

FCC ID: 2AEUPBHABN002
MPE limits for FCC, 1.1310

Mode	Frequency MHz	Duty Cycle %	Power dBm	Antenna		EIRP ¹ dBm	EIRP mW	Distance D cm	PD ² mW/m^2	PD Limit mW/cm^2	Margin dB	2.1091 EIRP		PD/PD Limit
				Gain dBi								Limit mW	Margin dB	
Zwave	908.4	100	-2.33	0.8		-1.53	1	20	0.00014	0.61	36.4			0.00023
FHSS	902.2	100	11.27	3.1		14.4	27	20	0.0054	0.60	20.4			0.00905
BLE	2402	100	8.37	5.8		14.2	26	20	0.0052	1.0	22.8			0.00520
Zigbee	2405	100	17.51	4.8		22.3	170	20	0.034	1.0	14.7			0.03386
Wifi 2.4G	2412	100	13.5	5.8		19.3	85	20	0.017	1.0	17.7			0.01693
Wifi 5G	5180	100	14.0	5.6		19.6	91	20	0.018	1.0	17.4			0.01814
Wifi 5G	5260	100	13.9	5.6		19.5	89	20	0.018	1.0	17.5			0.01773
Wifi 5G	5500	100	13.6	5.6		19.2	83	20	0.017	1.0	17.8			0.01655
Wifi 5G	5745	100	11.9	5.6		17.5	56	20	0.011	1.0	19.5			0.01124
LTE ^{3,4}	699	100	24.5	2.8		27.3	537	20	0.11	0.47	6.40	2455	6.60	0.22927
LTE ^{3,4}	777	100	24.5	2.8		27.3	537	20	0.11	0.52	6.86	2455	6.60	0.20625
LTE ^{3,4}	824	100	24.5	1.7		26.2	417	20	0.08	0.55	8.21	2455	7.70	0.15097
LTE ^{3,4}	1710	100	24.5	3.8		28.3	676	20	0.13	1.00	8.71	4910	8.61	0.13450
LTE ^{3,4}	1850	100	24.5	3.6		28.1	646	20	0.13	1.00	8.91	4910	8.81	0.12845
FCC Co-Location = 0.00023 + 0.00905 + 0.03386 + 0.01814 + 0.22927 = 0.29 <1														

IC: 20271-BHABN002; HVIN: Base Station NA
MPE limits for Innovation, Science and Economic Development Canada, RSS-102 Issue 5

Mode	Frequency MHz	Duty Cycle %	Power dBm	Antenna		EIRP ¹ dBm	EIRP W	Distance D m	PD ² W/m^2	PD Limit W/m^2	Margin dB	PD/PD Limit	Exemption	
				Gain dBi									Limit EIRP W	Margin dB
Zwave	908.4	100	-2.33	0.8		-1.5	0.001	0.2	0.001	2.75	32.94	0.00051	1.377	32.9
FHSS	902.2	100	11.27	3.1		14.4	0.027	0.2	0.05	2.74	17.02	0.01986	1.371	17.0
BLE	2402	100	8.37	5.8		14.2	0.026	0.2	0.05	5.35	20.13	0.00971	2.676	20.1
Zigbee	2405	100	17.51	4.8		22.3	0.170	0.2	0.34	5.36	11.99	0.06323	2.679	12.0
Wifi 2.4G	2412	100	13.5	5.8		19.3	0.085	0.2	0.17	5.37	15.01	0.03156	2.684	15.0
Wifi 5G	5180	100	14.0	5.6		19.6	0.091	0.2	0.181	9.05	16.98	0.02005	4.525	17.0
Wifi 5G	5260	100	13.9	5.6		19.5	0.089	0.2	0.177	9.14	17.12	0.01939	4.573	17.1
Wifi 5G	5500	100	13.6	5.6		19.2	0.083	0.2	0.165	9.43	17.56	0.01756	4.714	17.5
Wifi 5G	5745	100	11.92	5.6		17.5	0.056	0.2	0.112	9.71	19.37	0.01157	4.857	19.3
LTE ^{3,4}	699	100	24.5	2.8		27.3	0.537	0.2	1.07	2.30	3.33	0.46417	1.151	3.3
LTE ^{3,4}	777	100	24.5	2.8		27.3	0.537	0.2	1.07	2.47	3.65	0.43180	1.238	3.6
LTE ^{3,4}	824	100	24.5	1.7		26.2	0.417	0.2	0.83	2.58	4.92	0.32200	1.288	4.9
LTE ^{3,4}	1710	100	24.5	3.8		28.3	0.676	0.2	1.35	4.24	4.99	0.31708	2.122	5.0
LTE ^{3,4}	1850	100	24.5	3.6		28.1	0.646	0.2	1.28	4.48	5.42	0.28695	2.239	5.4
Canada Co-Location = 0.00051 + 0.01986 + 0.06323 + 0.02005 + 0.46417 = 0.57 <1														

¹EIRP = (Power dBm + Antenna Gain dBi) + 10 x Log (Duty Cycle % / 100)

²PD = EIRP / (4xπx D²)

³FCC ID: XMR201807EG91NA / IC: 10224A-2018EG91NA

⁴TA Technology MPE Report No. R1805A0250-M1