



RF Exposure evaluation

FCC ID: LTQVTREMNR
IC: 3659A-VTREMNR

RF Exposure Evaluation

Standards
OET Bulletin 65 Edition 97-01 August 1997
FCC 47 CFR §1.1307
FCC 47 CFR §1.1310
RSS-102, issue 5

Test limits

As specified in Table 1B of 47 CFR 1.1310 – Limits for Maximum Permissible Exposure (MPE), Limits for General Population/Uncontrolled Exposure.

Frequency range (MHz)	Power density (mW/cm ²)
300 – 1,500	f/1500
1,500 – 100,000	1.0

Equation OET bulletin 65, page 18, edition 97-01:

$$S = \frac{PG}{4\pi R^2} = \frac{EIRP}{4\pi R^2}$$

Where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest
relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Following antenna gain values were considered as far as they apply:



BT GFSK (1-DH1)

Band	Channel No.	Frequency [MHz]	Peak Power [dBm]	Limit [dBm]	Margin to Limit [dB]	E.I.R.P [dBm]
2.4 GHz ISM	0	2402	4.5	21.0	16.5	5.4
	39	2441	7.5	21.0	13.5	8.4
	78	2480	7.8	21.0	13.2	8.7

BT n/4 DQPSK (2-DH1)

Band	Channel No.	Frequency [MHz]	Peak Power [dBm]	Limit [dBm]	Margin to Limit [dB]	E.I.R.P [dBm]
2.4 GHz ISM	0	2402	3.2	21.0	17.8	4.1
	39	2441	6.7	21.0	14.3	7.6
	78	2480	6.8	21.0	14.2	7.7

BT 8-DPSK (3-DH1)

Band	Channel No.	Frequency [MHz]	Peak Power [dBm]	Limit [dBm]	Margin to Limit [dB]	E.I.R.P [dBm]
2.4 GHz ISM	0	2402	3.8	21.0	17.2	4.7
	39	2441	7.2	21.0	13.8	8.1
	78	2480	7.5	21.0	13.5	8.4

Operational Bands	Frequency (MHz)	Antenna Gain (dBi)	G	Max Output Power (dBm) + Tolerance	P	Limit (mW/cm ²)	S	Margin to Limit (mW/cm ²)
			Antenna Gain -numeric- (mW/cm ²)		Output Power - conducted- (mW)		Power Density value (mW/cm ²)	
Bluetooth	2480	0	1.0000	7.80	6.03	1.0000	0.0012	0.9988

Distance to Antenna (R) in cm:	20
--------------------------------	----

Yours sincerely,

Adyl Mssalak

Adyl Mssalak