

**LTE Band 2_1.4MHz_16QAM**

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-15.70	-29.30	8.10	21.70	33.00	H
1880.00	-15.89	-29.40	8.10	21.61	33.00	H
1909.30	-15.12	-29.30	8.10	22.28	33.00	H

LTE Band 2_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-15.76	-29.30	8.10	21.64	33.00	H
1880.00	-15.94	-29.40	8.10	21.56	33.00	H
1908.50	-15.23	-29.30	8.10	22.17	33.00	H

LTE Band 2_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-15.83	-29.30	8.10	21.57	33.00	H
1880.00	-15.98	-29.40	8.10	21.52	33.00	H
1907.50	-15.33	-29.30	8.10	22.07	33.00	H

LTE Band 2_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-15.86	-29.30	8.10	21.54	33.00	H
1880.00	-16.03	-29.40	8.10	21.47	33.00	H
1905.00	-15.42	-29.30	8.10	21.98	33.00	H

LTE Band 2_15MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-15.89	-29.30	8.10	21.51	33.00	H
1880.00	-16.06	-29.40	8.10	21.44	33.00	H
1902.50	-15.47	-29.30	8.10	21.93	33.00	H

LTE Band 2_20MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-15.97	-29.30	8.10	21.43	33.00	H
1880.00	-16.13	-29.40	8.10	21.37	33.00	H
1900.00	-15.54	-29.30	8.10	21.86	33.00	H



LTE Band 2_1.4MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1850.70	-15.73	-29.30	8.10	21.67	33.00	H
1880.00	-15.93	-29.40	8.10	21.57	33.00	H
1909.30	-15.19	-29.30	8.10	22.21	33.00	H

LTE Band 2_3MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1851.50	-15.79	-29.30	8.10	21.61	33.00	H
1880.00	-15.95	-29.40	8.10	21.55	33.00	H
1908.50	-15.30	-29.30	8.10	22.10	33.00	H

LTE Band 2_5MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1852.50	-15.86	-29.30	8.10	21.54	33.00	H
1880.00	-16.02	-29.40	8.10	21.48	33.00	H
1907.50	-15.39	-29.30	8.10	22.01	33.00	H

LTE Band 2_10MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1855.00	-15.91	-29.30	8.10	21.49	33.00	H
1880.00	-16.08	-29.40	8.10	21.42	33.00	H
1905.00	-15.45	-29.30	8.10	21.95	33.00	H

LTE Band 2_15MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1857.50	-15.94	-29.30	8.10	21.46	33.00	H
1880.00	-16.11	-29.40	8.10	21.39	33.00	H
1902.50	-15.49	-29.30	8.10	21.91	33.00	H

LTE Band 2_20MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1860.00	-15.99	-29.30	8.10	21.41	33.00	H
1880.00	-16.16	-29.40	8.10	21.34	33.00	H
1900.00	-15.54	-29.30	8.10	21.86	33.00	H

Peak EIRP (dBm)=P_{Mea}(-15.09dBm)-(P_{ci}+P_{Ag})(-29.30dB)+G_a(8.10dB) =22.31dBm



Antenna Up

LTE Band 4- EIRP Part 27.50(d)(4)

Limits: ≤30dBm (1W)

LTE Band 4_1.4MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-15.39	-29.60	8.10	22.31	30.00	H
1732.50	-15.25	-29.60	8.10	22.45	30.00	H
1754.30	-14.99	-29.50	8.10	22.61	30.00	H

LTE Band 4_3MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.52	-29.60	8.10	22.18	30.00	H
1732.50	-14.90	-29.60	8.10	22.80	30.00	H
1753.50	-14.97	-29.50	8.10	22.63	30.00	H

LTE Band 4_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.54	-29.60	8.10	22.16	30.00	H
1732.50	-15.27	-29.60	8.10	22.43	30.00	H
1752.50	-15.14	-29.50	8.10	22.46	30.00	H

LTE Band 4_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.58	-29.60	8.10	22.12	30.00	H
1732.50	-15.05	-29.60	8.10	22.65	30.00	H
1750.00	-15.10	-29.50	8.10	22.50	30.00	H

LTE Band 4_15MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.65	-29.60	8.10	22.05	30.00	H
1732.50	-15.12	-29.60	8.10	22.58	30.00	H
1747.50	-14.76	-29.50	8.10	22.84	30.00	H

LTE Band 4_20MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.68	-29.60	8.10	22.02	30.00	H
1732.50	-15.24	-29.60	8.10	22.46	30.00	H
1745.00	-15.32	-29.50	8.10	22.28	30.00	H

**LTE Band 4_1.4MHz_16QAM**

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-16.48	-29.60	8.10	21.22	30.00	H
1732.50	-15.92	-29.60	8.10	21.78	30.00	H
1754.30	-15.62	-29.50	8.10	21.98	30.00	H

