENDED September 18, 2000:

(THE FOLLOWING WILL BE PLACED IN INSTRUCTION MANUAL)

INSTRUCTIONS TO INSTALLERS & USERS

Minimum Safe Distance: 20 cm (2.8 in.)

Antenna Mounting

Antenna as supplied by manufacturer must not be mounted at a location such that any person or persons can come closer than the above-indicated minimum safe distance to the antenna...i.e. 20 cm (2.8 in.)

To comply with FCC RF Exposure Limits, antenna must be installed @ or exceeding minimum safe distance shown above.

Antenna

Substitution

Do not substitute any antenna for the one supplied by manufacturer. You may be exposing person(s) to harmful radiation. Contact supplier or manufacturer for further instructions.

**WARNING:**

**MAINTAIN SEPARATION DISTANCE  
FROM ANTENNA OF 20 cm.**