

10954	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.23	± 9.6 %
10955	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.42	± 9.6 %
10956	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.14	± 9.6 %
10957	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.31	± 9.6 %
10958	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.61	± 9.6 %
10959	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.33	± 9.6 %
10960	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.32	± 9.6 %
10961	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.36	± 9.6 %
10962	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.40	± 9.6 %
10963	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.55	± 9.6 %
10964	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.29	± 9.6 %
10965	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.37	± 9.6 %
10966	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.55	± 9.6 %
10967	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.42	± 9.6 %
10968	AAA	5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.49	± 9.6 %

^E Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

Appendix D. Photographs of EUT and Setup

The setup photographs for SAR testing are shown as follows.

Appendix E. Maximum Target Conducted Power

The maximum conducted average power (Unit: dBm) including tune-up tolerance is shown as below.

WLAN Tune-up Power (Full)							
WLAN2.4GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11b	1	2412	19.0	19.0	19.0	19.0	22.0
	6	2437	20.5	20.5	20.5	20.5	23.5
	11	2462	18.5	18.5	18.6	18.6	21.6
802.11g	1	2412	16.5	16.5	16.5	16.5	19.5
	6	2437	20.5	20.5	20.5	20.5	23.5
	11	2462	16.0	16.0	16.0	16.0	19.0
802.11n HT20	1	2412	15.5	16.0	16.0	16.0	19.0
	6	2437	20.5	21.0	21.0	21.0	24.0
	11	2462	16.0	16.0	16.0	16.0	19.0
802.11n HT40	3	2422	15.0	15.0	15.0	15.0	18.0
	6	2437	16.5	16.5	16.6	16.6	19.6
	9	2452	14.5	14.0	14.5	14.5	17.5

WLAN Tune-up Power (Full)				
Bluetooth				
Mode	Channel	Frequency	Ant 0 Max Tune-up	
BR / EDR	0	2402	0.5	
	39	2441	1.0	
	78	2480	0.5	
LE	0	2402	0.5	
	19	2440	1.0	
	39	2480	0.5	

WLAN Tune-up Power (Full)							
WLAN 5.2GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	36	5180	19.5	19.5	19.5	19.5	22.5
	40	5200	19.0	20.0	19.5	19.5	22.5
	44	5220	19.0	19.5	19.5	19.5	22.5
	48	5240	19.0	19.5	19.5	19.5	22.5
802.11n HT20	36	5180	19.5	20.0	20.0	20.0	23.0
	40	5200	19.5	20.0	20.0	20.0	23.0
	44	5220	19.5	20.0	20.0	20.0	23.0
	48	5240	19.5	20.0	20.0	20.0	23.0
802.11n HT40	38	5190	19.0	19.5	19.5	19.5	22.5
	46	5230	20.5	21.0	21.0	21.0	24.0
802.11ac VHT80	42	5210	18.5	19.0	19.0	19.0	22.0

WLAN Tune-up Power (Full)							
WLAN 5.3GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	52	5260	19.5	19.5	19.5	19.5	22.5
	56	5280	19.5	19.5	19.5	19.5	22.5
	60	5300	19.5	19.5	19.5	19.5	22.5
	64	5320	19.5	19.5	19.5	19.5	22.5
802.11n HT20	52	5260	20.0	20.0	20.0	20.0	23.0
	56	5280	19.5	20.0	20.0	20.0	23.0
	60	5300	19.5	20.0	20.0	20.0	23.0
	64	5320	19.5	20.0	20.0	20.0	23.0
802.11n HT40	54	5270	20.0	20.0	20.0	20.0	23.0
	62	5310	18.5	18.5	18.5	18.5	21.5
802.11ac VHT80	58	5290	18.0	18.0	18.0	18.0	21.0

