

9.7. SAR Measurement Variability

Per KDB Publication 865664 D01, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. These additional measurements were repeated after the completion of all measurements requiring the same head tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

- [1] The repeated measurement is not required, when the highest measured SAR is < 0.80 W/kg.
- [2] The measurement was repeated once, when the highest measured SAR is ≥ 0.80 W/kg.
- [3] A second repeated measurement was performed, if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20, or when the original or repeated measurement was ≥ 1.45 W/kg.
- [4] A third repeated measurement was performed, if the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20, and the original, first or second repeated measurement is ≥ 1.5 W/kg.
- [5] When 10g SAR measurement is considered, a factor of 2.5 is applied to the thresholds above.

Band	Modulation	Test Position	Spacing (mm)	Channel	Original SAR _{1g} (W/kg)	First SAR _{1g} (W/kg)	First Ratio SAR _{1g}	Original SAR _{10g} (W/kg)	First SAR _{10g} (W/kg)	First Ratio SAR _{10g}
GSM850	GPRS12	Rear Face	5	251	0.871	0.833	4.36%	0.473	0.453	4.23%

10. Evaluation for Simultaneous Transmission Scenario

10.1. Simultaneous Transmission Capabilities

The simultaneous transmission possibilities for this device are listed as below.

Simultaneous Tx Combination	Capable Transmit Configuration
1	WWAN + WLAN 2.4 GHz ANT 1 + Bluetooth ANT 2
2	WWAN + WLAN 2.4 GHz ANT 2 + Bluetooth ANT 1
3	WWAN + WLAN 2.4 GHz ANT 1+2
4	WWAN + WLAN 5 GHz ANT 1 + Bluetooth ANT 1
5	WWAN + WLAN 5 GHz ANT 1 + Bluetooth ANT 2
6	WWAN + WLAN 5 GHz ANT 2 + Bluetooth ANT 1
7	WWAN + WLAN 5 GHz ANT 2 + Bluetooth ANT 2
8	WWAN + WLAN 5 GHz ANT 1+2 + Bluetooth ANT 1
9	WWAN + WLAN 5 GHz ANT 1+2 + Bluetooth ANT 2
10	WWAN + WLAN 6 GHz ANT 1 + Bluetooth ANT 1
11	WWAN + WLAN 6 GHz ANT 1 + Bluetooth ANT 2
12	WWAN + WLAN 6 GHz ANT 2 + Bluetooth ANT 1
13	WWAN + WLAN 6 GHz ANT 2 + Bluetooth ANT 2
14	WWAN + WLAN 6 GHz ANT 1+2 + Bluetooth ANT 1
15	WWAN + WLAN 6 GHz ANT 1+2 + Bluetooth ANT 2

Simultaneous Tx Combination	Capable Transmit Configuration_ENDC
1	LTE + NR + WLAN 2.4 GHz ANT 1 + Bluetooth ANT 2
2	LTE + NR + WLAN 2.4 GHz ANT 2 + Bluetooth ANT 1
3	LTE + NR + WLAN 2.4 GHz ANT 1+2
4	LTE + NR + WLAN 5 GHz ANT 1 + Bluetooth ANT 1
5	LTE + NR + WLAN 5 GHz ANT 1 + Bluetooth ANT 2
6	LTE + NR + WLAN 5 GHz ANT 2 + Bluetooth ANT 1
7	LTE + NR + WLAN 5 GHz ANT 2 + Bluetooth ANT 2
8	LTE + NR + WLAN 5 GHz ANT 1+2 + Bluetooth ANT 1
9	LTE + NR + WLAN 5 GHz ANT 1+2 + Bluetooth ANT 2
10	LTE + NR + WLAN 6 GHz ANT 1 + Bluetooth ANT 1
11	LTE + NR + WLAN 6 GHz ANT 1 + Bluetooth ANT 2
12	LTE + NR + WLAN 6 GHz ANT 2 + Bluetooth ANT 1
13	LTE + NR + WLAN 6 GHz ANT 2 + Bluetooth ANT 2
14	LTE + NR + WLAN 6 GHz ANT 1+2 + Bluetooth ANT 1
15	LTE + NR + WLAN 6 GHz ANT 1+2 + Bluetooth ANT 2

10.2. SAR Summation Analysis

SAR Summation Analysis

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. When the sum of SAR of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (1.6 W/kg for SAR_{1g} and 4.0 W/kg for SAR_{10g}), the simultaneous transmission SAR is not required. When the sum of SAR is greater than the SAR limit, SAR test exclusion is determined by the SPLSR.

