

EU Adaptivity Test Requirements (2.4GHz BLE)



EN 300 328 V1.9.1 standard for 2.4GHz (BLE wide band modulation other than FHSS with non-LBT based DAA Mechanism)

1	Test standard:	EN 300 328 V1.9.1
2	Injected AWGN compliance threshold:	conducted AWGN -70dBm/MHz per chain
3	Injected AWGN center frequency:	Center at the channel frequency with 100% duty cycle
4	Injected AWGN bandwidth:	Larger than operating channel bandwidth
5	Required traffic load:	Minimum 30%
6	Required RSSI:	-30dBm
7	Injected blocking signal frequencies to be added (single tone signal applied after AWGN signal injection started)	2.4885GHz with -35dBm per chain shall be used for testing the lowest operating channel 2.395GHz with -35dBm per chain shall be used for testing the highest operating channel
8	Test channel/rate/mode	2.402GHz 2.480GHz
9	Traffic stop	Within 40msec
10	CCA time	None for non-LBT based wide band modulation other than FHSS
11	Allowed transmission with the AWGN and blocking signals	Only short control signals are allowed with <10%* duty cycle over 50ms observation period

Note: *Transmit power below 10dBm EIRP does not require adaptivity test compliance. This test is applied to the BLE master as the one controlling the channel map. For example, BLE master is the one inquired and created the BLE connection with the other companion device in BLUETOOL.

EU Adaptivity Test Requirements (2.4GHz BT)

EN 300 328 V1.9.1 standard for 2.4GHz (BT FHSS with non-LBT based DAA Mechanism)

1	Test standard:	EN 300 328 V1.9.1
2	Injected AWGN compliance threshold:	conducted AWGN -70dBm/MHz per chain
3	Injected AWGN center frequency:	Center at the channel frequency with 100% duty cycle
4	Injected AWGN bandwidth:	Larger than operating channel bandwidth (Must use 10MHz to block out more than 1 channel for SA measurement)
5	Required traffic load:	Not defined
6	Required RSSI:	-30dBm
7	Injected blocking signal frequencies to be added (single tone signal applied after AWGN signal injection started)	2.4885GHz with -35dBm per chain shall be used for testing the lowest operating channel 2.395GHz with -35dBm per chain shall be used for testing the highest operating channel
8	Test channel/rate/mode	FH 79 Channels at 2.402GHz (DH5) FH 79 Channels at 2.480GHz (DH5)
9	Traffic stop	(see next chart)
10	CCA time	None for non-LBT based FHSS
11	Allowed transmission with the AWGN and blocking signals	After $N \times COT = 79 \times (3.75/2.9) \times 40 \text{msec} \sim 4.0 \text{sec}$, total transmissions after AWGN injected shall be <40msec. After AWGN removed, traffic can resume only after $5 \times N \times COT = 5 \times 79 \times 40 \text{msec} = 15.8 \text{sec}$ silence period.

Note: *Transmit power below 10dBm EIRP does not require adaptivity test compliance. This test is applied to the BT master as the one controlling the channel map. For example, BT master is the one inquired and created the BT connection with the other companion device in BLUETOOL.