

Appendix B - LTE Band 28(715-718)

Frequency Tolerance

Test Result

Condition	Band	Bandwidth	Modulation	Channel	RB Configure	Result (Hz)	Limit (Hz)	Verdict
Normal	Band28	3MHz	QPSK	27345	15RB#0	-4.749298	±86.65	PASS
High temperature	Band28	3MHz	QPSK	27345	15RB#0	-2.918243	±86.65	PASS
Low temperature	Band28	3MHz	QPSK	27345	15RB#0	-2.48909	±86.65	PASS
Vibration	Band28	3MHz	QPSK	27345	15RB#0	-2.632141	±86.65	PASS
Humidity	Band28	3MHz	QPSK	27345	15RB#0	-3.175735	±86.65	PASS

RF Output Power Tolerance

Test Result

Condition	Band	Bandwidth	Modulation	Channel	RB Configure	Power (dBm)	DecPower (dBm)	Tol (%)	Limit (%)	Verdict
NTNV	Band28	3MHz	QPSK	27345	1RB#0	22.15	23.00	-17.78	-79 to 87	PASS
NTNV	Band28	3MHz	QPSK	27345	1RB#14	21.92	23.00	-22.02	-79 to 87	PASS
NTNV	Band28	3MHz	QPSK	27345	7RB#3	21.06	23.00	-36.03	-79 to 87	PASS
NTNV	Band28	3MHz	QPSK	27345	15RB#0	20.95	23.00	-37.63	-79 to 87	PASS

Occupied Bandwidth

Test Result

Condition	Band	Bandwidth	Modulation	Channel	RB Configure	Result (MHz)	Limit (MHz)	Verdict
NTNV	Band28	3MHz	QPSK	27345	15RB#0	2.6829	3	PASS

Adjacent Channel Leakage Power

Test Result

Condition	Band	Bandwidth	Modulation	Channel	RB Configure	Freq (MHz)	Result	Limit	Verdict
NTNV	Band28	3MHz	QPSK	27345	15RB#0	-4	-42.47dBc	$\leq -32.2\text{dBc}/3.84\text{MHz}$	PASS
NTNV	Band28	3MHz	QPSK	27345	15RB#0	-3	-40.97dBc	$\leq -29.2\text{dBc}/2.7\text{MHz}$	PASS
NTNV	Band28	3MHz	QPSK	27345	15RB#0	+3	-40.11dBc	$\leq -29.2\text{dBc}/2.7\text{MHz}$	PASS
NTNV	Band28	3MHz	QPSK	27345	15RB#0	+4	-41.45dBc	$\leq -32.2\text{dBc}/3.84\text{MHz}$	PASS

Unwanted Emission Strength in Out-band Area

Test Result

Condition	Band	Bandwidth	Modulation	Channel	RB Configure	Start Freq. (MHz)	Stop Freq. (MHz)	Freq (MHz)	Result	Limit	Verdict
NTNV	Band28	3MHz	QPSK	27345	15RB#0	-7.50	-6.50	709.98	-40.53dBm	-23.50dBm/1MHz	PASS
NTNV	Band28	3MHz	QPSK	27345	15RB#0	-6.50	-2.50	713.98	-22.25dBm	-8.50dBm/1MHz	PASS
NTNV	Band28	3MHz	QPSK	27345	15RB#0	-2.50	-1.50	714.99	-27.81dBm	-11.50dBm/30.00kHz	PASS
NTNV	Band28	3MHz	QPSK	27345	15RB#0	1.50	2.50	718.00	-27.94dBm	-11.50dBm/30.00kHz	PASS
NTNV	Band28	3MHz	QPSK	27345	15RB#0	2.50	6.50	719.00	-21.53dBm	-8.50dBm/1MHz	PASS
NTNV	Band28	3MHz	QPSK	27345	15RB#0	6.50	7.50	723.00	-40.86dBm	-23.50dBm/1MHz	PASS