Head / Body-worn / Hotspot Single Band +WLAN/BT:

Test Mode	Exposure Position	1-12											1+2-12		1+3+11		1+4	1+5+11	1+5+12		1+6+11		1+6+12		1+7+11		1+7+12		1+8+11		1+8+12		1+9+11		1+9+12		1+10+11		1+10+12	
		Max WWAN		WLAN 2.4 GHz ANT 1		WLAN 2.4 GHz ANT 2		WLAN 2.4 GHz ANT 1+2		Max WLAN 5 GHz ANT 1		Max WLAN 5 GHz ANT 2		Max WLAN 5 GHz ANT 1+2		Max WLAN 6 GHz ANT 1		Max WLAN 6 GHz ANT 2		Max WLAN 6 GHz ANT 1+2		Bluetooth ANT 1		Bluetooth ANT 2		ΣSAR _{1g} (W/kg)		ΣSAR _{10g} (W/kg)		ΣSAR _{1g} (W/kg)		ΣSAR _{10g} (W/kg)		ΣSAR _{1g} (W/kg)		ΣSAR _{10g} (W/kg)				
		SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)					
Head	Right Cheek	0.60	0.41	0.17	0.30	0.27	0.16	0.26	0.14	0.06	0.18	0.00	0.00	1.01	0.77	0.90	0.87	0.87	0.76	0.76	0.86	0.86	0.86	0.74	0.74	0.66	0.66	0.66	0.66	0.78	0.78									
	Right Titled	0.48	0.30	0.16	0.25	0.27	0.20	0.31	0.16	0.07	0.20	0.00	0.00	0.76	0.64	0.73	0.75	0.75	0.68	0.68	0.78	0.79	0.84	0.84	0.66	0.66	0.66	0.66	0.66	0.66										
	Left Cheek	0.62	0.17	0.35	0.38	0.40	0.21	0.39	0.26	0.18	0.26	0.00	0.00	0.79	0.97	1.00	1.02	1.02	0.83	0.83	1.01	1.01	0.88	0.88	0.80	0.80	0.80	0.80	0.88	0.88										
	Left Titled	0.33	0.14	0.29	0.33	0.37	0.20	0.39	0.25	0.13	0.26	0.00	0.00	0.47	0.62	0.66	0.70	0.70	0.53	0.53	0.72	0.72	0.58	0.58	0.46	0.46	0.46	0.46	0.59	0.59										
Hotspot	Front Face at 10 mm	0.62	0.17	0.17	0.23	0.07	0.05	0.08	-	-	-	0.00	0.00	0.79	0.79	0.83	0.83	0.69	0.67	0.67	0.70	0.70	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62										
	Rear Face at 10 mm	0.70	0.12	0.16	0.24	0.21	0.21	0.32	-	-	-	0.00	0.00	0.62	0.88	0.94	0.91	0.91	0.91	0.91	1.02	1.02	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.70										
	Left Side at 10 mm	0.60	0.29	0.00	0.36	0.32	0.00	0.33	-	-	-	0.00	0.00	0.89	0.60	0.96	0.92	0.92	0.60	0.60	0.93	0.93	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60										
	Right Side at 10 mm	0.60	0.00	0.16	0.25	0.00	0.23	0.27	-	-	-	0.00	0.00	0.60	0.76	0.85	0.60	0.60	0.83	0.83	0.67	0.67	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60										
	Top Side at 10 mm	0.60	0.13	0.23	0.31	0.15	0.14	0.26	-	-	-	0.00	0.00	0.13	0.23	0.31	0.15	0.15	0.14	0.14	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
	Bottom Side at 10 mm	0.59	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	0.00	0.00	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59	0.59									
Body-worn	Front Face at 5 mm	0.62	0.13	0.14	0.16	0.07	0.06	0.21	0.05	0.04	0.10	0.00	0.00	0.95	0.96	0.98	0.89	0.89	0.88	0.88	1.03	1.03	0.87	0.87	0.86	0.86	0.92	0.92	0.92	0.92										
	Rear Face at 5 mm	0.50	0.31	0.22	0.28	0.40	0.40	0.37	0.28	0.34	0.38	0.00	0.00	1.21	1.12	1.16	1.30	1.30	1.30	1.30	1.27	1.27	1.18	1.18	1.24	1.24	1.28	1.28	1.28	1.28										

Head / Body-worn / Hotspot EN-DC + WLAN/BT:

