



RE: Tekkeon  
FCC ID: RJ6ET1000S

1) Only one of the users manuals provided was updated for the missing the statements required by 15.21. Please correct both manuals.

**Response: Second manual uploaded with 15.21 statement.**

2) Note that Run #3 has labeled all channels as LOW. This likely should have been LOW, MIDDLE, and HIGH.

**Response: This has been corrected.**

3) Has the antenna of this device been quantified for gain as 0 dBi? If not, please provide additional information using the substitution method to support the power measurements provided.

**Response: Per client the gain is about 2dBi. The stated conducted power is 4dBm + 2dBi = 6 dBm EIRP (6.07dBm is the reported EIRP power). Per OET 63 (Page 29) states another formula to use for low power non-license transmitters. Using this equation, and assuming a unity gain antenna (G = 1) for EIRP or (G = 1.64) for ERP and a measurement distance of 3 meters (D = 3), a formula for determining power given field strength can be developed:**

$$P=0.3 \cdot E^2$$

**Where:**

**P = power in watts EIRP  
E = Field strength in V/m**

**So:**

**101.37 dBuV/m = 0.117 V/m  
 $P = 0.3 \cdot (0.117)^2$   
 $P = 0.004113$  Watts  
 $P = 6.14$  dBm (EIRP)**

**The formula we used:**

$$P = E \text{ (dBuV/m)} - 95.3\text{dB}$$

**Where:**

**P = power in dBm  
E = Field strength in dBuV/m**

**So:**

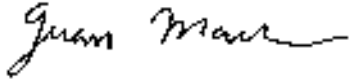
**$P = 101.37 - 95.3\text{dB}$   
 $P = 6.07$  dBm (EIRP)**

**The difference between this equation and formula we use is about 0.07 dB differences.**

**Per the client the power cannot be measured directly due to mismatch impedance problems.**

Anything else please let me know.

Regards,

A handwritten signature in black ink, appearing to read "Juan Martinez". The signature is written in a cursive, flowing style with a long horizontal stroke at the end.

Juan Martinez  
Sr. EMC Engineer