Appendix H. SAR Test Result

SAR Results for Body Exposure Condition.

Note:
1. SAR testing for WLAN was performed on the maximum power mode.
2. Per FCC guidance, SAR was performed using 6.5GHz SAR Probe calibration factors.
3. Per U-NII 6G interim test procedure in Oct. 2020 TCBs Workshop notes. At least 5 channels for BW 160MHz should be tested.

Test Engineer：Danny Lai, and Christina Wu

WLAN 2.4G / 5G Body SAR Test Result															
System & Position						DUT & Accessory		SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	Ant Status	Antenna Manufacturer	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
Body SAR Test SAR-1g : 1.6 W/kg															
	WLAN2.4G	802.11b	Bottom	0	11	Ant 0	INPQA	98.80	1.01	17.00	16.98	1.00	0.06	1.15	1.16
	WLAN2.4G	802.11b	Bottom	0	1	Ant 1	INPQA	98.40	1.02	17.00	16.97	1.01	-0.08	1.15	1.18
1	WLAN2.4G	802.11n HT20	Bottom	0	6	Ant 0+1	INPQA	99.90	1.00	20.00	19.68	1.08	0.08	1.1	**1.19**
	WLAN2.4G	802.11b	Bottom	0	1	Ant 0	INPQA	98.80	1.01	17.00	16.87	1.03	0.04	0.936	0.97
	WLAN2.4G	802.11b	Bottom	0	6	Ant 0	INPQA	98.80	1.01	17.00	16.91	1.02	0.12	1.06	1.09
	WLAN2.4G	802.11b	Bottom	0	12	Ant 0	INPQA	98.80	1.01	17.00	16.87	1.03	0.14	0.592	0.62
	WLAN2.4G	802.11b	Bottom	0	13	Ant 0	INPQA	98.80	1.01	15.25	15.21	1.01	-0.15	0.299	0.31
	WLAN2.4G	802.11b	Bottom	0	6	Ant 1	INPQA	98.40	1.02	17.00	16.91	1.02	0.17	1.08	1.12
	WLAN2.4G	802.11b	Bottom	0	11	Ant 1	INPQA	98.40	1.02	17.00	16.88	1.03	0.18	1.06	1.11
	WLAN2.4G	802.11b	Bottom	0	12	Ant 1	INPQA	98.40	1.02	17.00	16.89	1.03	-0.13	0.692	0.73
	WLAN2.4G	802.11b	Bottom	0	13	Ant 1	INPQA	98.40	1.02	15.50	15.41	1.02	-0.17	0.365	0.38
	WLAN2.4G	802.11n HT20	Bottom	0	1	Ant 0+1	INPQA	99.90	1.00	19.75	19.44	1.07	0.18	0.669	0.72
	WLAN2.4G	802.11n HT20	Bottom	0	11	Ant 0+1	INPQA	99.90	1.00	18.75	18.73	1.00	-0.05	0.495	0.50
	WLAN2.4G	802.11n HT20	Bottom	0	12	Ant 0+1	INPQA	99.90	1.00	14.75	14.71	1.01	0.16	0.174	0.18
	WLAN2.4G	802.11n HT20	Bottom	0	13	Ant 0+1	INPQA	99.90	1.00	11.50	11.48	1.00	-0.04	0.083	0.08
	WLAN2.4G	802.11n HT20	Bottom	0	6	Ant 0+1	Yageo	99.90	1.00	20.00	19.68	1.08	-0.12	0.726	0.78
	WLAN2.4G	802.11b	Bottom	0	1	Ant 1	INPQA	98.40	1.02	17.00	16.97	1.01	-0.03	1.11	1.14
						-									
2	WLAN5.3G	802.11n HT40	Bottom	0	54	Ant 0	INPQA	98.00	1.02	12.00	11.98	1.00	0.03	1.12	**1.14**
	WLAN5.3G	802.11n HT40	Bottom	0	54	Ant 1	INPQA	98.30	1.02	12.00	11.94	1.01	0.16	1.01	1.04
	WLAN5.2G	802.11n HT40	Bottom	0	46	Ant 0+1	INPQA	98.70	1.01	15.00	14.97	1.01	0.06	1.11	1.13
	WLAN5.3G	802.11n HT40	Bottom	0	62	Ant 0	INPQA	98.00	1.02	12.00	11.94	1.01	0.19	0.372	0.38
	WLAN5.3G	802.11n HT40	Bottom	0	62	Ant 1	INPQA	98.30	1.02	12.00	11.88	1.03	-0.04	0.382	0.40
	WLAN5.2G	802.11n HT40	Bottom	0	38	Ant 0+1	INPQA	98.70	1.01	15.00	14.88	1.03	0.05	0.395	0.41
	WLAN5.3G	802.11n HT40	Bottom	0	54	Ant 0	Yageo	98.00	1.02	12.00	11.98	1.00	0.03	0.716	0.73
	WLAN5.3G	802.11n HT40	Bottom	0	54	Ant 0	INPQA	98.00	1.02	12.00	11.98	1.00	-0.16	1.07	1.09
						-									

