

Client:	TopCon Positioning Systems	Job Number:	J89363
Model:	HIPER V (w/900MHz and HSPA module)	T-Log Number:	T89589
Contact:	Ferdinand Riodique	Account Manager:	Deepa Shetty
Standard:	FCC 15B/EN55022/15.247	Class:	N/A

## Maximum Permissible Exposure

### Test Specific Details

Objective: The objective of this test session is to perform final qualification testing of the EUT with respect to the specification listed above.

Date of Test: 2/8/2013

Test Engineer: Mark Hill

### General Test Configuration

Calculation uses the free space transmission formula:

$$S = (PG)/(4 \pi d^2)$$

Where: S is power density ( $W/m^2$ ), P is output power (W), G is antenna gain relative to isotropic, d is separation distance from the transmitting antenna (m).

### Summary of Results

Device complies with Power Density requirements at 20cm separation:	Yes
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### Modifications Made During Testing

No modifications were made to the EUT during testing

### Deviations From The Standard

No deviations were made from the requirements of the standard.

### Notes:

Evaluation includes assessment of co-location with FCC ID: WR4-TPSWT41E



# EMC Test Data

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Use: General  
Antenna: 2.5dBi antenna

## 900MHz stand alone operation

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
	dBm	mW*	dB	dBi	dBm	mW	mW/cm^2	mW/cm^2
902.2	28.6	724.4	0	2.5	28.6	1288.25	0.256	0.601
915	28.8	758.6	0	2.5	28.8	1348.96	0.268	0.610
927.6	28.2	665.3	0	2.5	28.2	1183.04	0.235	0.618

## FCC ID: WR4-TPSWT41E (Bluetooth transmitter)

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
	dBm	mW*	dB	dBi	dBm	mW	mW/cm^2	mW/cm^2
2440	15.9	39.3	0	2.14	15.9	64.33	0.013	1.000

For simultaneous transmissions, the EIRP from each individual transmitter was summed and compared to the worse case MPE limit

Freq. MHz	EUT Power		Cable Loss	Ant Gain	Power at Ant	EIRP	Power Density (S) at 20 cm	MPE Limit at 20 cm
	dBm	mW*	dB	dBi	dBm	mW	mW/cm^2	mW/cm^2
902.2						1352.58	0.269	0.601
915						1413.29	0.281	0.610
927.6						1247.37	0.248	0.618