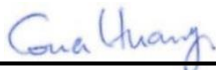


Power Density Evaluation Report

FCC ID : A4RGGH2X
Equipment : Phone
Model Name : GGH2X, GC15S
Applicant : Google LLC
1600 Amphitheatre Parkway,
Mountain View, CA, 94043 USA
Standard : FCC 47 CFR Part 2 (2.1093)

The product was received on Jan. 04, 2024 and testing was started from Jan. 12, 2024 and completed on Feb. 09, 2024. We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample provide by manufacturer and the test data has been evaluated in accordance with the test procedures given in 47 CFR part2.1093 and has been pass the FCC requirement.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full.



Approved by: Cona Huang / Deputy Manager



Sporton International Inc. EMC & Wireless Communications Laboratory
No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan



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Appendix A. Plots of System Performance Check
Appendix B. Plots of Power Density Measurement
Appendix C. DASY Calibration Certificate
Appendix D. Setup Photo



History of this test report

Report No.	Version	Description	Issued Date
FA3D2001B	01	Initial issue of report	May 15, 2024



1. Summary

The maximum measured average power density found during testing for Google LLC, Phone, are as follows.

Standalone transmission				Simultaneous transmission with other transmitters
RF Transmitter		Measured PD (mW/cm²)	Reported PD (mW/cm²)	Summation of Exposure Ratio
5G FR2	n258	0.507	0.75	0.993
	n260	0.392	0.75	
	n261	0.312	0.75	
Result		PASS		

This device is compliance with human exposure to RF radiation limit (1.0 mW/cm²) specified in FCC 47 CFR part1.1310

Reviewed by: Jason Wang
Report Producer: Daisy Peng

2. Guidance Applied

The Power Density testing specification, method, and procedure for this device is in accordance with the following standards, if the KDB standards were not list within TAF approval, because it is included in the KDB 447498.

- FCC 47 CFR Part 2.1091
- FCC 47 CFR Part 2.1093
- FCC KDB 865664 D02 SAR Reporting v01r02
- FCC KDB 447498 D01 General RF Exposure Guidance v06
- FCC KDB 648474 D04 SAR Evaluation Considerations for Wireless Handsets v01r03
- TCBC workshop notes
- IEC TR 63170



3. Equipment Under Test (EUT) Information

3.1 General Information

Product Feature & Specification	
Applicant Name	Google LLC
Equipment Name	Phone
Model Name	GGH2X, GC15S
FCC ID	A4RGGH2X
Wireless Technology and Frequency Range	GSM850: 824.2 MHz ~ 848.8 MHz GSM1900: 1850.2 MHz ~ 1909.8 MHz WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n12 : 699 MHz ~ 716 MHz 5G NR n14 : 788 MHz ~ 798 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n26 : 814 MHz ~ 849 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n70 : 1695 MHz ~ 1710 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3700 MHz ~ 3980 MHz, 3450MHz ~ 3550MHz 5G NR n78: 3700 MHz ~ 3800 MHz, 3450MHz ~ 3550MHz 5G NR n258 : 24.25 GHz~27.5 GHz 5G NR n260 : 37 GHz~40 GHz 5G NR n261 : 27.5 GHz~28.35 GHz NTN Band 23: 2000 MHz ~2020 MHz NTN Band 255: 1626.5 MHz ~ 1660.5 MHz WLAN 2.4 GHz Band: 2400 MHz ~ 2483.5 MHz WLAN 5.2 GHz Band: 5150 MHz ~ 5250 MHz WLAN 5.3 GHz Band: 5250 MHz ~ 5350 MHz WLAN 5.6 GHz Band: 5470 MHz ~ 5725 MHz WLAN 5.8 GHz Band: 5725 MHz ~ 5850 MHz WLAN 5.9 GHz Band: 5850 MHz ~ 5895 MHz WLAN 6E: 5925 MHz ~ 6425 MHz, 6425 MHz ~ 6525 MHz, 6525 MHz ~ 6875 MHz, 6875 MHz ~ 7125 MHz Bluetooth: 2400 MHz ~ 2483.5 MHz NFC: 13.56 MHz WPC: 110 kHz ~ 148.5 kHz(Rx) UWB: 6489.6 MHz, 7987.2 MHz Thread: 2405 MHz ~ 2480 MHz
Mode	GSM/GPRS/EGPRS UMTS: RMC/AMR 12.2Kbps, HSDPA, HSUPA LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM NTN: BPSK,QPSK WLAN:802.11a/b/g/n/ac/ax/be HT20/HT40/VHT20/VHT40/VHT80/VHT160/HE20/HE40/HE80/HE160/EHT20/EHT40/EHT80/EHT160 Bluetooth BR/EDR/LE/CS NFC: ASK WPC: ASK UWB: BPM-BPSK/HPSK Thread: QPSK

4. RF Exposure Limits

4.1 Uncontrolled Environment

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

4.2 Controlled Environment

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. The exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

The criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure above 6GHz to radio frequency (RF) radiation as specified in §1.1310.