LTE Band 4_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.58	-29.60	8.10	22.12	30.00	H
1732.50	-15.98	-29.60	8.10	21.72	30.00	H
1753.50	-15.71	-29.50	8.10	21.89	30.00	H

LTE Band 4_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.65	-29.60	8.10	22.05	30.00	H
1732.50	-16.04	-29.60	8.10	21.66	30.00	H
1752.50	-15.77	-29.50	8.10	21.83	30.00	H

LTE Band 4_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.73	-29.60	8.10	21.97	30.00	H
1732.50	-16.08	-29.60	8.10	21.62	30.00	H
1750.00	-15.84	-29.50	8.10	21.76	30.00	H

LTE Band 4_15MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.81	-29.60	8.10	21.89	30.00	H
1732.50	-16.14	-29.60	8.10	21.56	30.00	H
1747.50	-15.90	-29.50	8.10	21.70	30.00	H

LTE Band 4_20MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.84	-29.60	8.10	21.86	30.00	H
1732.50	-16.17	-29.60	8.10	21.53	30.00	H
1745.00	-15.96	-29.50	8.10	21.64	30.00	H



LTE Band 4_1.4MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-16.54	-29.60	8.10	21.16	30.00	H
1732.50	-15.98	-29.60	8.10	21.72	30.00	H
1754.30	-15.71	-29.50	8.10	21.89	30.00	H

LTE Band 4_3MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.63	-29.60	8.10	22.07	30.00	H
1732.50	-16.04	-29.60	8.10	21.66	30.00	H
1753.50	-15.81	-29.50	8.10	21.79	30.00	H

LTE Band 4_5MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.67	-29.60	8.10	22.03	30.00	H
1732.50	-16.08	-29.60	8.10	21.62	30.00	H
1752.50	-15.86	-29.50	8.10	21.74	30.00	H

LTE Band 4_10MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.75	-29.60	8.10	21.95	30.00	H
1732.50	-16.14	-29.60	8.10	21.56	30.00	H
1750.00	-15.88	-29.50	8.10	21.72	30.00	H

LTE Band 4_15MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.81	-29.60	8.10	21.89	30.00	H
1732.50	-16.23	-29.60	8.10	21.47	30.00	H
1747.50	-15.95	-29.50	8.10	21.65	30.00	H

LTE Band 4_20MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.94	-29.60	8.10	21.76	30.00	H
1732.50	-16.27	-29.60	8.10	21.43	30.00	H
1745.00	-16.02	-29.50	8.10	21.58	30.00	H

Peak EIRP (dBm)=P_{Mea}(-14.76dBm)-(P_{ci}+P_{Ag})(-29.50dB)+G_a(8.10dB) =22.84dBm



Antenna Down

LTE Band 4- EIRP Part 27.50(d)(4)

Limits: ≤30dBm (1W)

LTE Band 4_1.4MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-15.42	-29.60	8.10	22.28	30.00	H
1732.50	-15.16	-29.60	8.10	22.54	30.00	H
1754.30	-14.73	-29.50	8.10	22.87	30.00	H

LTE Band 4_3MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.46	-29.60	8.10	22.24	30.00	H
1732.50	-15.22	-29.60	8.10	22.48	30.00	H
1753.50	-14.81	-29.50	8.10	22.79	30.00	H

LTE Band 4_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.53	-29.60	8.10	22.17	30.00	H
1732.50	-15.33	-29.60	8.10	22.37	30.00	H
1752.50	-14.86	-29.50	8.10	22.74	30.00	H

LTE Band 4_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.59	-29.60	8.10	22.11	30.00	H
1732.50	-15.38	-29.60	8.10	22.32	30.00	H
1750.00	-14.93	-29.50	8.10	22.67	30.00	H

LTE Band 4_15MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.68	-29.60	8.10	22.02	30.00	H
1732.50	-15.46	-29.60	8.10	22.24	30.00	H
1747.50	-14.97	-29.50	8.10	22.63	30.00	H

LTE Band 4_20MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.73	-29.60	8.10	21.97	30.00	H
1732.50	-15.54	-29.60	8.10	22.16	30.00	H
1745.00	-15.03	-29.50	8.10	22.57	30.00	H

**LTE Band 4_1.4MHz_16QAM**

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-16.45	-29.60	8.10	21.25	30.00	H
1732.50	-16.23	-29.60	8.10	21.47	30.00	H
1754.30	-15.76	-29.50	8.10	21.84	30.00	H

LTE Band 4_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-16.52	-29.60	8.10	21.18	30.00	H
1732.50	-16.28	-29.60	8.10	21.42	30.00	H
1753.50	-15.85	-29.50	8.10	21.75	30.00	H

