

APPENDIX D: CONDUCTED AVERAGE POWER MEASUREMENTS FOR WCDMA, HSUPA AND DC-HSDPA

Type: RM-1039; Serial: 004402/47/947796/4, HW: 0241, SW: 02032.00000.14271.24000 used for WCDMA850 (Band 5) Head, Body-worn and Wireless Router SAR measurements

D.1. WCDMA850 (Band 5) Test results

Average power

Ch / f(MHz)	P [dBm]	P [dBm]
	Antenna 1	Antenna 2
4132 / 826.4	24.3	24.1
4175 / 835.0	24.3	24.1
4233 / 846.6	24.3	24.1

D.2. HSUPA850 Test results

Average power

Ch / f(MHz)	P [dBm]				
	Antenna 1				
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
4132	22.4	22.0	21.6	22.5	22.9
4175	22.8	21.6	21.9	22.4	22.9
4233	22.5	21.9	21.9	22.3	22.8

Ch / f(MHz)	P [dBm]				
	Antenna 2				
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
4132	22.2	21.8	21.4	22.3	22.7
4175	22.6	21.4	21.7	22.2	22.7
4233	22.3	21.7	21.7	22.1	22.6

Note: In HSUPA operation, the output power is reduced relative to the tuning target power for WCDMA. This device runs a single HSUPA power control routine: MPR. As a result, the MPR for each of the Subtest modes is as follows:

Maximum Power Reduction (MPR)				
Antenna 1				
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1.0dB	3.0dB	2.0dB	3.0dB	1.0dB

Maximum Power Reduction (MPR)				
Antenna 2				
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1.0dB	3.0dB	2.0dB	3.0dB	1.0dB

D.3. DC-HSDPA850 Test results

DC-HSDPA power measurements are conducted according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1 with a primary and secondary serving HS-DSCH Cell active.

Ch / f(MHz)	P [dBm]			
	Antenna 1			
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
4132	23.2	23.2	22.7	22.7
4175	23.1	23.2	22.6	22.8
4233	23.1	23.1	22.6	22.6

Ch / f(MHz)	P [dBm]			
	Antenna 2			
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
4132	23.0	23.0	22.5	22.5
4175	22.9	23.0	22.5	22.6
4233	22.9	22.9	22.4	22.4

Note: In DC-HSDPA operation, the output power is reduced relative to the tuning target power for WCDMA. This device runs a single HSDPA power control routine: MPR. As a result, the MPR for each of the Subtest modes is as follows:

Maximum Power Reduction (MPR)			
Antenna 1			
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1.0dB	1.0dB	1.5dB	1.5dB

Maximum Power Reduction (MPR)			
Antenna 2			
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1.0dB	1.0dB	1.5dB	1.5dB

Type: RM-1039; Serial: 004402/47/947814/5, HW: 0241, SW: 02032.00000.14271.24000 used for WCDMA1700/2100 (Band 4) Head and Body-worn SAR measurements

D.4. WCDMA1700/2100 (Band 4) Test results

Average power

Ch / f(MHz)	P [dBm]	
	Antenna 1	Antenna 2
1312 / 1712.4	23.3	23.0
1412 / 1732.4	23.5	23.2
1513 / 1752.6	23.6	23.3

D.5. HSUPA1700/2100 Test results

Average power

Ch / f(MHz)	P [dBm]				
	Antenna 1				
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1312 / 1712.4	21.6	21.3	20.9	21.7	22.3
1412 / 1732.4	22.0	20.6	20.3	21.6	22.2
1513 / 1752.6	22.0	20.8	21.2	21.7	22.2

Ch / f(MHz)	P [dBm]				
	Antenna 2				
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1312 / 1712.4	21.3	21.0	20.6	21.4	22.0
1412 / 1732.4	21.7	20.3	20.0	21.3	21.9
1513 / 1752.6	21.7	20.5	20.9	21.4	21.9

Note: In HSUPA operation, the output power is reduced relative to the tuning target power for WCDMA. This device runs a single HSUPA power control routine: MPR. As a result, the MPR for each of the Subtest modes is as follows:

Maximum Power Reduction (MPR)				
Antenna 1				
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1.0dB	3.0dB	2.0dB	3.0dB	1.0dB

Maximum Power Reduction (MPR)				
Antenna 2				
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1.0dB	3.0dB	2.0dB	3.0dB	1.0dB

D.6. DC-HSDPA1700/2100 Test results

DC-HSDPA power measurements are conducted according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1 with a primary and secondary serving HS-DSCH Cell active.