General Population Basic restriction for power density for frequencies between 1.5GHz and 100 GHz is $1.0 \text{ mW/cm}^2 = 10 \text{ W/m}^2$

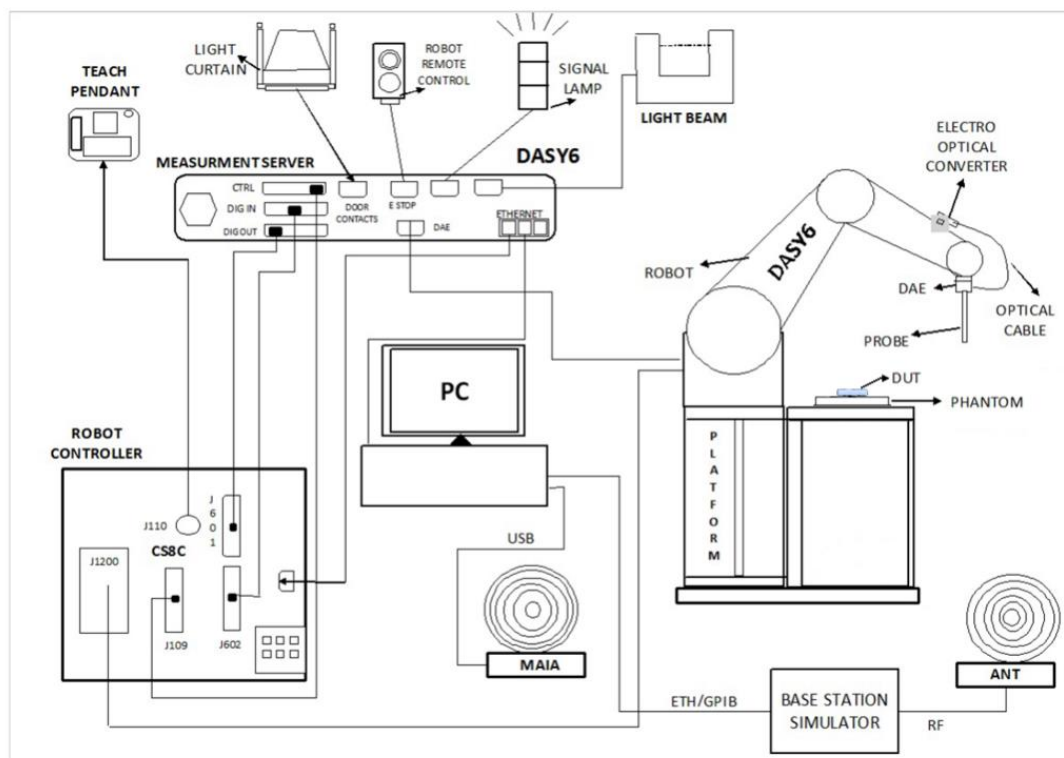
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f ²)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	824/f	2.19/f	*(180/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500			f/1500	30
1500-100,000			1.0	30

Table 1

5. System Description and Setup

The system to be used for the near field power density measurement

- SPEAG DASY6 system
- SPEAG cDASY6 5G module software
- EUmWVx probe
- 5G Phantom cover



5.1 Test Site Location

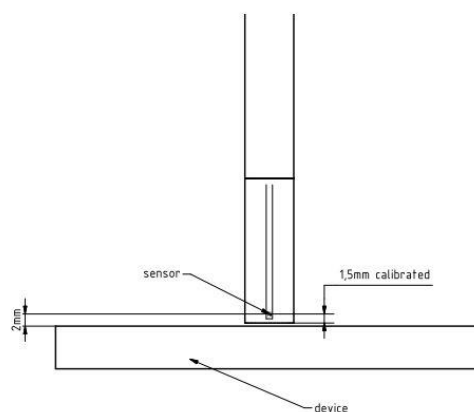
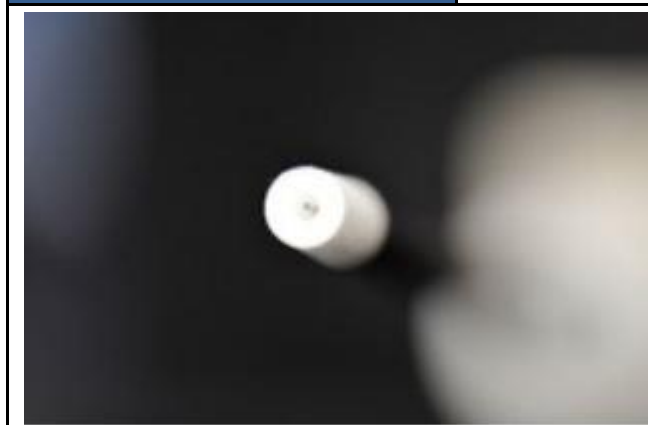
Sporton Lab and below test site location are accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC test.