WLAN 2.4G / 5G Body SAR Test Result															
System & Position						DUT & Accessory		SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	Ant Status	Antenna Manufacturer	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
Body SAR Test SAR-1g : 1.6 W/kg															
	WLAN5.6G	802.11ac VHT80	Bottom	0	138	Ant 0	INPQA	98.30	1.02	12.00	11.94	1.01	-0.08	0.982	1.01
	WLAN5.6G	802.11ac VHT80	Bottom	0	138	Ant 1	INPQA	98.30	1.02	12.00	11.98	1.00	-0.09	1.05	1.07
3	WLAN5.6G	802.11n HT40	Bottom	0	110	Ant 0+1	INPQA	98.70	1.01	15.00	14.32	1.17	-0.01	0.991	**1.17**
	WLAN5.6G	802.11ac VHT80	Bottom	0	106	Ant 0	INPQA	98.30	1.02	12.00	11.89	1.03	-0.03	0.634	0.67
	WLAN5.6G	802.11ac VHT80	Bottom	0	122	Ant 0	INPQA	98.30	1.02	12.00	11.91	1.02	-0.17	0.922	0.96
	WLAN5.6G	802.11ac VHT80	Bottom	0	106	Ant 1	INPQA	98.30	1.02	12.00	11.87	1.03	-0.01	0.472	0.50
	WLAN5.6G	802.11ac VHT80	Bottom	0	122	Ant 1	INPQA	98.30	1.02	12.00	11.94	1.01	0.1	0.895	0.92
	WLAN5.6G	802.11n HT40	Bottom	0	102	Ant 0+1	INPQA	98.70	1.01	15.00	14.22	1.20	-0.11	0.433	0.52
	WLAN5.6G	802.11n HT40	Bottom	0	118	Ant 0+1	INPQA	98.70	1.01	15.00	14.18	1.21	0.01	0.929	1.14
	WLAN5.6G	802.11n HT40	Bottom	0	126	Ant 0+1	INPQA	98.70	1.01	15.00	13.98	1.26	0.19	0.915	1.16
	WLAN5.6G	802.11n HT40	Bottom	0	134	Ant 0+1	INPQA	98.70	1.01	15.00	13.71	1.35	-0.08	0.553	0.75
	WLAN5.6G	802.11n HT40	Bottom	0	142	Ant 0+1	INPQA	98.70	1.01	15.00	13.68	1.36	0.11	0.848	1.16
	WLAN5.6G	802.11n HT40	Bottom	0	110	Ant 0+1	Yageo	98.70	1.01	15.00	14.32	1.17	0.05	0.651	0.77
	WLAN5.6G	802.11ac VHT80	Bottom	0	138	Ant 1	INPQA	98.30	1.02	12.00	11.98	1.00	-0.17	1.01	1.03
	WLAN5.8G	802.11n HT40	Bottom	0	159	Ant 0	INPQA	98.00	1.02	11.50	11.48	1.00	-0.03	0.982	1.00
4	WLAN5.8G	802.11n HT40	Bottom	0	151	Ant 1	INPQA	98.30	1.02	11.50	11.48	1.00	-0.03	1.08	**1.10**
	WLAN5.8G	802.11n HT40	Bottom	0	151	Ant 0+1	INPQA	98.70	1.01	14.50	14.49	1.00	0.05	0.97	0.98
	WLAN5.8G	802.11n HT40	Bottom	0	151	Ant 0	INPQA	98.00	1.02	11.50	11.43	1.02	0.01	0.966	1.01
	WLAN5.8G	802.11n HT40	Bottom	0	159	Ant 1	INPQA	98.30	1.02	11.50	11.42	1.02	-0.12	1.02	1.06
	WLAN5.8G	802.11n HT40	Bottom	0	159	Ant 0+1	INPQA	98.70	1.01	14.50	14.45	1.01	-0.02	1.01	1.03
	WLAN5.8G	802.11n HT40	Bottom	0	151	Ant 1	Yageo	98.30	1.02	11.50	11.48	1.00	0.02	0.738	0.75
	WLAN5.8G	802.11n HT40	Bottom	0	151	Ant 1	INPQA	98.30	1.02	11.50	11.48	1.00	-0.11	1.04	1.06