LTE Band 4_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.60	-29.60	8.10	22.10	30.00	H
1732.50	-16.35	-29.60	8.10	21.35	30.00	H
1752.50	-15.92	-29.50	8.10	21.68	30.00	H

LTE Band 4_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.71	-29.60	8.10	21.99	30.00	H
1732.50	-16.43	-29.60	8.10	21.27	30.00	H
1750.00	-15.99	-29.50	8.10	21.61	30.00	H

LTE Band 4_15MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.78	-29.60	8.10	21.92	30.00	H
1732.50	-16.49	-29.60	8.10	21.21	30.00	H
1747.50	-16.05	-29.50	8.10	21.55	30.00	H

LTE Band 4_20MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.85	-29.60	8.10	21.85	30.00	H
1732.50	-15.57	-29.60	8.10	22.13	30.00	H
1745.00	-16.12	-29.50	8.10	21.48	30.00	H



LTE Band 4_1.4MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1710.70	-16.50	-29.60	8.10	21.20	30.00	H
1732.50	-16.27	-29.60	8.10	21.43	30.00	H
1754.30	-15.83	-29.50	8.10	21.77	30.00	H

LTE Band 4_3MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1711.50	-15.62	-29.60	8.10	22.08	30.00	H
1732.50	-16.34	-29.60	8.10	21.36	30.00	H
1753.50	-15.92	-29.50	8.10	21.68	30.00	H

LTE Band 4_5MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1712.50	-15.71	-29.60	8.10	21.99	30.00	H
1732.50	-16.41	-29.60	8.10	21.29	30.00	H
1752.50	-16.01	-29.50	8.10	21.59	30.00	H

LTE Band 4_10MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1715.00	-15.79	-29.60	8.10	21.91	30.00	H
1732.50	-16.45	-29.60	8.10	21.25	30.00	H
1750.00	-16.07	-29.50	8.10	21.53	30.00	H

LTE Band 4_15MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1717.50	-15.84	-29.60	8.10	21.86	30.00	H
1732.50	-16.54	-29.60	8.10	21.16	30.00	H
1747.50	-16.14	-29.50	8.10	21.46	30.00	H

LTE Band 4_20MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
1720.00	-15.88	-29.60	8.10	21.82	30.00	H
1732.50	-15.64	-29.60	8.10	22.06	30.00	H
1745.00	-16.21	-29.50	8.10	21.39	30.00	H

Peak EIRP (dBm)=P_{Mea}(-14.73dBm)-(P_{ci}+P_{Ag})(-29.50dB)+G_a(8.10dB) =22.87dBm



Antenna Up

LTE Band 5- ERP Part 22.913(a)

Limits: ≤38.45dBm (7W)

LTE Band 5_1.4MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-9.08	-33.60	-0.79	2.15	21.58	38.45	V
836.50	-8.64	-33.50	-0.74	2.15	21.98	38.45	V
848.30	-8.47	-33.50	-0.73	2.15	22.14	38.45	V

LTE Band 5_3MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-9.18	-33.60	-0.84	2.15	21.43	38.45	V
836.50	-8.77	-33.50	-0.74	2.15	21.84	38.45	V
847.50	-8.58	-33.50	-0.73	2.15	22.03	38.45	V

LTE Band 5_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-9.26	-33.60	-0.84	2.15	21.35	38.45	V
836.50	-8.82	-33.50	-0.74	2.15	21.79	38.45	V
846.50	-8.64	-33.50	-0.73	2.15	21.98	38.45	V

LTE Band 5_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-9.31	-33.60	-0.84	2.15	21.30	38.45	V
836.50	-8.91	-33.50	-0.74	2.15	21.71	38.45	V
844.00	-8.62	-33.50	-0.78	2.15	21.94	38.45	V



LTE Band 5_1.4MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-10.12	-33.60	-0.79	2.15	20.53	38.45	V
836.50	-9.72	-33.50	-0.74	2.15	20.89	38.45	V
848.30	-10.48	-33.50	-0.73	2.15	20.13	38.45	V

LTE Band 5_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-10.18	-33.60	-0.84	2.15	20.43	38.45	V
836.50	-9.79	-33.50	-0.74	2.15	20.82	38.45	V
847.50	-9.69	-33.50	-0.73	2.15	20.93	38.45	V

LTE Band 5_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-10.27	-33.60	-0.84	2.15	20.34	38.45	V
836.50	-9.87	-33.50	-0.74	2.15	20.74	38.45	V
846.50	-9.74	-33.50	-0.73	2.15	20.88	38.45	V

LTE Band 5_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-10.40	-33.60	-0.84	2.15	20.21	38.45	V
836.50	-9.95	-33.50	-0.74	2.15	20.66	38.45	V
844.00	-9.76	-33.50	-0.78	2.15	20.81	38.45	V



