# MPE Analysis Report

The Equipment-Under-Test (EUT) CSR8675 is Bluetooth Module. The EUT is powered by 5VDC.

The EUT only use one type of antenna that has been tested with this module

The antenna is permanently attached, can't be replaced

Antenna Type: Integral
Antenna Gain: 2dBi

For Maximum Permissible Exposure (MPE) evaluation of the unit, the maximum power density at 20 cm from this transmitter shall be less than the General Population / Uncontrolled MPE limit in OET Bulletin 65 and meet the requirement listed in KDB447498.

1) For the Bluetooth portion of the unit, the measured powers among all the measured channels were within its production tolerance. The antenna gain is 2 dBi = 1.58 (num gain) and its maximum source-based time-averaging duty factor is 100%. From these data and its operating configuration, the exposed power density at a distance (R) of 20 cm from the center of radiation of the antenna can be calculated according to OET Bulletin 65 as follow:

The EIRP radiated power
= 10dBm + 2dBi
= 12 dBm (15.85 mW)

The radiated (EIRP) source-based time-averaging output power
= (15.85 * 1) mW
= 15.85 mW

The power density at 20 cm
= 15.85 / $4\pi R^2$
= 0.0032 mW $cm^{-2}$