Test Mode	Exposure Position	0-11											0+1+2+12		0+1+3+11		0+1+4	0+1+5+11	0+1+5+12		0+1+6+11		0+1+6+12		0+1+7+11		0+1+7+12		0+1+8+11		0+1+8+12		0+1+9+11		0+1+9+12		0+1+10+11		0+1+10+12	
		Max LTE		Max NR		WLAN 2.4 GHz ANT 1		WLAN 2.4 GHz ANT 2		WLAN 2.4 GHz ANT 1+2		Max WLAN 5 GHz ANT 1		Max WLAN 5 GHz ANT 2		Max WLAN 5 GHz ANT 1+2		Max WLAN 6 GHz ANT 1		Max WLAN 6 GHz ANT 2		Max WLAN 6 GHz ANT 1+2		Bluetooth ANT 1		Bluetooth ANT 2		ΣSAR _{1g} (W/kg)		ΣSAR _{10g} (W/kg)		ΣSAR _{1g} (W/kg)		ΣSAR _{10g} (W/kg)		ΣSAR _{1g} (W/kg)		ΣSAR _{10g} (W/kg)		
		SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)	SAR _{1g} (W/kg)	SAR _{10g} (W/kg)					
Head	Right Cheek	0.58	0.60	0.41	0.17	0.30	0.27	0.19	0.26	0.14	0.06	0.14	0.00	0.00	1.59	1.35	1.48	1.45	1.45	1.37	1.37	1.44	1.44	1.32	1.32	1.24	1.24	1.32	1.32											
	Right Titled	0.48	0.24	0.30	0.16	0.25	0.27	0.19	0.31	0.16	0.07	0.16	0.00	0.00	1.02	0.88	0.97	0.99	0.99	0.91	0.91	1.03	1.03	0.88	0.88	0.79	0.79	0.88	0.88											
	Left Cheek	0.62	0.57	0.17	0.35	0.38	0.40	0.23	0.39	0.26	0.18	0.25	0.00	0.00	1.36	1.54	1.57	1.59	1.09	1.42	1.42	1.58	1.58	1.45	1.45	1.37	1.37	1.44	1.44											
	Left Titled	0.33	0.21	0.14	0.29	0.33	0.37	0.23	0.39	0.25	0.12	0.24	0.00	0.00	0.68	0.83	0.87	0.91	0.91	0.77	0.77	0.93	0.93	0.79	0.79	0.66	0.66	0.73	0.73											
Hotspot	Front Face at 10 mm	0.32	0.34	0.17	0.17	0.21	0.07	0.05	0.08	-	-	-	0.00	0.00	0.83	0.83	0.87	0.73	0.73	0.71	0.71	0.74	0.74	0.66	0.66	0.66	0.66	0.66	0.66											
	Rear Face at 10 mm	0.34	0.34	0.12	0.16	0.24	0.21	0.21	0.32	-	-	-	0.00	0.00	0.80	0.86	0.92	0.89	0.89	0.89	0.89	1.00	1.00	0.68	0.68	0.68	0.68	0.68	0.68											
	Left Side at 10 mm	0.59	0.59	0.29	0.00	0.36	0.32	0.00	0.33	-	-	-	0.00	0.00	1.17	1.18	1.54	1.50	1.50	1.18	1.18	1.51	1.51	1.18	1.18	1.18	1.18	1.18	1.18											
	Right Side at 10 mm	0.59	0.60	0.00	0.16	0.25	0.00	0.23	0.27	-	-	-	0.00	0.00	1.19	1.35	1.44	1.19	1.19	1.42	1.42	1.46	1.46	1.19	1.19	1.19	1.19	1.19	1.19											
	Top Side at 10 mm	0.00	0.00	0.13	0.23	0.31	0.15	0.14	0.26	-	-	-	0.00	0.00	0.13	0.23	0.31	0.15	0.15	0.14	0.14	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00										
	Bottom Side at 10 mm	0.46	0.59	0.00	0.00	0.00	0.00	0.00	0.00	-	-	-	0.00	0.00	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05										
Body-worn	Front Face at 5 mm	0.58	0.65	0.13	0.14	0.16	0.07	0.06	0.21	0.05	0.04	0.10	0.00	0.00	1.36	1.37	1.39	1.30	1.30	1.29	1.29	1.44	1.44	1.28	1.28	1.27	1.27	1.33	1.33											
	Rear Face at 5 mm	0.58	0.60	0.31	0.22	0.28	0.40	0.40	0.37	0.28	0.34	0.38	0.00	0.00	1.49	1.40	1.46	1.58	1.58	1.58	1.58	1.55	1.55	1.46	1.46	1.52	1.52	1.56	1.56											

Note. Since the sum of the SAR of all simultaneously transmitting band does not exceed the limit value, we represent it by the sum of the maximum values.

