

CERPASS TECHNOLOGY (SUZHOU)CO., LTD. Report No.: SEFB1908144

FCC RF EXPOSURE REPORT

EUT	2-in-1 Bluetooth Transmitter/Receiver Adapter						
Model No.	B07TVPVC7N						
FCC ID:	2AAYXB07TVPVC7N						
Frequency band (Operating)	 WLAN: 2.412GHz ~ 2.462GHz WLAN: 2.422GHz ~ 2.452GHz WLAN: 5.180GHz ~ 5.240GHz WLAN: 5.260GHz ~ 5.320GHz WLAN: 5.500GHz ~ 5.700GHz BLE: 2.402GHz ~ 2.480GHz Bluetooth: 2.402GHz ~ 2.480GHz 						
Device category	☐ Portable (<20cm separation) ☐ Mobile (>20cm separation)						
Exposure classification	 ☐ Occupational/Controlled exposure (S = 5mW/cm²) ☐ General Population/Uncontrolled exposure (S=1mW/cm²) 						
Antenna diversity	Single antenna ☐Multiple antennas ☐ Tx diversity ☐ Rx diversity ☐ Tx/Rx diversity						
Evaluation applied							

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Page No. : 1 of 2

TEST RESULTS

No non-compliance noted.

Calculation

Given

$$E = \frac{\sqrt{30 \times P \times G}}{d} \quad \& \quad S = \frac{E^2}{3770}$$

Where E = Field strength in Volts / meter

P = Power in Watts

G = *Numeric* antenna gain

d = *Distance in meters*

S = Power density in milliwatts / square centimeter

Combining equations and re-arranging the terms to express the distance as a function of the remaining variables yields:

$$S = \frac{30 \times P \times G}{3770d^2}$$

Changing to units of mW and cm, using:

$$P(mW) = P(W) / 1000$$
 and $d(cm) = d(m) / 100$

Yields

$$S = \frac{30 \times (P/1000) \times G}{3770 \times (d/100)^2} = 0.0796 \times \frac{P \times G}{d^2}$$
 Equation 1

Where d = Distance in cm

P = Power in mW

G = Numeric antenna gain

 $S = Power density in mW / cm^2$

Maximum Permissible Exposure

	Frequency	Measured	Tuneuptoleran	Max.TuneupP	Peak output	Antenna Gain	Antenna gain		Power density	Limit
Test Mode	band (MHz)	power(dBm)	ce(dBm)	ower(dBm)	power(mW)	(dBi)	(Numeric)	Distance (cm)	(mW/cm2)	(mW/cm2)
Bluetooth EDR	2402-2480	7.25	7.25 ±1	8.25	6.683439176	0	1.00	20	0.001330004	1

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Page No. : 2 of 2