LTE Band 5_1.4MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-10.17	-33.60	-0.79	2.15	20.49	38.45	V
836.50	-9.88	-33.50	-0.74	2.15	20.73	38.45	V
848.30	-9.64	-33.50	-0.73	2.15	20.98	38.45	V

LTE Band 5_3MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-10.21	-33.60	-0.84	2.15	20.40	38.45	V
836.50	-9.97	-33.50	-0.74	2.15	20.64	38.45	V
847.50	-9.74	-33.50	-0.73	2.15	20.88	38.45	V

LTE Band 5_5MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-10.27	-33.60	-0.84	2.15	20.34	38.45	V
836.50	-10.01	-33.50	-0.74	2.15	20.60	38.45	V
846.50	-9.81	-33.50	-0.73	2.15	20.81	38.45	V

LTE Band 5_10MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-10.34	-33.60	-0.84	2.15	20.27	38.45	V
836.50	-10.08	-33.50	-0.74	2.15	20.53	38.45	V
844.00	-9.82	-33.50	-0.78	2.15	20.74	38.45	V

Peak ERP (dBm)=P_{Mea}(-8.47dBm)-(P_{cl}+P_{Ag})(-33.50dB)+G_a(-0.79dB) -2.15dB =22.14dBm

**Antenna Down****LTE Band 5- ERP Part 22.913(a)****Limits: $\leq 38.45\text{dBm}$ (7W)****LTE Band 5_1.4MHz_QPSK**

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-10.39	-33.60	-0.79	2.15	20.27	38.45	H
836.50	-10.12	-33.50	-0.74	2.15	20.49	38.45	H
848.30	-10.04	-33.50	-0.73	2.15	20.58	38.45	H

LTE Band 5_3MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-10.42	-33.60	-0.84	2.15	20.19	38.45	H
836.50	-10.19	-33.50	-0.74	2.15	20.42	38.45	H
847.50	-10.12	-33.50	-0.73	2.15	20.49	38.45	H

LTE Band 5_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-10.49	-33.60	-0.84	2.15	20.12	38.45	H
836.50	-10.28	-33.50	-0.74	2.15	20.33	38.45	H
846.50	-10.18	-33.50	-0.73	2.15	20.44	38.45	H

LTE Band 5_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-10.53	-33.60	-0.84	2.15	20.08	38.45	H
836.50	-10.33	-33.50	-0.74	2.15	20.28	38.45	H
844.00	-10.18	-33.50	-0.78	2.15	20.39	38.45	H

**LTE Band 5_1.4MHz_16QAM**

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-10.43	-33.60	-0.79	2.15	20.23	38.45	H
836.50	-10.15	-33.50	-0.74	2.15	20.46	38.45	H
848.30	-10.09	-33.50	-0.73	2.15	20.53	38.45	H

LTE Band 5_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-10.44	-33.60	-0.84	2.15	20.17	38.45	H
836.50	-10.21	-33.50	-0.74	2.15	20.40	38.45	H
847.50	-10.14	-33.50	-0.73	2.15	20.48	38.45	H

LTE Band 5_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-10.51	-33.60	-0.84	2.15	20.10	38.45	H
836.50	-10.28	-33.50	-0.74	2.15	20.33	38.45	H
846.50	-10.20	-33.50	-0.73	2.15	20.42	38.45	H

LTE Band 5_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-10.60	-33.60	-0.84	2.15	20.01	38.45	H
836.50	-10.35	-33.50	-0.74	2.15	20.26	38.45	H
844.00	-10.21	-33.50	-0.78	2.15	20.36	38.45	H



LTE Band 5_1.4MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
824.70	-10.48	-33.60	-0.79	2.15	20.18	38.45	V
836.50	-10.20	-33.50	-0.74	2.15	20.41	38.45	V
848.30	-10.14	-33.50	-0.73	2.15	20.48	38.45	V

LTE Band 5_3MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
825.50	-10.49	-33.60	-0.84	2.15	20.12	38.45	V
836.50	-10.25	-33.50	-0.74	2.15	20.36	38.45	V
847.50	-10.20	-33.50	-0.73	2.15	20.42	38.45	V

LTE Band 5_5MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
826.50	-10.38	-33.60	-0.84	2.15	20.23	38.45	V
836.50	-10.34	-33.50	-0.74	2.15	20.27	38.45	V
846.50	-10.26	-33.50	-0.73	2.15	20.36	38.45	V

LTE Band 5_10MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
829.00	-10.69	-33.60	-0.84	2.15	19.92	38.45	V
836.50	-10.42	-33.50	-0.74	2.15	20.19	38.45	V
844.00	-10.30	-33.50	-0.78	2.15	20.27	38.45	V