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	TW1190 No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan
Test Site No.	SAR01-HY

5.2 EUmmWave Probe / E-Field 5G Probe

The probe design allows measurements at distances as small as 2 mm from the sensors to the surface of the device under test (DUT). The typical sensor to probe tip distance is 1.5 mm.

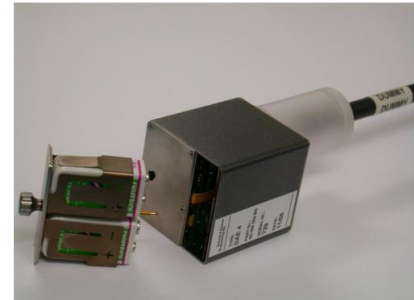
Frequency	750 MHz – 110 GHz
Probe Overall Length	320 mm
Probe Body Diameter	8.0 mm
Tip Length	23.0 mm
Tip Diameter	8.0 mm
Probe's two dipoles length	0.9 mm – Diode loaded
Dynamic Range	< 20 V/m - 10000 V/m with PRE-10 (min < 50 V/m - 3000 V/m)
Position Precision	< 0.2 mm
Distance between diode sensors and probe's tip	1.5 mm
Minimum Mechanical separation between probe tip and a Surface	0.5 mm
Applications	E-field measurements of 5G devices and other mm-wave transmitters operating above 10GHz in < 2 mm distance from device (free-space) Power density, H-field and far-field analysis using total field reconstruction.
Compatibility	cDASY6 + 5G-Module SW1.0 and higher



5.3 Data Acquisition Electronics (DAE)

The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock.

The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.



5.4 Scan configuration

Fine-resolution scans on 2 different planes are performed to reconstruct the E- and H-fields as well as the power density; the z-distance between the 2 planes is set to $\lambda/4$.

The (x, y) grid step is also set $\lambda/4$, the grid extent is set to sufficiently large to identify the field pattern and the peak.

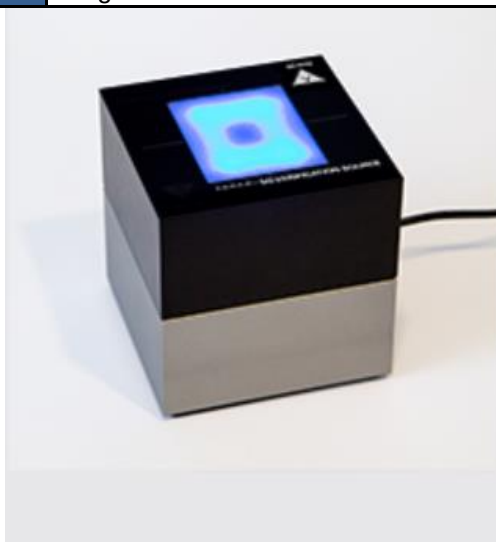
6. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	5G Verification Source	30GHz	1007	Nov. 16, 2023	Nov. 15, 2024
SPEAG	5G Verification Source	30GHz	1009	May. 19, 2023	May. 18, 2024
SPEAG	EUmmWV Probe Tip Protection	EUmmWV4	9461	Oct. 12, 2023	Oct. 11, 2024
SPEAG	Data Acquisition Electronics	DAE4	854	Aug. 17, 2023	Aug. 16, 2024
TESTO	Hygro meter	608-H1	45256952	Nov. 02, 2023	Nov. 01, 2024
Anritsu	Spectrum Analyzer	MS2830A	6201396378	Jul. 10, 2023	Jul. 09, 2024
Custom Microwave	Standard Horn antenna	M15RH	V91113-A	NCR	NCR

7. System Verification Source

The System Verification sources at 30 GHz and above comprise horn-antennas and very stable signal generators.

Model	Ka-band horn antenna
Calibrated frequency:	30 GHz at 10mm from the case surface
Frequency accuracy	± 100 MHz
E-field polarization	linear
Harmonics	-20 dBc
Total radiated power	14 dBm
Power stability	0.05 dB
Power consumption	5 W
Size	100 x 100 x 100 mm
Weight	1 kg



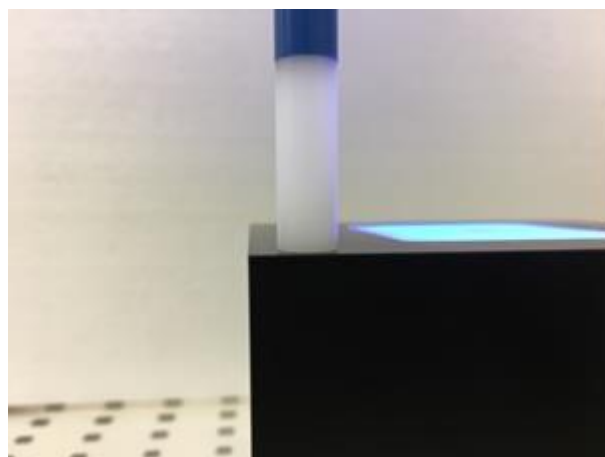
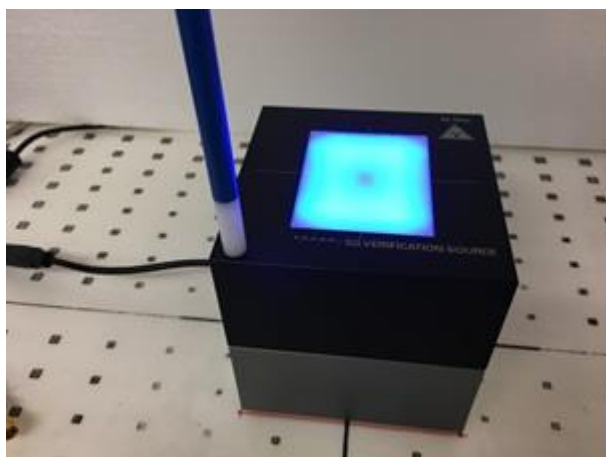
8. Power Density System Verification

