

Annex: Product Specification of Equipment Under Test

Product Specification	
Brand Name	NTT docomo
Model Name	SH-03J
GSM Operating Band(s)	GSM 850/1900 MHz
GPRS Multi-Slot Class	GPRS Class 12
WCDMA Operating Band(s)	FDD Band 5
WCDMA Release, Category	HSDPA Rel. 8, Cat. 10 / HSUPA Rel. 8, Cat. 6
LTE Operating Band(s)	FDD Band 5, Bandwidth: 1.4 M/3 M/5 M/10 M
LTE Release, Category	Up Link: Rel. 11, Cat. 3 Down Link: Rel. 11, Cat. 16
Wi-Fi Specification	802.11a/b/g/n HT20/HT40 802.11ac VHT20/ VHT40/ VHT80
Bluetooth Version	Bluetooth BR/EDR/LE
Antenna Type / Gain	<p>GSM: ILA Antenna GSM 850: -2.50 dBi GSM 1900: 0.10 dBi</p> <p>WCDMA: ILA Antenna FDD Band 5: 0.10 dBi</p> <p>LTE: ILA Antenna FDD Band 5: -2.50 dBi</p> <p>WLAN (Ant. 1): ILA Antenna 2400~2483.5MHz: -1.80 dBi 5150~5250MHz: -1.90 dBi 5250~5350MHz: -1.90 dBi 5470~5725MHz: -1.90 dBi 5725~5850MHz: -1.90 dBi</p> <p>WLAN (Ant. 2): ILA Antenna 2400~2483.5MHz: -9.40 dBi 5150~5250MHz: -5.30 dBi 5250~5350MHz: -5.30 dBi 5470~5725MHz: -5.30 dBi 5725~5850MHz: -5.30 dBi</p> <p>Bluetooth: ILA Antenna / -1.80 dBi</p> <p>GPS / Glonass: ILA Antenna</p> <p>NFC : Loop Antenna</p>
Type of Modulation	<p>GSM / GPRS: GMSK WCDMA: QPSK (Uplink) HSDPA: 16QAM (Downlink) / HSUPA : QPSK (Uplink) LTE: QPSK / 16QAM Bluetooth: GFSK, $\pi/4$-DQPSK, 8-DPSK WLAN 802.11b: DSSS (DBPSK / DQPSK / CCK) WLAN 802.11a/g/n: OFDM (BPSK / QPSK / 16QAM / 64QAM) WLAN 802.11ac: OFDM (BPSK / QPSK / 16QAM / 64QAM / 256QAM) GPS / Glonass: BPSK NFC : ASK</p>
Transmitter Frequency Range	<p>GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band 5: 826.4 MHz ~ 846.6 MHz LTE Band 5 : 824.7 MHz ~ 848.3 MHz WLAN 802.11b/g/n: 2412 MHz ~ 2462 MHz WLAN 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz Bluetooth: 2402 MHz ~ 2480 MHz NFC : 13.56 MHz</p>

Receiver Frequency Range

GSM850: 869.2 MHz ~ 893.8 MHz

GSM1900: 1930.2 MHz ~ 1989.8 MHz

WCDMA Band 5: 871.4 MHz ~ 891.6 MHz

LTE Band 5 : 869.7 MHz ~ 893.3 MHz

WLAN 802.11b/g/n: 2412 MHz ~ 2462 MHz

WLAN 802.11a/n/ac: 5180 MHz ~ 5240 MHz; 5260 MHz ~ 5320 MHz; 5500 MHz ~ 5700 MHz

Bluetooth: 2402 MHz ~ 2480 MHz

GPS: 1.57542 GHz

Glonass: 1602 MHz + $n \times 0.5625\text{MHz}$ ($n=-7, -6, -5, \dots, 0, \dots, 6$)

NFC : 13.56 MHz