Peak ERP (dBm)=P_{Mea}(-10.04dBm)-(P_d+P_{Ag})(-33.50dB)+G_a(-0.73dB) -2.15dB =20.58dBm

**Antenna Up****LTE Band 7- EIRP Part 27.50(h)(2)**Limits: ≤ 33 dBm (2W)**LTE Band 7_5MHz_QPSK**

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-17.41	-28.70	10.70	21.99	33.00	H
2535.00	-17.47	-28.60	10.70	21.83	33.00	H
2567.50	-17.56	-28.60	10.70	21.74	33.00	H

LTE Band 7_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-17.78	-28.70	10.70	21.62	33.00	H
2535.00	-17.34	-28.60	10.70	21.96	33.00	H
2565.00	-17.33	-28.60	10.70	21.97	33.00	H

LTE Band 7_15MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-17.51	-28.70	10.70	21.89	33.00	H
2535.00	-17.40	-28.60	10.70	21.90	33.00	H
2562.50	-17.39	-28.60	10.70	21.91	33.00	H

LTE Band 7_20MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-17.56	-28.70	10.70	21.84	33.00	H
2535.00	-17.45	-28.60	10.70	21.85	33.00	H
2560.00	-17.44	-28.60	10.70	21.86	33.00	H

**LTE Band 7_5MHz_16QAM**

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-17.51	-28.70	10.70	21.89	33.00	H
2535.00	-17.35	-28.60	10.70	21.95	33.00	H
2567.50	-17.34	-28.60	10.70	21.96	33.00	H

LTE Band 7_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-17.54	-28.70	10.70	21.86	33.00	H
2535.00	-17.40	-28.60	10.70	21.90	33.00	H
2565.00	-17.38	-28.60	10.70	21.92	33.00	H

LTE Band 7_15MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-17.62	-28.70	10.70	21.78	33.00	H
2535.00	-17.45	-28.60	10.70	21.85	33.00	H
2562.50	-17.43	-28.60	10.70	21.87	33.00	H

LTE Band 7_20MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-17.64	-28.70	10.70	21.76	33.00	H
2535.00	-17.49	-28.60	10.70	21.81	33.00	H
2560.00	-17.46	-28.60	10.70	21.84	33.00	H



LTE Band 7_5MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-17.54	-28.70	10.70	21.86	33.00	H
2535.00	-17.42	-28.60	10.70	21.88	33.00	H
2567.50	-17.41	-28.60	10.70	21.89	33.00	H

LTE Band 7_10MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-17.60	-28.70	10.70	21.80	33.00	H
2535.00	-17.48	-28.60	10.70	21.82	33.00	H
2565.00	-17.46	-28.60	10.70	21.84	33.00	H

LTE Band 7_15MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-17.66	-28.70	10.70	21.74	33.00	H
2535.00	-17.52	-28.60	10.70	21.78	33.00	H
2562.50	-17.50	-28.60	10.70	21.80	33.00	H

LTE Band 7_20MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-17.71	-28.70	10.70	21.69	33.00	H
2535.00	-17.57	-28.60	10.70	21.73	33.00	H
2560.00	-17.54	-28.60	10.70	21.76	33.00	H

Peak EIRP (dBm)=P_{Mea}(-17.41dBm)-(P_{cl}+P_{Ag})(-28.70dB)+G_a(10.70dB) =21.99dBm

**Antenna Down****LTE Band 7- EIRP Part 27.50(h)(2)**Limits: ≤ 33 dBm (2W)**LTE Band 7_5MHz_QPSK**

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-17.65	-28.70	10.70	21.75	33.00	H
2535.00	-17.42	-28.60	10.70	21.88	33.00	H
2567.50	-17.38	-28.60	10.70	21.92	33.00	H

LTE Band 7_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-17.77	-28.70	10.70	21.63	33.00	H
2535.00	-17.48	-28.60	10.70	21.82	33.00	H
2565.00	-17.43	-28.60	10.70	21.87	33.00	H

LTE Band 7_15MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-17.83	-28.70	10.70	21.57	33.00	H
2535.00	-17.54	-28.60	10.70	21.76	33.00	H
2562.50	-17.46	-28.60	10.70	21.84	33.00	H

LTE Band 7_20MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-17.86	-28.70	10.70	21.54	33.00	H
2535.00	-17.60	-28.60	10.70	21.70	33.00	H
2560.00	-17.53	-28.60	10.70	21.77	33.00	H

**LTE Band 7_5MHz_16QAM**

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-17.71	-28.70	10.70	21.69	33.00	H
2535.00	-17.46	-28.60	10.70	21.84	33.00	H
2567.50	-17.40	-28.60	10.70	21.90	33.00	H

