RF Exposure Compliance for Simultaneous Operations

Configurations for Simultaneous Operations
Configuration 1: GW950MHz + LTE B12 + Bluetooth
Configuration 2: GW950MHz + LTEB2 + Bluetooth

Power Density is calculated from Maximum Conducted Power and Antenna Gain at prediction distance

RF Function	ITS950 GW	LTE B12	LTE B2	BT	
Frequency (MHz)	**902**	**699.7**	**1909.3**	**2402**	
Conducted Output Power (dBm)	9.59	25.00	25.00	0.00	
Tune Up Tolerance (dB)	0.00	0.00	0.00	0.00	
Output Power incl. Tune Up Tolerance (W)	0.009	0.316	0.316	0.001	
Antenna Gain (dBi)	15.00	3.00	3.00	0.00	
Antenna Gain (Numeric)	31.62	2.00	2.00	1.00	
Prediction Distance (cm)	20	20	20	20	**Σ of MPE ratios**
Time Averaged Duty Cycle (%)	100	100	100	100	
Calculated Power Density (W/m2)	0.572	1.255	1.255	0.002	
Requirement (W/m2)	6.013	4.665	10.000	10.000	
MPE ratio (Power Density/Requirement)	0.095	0.269	0.126	0.000	
Configuration 1 (MPE Ratio)	0.095	0.269		0.000	**0.364**
Configuration 2 (MPE Ratio)	0.095		0.126	0.000	**0.221**

Requirement: Σ of MPE ratios ≤ 1

Power values for GSM and UMTS are from Exposure Report for UBLOX Module (FCC ID: XPY2AGQN4NNN)
Gain values for cellular antenna is from Data Sheet for Taoglas FXUB63.07.0150C antenna