



## Statement of Human Exposure to Radiofrequency Electromagnetic Field

### Equipment

Type of Equipment Nordic ID Morphic  
Model 811-4A  
Manufacturer Nordic ID Oy

### Standard

OET Bullet 65, Edition 97-01

### RF Exposure compliance for Spread Spectrum Transmitters

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

where: S = power density

P = power input to the antenna (mW)

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

R = distance from the antenna (20 cm)

WLAN FCC ID:TWG-SDCMSD40NBT / IC ID: 6616A-SDCMSD40NBT

Frequency (MHz)	P (dBm)	P (mW)	G (dBi)	G (lin)	R (cm)	S (mW/cm <sup>2</sup> )	Limit
5500	16,9	49	4,9	3,1	20	0,030234	1

Bluetooth

Frequency (MHz)	P (dBm)	P (mW)	G (dBi)	G (lin)	R (cm)	S (mW/cm <sup>2</sup> )	Limit
2400	1,8	1,5	1	1,3	20	0,000388	1

UHF RFID

Frequency (MHz)	P (dBm)	P (mW)	G (dBi)	G (lin)	R (cm)	S (mW/cm <sup>2</sup> )	Limit
915	27,7	589	0	1	20	0,117197	0,61

Limits according to OET Bulletin 65, for power density at 1.34 - 30 Mhz is  $180/f^2$  mW/cm<sup>2</sup>,  
300 – 1500 MHz is  $f/1500$  and 1500 – 100 000 Mhz is 1 mW/cm<sup>2</sup>

$$\Rightarrow PD1/L1+PD2/L2+PD3/L3 = 0,030234 + 0,000388 + 0,117197/0,61 = 0,222748$$

### Calculated summary power density: 0,2227 (mW/cm<sup>2</sup>)

In considering the calculation it is determined that the requirements according the referred standard is fulfilled.

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