



2.4. Power Consumption

Parameter	Typ / LL variant Typ / HT variant		Unit
Radio current, Receiver active (1)	6.1	6	mA
Radio current, Transmitter active -40 dBm Output Power (1)	3.4	3.5	mA
Peak current, Transmitter active 0 dBm Output Power (1)	5.8	6.1	mA
System OFF, no RAM retention, wake on reset	0.3	0.6	μA
System ON, full RAM retention, wake on any event	0.8	1.8	μA

⁽¹⁾ DCDC enable, Power supply 3V, 1 Mbps

2.5. Clock Sources

Parameter	Max	Unit
Internal High Frequency Clock for RF Stability: 32 MHz Crystal Frequency Tolerance (1)	+/- 40	ppm
Internal Low Frequency Clock for BLE Synchronization: 32.768 kHz Crystal Frequency Tolerance (1)	+/- 40	ppm
Internal Low Frequency Clock for BLE Synchronization: RC Oscillator (2)	+/- 500	ppm
RF Frequency tolerance: For BLE operation Channels0 to 39	+/- 40	ppm

⁽¹⁾ including initial tolerance, drift, aging, and frequency pulling

2.6. Radio Specifications

Parameter	Min	Тур	Max	Unit
Operating Frequencies	2360		2500	MHz
RF Channel spacing		1		MHz
Data Rate	125		2000	kbps
RF Output Power, LL variant	-20		+4	dBm
RF Output Power, HT variant	-20		+8	dBm
Rx sensitivity Level 1 Mbps BLE mode, ideal Tx		-94		dBm
Rx sensitivity Level 125 kbps Long Range mode, ideal Tx		-104		dBm
Antenna Gain		0.6		dBi
Range Open field, BLE mode @1m height		100		m
Range Open field, Long Range mode +4 dBm @1m height		400		m

GreenSide, Bat.7, Entree2,

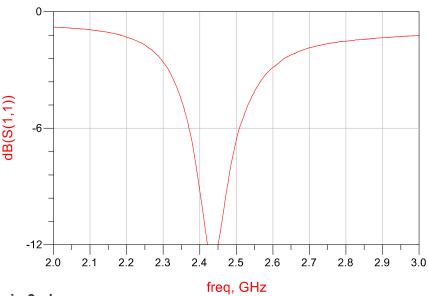
⁽²⁾ Frequency tolerance after calibration

ISP1907 Data Sheet



Typical Antenna Return Loss

Module mounted on a USB dongle ground plane



Radiation Pattern in 3 planes

Module mounted on a USB dongle ground plane