The system performance check verifies that the system operates within its specifications.

The EUT is replaced by a calibrated source, the same spatial resolution, measurement region and the test separation used in the calibration was applied to system check. Through visual inspection into the measured power density distribution, both spatially (shape) and numerically (level) have no noticeable difference. The measured results should be within 0.66dB of the calibrated targets.

Frequency [GHz]	Grid step	Grid extent X/Y [mm]	Measurement points
10	$0.25 \left(\frac{\lambda}{4}\right)$	120/120	16×16
30	$0.25 \left(\frac{\lambda}{4}\right)$	60/60	24×24
60	$0.25 \left(\frac{\lambda}{4}\right)$	32.5/32.5	26×26
90	$0.25 \left(\frac{\lambda}{4}\right)$	30/30	36×36

Settings for measurement of verification sources



Verification Setup photo

9. System Verification Results

Test Site	Frequency (GHz)	5G Verification Source	Probe S/N	DAE S/N	Distance (mm)	Measured 4 cm^2 (W/m^2)	Targeted 4 cm^2 (W/m^2)	Deviation (dB)	Date
SAR01	30G	30GHz_1009	9461	854	10	30.2	30.8	-0.09	2024/1/12
SAR01	30G	30GHz_1009	9461	854	10	30.6	30.8	-0.03	2024/1/21
SAR01	30G	30GHz_1007	9461	854	10	35.7	39.6	-0.45	2024/2/2
SAR01	30G	30GHz_1007	9461	854	10	36.6	39.6	-0.34	2024/2/9

Remark:

- According to 2017 TCB workshop guidance, The mmWave System check is also required before each series of continuous measurement and, as applicable, repeated at least weekly

9.1 Computation of the Electric Field Polarization Ellipse

For the numerical description of an arbitrarily oriented ellipse in three-dimensional space, five parameters are needed: the semi-major axis (a), the semi-minor axis (b), two angles describing the orientation of the normal vector of the ellipse (ϕ , θ), and one angle describing the tilt of the semi-major axis (ψ). For the two extreme cases, i.e., circular and linear polarizations, three parameters only (a , ϕ and θ) are sufficient for the description of the incident field.

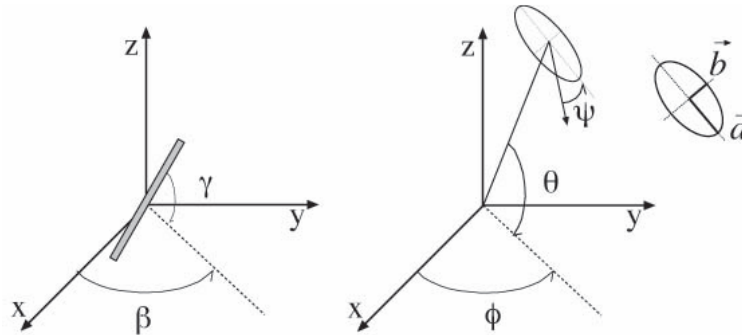


Illustration of the angles used for the numerical description of the sensor and the orientation of an ellipse in 3-D space.

For the reconstruction of the ellipse parameters from measured data, the problem can be reformulated as a nonlinear search problem. The semi-major and semi-minor axes of an elliptical field can be expressed as functions of the three angles (ϕ , θ and ψ). The parameters can be uniquely determined towards minimizing the error based on least-squares for the given set of angles and the measured data. In this way, the number of free parameters is reduced from five to three, which means that at least three sensor readings are necessary to gain sufficient information for the reconstruction of the ellipse parameters. However, to suppress the noise and increase the reconstruction accuracy, it is desirable that the system of equations be over determined. The solution to use a probe consisting of two sensors angled by r_1 and r_2 toward the probe axis and to perform measurements at three angular positions of the probe, i.e., at β_1 , β_2 and β_3 , results in over-determinations by a factor of two. If there is a need for more information or increased accuracy, more rotation angles can be added. The reconstruction of the ellipse parameters can be separated into linear and non-linear parts that are best solved by the Givens algorithm combined with a downhill simplex algorithm. To minimize the mutual coupling, sensor angles are set with a shift of 90 degree ($r_2 = r_1 + 90$ degree), and to simplify, the first rotation angle of the probe (β_1) can be set to 0 degree.