Extremity Single Band +WLAN/BT:

Exposure Position	1	2	3	4	5	6	7	1+2	1+3	1+4	1+5	1+6	1+7
	Max WWAN	Max WLAN 5 GHz ANT 1	Max WLAN 5 GHz ANT 2	Max WLAN 5 GHz ANT 1+2	Max WLAN 6 GHz ANT 1	Max WLAN 6 GHz ANT 2	Max WLAN 6 GHz ANT 1+2	ΣSAR _{10g} (W/kg)	ΣSAR _{10g} (W/kg)	ΣSAR _{10g} (W/kg)	ΣSAR _{10g} (W/kg)	ΣSAR _{10g} (W/kg)	ΣSAR _{10g} (W/kg)
Front Face	0.22	0.04	0.05	0.04	0.03	0.06	0.03	0.26	0.27	0.26	0.25	0.28	0.25
Rear Face	0.33	0.20	0.26	0.18	0.14	0.15	0.24	0.53	0.59	0.51	0.47	0.48	0.57
Left Side	1.47	0.67	0.00	0.81	0.29	0.00	0.20	2.14	1.47	2.28	1.76	1.47	1.67
Right Side	0.00	0.00	0.65	0.35	0.00	0.28	0.27	0.00	0.65	0.35	0.00	0.28	0.27
Top Side	0.00	0.13	0.15	0.10	0.08	0.13	0.11	0.13	0.15	0.10	0.08	0.13	0.11
Bottom Side	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Extremity EN-DC +WLAN/BT:

Exposure Position	0	1	2	3	4	5	6	7	0+1+2	0+1+3	0+1+4	0+1+5	0+1+6	0+1+7
	Max LTE	Max NR	Max WLAN 5 GHz ANT 1	Max WLAN 5 GHz ANT 2	Max WLAN 5 GHz ANT 1+2	Max WLAN 6 GHz ANT 1	Max WLAN 6 GHz ANT 2	Max WLAN 6 GHz ANT 1+2	Σ SAR _{10g} (W/kg)	Σ SAR _{10g} (W/kg)	Σ SAR _{10g} (W/kg)	Σ SAR _{10g} (W/kg)	Σ SAR _{10g} (W/kg)	Σ SAR _{10g} (W/kg)
	SAR _{10g} (W/kg)	SAR _{10g} (W/kg)	SAR _{10g} (W/kg)	SAR _{10g} (W/kg)	SAR _{10g} (W/kg)	SAR _{10g} (W/kg)	SAR _{10g} (W/kg)	SAR _{10g} (W/kg)						
Front Face	0.11	0.22	0.04	0.05	0.04	0.03	0.06	0.03	0.37	0.38	0.37	0.36	0.39	0.36
Rear Face	0.18	0.33	0.20	0.26	0.18	0.14	0.15	0.24	0.71	0.77	0.69	0.65	0.66	0.75
Left Side	0.72	1.47	0.67	0.00	0.81	0.29	0.00	0.20	2.86	2.19	3.00	2.48	2.19	2.39
Right Side	0.00	0.00	0.00	0.65	0.35	0.00	0.28	0.27	0.00	0.65	0.35	0.00	0.28	0.27
Top Side	0.00	0.00	0.13	0.15	0.10	0.08	0.13	0.11	0.13	0.15	0.10	0.08	0.13	0.11
Bottom Side	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Note. Since the sum of the SAR of all simultaneously transmitting band does not exceed the limit value, we represent it by the sum of the maximum values.