WLAN Tune-up Power (Full)							
WLAN 5.6GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	100	5500	19.0	19.5	19.5	19.5	22.5
	116	5580	19.0	19.5	19.5	19.5	22.5
	120	5600	18.5	19.5	19.5	19.5	22.5
	124	5620	18.5	19.5	19.4	19.4	22.4
	132	5660	18.5	19.5	19.4	19.4	22.4
	140	5700	19.0	19.5	19.3	19.3	22.3
	144	5720	19.0	19.0	19.1	19.1	22.1
802.11n HT20	100	5500	19.5	19.5	20.0	20.0	23.0
	116	5580	19.0	20.0	19.5	19.5	22.5
	120	5600	19.0	19.5	19.5	19.5	22.5
	124	5620	19.0	19.5	19.5	19.5	22.5
	132	5660	19.0	19.5	19.5	19.5	22.5
	140	5700	19.5	19.0	19.5	19.5	22.5
	144	5720	19.5	19.0	19.5	19.5	22.5
802.11n HT40	102	5510	19.0	19.0	19.0	19.0	22.0
	110	5550	19.8	20.0	20.1	20.1	23.1
	118	5590	19.8	20.0	20.0	20.0	23.0
	126	5630	19.8	20.0	20.0	20.0	23.0
	134	5670	19.5	19.5	19.6	19.6	22.6
	142	5710	19.5	20.0	20.0	20.0	23.0
802.11ac VHT80	106	5530	18.5	19.0	18.5	18.5	21.5
	122	5610	18.0	18.5	18.5	18.5	21.5
	138	5690	19.5	19.5	19.5	19.5	22.5

WLAN Tune-up Power (Full)							
WLAN 5.8GHz							
Mode	Channel	Frequency	SISO Ant 0 Max Tune up	SISO Ant 1 Max Tune up	MIMO Ant 0 Tune up	MIMO Ant 1 Tune up	MIMO Ant 0+1 Max Tune up
802.11a	149	5745	16.0	16.5	16.5	16.5	19.5
	153	5765	16.5	16.5	16.5	16.5	19.5
	157	5785	16.5	16.5	16.5	16.5	19.5
	161	5805	16.5	16.5	16.5	16.5	19.5
	165	5825	16.0	16.5	16.5	16.5	19.5
802.11n HT20	149	5745	16.5	16.5	16.5	16.5	19.5
	153	5765	16.5	16.5	16.5	16.5	19.5
	157	5785	16.5	16.5	16.5	16.5	19.5
	161	5805	16.5	16.5	16.5	16.5	19.5
	165	5825	16.0	16.5	16.5	16.5	19.5
802.11n HT40	151	5755	16.5	16.5	16.5	16.5	19.5
	159	5795	16.5	16.5	16.5	16.5	19.5
802.11ac VHT80	155	5775	16.5	16.5	16.5	16.5	19.5

Appendix F. Measured Conducted Power Result

The measuring conducted power (Unit: dBm) are shown as below.

WLAN2.4GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11b	1	2412	18.78
	6	2437	20.14
	11	2462	18.16
802.11g	1	2412	16.22
	6	2437	20.12
	11	2462	15.55
802.11n HT20	1	2412	15.5
	6	2437	20.45
	11	2462	15.7
802.11n HT40	3	2422	14.53
	6	2437	16.41
	9	2452	14.09

Bluetooth Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
BR / EDR	0	2402	0.22
	39	2441	0.81
	78	2480	0.43
LE	0	2402	0.29
	19	2440	0.92
	39	2480	0.5

WLAN 5.2GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11n HT40	38	5190	18.9
	46	5230	20.5

WLAN 5.6GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11n HT40	102	5510	18.55
	110	5550	19.72
	118	5590	19.7
	126	5630	19.71
	134	5670	19.12
	142	5710	19.23

WLAN 5.8GHz Ant 0			
Mode	Channel	Frequency	SISO Ant 0 Avg. Power
802.11ac VHT80	155	5775	16.32

WLAN2.4GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11b	1	2412	18.81
	6	2437	20.11
	11	2462	18.42
802.11g	1	2412	16.4
	6	2437	20.34
	11	2462	15.78
802.11n HT20	1	2412	15.55
	6	2437	20.65
	11	2462	15.63
802.11n HT40	3	2422	14.7
	6	2437	16.33
	9	2452	13.95

