Product name: UIW4010ECH
Manufacturer: TECHNICOLOR
FCC Id: **G95-UIW4010ECH**

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

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

Transmitter n°1 (Wi-Fi: 2400-2483,5 MHz)

Maximum peak output power at the antenna terminal:	17,11 (dBm)
Maximum peak output power at the antenna terminal:	51,40436516 (mW)
Antenna gain(typical):	3,9 (dBi)
Maximum antenna gain:	2,454708916 (numeric)
Prediction distance:	20 (cm)
Prediction frequency:	2412 (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1 (mW/cm^2)

Power density at prediction frequency: 0,025103 (mW/cm^2)

Note : Transmitter n°1 includes 2 antennas for 2.4GHz
Equivalent maximum gain for the 2 combinated antenna is equal to 3,9dBi
17,11 dBm is the maximum power delivered to the 2 combinated antennas

Transmitter n°2 (Wi-Fi: 5150-5850 MHz)

Maximum peak output power at the antenna terminal:	16,60 (dBm)
Maximum peak output power at the antenna terminal:	45,70881896 (mW)
Antenna gain(typical):	5,7 (dBi)
Maximum antenna gain:	3,715352291 (numeric)
Prediction distance:	20 (cm)
Prediction frequency:	5150 (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1 (mW/cm^2)

Power density at prediction frequency: 0,033785 (mW/cm^2)

Note : Transmitter n°2 includes 2 antennas for 5150-5850 MHz band
Equivalent maximum gain for these 2 combinated antennais equal to 5,7dBi
16,6 dBm is the maximum power delivered to the 2 combinated antennas

Transmitter n°4 (Bluetooth EDR: 2400-2483,5 MHz)

Maximum peak output power at the antenna terminal:	2,77 (dBm)
Maximum peak output power at the antenna terminal:	1,892343619 (mW)
Antenna gain(typical):	5,4 (dBi)
Maximum antenna gain:	3,467368505 (numeric)
Prediction distance:	20 (cm)
Prediction frequency:	2402 (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1 (mW/cm^2)

Power density at prediction frequency: 0,001305 (mW/cm^2)

Transmitter n°4 (Bluetooth LE: 2400-2483,5 MHz)

Maximum peak output power at the antenna terminal:	2,33 (dBm)
Maximum peak output power at the antenna terminal:	1,710015315 (mW)
Antenna gain(typical):	5,4 (dBi)
Maximum antenna gain:	3,467368505 (numeric)
Prediction distance:	20 (cm)
Prediction frequency:	2402 (MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1 (mW/cm^2)

Power density at prediction frequency: 0,001180 (mW/cm^2)

Transmitter n°1 + Transmitter n°2 + Transmitter n°3 + Transmitter n°4 :

[Pd(1)/LPd(1)] + [Pd(2)/LPd(2)] + [Pd(3)/LPd(3)] + [Pd(4)/LPd(4)] = 0,06137
                                                                    <1