WLAN 2.4G / 5G Body SAR Test Result

System & Position						DUT & Accessory		SAR							
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	Ant Status	Antenna Manufacturer	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)
Body SAR Test SAR-1g : 1.6 W/kg															
5	BT	BR / EDR	Bottom	0	0	Ant 1	INPQA	76.47	1.31	11.00	9.79	1.32	0.19	0.16	**0.28**
	BT	BR / EDR	Bottom	0	39	Ant 1	INPQA	76.47	1.31	11.00	9.57	1.39	0.02	0.133	0.24
	BT	BR / EDR	Bottom	0	78	Ant 1	INPQA	76.47	1.31	11.00	9.44	1.43	-0.08	0.113	0.21
	BT	BR / EDR	Bottom	0	0	Ant 1	Yageo	76.47	1.31	11.00	9.79	1.32	0.13	0.146	0.25

WLAN 6E Body SAR & Power Density Test Result																										
System & Position						DUT & Accessory		SAR									PD									
Plot No.	Band	Mode	Test Position	Separation Distance (mm)	Channel	Ant Status	Antenna Manufacturer	Duty Cycle	Crest Factor	Max. Tune-up Power (dBm)	Measured Conducted Power (dBm)	Scaling Factor	Power Drift (dB)	Measured SAR-1g (W/kg)	Scaled SAR-1g (W/kg)	Measured APD W/m^2 (4cm^2)	Grid Step [λ]	iPD [W/m^2]	Scaling Factor for Measurement Uncertainty	Averaging Area [cm^2]	Power Drift [dB]	Normal psPD [W/m^2]	Scaled Normal psPD [W/m^2]	Total psPD [W/m^2]	Scaled Total psPD [W/m^2]
6\S	UNII-5	802.11ax HE160	Bottom	0	79	Ant 0	INPQA	98.66	1.01	13.50	13.48	1.00	-0.12	1.12	1.13	9.08	0.25	7.20	1.545	4.00	-0.14	2.52	3.89	2.65	4.14
	UNII-5	802.11ax HE160	Bottom	0	79	Ant 1	INPQA	98.66	1.01	13.50	13.47	1.01	0.03	1.02	1.04	8.21	-	-	-	-	-	-	-	-	-
	UNII-5	802.11ax HE160	Bottom	0	79	Ant 0+1	INPQA	97.25	1.03	13.50	13.49	1.00	-0.05	0.472	0.49	4.58	-	-	-	-	-	-	-	-	-
6P	UNII-5	802.11ax HE160	Bottom	0	15	Ant 0	INPQA	98.66	1.01	13.50	13.45	1.01	0.11	1.09	1.11	8.69	0.25	11.20	1.545	4.00	-0.18	3.37	5.21	3.65	5.70
