

$$S = GP/(4\pi R^2)$$

S = power density

P = power output

G = antenna gain

R = distance to antenna

PD = power density

	GPRS			RFID	
	800				
P	30.63	(dBm)		29.43	(dBm)
P	1156	(mW)		877	(mW)
G	2	(dBi)		2.7	(dBi)
G numeric	1.58	(numeric)		1.86	(numeric)
R	20	(cm)		20	(cm)
Duty Cycle	50	(%)		100	(%)
Frequency	824	(MHz)		902	(MHz)
MPE limit	0.549	(mW/cm ²)		0.601	(mW/cm ²)
PD	0.182	(mW/cm ²)		0.325	(mW/cm ²)
Margin	4.8	(dB)		2.7	(dB)
Combined	0.33179	+		0.540275	= 0.87