Ch / f(MHz)	P [dBm]			
	Antenna 1			
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1312 / 1712.4	22.7	22.8	22.3	22.4
1412 / 1732.4	22.7	22.7	22.4	22.4
1513 / 1752.6	22.8	22.7	22.3	22.3

Ch / f(MHz)	P [dBm]			
	Antenna 2			
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1312 / 1712.4	22.5	22.6	22.0	22.1
1412 / 1732.4	22.5	22.4	22.1	22.1
1513 / 1752.6	22.6	22.4	22.0	22.0

Note: In DC-HSDPA operation, the output power is reduced relative to the tuning target power for WCDMA. This device runs a single HSDPA power control routine: MPR. As a result, the MPR for each of the Subtest modes is as follows:

Maximum Power Reduction (MPR)			
Antenna 1			
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1.0dB	1.0dB	1.5dB	1.5dB

Maximum Power Reduction (MPR)			
Antenna 2			
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1.0dB	1.0dB	1.5dB	1.5dB

Type: RM-1039; Serial: 004402/47/947812/9, HW: 0241, SW: 02032.00000.14271.24000 used for WCDMA1900 (Band 2) Head and Body-worn SAR measurements

D.7. WCDMA1900 (Band 2) Test results

Average power

Ch / f(MHz)	P [dBm]	P [dBm]
	Antenna 1	Antenna 2
9262 / 1852.4	23.6	23.3
9400 / 1880.0	23.4	23.3
9538 / 1907.6	23.4	23.1

D.8. HSUPA1900 Test results

Average power

Ch / f(MHz)	P [dBm]				
	Antenna 1				
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
9262 / 1852.4	22.7	21.2	21.2	22.2	22.5
9400 / 1880.0	22.3	21.1	21.1	22.2	22.6
9538 / 1907.6	22.0	21.5	21.1	22.0	22.6

Ch / f(MHz)	P [dBm]				
	Antenna 2				
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
9262 / 1852.4	22.4	20.9	20.9	21.9	22.2
9400 / 1880.0	22.0	20.8	20.8	21.9	22.3
9538 / 1907.6	21.7	21.2	20.8	21.7	22.3

Note: In HSUPA operation, the output power is reduced relative to the tuning target power for WCDMA. This device runs a single HSUPA power control routine: MPR. As a result, the MPR for each of the Subtest modes is as follows:

Maximum Power Reduction (MPR)				
Antenna 1				
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1.0dB	3.0dB	2.0dB	3.0dB	1.0dB

Maximum Power Reduction (MPR)				
Antenna 2				
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1.0dB	3.0dB	2.0dB	3.0dB	1.0dB

D.9. DC-HSDPA1900 Test results

DC-HSDPA power measurements are conducted according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1 with a primary and secondary serving HS-DSCH Cell active.

Ch / f(MHz)	P [dBm]			
	Antenna 1			
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
9262 / 1852.4	22.6	22.8	22.4	22.4
9400 / 1880.0	22.7	22.7	22.2	22.1
9538 / 1907.6	22.6	22.7	22.2	22.1

Ch / f(MHz)	P [dBm]			
	Antenna 2			
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
9262 / 1852.4	22.4	22.6	22.1	22.1
9400 / 1880.0	22.4	22.5	22.0	21.9
9538 / 1907.6	22.4	22.5	22.0	21.9

Note: In DC-HSDPA operation, the output power is reduced relative to the tuning target power for WCDMA. This device runs a single HSDPA power control routine: MPR. As a result, the MPR for each of the Subtest modes is as follows:

Maximum Power Reduction (MPR)			
Antenna 1			
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1.0dB	1.0dB	1.5dB	1.5dB

Maximum Power Reduction (MPR)			
Antenna 2			
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1.0dB	1.0dB	1.5dB	1.5dB

Type: RM-1039; Serial: 004402/47/947792/3, HW: 0241, SW: 02032.00000.14271.24000 used for WCDMA1700/2100 (Band 4) Wireless Router SAR measurements

D.10. WCDMA1700/2100 (Band 4) Test results

Average power

Ch / f(MHz)	P [dBm]	
	Antenna 1	Antenna 2
1312 / 1712.4	20.3	20.0
1412 / 1732.4	20.3	20.0
1513 / 1752.6	20.4	20.1

D.11. HSUPA1700/2100 Test results

Average power

Ch / f(MHz)	P [dBm]				
	Antenna 1				
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1312 / 1712.4	19.2	18.1	18.3	18.9	19.4
1412 / 1732.4	19.4	17.9	17.6	18.9	19.3
1513 / 1752.6	19.5	18.1	17.7	19.1	19.5

Ch / f(MHz)	P [dBm]				
	Antenna 2				
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1312 / 1712.4	18.9	17.8	18.0	18.6	19.1
1412 / 1732.4	19.1	17.6	17.3	18.6	19.0
1513 / 1752.6	19.2	17.8	17.4	18.8	19.2

Note: In HSUPA operation, the output power is reduced relative to the tuning target power for WCDMA. This device runs a single HSUPA power control routine: MPR. As a result, the MPR for each of the Subtest modes is as follows:

Maximum Power Reduction (MPR)				
Antenna 1				
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1.0dB	3.0dB	2.0dB	3.0dB	1.0dB

Maximum Power Reduction (MPR)				
Antenna 2				
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1.0dB	3.0dB	2.0dB	3.0dB	1.0dB

D.12. DC-HSDPA1700/2100 Test results

DC-HSDPA power measurements are conducted according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1 with a primary and secondary serving HS-DSCH Cell active.