9.2 Total Field and Power Flux Density Reconstruction

Computation of the power density in general requires knowledge of the electric and magnetic field amplitudes and phases in the plane of incidence. Reconstruction of these quantities from pseudo-vector E-field measurements is feasible, as they are constrained by Maxwell's equations. SPEAG have developed a reconstruction approach based on the Gerchberg-Saxton algorithm, which benefits from the availability of the E-field polarization ellipse information obtained with the EummWV2 probe.

The average of the reconstructed power density is evaluated over a circular area in each measurement plane. Two average power density values can be computed, the average total power density and the average incident power density, and the average total power density is used to determine compliance.

- $|Re\{S\}|$ is the total Poynting vector
- $\mathbf{n} \cdot Re\{S\}$ is the normal Poynting vector

The software post-processing reports to values, "S avg tot" and "S avg inc". "S avg tot" represents average total power density (all three xyz components included), and "S avg inc" represents average normal power density. The average total power density "S avg tot" is reported to determine the device compliance.

9.3 Test Positions

Close Mode							
Band	Antenna Module	S1 (Front)	S2 (Back)	S3 (Left)	S4 (Right)	S5 (Top)	S6 (Bottom)
n258/260/n261	Plane A sub-module	V	V	V	V	V	X
	Plane B sub-module	V	V	V	V	V	X

Open Mode							
Band	Antenna Module	S1 (Front)	S2 (Back)	S3 (Left)	S4 (Right)	S5 (Top)	S6 (Bottom)
n258/260/n261	Plane A sub-module	V	V	X	V	V	X
	Plane B sub-module	V	V	X	V	V	X

- From the Part 0 and simulation report, beam IDs with highest PD and corresponding Plimit were selected to be tested for each antenna module and for each frequency band.
- PD is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge.

10. RF Exposure Evaluation Results

- The PD test was performed of a 2mm separation between sensor and EUT surface (the probe tip is 0.5mm to the EUT surface).
- According to TCBC Workshop in October 2018, 4 cm² averaging area are used.
- This device is enabled with Samsung S.LSI TAS feature, S.LSI TAS will manage and ensure LTE and 5G simultaneous transmission is compliant. The validation of the time-averaging algorithm and compliance under the Tx varying transmission scenario for WWAN technologies are reported in Part 2 report.
- Pimit parameter for 5G mmW NR radio was calculated in RF Exposure Part 0 test report.
- TAS algorithm makes use of the target power per slot in determining consumed SAR. The EIRP control can maintain the required amount of power for either CW tone or actual waveform to ensure the accuracy of actual transmit power. Plimit derived from CW tone signals can be confirmed to apply irrespective of the waveform, therefore the device was configured to transmit CW wave signal for testing.
- Run PD test, from the beam ID with the highest simulated for selected side at middle channel
 - Horizontal polarization (H-only), CW tone signal.
 - Vertical polarization (V-only), CW tone signal.
 - Horizontal + Vertical polarization (H+V) , CW tone signal
 - If step b to c result > 50% limit, then repeat for 2nd highest beam ID. If 2nd beam ID result is also > 50% limit, then repeat for 3rd beam ID
 - For Maximum among 2)–3), test low and high channel
 - For Maximum among 2)–4), test other sides, which is within 2.5 cm from the mmwave antenna module
 - Apply the ratio from simulation to scale PD values@2 mm separation distance to PD values@10 mm separation distance.
 Repeat steps a)-f) for the rest of the bands and plane
- It's illustrated in Part 0 report that, for 5G mmW NR since there is total design-related uncertainty arising from TxAGC and device-to-device variation, the worst-case RF exposure should be determined by accounting for this device uncertainty of 2.3 dB, as well as PD design target of 4.42 W/m². Therefore, 5G mmW NR RF exposure for this DUT is evaluated by reported PD calculated as:

$$\text{Reported PD} = \text{PD design target} + 2.3 \text{ dB} = 7.5 \text{ W/m}^2 = 0.75 \text{ mW/cm}^2$$