WLAN 5.2GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11n HT40	38	5190	19.33
	46	5230	20.6

WLAN 5.6GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11n HT40	102	5510	18.72
	110	5550	19.99
	118	5590	19.92
	126	5630	19.85
	134	5670	19.46
	142	5710	19.7

WLAN 5.8GHz Ant 1			
Mode	Channel	Frequency	SISO Ant 1 Avg. Power
802.11ac VHT80	155	5775	16.35

WLAN2.4GHz Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11b	1	2412	18.88	18.91	21.91
	6	2437	20.24	20.21	23.24
	11	2462	18.26	18.52	21.4
802.11g	1	2412	16.34	16.48	19.42
	6	2437	20.22	20.44	23.34
	11	2462	15.66	15.88	18.78
802.11n HT20	1	2412	15.61	15.63	18.63
	6	2437	20.55	20.75	23.66
	11	2462	15.82	15.73	18.79
802.11n HT40	3	2422	14.63	14.8	17.73
	6	2437	16.51	16.43	19.48
	9	2452	14.19	14.06	17.14

WLAN 5.2GHz Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11n HT40	38	5190	19	19.43	22.23
	46	5230	20.62	20.71	23.68

WLAN 5.6GHz Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11n HT40	102	5510	18.67	18.83	21.76
	110	5550	19.82	20.09	22.97
	118	5590	19.8	20	22.91
	126	5630	19.81	19.96	22.9
	134	5670	19.22	19.56	22.4
	142	5710	19.33	19.81	22.59

WLAN 5.8GHz Ant 0+1					
Mode	Channel	Frequency	MIMO Ant 0 Avg. Power	MIMO Ant 1 Avg. Power	MIMO Ant 0+1 Avg. Power
802.11ac VHT80	155	5775	16.41	16.47	19.45

Appendix G. Analysis of Simultaneous Transmission SAR.

The analysis of simultaneous transmission SAR are shown as below.

Simultaneous Transmission SAR Evaluation (Head SAR)						
Position	Test Gap (mm)	A	B	C	A+C	B+C
		Max WLAN 2.4GHz	Max WLAN 5GHz	MAX BT	Summimg result 1g SAR W/kg	Summimg result 1g SAR W/kg
		1g SAR W/kg	1g SAR W/kg	1g SAR W/kg		
Right Cheek	-	0.50	1.03	0.01	0.51	1.04
Right Tilted		0.55	0.88	0.01	0.56	0.89
Left Cheek		0.55	1.13	0.00	0.55	1.13
Left Tilted		0.30	1.17	0.00	0.30	1.17

Simultaneous Transmission SAR Evaluation (Body-worn SAR)						
Position	Test Gap (mm)	A	B	C	A+C	B+C
		Max WLAN 2.4GHz	Max WLAN 5GHz	MAX BT	Summimg result 1g SAR W/kg	Summimg result 1g SAR W/kg
		1g SAR W/kg	1g SAR W/kg	1g SAR W/kg		
Front Face	15	0.21	0.39	0.00	0.21	0.39
Rear Face	15	0.20	0.66	0.00	0.20	0.66

Simultaneous Transmission SAR Evaluation (Product Specific SAR)						
Position	Test Gap (mm)	A	B	C	A+C	B+C
		Max WLAN 2.4GHz	Max WLAN 5GHz	MAX BT	Summimg result	Summimg result
		10g SAR W/kg	10g SAR W/kg	10g SAR W/kg	10g SAR W/kg	10g SAR W/kg
Front Face	0	0.43	0.56	0.00	0.43	0.56
Rear Face	0	0.34	0.55	0.00	0.34	0.55
Left Side	0	1.24	1.69	0.01	1.25	1.70
Right Side	0	1.48	0.96	0.00	1.48	0.96
Top Side	0	0.77	1.22	0.01	0.78	1.23
Bottom Side	0	0.00	0.00	0.00	0.00	0.00