11. Test Equipment

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Cal. Date	Cal.Period
SPEAG	750 MHz System Validation Kit	D750V3	1222	Aug. 21, 2023	1 year
SPEAG	835 MHz System Validation Kit	D835V2	4d291	Aug. 21, 2023	1 year
SPEAG	1800 MHz System Validation Kit	D1800V2	2d167	Jul. 12, 2023	1 year
SPEAG	1900 MHz System Validation Kit	D1900V2	5d111	Sep. 21, 2023	1 year
SPEAG	2300 MHz System Validation Kit	D2300V2	1005	Jul. 11, 2023	1 year
SPEAG	2450 MHz System Validation Kit	D2450V2	1087	Aug. 18, 2023	1 year
SPEAG	2600 MHz System Validation Kit	D2600V2	1197	Aug. 18, 2023	1 year
SPEAG	3500 MHz System Validation Kit	D3500V2	1013	Sep. 20, 2023	1 year
SPEAG	3700 MHz System Validation Kit	D3700V2	1034	Sep. 20, 2023	1 year
SPEAG	3900 MHz System Validation Kit	D3900V2	1014	Sep. 20, 2023	1 year
SPEAG	5 GHz System Validation Kit	D5GHzV2	1358	Aug. 22, 2023	1 year
SPEAG	6.5 GHz System Validation Kit	D6.5GHzV2	1081	Aug. 16, 2023	1 year
SPEAG	5G Verification Source	10 GHz	1060	Aug. 21, 2023	1 year
SPEAG	Dosimetric E-Field Probe	EUmmWV4	9639	Aug. 18, 2023	1 year
SPEAG	Dosimetric E-Field Probe	EX3DV4	7650	May. 22, 2023	1 year
SPEAG	Dosimetric E-Field Probe	EX3DV4	7756	Aug. 24, 2023	1 year
SPEAG	Dosimetric E-Field Probe	EX3DV4	7737	Jun. 05, 2023	1 year
SPEAG	Dosimetric E-Field Probe	EX3DV4	7757	Aug. 22, 2023	1 year
SPEAG	Data Acquisition Electronics	DAE4	1669	May. 23, 2023	1 year
SPEAG	Data Acquisition Electronics	DAE4	1741	Aug. 23, 2023	1 year
SPEAG	Data Acquisition Electronics	DAE4	1742	Aug. 17, 2023	1 year
SPEAG	Data Acquisition Electronics	DAE4	1743	Aug. 17, 2023	1 year
Anritsu	Radio Communication Analyzer	MT8821C	6272374573	Jan. 05, 2023	1 year
Anritsu	Radio Communication Analyzer	MT8000A	6272368745	Jan. 06, 2023	1 year
Anritsu	Radio Communication Analyzer	MT8870A	6272488631	Sep. 11, 2023	1 year
Keysight	Network Analyzer	E5080B	MY59202161	Feb. 18, 2023	1 year
Agilent	Wideband Radio Communication Tester	E5515C	GB47020167	Sep. 15, 2023	1 year
SPEAG	Dielectric Probe Kit	DAK-3.5	1219	Jan. 19, 2023	1 year
SPEAG	Dielectric Probe Kit	DAKS_VNA R140	0010318	May. 22, 2023	1 year
SPEAG	Dielectric Probe Kit	DAKS-3.5	1101	May. 23, 2023	1 year
SPEAG	Dielectric Probe Kit	DAKS_VNA R140B	22420002	Dec. 08, 2022	1 year
SPEAG	Dielectric Probe Kit	DAKS-3.5	1158	Dec. 14, 2022	1 year
SPEAG	POWERSOURCE1	SE UMS 160 CA	4244	May. 16, 2023	1 year
Keysight	Spectrum Analyzer	N9010B	MY59071418	Mar. 20, 2023	1 year
Agilent	Power Sensor	8481H	3318A20779	May. 25, 2023	1 year
Agilent	Signal Generator	E8257D	MY44320425	Feb. 17, 2023	1 year
Testo	Thermometer	608-H1	83288312	Jun. 02, 2023	1 year
Mini-Circuits	Dual Directional Coupler	ZCDC20-5R263-S+	E69806	NCR	
EMCI	Power Amplifier	EMC2830-P	980880	NCR	
Attenuator	INMET	18AH-03	S180301	NCR	

Note: CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, attenuator, coupler, or filter were connected to a calibrated source to determine the losses of the measurement path. The power meter offset was then adjusted to compensate for the measurement system losses. This level offset is stored within the power meter before measurements are made. This calibration verification procedure applies to output power measurements. The calibrated reading is then taken directly from the power meter after compensation of the losses for all final power measurements.

Test Engineer : Joanna Chen, Jordan Chen, Mars Chang, Raymond Wu, Ida Chen

12. Measurement Uncertainty

Per KDB Publication 865664 D01, SAR measurement uncertainty analysis is required when the highest measured 1g SAR is ≥ 1.5 W/kg and the highest measured 10g SAR is ≥ 3.75 W/kg. The expanded SAR measurement uncertainty must be $\leq 30\%$, for a confidence interval of $k = 2$. Since the highest measured SAR was < 1.5 W/kg for 1g and < 3.75 W/kg for 10g for all frequency bands, the measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval.

***** End of Report *****