FCC RF Exposure Report

Report No. : FA3D2001B

Test Number	Antenna Module	H	V	Band	Frequency (GHz)	Mode	Exposure Surface	Input Power limit	Test Separation (mm)	Modulation	Epeak (V/m)	Hpeak (A/m)	Measured results Savg inc 4cm^2 (W/m2)	Measured results Savg tot 4cm^2 (W/m2)
01	Plane A sub-module	5	-	n258	24.75	Open	Top (S5)	11.38	2mm	CW	88.7	0.171	2.2	2.93
	Plane A sub-module	-	4	n258	24.75	Open	Top (S5)	11.38	2mm	CW	56.2	0.146	1.57	1.96
	Plane A sub-module	3	3	n258	24.75	Open	Top (S5)	11.38	2mm	CW	109	0.229	4.03	5.07
	Plane A sub-module	5	5	n258	24.75	Open	Front (S1)_Visor	11.38	2mm	CW	47.2	0.137	1.74	2.07
	Plane A sub-module	3	3	n258	24.75	Open	Back (S2)	11.38	2mm	CW	48.6	0.101	0.956	1.37
	Plane A sub-module	6	6	n258	24.75	Open	Right (S3)	11.38	2mm	CW	9.63	0.025	0.095	0.099
	Plane A sub-module	3	3	n258	24.75	Close	Top (S5)	11.38	2mm	CW	93.3	0.231	3.67	4.66
	Plane A sub-module	3	3	n258	24.75	Close	Front (S1)	11.38	2mm	CW	38.1	0.095	0.956	1.46
	Plane A sub-module	5	5	n258	24.75	Close	Back (S2)_Visor	11.38	2mm	CW	39.1	0.091	1.02	1.28
	Plane A sub-module	6	6	n258	24.75	Close	Right (S3)	11.38	2mm	CW	9	0.031	0.086	0.187
	Plane A sub-module	1	1	n258	24.75	Close	Left (S4)	11.38	2mm	CW	17.6	0.047	0.52	0.533
	Plane A sub-module	2	2	n258	24.25	Open	Top (S5)	11.38	2mm	CW	55.4	0.164	1.95	2.16
	Plane A sub-module	3	3	n258	25.25	Open	Top (S5)	11.38	2mm	CW	71.8	0.165	1.8	2.22
	Plane A sub-module	3	3	n258	25.25	Open	Top (S5)	11.38	2mm	CW	71.8	0.165	1.8	2.22
02	Plane B sub-module	2	-	n258	24.75	Open	Front (S1)_Visor	11.37	2mm	CW	40.7	0.096	1.11	1.21
	Plane B sub-module	-	1	n258	24.75	Open	Front (S1)_Visor	11.37	2mm	CW	36.8	0.091	0.749	0.901
	Plane B sub-module	4	4	n258	24.75	Open	Front (S1)_Visor	11.37	2mm	CW	53.9	0.124	1.37	1.62
	Plane B sub-module	5	5	n258	24.75	Open	Back (S2)	11.37	2mm	CW	18.1	0.04	0.133	0.149
	Plane B sub-module	6	6	n258	24.75	Open	Right (S3)	11.37	2mm	CW	8.28	0.029	0.067	0.083
	Plane B sub-module	4	4	n258	24.75	Open	Top (S5)	11.37	2mm	CW	35.6	0.09	1.19	1.29
	Plane B sub-module	4	4	n258	24.75	Close	Back (S2)_Visor	11.37	2mm	CW	46.5	0.105	1.16	1.39
	Plane B sub-module	1	1	n258	24.75	Close	Front (S1)	11.37	2mm	CW	9.7	0.031	0.108	0.113
	Plane B sub-module	4	4	n258	24.75	Close	Top (S5)	11.37	2mm	CW	39.8	0.091	1.21	1.46
	Plane B sub-module	1	1	n258	24.75	Close	Right (S3)	11.37	2mm	CW	9.48	0.028	0.1	0.123
	Plane B sub-module	2	2	n258	24.75	Close	Left (S4)	11.37	2mm	CW	12.3	0.036	0.213	0.234
	Plane B sub-module	4	4	n258	24.25	Open	Front (S1)_Visor	11.37	2mm	CW	45.4	0.098	1.01	1.17
	Plane B sub-module	1	1	n258	25.25	Open	Front (S1)_Visor	11.37	2mm	CW	45.9	0.127	1.12	1.31
	Plane B sub-module	1	1	n258	25.25	Open	Front (S1)_Visor	11.37	2mm	CW	45.9	0.127	1.12	1.31
02	Plane A sub-module	4	-	n260	38.5	Open	Top (S5)	13.33	2mm	CW	63	0.135	1.18	1.42
	Plane A sub-module	-	1	n260	38.5	Open	Top (S5)	13.33	2mm	CW	68.1	0.175	1.47	1.88
	Plane A sub-module	4	4	n260	38.5	Open	Top (S5)	13.33	2mm	CW	92.8	0.214	3.05	3.7
	Plane A sub-module	0	0	n260	38.5	Open	Front (S1)_Visor	13.33	2mm	CW	39.4	0.089	0.809	0.91
	Plane A sub-module	2	2	n260	38.5	Open	Back (S2)	13.33	2mm	CW	42	0.087	0.975	1.3
	Plane A sub-module	5	5	n260	38.5	Open	Right (S3)	13.33	2mm	CW	6.91	0.022	0.042	0.045
	Plane A sub-module	1	1	n260	38.5	Close	Top (S5)	13.33	2mm	CW	79.1	0.19	1.94	2.44
	Plane A sub-module	2	2	n260	38.5	Close	Front (S1)	13.33	2mm	CW	28.6	0.059	0.639	0.708
	Plane A sub-module	0	0	n260	38.5	Close	Back (S2)_Visor	13.33	2mm	CW	32	0.098	0.701	0.783
	Plane A sub-module	5	5	n260	38.5	Close	Right (S3)	13.33	2mm	CW	7.04	0.025	0.071	0.074
	Plane A sub-module	2	2	n260	38.5	Close	Left (S4)	13.33	2mm	CW	18.6	0.048	0.441	0.482
	Plane A sub-module	2	2	n260	37.0	Open	Top (S5)	13.33	2mm	CW	94.3	0.251	3.34	3.92
	Plane A sub-module	4	4	n260	40.0	Open	Top (S5)	13.33	2mm	CW	113	0.258	3.15	3.55
	Plane A sub-module	4	4	n260	40.0	Open	Top (S5)	13.33	2mm	CW	113	0.258	3.15	3.55
02	Plane B sub-module	2	-	n260	38.5	Open	Front (S1)_Visor	11.49	2mm	CW	54.7	0.153	1.23	1.39
	Plane B sub-module	-	1	n260	38.5	Open	Front (S1)_Visor	11.49	2mm	CW	30.9	0.071	0.408	0.51
	Plane B sub-module	4	4	n260	38.5	Open	Front (S1)_Visor	11.49	2mm	CW	80.4	0.21	2.82	3.17
	Plane B sub-module	5	5	n260	38.5	Open	Back (S2)	11.49	2mm	CW	14.2	0.042	0.085	0.108
	Plane B sub-module	6	6	n260	38.5	Open	Right (S3)	11.49	2mm	CW	5.22	0.021	0.025	0.031
	Plane B sub-module	4	4	n260	38.5	Open	Top (S5)	11.49	2mm	CW	29	0.08	0.731	0.772
	Plane B sub-module	0	0	n260	38.5	Close	Back (S2)_Visor	11.49	2mm	CW	71.7	0.193	1.58	1.91
	Plane B sub-module	2	2	n260	38.5	Close	Front (S1)	11.49	2mm	CW	8.48	0.028	0.065	0.067
	Plane B sub-module	1	1	n260	38.5	Close	Top (S5)	11.49	2mm	CW	28.6	0.072	0.524	0.587
	Plane B sub-module	5	5	n260	38.5	Close	Right (S3)	11.49	2mm	CW	7.24	0.027	0.062	0.065
	Plane B sub-module	2	2	n260	38.5	Close	Left (S4)	11.49	2mm	CW	16.4	0.04	0.236	0.252
	Plane B sub-module	1	1	n260	37.0	Open	Front (S1)_Visor	11.49	2mm	CW	63.8	0.158	1.52	1.75
	Plane B sub-module	1	1	n260	40.0	Open	Front (S1)_Visor	11.49	2mm	CW	64	0.157	1.33	1.51
	Plane B sub-module	1	1	n260	40.0	Open	Front (S1)_Visor	11.49	2mm	CW	64	0.157	1.33	1.51