LTE Band 7_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-17.82	-28.70	10.70	21.58	33.00	H
2535.00	-17.53	-28.60	10.70	21.77	33.00	H
2565.00	-17.45	-28.60	10.70	21.85	33.00	H

LTE Band 7_15MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-17.89	-28.70	10.70	21.51	33.00	H
2535.00	-17.63	-28.60	10.70	21.67	33.00	H
2562.50	-17.52	-28.60	10.70	21.78	33.00	H

LTE Band 7_20MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{ci} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-17.95	-28.70	10.70	21.45	33.00	H
2535.00	-17.67	-28.60	10.70	21.63	33.00	H
2560.00	-17.58	-28.60	10.70	21.72	33.00	H



LTE Band 7_5MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2502.50	-17.72	-28.70	10.70	21.68	33.00	H
2535.00	-17.54	-28.60	10.70	21.76	33.00	H
2567.50	-17.43	-28.60	10.70	21.87	33.00	H

LTE Band 7_10MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2505.00	-17.82	-28.70	10.70	21.58	33.00	H
2535.00	-17.59	-28.60	10.70	21.71	33.00	H
2565.00	-17.53	-28.60	10.70	21.77	33.00	H

LTE Band 7_15MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2507.50	-17.88	-28.70	10.70	21.52	33.00	H
2535.00	-17.66	-28.60	10.70	21.64	33.00	H
2562.50	-17.63	-28.60	10.70	21.67	33.00	H
2567.50	-17.38	-28.60	10.70	21.92	33.00	H

LTE Band 7_20MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _{cl} (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	EIRP(dBm)	Limit(dBm)	Polarization
2510.00	-17.95	-28.70	10.70	21.45	33.00	H
2535.00	-17.73	-28.60	10.70	21.57	33.00	H
2560.00	-17.67	-28.60	10.70	21.63	33.00	H

Peak EIRP (dBm)=P_{Mea}(-17.38dBm)-(P_{cl}+P_{Ag})(-28.60dB)+G_a(10.70dB) =21.92dBm



Antenna Up

LTE Band 12 - ERP Part 27.50(c)(10)

Limits: ≤34.77dBm (3W)

LTE Band 12_1.4MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-11.55	-34.80	-0.93	2.15	20.17	34.77	H
707.50	-11.22	-34.70	-0.91	2.15	20.42	34.77	H
715.30	-11.87	-34.70	-0.68	2.15	20.00	34.77	H

LTE Band 12_3MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-11.59	-34.80	-0.97	2.15	20.09	34.77	V
707.50	-11.29	-34.70	-0.91	2.15	20.35	34.77	V
714.50	-11.98	-34.70	-0.64	2.15	19.92	34.77	V

LTE Band 12_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-11.70	-34.80	-0.97	2.15	19.98	34.77	V
707.50	-11.40	-34.70	-0.91	2.15	20.24	34.77	V
713.50	-12.07	-34.70	-0.64	2.15	19.83	34.77	V

LTE Band 12_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-11.77	-34.80	-0.97	2.15	19.91	34.77	V
707.50	-11.47	-34.70	-0.91	2.15	20.17	34.77	V
711.00	-12.16	-34.70	-0.64	2.15	19.75	34.77	V



LTE Band 12_1.4MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-11.64	-34.80	-0.93	2.15	20.08	34.77	H
707.50	-11.27	-34.70	-0.91	2.15	20.37	34.77	H
715.30	-11.91	-34.70	-0.68	2.15	19.95	34.77	H

LTE Band 12_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-11.75	-34.80	-0.97	2.15	19.93	34.77	V
707.50	-11.33	-34.70	-0.91	2.15	20.31	34.77	V
714.50	-12.02	-34.70	-0.64	2.15	19.88	34.77	V

LTE Band 12_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-11.83	-34.80	-0.97	2.15	19.85	34.77	V
707.50	-11.42	-34.70	-0.91	2.15	20.22	34.77	V
713.50	-12.10	-34.70	-0.64	2.15	19.80	34.77	V

LTE Band 12_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-11.89	-34.80	-0.97	2.15	19.79	34.77	V
707.50	-11.51	-34.70	-0.91	2.15	20.13	34.77	V
711.00	-12.17	-34.70	-0.64	2.15	19.73	34.77	V



LTE Band 12_1.4MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-11.69	-34.80	-0.93	2.15	20.03	34.77	H
707.50	-11.31	-34.70	-0.91	2.15	20.33	34.77	H
715.30	-11.94	-34.70	-0.68	2.15	19.92	34.77	H

LTE Band 12_3MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-11.72	-34.80	-0.97	2.15	19.96	34.77	V
707.50	-11.37	-34.70	-0.91	2.15	20.28	34.77	V
714.50	-12.07	-34.70	-0.64	2.15	19.83	34.77	V