Unwanted Emission Strength in Spurious Area

Test Result

Band	Bandwidth	Modulation	Channel	RB Configure	Test Frequency	Freq (MHz)	Result	Limit	Verdict
Band28	3MHz	QPSK	27345	15RB#0	0.009~0.15MHz	0.07	-52.52dBm	-36dBm/1kHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	0.15~30MHz	0.15	-54.59dBm	-36dBm/10kHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	30~709MHz	708.80	-49.17dBm	-36dBm/100kHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	470~710MHz	708.56	-51.19dBm	-36dBm/100kHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	724~1000MHz	724.28	-48.67dBm	-36dBm/100kHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	770~773MHz	771.22	-66.17dBm	-32dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	773~803MHz	773.06	-67.46dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	860~890MHz	889.82	-65.29dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	945~960MHz	946.82	-60.74dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	1000~3000MHz	2665.00	-49.64dBm	-30dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	1475.9~1496.6MHz	1488.32	-64.73dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	1496.6~1510.9MHz	1506.21	-64.68dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	1805~1845MHz	1844.52	-63.83dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	1845~1880MHz	1878.36	-63.58dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	1906.6~1910MHz	1906.95	-63.25dBm	-30dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	1910~1915.7MHz	1910.02	-63.23dBm	-30dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	2010~2025MHz	2014.20	-61.81dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	2110~2144.4MHz	2138.76	-71.89dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	2144.4~2170MHz	2150.93	-70.02dBm	-30dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	2330~2370MHz	2369.32	-70.9dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	3000~12750MHz	12564.75	-37.43dBm	-30dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	3400~3419.3MHz	3419.20	-69.66dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	3419.3~3500.7MHz	3447.38	-69.64dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	3500.7~3574.7MHz	3543.40	-69.62dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	3574.7~3590.3MHz	3589.16	-69.21dBm	-30dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	3590.3~3600MHz	3593.78	-69.11dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	3600~4100MHz	3605.00	-68.26dBm	-50dBm/1MHz	PASS
Band28	3MHz	QPSK	27345	15RB#0	4500~4900MHz	4854.40	-66.92dBm	-50dBm/1MHz	PASS

Secondarily Emitted Radio Wave Strength Measurement

Test Result

Condition	Band	Bandwidth	Modulation	Channel	RB Configure	Test Frequency (MHz)	Freq (MHz)	Result (dBm)	Limit	Verdict
NTNV	Band28	3MHz	RX1	27345	15RB#0	30~1000	902.32	-82.9	-57dBm/100kHz	PASS
NTNV	Band28	3MHz	RX1	27345	15RB#0	1000~12750	12529.1	-60.41	-47dBm/1MHz	PASS
NTNV	Band28	3MHz	RX2	27345	15RB#0	30~1000	867.3	-83.31	-57dBm/100kHz	PASS
NTNV	Band28	3MHz	RX2	27345	15RB#0	1000~12750	11656.86	-60.5	-47dBm/1MHz	PASS
NTNV	Band28	3MHz	RX1+ RX2	27345	15RB#0	30~1000	-	-80.09	-57dBm/100kHz	PASS
NTNV	Band28	3MHz	RX1+ RX2	27345	15RB#0	1000~12750	-	-57.44	-47dBm/1MHz	PASS

Leakage Power at No-carrier Transmission Measurement

Test Result

Condition	Band	Bandwidth	Modulation	Channel	RB Configure	Freq (MHz)	Result	Limit	Verdict
NTNV	Band28	3MHz	QPSK	27345	15RB#0	715.15~717.85	-84.62dBm	-48.5dBm/2.7MHz	PASS

Comprehensive Operation Test Measurement

		Unit	Regulation	Result
Calling and response test	GOOD	-	-	PASS
Reading test of an unique numb	GOOD	-	-	PASS
Automatic power control test	GOOD	-	-	PASS

Compliance of below detail item

Automatic Identification	The transmitter of each land mobile station communicating with a base station shall be identified automatically by a base station.
Hand Over Function	The radio equipment shall be the one in which the call channel of the base station is automatically switched to the call channel of another base station.
Traffic control	The area that is related to the provision of service of the base station prescribed in land where field intensity necessary for providing the said service is available shall be capable of being segmentalized to suit the traffic of the said area.
Reception Characteristic Improvement	The radio equipment shall have the function to separate the multi-path propagation received in temporal dispersion and improve the receive characteristics by synthesizing multi-path components.

~The End~