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	Plane A sub-module	4	-	n261	27.925	Open	Top (S5)	12.57	2mm	CW	77.2	0.174	1.78	2.19
	Plane A sub-module	-	6	n261	27.925	Open	Top (S5)	12.57	2mm	CW	49.2	0.126	0.979	1.32
	Plane A sub-module	4	4	n261	27.925	Open	Top (S5)	12.57	2mm	CW	76	0.197	2	2.51
	Plane A sub-module	3	3	n261	27.925	Open	Front (S1)_Visor	12.57	2mm	CW	40.6	0.103	0.975	1.33
	Plane A sub-module	2	2	n261	27.925	Open	Back (S2)	12.57	2mm	CW	38.5	0.096	0.915	1.06
	Plane A sub-module	1	1	n261	27.925	Open	Right (S3)	12.57	2mm	CW	9.17	0.032	0.066	0.072
	Plane A sub-module	4	4	n261	27.925	Close	Top (S5)	12.57	2mm	CW	74	0.165	2.15	2.45
	Plane A sub-module	6	6	n261	27.925	Close	Front (S1)	12.57	2mm	CW	21.6	0.057	0.402	0.446
	Plane A sub-module	3	3	n261	27.925	Close	Back (S2)_Visor	12.57	2mm	CW	37.6	0.085	0.868	1.2
	Plane A sub-module	1	1	n261	27.925	Close	Right (S3)	12.57	2mm	CW	7.9	0.026	0.084	0.089
	Plane A sub-module	2	2	n261	27.925	Close	Left (S4)	12.57	2mm	CW	10.2	0.03	0.125	0.134
03	Plane A sub-module	4	4	n261	27.5	Open	Top (S5)	12.57	2mm	CW	92.6	0.237	2.52	3.12
	Plane A sub-module	4	4	n261	28.35	Open	Top (S5)	12.57	2mm	CW	74.9	0.169	2.25	2.67
	Plane B sub-module	5	-	n261	27.925	Open	Front (S1)_Visor	11.21	2mm	CW	39	0.10	1.17	1.48
	Plane B sub-module	-	1	n261	27.925	Open	Front (S1)_Visor	11.21	2mm	CW	38.1	0.08	0.629	0.765
	Plane B sub-module	5	5	n261	27.925	Open	Front (S1)_Visor	11.21	2mm	CW	41.9	0.111	1.39	1.73
	Plane B sub-module	3	3	n261	27.925	Open	Back (S2)	11.21	2mm	CW	14.4	0.029	0.094	0.122
	Plane B sub-module	3	3	n261	27.925	Open	Right (S3)	11.21	2mm	CW	7.18	0.022	0.047	0.064
	Plane B sub-module	3	3	n261	27.925	Open	Top (S5)	11.21	2mm	CW	45	0.129	1.16	1.67
	Plane B sub-module	5	5	n261	27.925	Close	Back (S2)_Visor	11.21	2mm	CW	40	0.103	1.05	1.19
	Plane B sub-module	3	3	n261	27.925	Close	Front (S1)	11.21	2mm	CW	11.9	0.03	0.116	0.14
	Plane B sub-module	3	3	n261	27.925	Close	Top (S5)	11.21	2mm	CW	39.1	0.101	0.739	1.2
	Plane B sub-module	3	3	n261	27.925	Close	Right (S3)	11.21	2mm	CW	7.14	0.024	0.079	0.082
	Plane B sub-module	2	2	n261	27.925	Close	Left (S4)	11.21	2mm	CW	10.9	0.03	0.138	0.149
	Plane B sub-module	6	6	n261	27.5	Open	Front (S1)_Visor	11.21	2mm	CW	42.2	0.11	1.21	1.48
	Plane B sub-module	5	5	n261	28.35	Open	Front (S1)_Visor	11.21	2mm	CW	38.2	0.102	1.22	1.36