LTE Band 12_5MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-11.79	-34.80	-0.97	2.15	19.89	34.77	V
707.50	-11.43	-34.70	-0.91	2.15	20.21	34.77	V
713.50	-12.13	-34.70	-0.64	2.15	19.77	34.77	V

LTE Band 12_10MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-11.85	-34.80	-0.97	2.15	19.83	34.77	V
707.50	-11.47	-34.70	-0.91	2.15	20.18	34.77	V
711.00	-12.22	-34.70	-0.64	2.15	19.69	34.77	V

Peak ERP (dBm)=P_{Mea}(-11.22Bm)-(P_{cl}+P_{Ag})(-34.70dB)+G_a(-0.91dB) -2.15dB =20.42dBm



Antenna Down

LTE Band 12 - ERP Part 27.50(c)(10)

Limits: ≤34.77dBm (3W)

LTE Band 12_1.4MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-13.05	-34.80	-0.93	2.15	18.67	34.77	V
707.50	-12.42	-34.70	-0.91	2.15	19.22	34.77	V
715.30	-12.57	-34.70	-0.68	2.15	19.30	34.77	V

LTE Band 12_3MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-13.05	-34.80	-0.97	2.15	18.63	34.77	V
707.50	-12.45	-34.70	-0.91	2.15	19.19	34.77	V
714.50	-12.68	-34.70	-0.64	2.15	19.22	34.77	V

LTE Band 12_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-13.10	-34.80	-0.97	2.15	18.58	34.77	V
707.50	-12.51	-34.70	-0.91	2.15	19.13	34.77	V
713.50	-12.70	-34.70	-0.64	2.15	19.20	34.77	V

LTE Band 12_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-13.14	-34.80	-0.97	2.15	18.54	34.77	V
707.50	-12.54	-34.70	-0.91	2.15	19.10	34.77	V
711.00	-12.76	-34.70	-0.64	2.15	19.15	34.77	V



LTE Band 12_1.4MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-13.07	-34.80	-0.93	2.15	18.65	34.77	V
707.50	-12.46	-34.70	-0.91	2.15	19.19	34.77	V
715.30	-12.61	-34.70	-0.68	2.15	19.26	34.77	V

LTE Band 12_3MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-13.10	-34.80	-0.97	2.15	18.58	34.77	V
707.50	-12.52	-34.70	-0.91	2.15	19.12	34.77	V
714.50	-12.70	-34.70	-0.64	2.15	19.20	34.77	V

LTE Band 12_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-13.14	-34.80	-0.97	2.15	18.54	34.77	V
707.50	-12.56	-34.70	-0.91	2.15	19.08	34.77	V
713.50	-12.80	-34.70	-0.64	2.15	19.10	34.77	V

LTE Band 12_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-13.19	-34.80	-0.97	2.15	18.50	34.77	V
707.50	-12.63	-34.70	-0.91	2.15	19.01	34.77	V
711.00	-12.84	-34.70	-0.64	2.15	19.06	34.77	V



LTE Band 12_1.4MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
699.70	-13.11	-34.80	-0.93	2.15	18.61	34.77	H
707.50	-12.50	-34.70	-0.91	2.15	19.14	34.77	H
715.30	-12.65	-34.70	-0.68	2.15	19.22	34.77	H

LTE Band 12_3MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
700.50	-13.13	-34.80	-0.97	2.15	18.55	34.77	V
707.50	-12.52	-34.70	-0.91	2.15	19.12	34.77	V
714.50	-12.71	-34.70	-0.64	2.15	19.19	34.77	V

LTE Band 12_5MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
701.50	-13.20	-34.80	-0.97	2.15	18.48	34.77	V
707.50	-12.55	-34.70	-0.91	2.15	19.09	34.77	V
713.50	-12.77	-34.70	-0.64	2.15	19.13	34.77	V

LTE Band 12_10MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
704.00	-13.25	-34.80	-0.97	2.15	18.43	34.77	V
707.50	-12.70	-34.70	-0.91	2.15	18.94	34.77	V
711.00	-12.87	-34.70	-0.64	2.15	19.03	34.77	V

Peak ERP (dBm)=P_{Mea}(-12.57Bm)-(P_{cl}+P_{Ag})(-34.70dB)+G_a(-0.68dB) -2.15dB =19.30dBm



Antenna Up

LTE Band 13- ERP Part 27.50(b)(10)

Limits: ≤34.77dBm (3W)

LTE Band 13_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
779.50	-10.89	-34.00	-0.08	2.15	20.88	34.77	V
782.00	-11.29	-34.00	-0.13	2.15	20.43	34.77	V
784.50	-11.55	-34.00	-0.13	2.15	20.17	34.77	V

