

FCC 1.1310

	Frequency MHz	Power dBm	Antenna		EIRP		EIRP Margin dB	EIRP mW	Distance D cm	PD mW/m^2	PD Limit mW/cm^2	PD Margin dB	PD/Limit
			Gain dBi	EIRP dBm	EIRP Limit ¹ dBm								
WCDMA (Band V) ²	824	23.5	1.5	25.0	33.9	8.9	316	20	0.063	0.55	9.4	0.11	
WCDMA (Band II) ²	1850	23.5	5.5	29.0	33	4.0	794	20	0.158	1.00	8.0	0.16	
WCDMA (Band IV) ²	1710	23.5	5.4	28.9	30	1.1	776	20	0.154	1.00	8.1	0.15	
LTE (Band II) ²	1850	24	5.5	29.5	33	3.5	891	20	0.177	1.00	7.5	0.18	
LTE (Band IV) ²	1710	24	5.4	29.4	30	0.6	871	20	0.173	1.00	7.6	0.17	
LTE (Band XII) ²	699	24	2.7	26.7	33.9	7.2	468	20	0.093	0.47	7.0	0.20	
Wifi ³	2412	23.86	3.9	27.76	36.0	8.24	597	20	0.119	1.00	9.3	0.12	
Wifi ³	5500	18.44	4.6	23.04	30.0	6.96	201	20	0.040	1.00	14.0	0.040	
TI Radio ⁴	902.2	12.5	0.8	13.3	36.0	22.7	21.4	20	0.00425	0.60	21.5	0.0071	
Zigbee Radio ⁴	2405	19.2	5.8	25.0	36.0	11.0	316	20	0.0629	1.00	12.0	0.063	
Z-Wave Radio ⁴	908.4	-2.53	1.2	-1.33	-1.23	0.10	0.736	20	0.000146	0.61	36.2	0.00024	

CANADA RSS-102

	Frequency MHz	Power dBm	Antenna		EIRP		EIRP W	Distance D m	PD W/m^2	PD Limit W/m^2	PD Margin dB	PD/Limit	Exemption Limit EIRP W
			Gain dBi	EIRP dBm	EIRP Limit dBm	Margin dB							
WCDMA (Band V) ²	824	23.5	1.5	25.0	40.6	15.6	0.316	0.2	0.63	2.58	6.1	0.24	1.29
WCDMA (Band II) ²	1850	23.5	5.5	29.0	33.0	4.0	0.794	0.2	1.58	4.48	4.5	0.35	2.24
WCDMA (Band IV) ²	1710	23.5	5.4	28.9	30.0	1.1	0.776	0.2	1.54	4.24	4.4	0.36	2.12
LTE (Band II) ²	1850	24	5.5	29.5	33.0	3.5	0.891	0.2	1.77	4.48	4.0	0.40	2.24
LTE (Band IV) ²	1710	24	5.4	29.4	30.0	0.6	0.871	0.2	1.73	4.24	3.9	0.41	2.12
LTE (Band XII) ²	699	24	2.7	26.7	37.0	10.3	0.468	0.2	0.93	2.30	3.9	0.40	1.15
Wifi ³	2412	23.86	3.9	27.76	36.0	8.24	0.597	0.2	1.19	5.37	6.5	0.22	2.68
Wifi ³	5500	18.44	4.6	23.04	30.0	6.96	0.201	0.2	0.40	9.43	13.7	0.043	4.71
TI Radio ⁴	902.2	12.5	0.8	13.3	36.0	22.7	0.0214	0.2	0.0425	2.74	18.1	0.016	1.37
Zigbee Radio ⁴	2405	19.2	5.8	25.0	36.0	11.0	0.316	0.2	0.629	5.36	9.3	0.117	2.68
Z-Wave Radio ⁴	908.4	-2.53	1.2	-1.33	-1.23	0.10	0.000736	0.2	0.00146	2.75	32.7	0.00053	1.38

¹ service rule limit or 2.1091, which ever is less

² Contains Module FCC ID: XMR201606EC21A / IC: 10224A-201611EC21A

³ Contains Module FCC ID: 2AEUPWL18DBMOD / IC: 20271-WL18DBMOD

⁴ Base Station FCC ID: 2AEUPBHABS001 / 2AEUPBHABS001

$PD = EIRP / (4 \times \pi \times D^2)$

FCC co-location =	Σ (PD/Limit) =	0.20	+	0.12	+	0.0071	+	0.063	+	0.00024	=	0.39	< 1
Canada co-location =	Σ (PD/Limit) =	0.41	+	0.221	+	0.016	+	0.117	+	0.00053	=	0.76	< 1