

Transmitter Characteristics (Chapter 6) Release 13			
	Refer to 1MA154	FSW w/ FSW-K10x	
Chapter (TS36.141)	Test	SC	MC
6.2	BS Max Output Power	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.2.6	Home BS Output Power adjacent W-CDMA	<input checked="" type="checkbox"/>	—
6.2.7	Home BS Output Power adjacent LTE	<input checked="" type="checkbox"/>	—
6.2.6	Home BS Output Power co-channel LTE	<input checked="" type="checkbox"/>	—
6.3.1	RE power control dynamic range	No dedicated test, covered by 6.5.2	
6.3.2	Total Power Dynamic Range	<input checked="" type="checkbox"/>	—
6.3.3	NB-IoT RB power dynamic range for in-band or guard band operation	<input checked="" type="checkbox"/>	—
6.4	Transmit ON/OFF Power (6.4.1 Off power + 6.4.2 Transient period)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.5.1	Frequency Error	<input checked="" type="checkbox"/>	—
6.5.2	Error Vector Magnitude (EVM)		
6.5.3	Time Alignment Error	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.5.4	Reference Symbol Power	<input checked="" type="checkbox"/>	—
6.6.1	Occupied Bandwidth	<input checked="" type="checkbox"/> ¹	<input checked="" type="checkbox"/> ¹
6.6.2	Adjacent Channel Leakage Power (ACLR)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.6.3	Operating Band Unwanted Emissions (SEM)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.6.4	Transmitter Spurious Emissions	<input checked="" type="checkbox"/> ¹	<input checked="" type="checkbox"/> ¹
6.7	Transmitter Intermodulation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Test available in Demo-program 1: uses basic function of FSx yellow: not implemented yet

— Test not mandated by TS36.141 Test not supported in Demo-program at this time

Receiver Characteristics (Chapter 7) Release 13	
	Refer to 1MA195
Chapter (TS36.141)	Test
7.2	Reference Sensitivity Level
7.3	Dynamic Range
7.4	In-channel Selectivity
7.5	Adjacent Channel Selectivity (ACS) and Narrow-band Blocking
7.6	Blocking
7.7	Receiver Spurious Emissions
7.8	Receiver Intermodulation

For multi-carrier scenarios, 3 LTE paths (baseband sections in SMx) are necessary:

1 unit SMW200A + external generator (e.g. SGS)

Performance requirements (Chapter 8) Release 13		
	Refer to 1MA162	
Chapter (TS36.141)	Name	Comment
8.2.1	PUSCH in multipath fading propagation conditions transmission on single antenna port	2 , 4 or 8 RX antennas
8.2.1A	PUSCH in multipath fading propagation conditions transmission on two antenna ports	2 , 4 or 8 RX antennas ,MIMO
8.2.2	Uplink timing adjustment	
8.2.3	HARQ-ACK multiplexed on PUSCH	
8.2.4	High Speed Train conditions	
8.2.5	Performance requirements for PUSCH with TTI bundling and enhanced HARQ pattern	
8.2.6	Enhanced performance requirements type A of PUSCH in multipath fading propagation conditions with synchronous interference	
8.2.6A	Enhanced performance requirements type A of PUSCH in multipath fading propagation conditions with asynchronous interference	
8.2.7	Performance requirements of PUSCH in multipath fading propagation conditions transmission on single antenna port for coverage enhancement	
8.3.1	ACK missed detection for single user PUCCH format 1a	2 , 4 or 8 RX antennas
8.3.2	CQI missed detection for PUCCH format 2 transmission on single antenna port	
8.3.3	ACK missed detection for multi user PUCCH format 1a	2 , 4 or 8 RX antennas , MIMO
8.3.4	ACK missed detection for PUCCH format 1b with Channel Selection	2 , 4 or 8 RX antennas
8.3.5	ACK missed detection for PUCCH format 3	2 , 4 or 8 RX antennas
8.3.6	NAK to ACK detection for PUCCH format 3	2 , 4 or 8 RX antennas
8.3.7	ACK missed detection for single user PUCCH format 1a on two antenna ports	2 , 4 or 8 RX antennas, MIMO

8.3.8	CQI missed detection for PUCCH format 2 transmission on two antenna ports	MIMO
8.3.9	CQI performance requirements for PUCCH format 2 with DTX detection	MIMO
8.3.10	ACK missed detection for PUCCH format 1a transmission on single antenna port for coverage enhancement	
8.3.11	CQI performance requirements for PUCCH format 2 transmission on single antenna port for coverage enhancement	
8.3.12	ACK missed detection for PUCCH format 4	2 , 4 or 8 RX antennas
8.3.13	ACK missed detection for PUCCH format 5	2 , 4 or 8 RX antennas
8.4.1*	PRACH false alarm probability and missed detection	2 , 4 or 8 RX antennas
8.5.1	Performance requirements for NPUSCH format 1	
8.5.2	ACK missed detection for NPUSCH format 2	
8.5.3	Performance requirements for NPRACH	

- Tests with 4 RX antennas and Test 8.3.3 need 1 fully equipped unit SMW200A + 2 SGS
- Tests with 8 RX antennas need 1 fully equipped unit SMW200A + 2 SGS + 4 SGT
- Yellow marked test will be implemented later
- * PRACH for eMTC not covered yet.