LTE Band 13_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
782.00	-11.41	-34.00	-0.13	2.15	20.31	34.77	V

LTE Band 13_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
779.50	-10.97	-34.00	-0.08	2.15	20.80	34.77	V
782.00	-11.38	-34.00	-0.13	2.15	20.34	34.77	V
784.50	-11.58	-34.00	-0.13	2.15	20.14	34.77	V

LTE Band 13_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
782.00	-11.43	-34.00	-0.13	2.15	20.29	34.77	V

LTE Band 13_5MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
779.50	-11.03	-34.00	-0.08	2.15	20.73	34.77	V
782.00	-11.43	-34.00	-0.13	2.15	20.29	34.77	V
784.50	-11.64	-34.00	-0.13	2.15	20.08	34.77	V

LTE Band 13_10MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
782.00	-11.48	-34.00	-0.13	2.15	20.24	34.77	V

Peak ERP (dBm)=P_{Mea}(-10.89dBm)-(P_d+P_{Ag})(-34.00dB)+G_a(-0.08dB) -2.15dB =20.88dBm



Antenna Down

LTE Band 13- ERP Part 27.50(b)(10)

Limits: ≤34.77dBm (3W)

LTE Band 13_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
779.50	-11.77	-34.00	-0.08	2.15	19.99	34.77	V
782.00	-11.94	-34.00	-0.13	2.15	19.78	34.77	V
784.50	-12.42	-34.00	-0.13	2.15	19.31	34.77	V

LTE Band 13_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
782.00	-11.99	-34.00	-0.13	2.15	19.73	34.77	V

LTE Band 13_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
779.50	-11.84	-34.00	-0.08	2.15	19.92	34.77	V
782.00	-11.98	-34.00	-0.13	2.15	19.74	34.77	V
784.50	-12.48	-34.00	-0.13	2.15	19.24	34.77	V

LTE Band 13_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
782.00	-12.03	-34.00	-0.13	2.15	19.69	34.77	V

LTE Band 13_5MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
779.50	-11.87	-34.00	-0.08	2.15	19.90	34.77	V
782.00	-12.01	-34.00	-0.13	2.15	19.71	34.77	V
784.50	-12.51	-34.00	-0.13	2.15	19.21	34.77	V

LTE Band 13_10MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
782.00	-12.06	-34.00	-0.13	2.15	19.66	34.77	V

Peak ERP (dBm)=P_{Mea}(-11.77dBm)-(P_d+P_{Ag})(-34.00dB)+G_a(-0.08dB)-2.15dB=19.99dBm



Antenna Up

LTE Band 17- ERP 27.50(c)(10)

Limits: ≤34.77dBm (3W)

LTE Band 17_5MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
706.50	-11.44	-34.70	-0.91	2.15	20.21	34.77	H
710.00	-11.09	-34.70	-0.64	2.15	20.81	34.77	H
713.50	-11.76	-34.70	-0.64	2.15	20.14	34.77	H

LTE Band 17_10MHz_QPSK

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
709.00	-11.50	-34.70	-0.91	2.15	20.14	34.77	H
710.00	-11.20	-34.70	-0.64	2.15	20.70	34.77	H
711.00	-11.83	-34.70	-0.64	2.15	20.08	34.77	H

LTE Band 17_5MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
706.50	-11.47	-34.70	-0.91	2.15	20.18	34.77	H
710.00	-11.12	-34.70	-0.64	2.15	20.78	34.77	H
713.50	-11.78	-34.70	-0.64	2.15	20.13	34.77	H

LTE Band 17_10MHz_16QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
709.00	-11.52	-34.70	-0.91	2.15	20.12	34.77	H
710.00	-11.23	-34.70	-0.64	2.15	20.68	34.77	H
711.00	-11.85	-34.70	-0.64	2.15	20.05	34.77	H

LTE Band 17_5MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
706.50	-11.46	-34.70	-0.91	2.15	20.18	34.77	H
710.00	-11.15	-34.70	-0.64	2.15	20.75	34.77	H
713.50	-11.81	-34.70	-0.64	2.15	20.09	34.77	H

LTE Band 17_10MHz_64QAM

Frequency(MHz)	P _{Mea} (dBm)	P _d (dB)+ P _{Ag} (dB)	Ga Antenna Gain(dBi)	Correction (dB)	ERP(dBm)	Limit(dBm)	Polarization
709.00	-11.55	-34.70	-0.91	2.15	20.09	34.77	H
710.00	-11.19	-34.70	-0.64	2.15	20.71	34.77	H
711.00	-11.88	-34.70	-0.64	2.15	20.02	34.77	H

Peak ERP (dBm)=P_{Mea}(-11.09dBm)-(P_d+P_{Ag})(-34.70dB)+G_a(-0.64)-2.15dB =20.81dBm