Ch / f(MHz)	P [dBm]			
	Antenna 1			
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1312 / 1712.4	19.5	19.5	19.2	19.3
1412 / 1732.4	19.6	19.6	19.1	19.2
1513 / 1752.6	19.5	19.6	19.3	19.2

Ch / f(MHz)	P [dBm]			
	Antenna 2			
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1312 / 1712.4	19.3	19.2	19.0	19.0
1412 / 1732.4	19.3	19.4	18.9	18.9
1513 / 1752.6	19.2	19.4	19.0	19.0

Note: In DC-HSDPA operation, the output power is reduced relative to the tuning target power for WCDMA. This device runs a single HSDPA power control routine: MPR. As a result, the MPR for each of the Subtest modes is as follows:

Maximum Power Reduction (MPR)			
Antenna 1			
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1.0dB	1.0dB	1.5dB	1.5dB

Maximum Power Reduction (MPR)			
Antenna 2			
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1.0dB	1.0dB	1.5dB	1.5dB

Type: RM-1039; Serial: 004402/47/947820/2, HW: 0241, SW: 02032.00000.14271.24000 used for WCDMA1900 (Band 2) Wireless Router SAR measurements

D.13. WCDMA1900 (Band 2) Test results

Average power

Ch / f(MHz)	P [dBm]	P [dBm]
	Antenna 1	Antenna 2
9262 / 1852.4	20.6	20.3
9400 / 1880.0	20.4	20.1
9538 / 1907.6	20.5	20.2

D.14. HSUPA1900 Test results

Average power

Ch / f(MHz)	P [dBm]				
	Antenna 1				
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
9262 / 1852.4	19.1	18.1	17.7	19.1	19.5
9400 / 1880.0	19.1	18.6	18.5	19.1	19.6
9538 / 1907.6	19.6	18.6	18.5	18.9	19.6

Ch / f(MHz)	P [dBm]				
	Antenna 2				
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
9262 / 1852.4	18.8	17.8	17.4	18.8	19.2
9400 / 1880.0	18.8	18.3	18.2	18.8	19.3
9538 / 1907.6	19.3	18.3	18.2	18.6	19.3

Note: In HSUPA operation, the output power is reduced relative to the tuning target power for WCDMA. This device runs a single HSUPA power control routine: MPR. As a result, the MPR for each of the Subtest modes is as follows:

Maximum Power Reduction (MPR)				
Antenna 1				
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1.0dB	3.0dB	2.0dB	3.0dB	1.0dB

Maximum Power Reduction (MPR)				
Antenna 2				
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4	Subtest mode 5
1.0dB	3.0dB	2.0dB	3.0dB	1.0dB

D.15. DC-HSDPA1900 Test results

DC-HSDPA power measurements are conducted according to the H-Set 12, Fixed Reference Channel (FRC) configuration in Table C.8.1.12 of 3GPP TS 34.121-1 with a primary and secondary serving HS-DSCH Cell active.

Ch / f(MHz)	P [dBm]			
	Antenna 1			
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
9262 / 1852.4	19.6	19.8	19.4	19.4
9400 / 1880.0	19.7	19.7	19.2	19.1
9538 / 1907.6	19.6	19.7	19.2	19.1

Ch / f(MHz)	P [dBm]			
	Antenna 2			
	Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
9262 / 1852.4	19.4	19.6	19.2	19.2
9400 / 1880.0	19.5	19.5	19.2	18.9
9538 / 1907.6	19.4	19.6	19.0	18.9

Note: In DC-HSDPA operation, the output power is reduced relative to the tuning target power for WCDMA. This device runs a single HSDPA power control routine: MPR. As a result, the MPR for each of the Subtest modes is as follows:

Maximum Power Reduction (MPR)			
Antenna 1			
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1.0dB	1.0dB	1.5dB	1.5dB

Maximum Power Reduction (MPR)			
Antenna 2			
Subtest mode 1	Subtest mode 2	Subtest mode 3	Subtest mode 4
1.0dB	1.0dB	1.5dB	1.5dB