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RE: Tekkeon
FCC ID: RJ6ET1000S

1) Please provide top bottom photographs of the Bluetooth Module by itself and photographs of the main board without the module attached.

Response: Photos have been upload

2) A schematic for the TX portion of the device is required as specified 2.1033(b)(5) for the RF section. However, if the TX portion of this device is an OEM part provided by another manufacturer, as an alternative, you may provide a parts list that lists that shows that this part is provided by another manufacturer. Please provide either a schematic for the TX or parts list as specified.

Response: Schematics of transmitter bluetooth module uploaded.

3) The users manual appears to be missing the statements required by 15.21. Please correct.

Response: Statement has been place on the manual page 4 of 4.

4) Please provide units for the table located on page 11 of 20 for the output power. Additionally it is not certain what method was applied (far field equations, substitution, etc.). Additionally, is the power calculated for conducted power, ERP, or EIRP.

Response: Units have been included. Method of far field equations was used by using the following formula to calculated the field strength EIRP and convert to dBm EIRP:

Calculation Of Effective Radiated Power From Radiated Field Strength

In order to determine the transmit power from an intentional radiator with no external antenna it is necessary to use the radiated field strength. The calculation uses the following formula:

$$E = \frac{\sqrt{(30.P.G)}}{d}$$

Where:

E is the radiated field strength in V/m;
P is the power transmitted in Watts;
G is the gain of the transmit antenna;
d is the distance from the transmitter at which field strength E was recorded

Rearranging gives:

$$P = \frac{E^2.d^2}{30.G}$$

Converting to logarithmic units (multiplication becomes addition, division becomes subtraction) gives:

$$P\ dB(W) = E\ dB(V/m) + 20\log10\ (d) - 10\log_{10}(30) - 10\log_{10}\ (G).$$

For the purposes of calculating the effective radiated power the unit under test is assumed to have unity gain (i.e. 0dB). so:

$$P\ dB(W) = E\ dB(V/m) + 20\log10\ (d) - 10\log_{10}(30)$$

To convert dBm to dB(W) subtract 30, to convert dB(µV/m) to dB(V/m) subtract 120, giving:

$$P\ dBm - 30 = E\ dB(\mu V/m) - 120 + 20\log10\ (d) - 10\log_{10}(30)$$

Substitute for $10\log_{10}(30)$ gives

$$P\ dBm - 30 = E\ dB(\mu V/m) -120 + 20\log10\ (d) - 14.77$$

For d = 3m the final calculation is:

$$P\ dBm = E\ dB(\mu V/m) -120 + 9.5 - 14.77 +30$$

$P\ dBm = E\ dB(\mu V/m) - 95.27$

If the unit has an antenna of gain GdB attached when taking the field strength measurement then you adjust the value of P above by subtracting G.

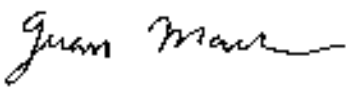
5) Information given on page 12 appears to be partially incorrect. The maximum dwell time should be in a 30 second period of time given the nature of this signal (< 1 MHz bandwidth), not 10 second. Please carefully review the results of this page.

Response: This has been corrected to 30 seconds. Revised report has been revised and uploaded.

6) The data given on page 16 of 20 appears to suggest that the EUT is transmitting on frequencies from 2390 to 2393 and 2483.5 to 2486.50 or is otherwise unclear what was originally measured and using what bandwidths. Note that transmission below 2.4 GHz and above 2.4835 GHz is not allowed. Please clarify the table.

Response: This has been corrected and revised. New revised report has been uploaded.

Regards,



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