

RF Exposure Compliance for Simultaneous Operations

Configurations for Simultaneous Operations

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

RF Function	BLE	LTE 02/25	LTE 04/66	LTE 05	LTE 12/85	LTE 13	LTE 14	LTE 26	Σ of MPE ratios
Frequency (MHz)	2402	1850	1710	824	699	777	788	814	
Conducted Output Power (dBm)	7.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	
Tune Up Tolerance (dB)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Output Power incl. Tune Up Tolerance (W)	0.005	0.200	0.200	0.200	0.200	0.200	0.200	0.200	
Antenna Gain (dBi)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	
Antenna Gain (Numeric)	3.16	3.16	3.16	3.16	3.16	3.16	3.16	3.16	
Prediction Distance (cm)	20	20	20	20	20	20	20	20	
Time Averaged Duty Cycle (%)	100	100	50	100	100	100	100	100	
Calculated Power Density (W/m2)	0.032	1.255	0.628	1.255	1.255	1.255	1.255	1.255	
FCC Limit (W/m2)	10.00	10.00	10.00	5.66	4.77	5.25	5.32	5.66	
ISED Limit (W/m2)	5.35	4.48	4.24	2.58	2.30	2.47	2.50	2.55	
MPE ratio FCC (Power Density/Limit)	0.003	0.126	0.063	0.222	0.263	0.239	0.236	0.222	
MPE ratio ISED (Power Density/Limit)	0.006	0.280	0.148	0.487	0.545	0.507	0.502	0.491	
Worst Case MPE Ratio, FCC	0.003				0.263				0.266
Worst Case MPE Ratio, ISED	0.006				0.545				0.551

Requirement: Σ of MPE ratios ≤ 1

Power values for LTE from Exposure Report for Quectel BG95-M3 Module (FCC ID: XMR201910BG95M3)