	UNII-5	802.11ax HE160	Bottom	0	47	Ant 0	INPQA	98.66	1.01	13.50	13.46	1.01	-0.03	1.02	1.04	8.02	-	-	-	-	-	-	-	-	-
	UNII-6	802.11ax HE160	Bottom	0	111	Ant 0	INPQA	98.66	1.01	13.50	13.41	1.02	0.05	1.05	1.08	8.44	0.25	9.15	1.545	4.00	-0.15	1.87	2.89	1.94	3.03
	UNII-7	802.11ax HE160	Bottom	0	175	Ant 0	INPQA	98.66	1.01	12.75	12.72	1.01	-0.07	1.06	1.08	8.33	0.25	5.36	1.545	4.00	0.13	1.27	1.96	1.40	2.18
	UNII-7	802.11ax HE160	Bottom	0	143	Ant 0	INPQA	98.66	1.01	12.75	12.71	1.01	-0.01	1.01	1.03	8.10	-	-	-	-	-	-	-	-	-
	UNII-8	802.11ax HE160	Bottom	0	207	Ant 0	INPQA	98.66	1.01	12.75	12.73	1.00	0.03	1.04	1.05	8.45	0.25	6.70	1.545	4.00	0.12	1.74	2.69	1.80	2.81
	UNII-5	802.11ax HE160	Bottom	0	15	Ant 1	INPQA	98.66	1.01	13.50	13.43	1.02	-0.01	1.01	1.04	8.10	-	-	-	-	-	-	-	-	-
	UNII-5	802.11ax HE160	Bottom	0	47	Ant 1	INPQA	98.66	1.01	13.50	13.41	1.02	0.08	0.993	1.02	7.98	-	-	-	-	-	-	-	-	-
	UNII-6	802.11ax HE160	Bottom	0	111	Ant 1	INPQA	98.66	1.01	13.50	13.46	1.01	-0.09	1	1.02	8.09	-	-	-	-	-	-	-	-	-
	UNII-7	802.11ax HE160	Bottom	0	175	Ant 1	INPQA	98.66	1.01	12.75	12.73	1.00	-0.03	1	1.01	8.67	-	-	-	-	-	-	-	-	-
	UNII-7	802.11ax HE160	Bottom	0	143	Ant 1	INPQA	98.66	1.01	12.75	12.71	1.01	0.12	0.936	0.95	7.11	-	-	-	-	-	-	-	-	-
	UNII-8	802.11ax HE160	Bottom	0	207	Ant 1	INPQA	98.66	1.01	12.75	12.73	1.00	-0.05	0.989	1.00	8.21	-	-	-	-	-	-	-	-	-
	UNII-5	802.11ax HE160	Bottom	0	79	Ant 0	Yageo	98.66	1.01	13.50	13.48	1.00	-0.06	1.05	1.06	8.39	-	-	-	-	-	-	-	-	-
	UNII-5	802.11ax HE160	Bottom	0	15	Ant 0	Yageo	98.66	1.01	13.50	13.48	1.00	-0.16	1.02	1.03	8.02	-	-	-	-	-	-	-	-	-
	UNII-5	802.11ax HE160	Bottom	0	47	Ant 0	Yageo	98.66	1.01	13.50	13.48	1.00	-0.18	0.956	0.97	7.41	-	-	-	-	-	-	-	-	-
	UNII-5	802.11ax HE160	Bottom	0	79	Ant 0	INPQA	98.66	1.01	13.50	13.48	1.00	-0.03	1.09	1.10	9.08	-	-	-	-	-	-	-	-	-