

8. RF Exposure Report

8.1. Limit

According to §15.247(i), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess of the Commission's guidelines. See KDB 447498 D01 General RF Exposure Guidance V05.

8.2. EUT Specification

Maximum measured transmitter power: GFSK(BT 3.0)

Average Conducted Power (dBm)	Target Value (dBm)	Max . Power(mW)
4.535	4.2±0.4	2.884

Maximum measured transmitter power: $\pi/4$ DQPSK (BT 3.0)

Average Conducted Power (dBm)	Target Value (dBm)	Max . Power(mW)
4.204	4.0±0.4	2.754

Maximum measured transmitter power: 8-DPSK (BT 3.0)

Average Conducted Power (dBm)	Target Value (dBm)	Max . Power(mW)
4.172	4.0±0.3	2.692

Maximum measured transmitter power: GFSK(BT 4.0)

Average Conducted Power (dBm)	Target Value (dBm)	Max . Power(mW)
-1.28	-1.4±0.2	0.759

Maximum measured transmitter power: 802.11b

Average Conducted Power (dBm)	Target Value (dBm)	Max . Power(mW)
8.37	8.2±0.2	6.918

Maximum measured transmitter power: 802.11g

Average Conducted Power (dBm)	Target Value (dBm)	Max . Power(mW)
7.64	7.5±0.2	5.888

Maximum measured transmitter power: 802.11n

Average Conducted Power (dBm)	Target Value (dBm)	Max . Power(mW)
7.45	7.3±0.2	5.623

8.3. Standalone SAR test exclusion considerations

1. GFSK(BT 3.0)

Max Calculated value= $(2.884/5) * 2.480^{1/2} = 0.908 \leq 3.0$

2. GFSK(BT 4.0)

Max Calculated value= $(0.759/5) * 2.480^{1/2} = 0.239 \leq 3.0$

3. 802.11b

Max Calculated value= $(6.918/5) * 2.437^{1/2} = 2.160 \leq 3.0$

$[(\text{max power of channel, including tune-up tolerance, mW}) / (\text{min test separation distance, mm})] \cdot [f^{1/2}(\text{GHz})] \leq 3.0$ For 1-g SAR and ≤ 7.5 for 10-g extremity SAR.

a. $f(\text{GHz})$ is the RF channel transmit frequency in GHz.

b. Power and distance are rounded to the nearest mW and mm before calculation

c. The result is rounded to one decimal place for comparison

d. 3.5 and 7.5 are referred to as the numeric thresholds

Note: For this EUT the min separation distance to body is 5mm

8.4. Test Results

Threshold at which no SAR required

Maximum Tx Output power is 6.918mW ERP.

Max Standalone SAR test exclusion considerations Calculated value is 2.160

Conclusion: No SAR is required.