Conformity:

The test results with all measurement uncertainty excluded is presented in accordance with the regulation limits or requirements declared by manufacturers.

Disclaimer:

The declared of product specification for EUT presented in the report are provided by the manufacturer, and the manufacturer takes all the responsibilities for the accuracy of product specification.

11. 5G NR + LTE + WLAN + BT Sim-Tx analysis

In 5G NR + LTE + WLAN + BT simultaneous transmission, 5G NR FR2 and LTE/FR1 transmission are managed and controlled by Samsung S.LSI TAS feature, while the RF exposure from WLAN and BT radios is managed using legacy approach, i.e., through a fixed power back-off if needed.

Since WLAN and BT do not employ time-averaging, 1gSAR and 10gSAR measurement for WLAN and BT need to be conducted at their corresponding rated power following current FCC test procedures to determine reported SAR values.

Since WLAN and BT do not employ time-averaging, 1gSAR and 10gSAR measurement for WLAN and BT need to be conducted at their corresponding rated power following current FCC test procedures to determine reported SAR values.

TAS managed and controlled for Multi-RATs (5G NR + LTE)

The power ratio factors are g1 and g2 for LTE/FR1 and FR2 respectively. The main purpose of these power ratio factors is to split the available SAR budget among different RATs, so $g1 + g2 \leq 1$. The value of g1 is computed based on the need of the LTE/FR1 anchor and can be changed if the anchor changes its power request. Based on the SAR Budget portion allocated to the anchor, the value of g2 will be computed. At steady state (where all RATs are being on for a while), the allocated power ratio factors will guarantee that the total exposure ratio never exceeds the highest exposure of either one.

The reported time-averaged PD is applicable for the worst-surface of the device, and for other surfaces the reported PD is determined as below

1. Calculate ratio of simulated PD for desired surface to simulated PD of worst surface for a given beam
 2. Repeat 1 to obtain ratios for all supported beams, and determine maximum ratio
 3. Repeat 1~2 to obtain the corresponding worst-case PD for other surfaces which are needed for TER analysis.
- *For body-worn and hotspot scenario, if SAR was measured at 15mm and 10mm, respectively, then the worst-case PD at 15mm and 10mm separation distance should be determined per surface as*
 - $15mm_worst_case_PD = PD_ratio_15mm_to_2mm * reported\ time_averaged\ PD$
 - $10mm_worst_case_PD = PD_ratio_10mm_to_2mm * reported\ time_averaged\ PD$

12. Standalone and Simultaneous-Tx combination

<Closed mode>

Exposure Condition	Mode	Capable TX Configurations	WWAN Power	WiFi Power	BT Power	
Head	WWAN Standalone	WWAN	Index 2			
	WiFi Standalone	WiFi 2.4G SISO (Ant3 or Ant4)		Index1-1		
		WiFi 2.4G MIMO/CDD (Ant4+3)				
		WiFi 5G MIMO (Ant3+4)				
		WiFi 6E MIMO (Ant3+4)				
		WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 5G MIMO (Ant3+4)		Index1-2 (RSDB)		
		WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 6E MIMO (Ant3+4)				
		WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 5G MIMO (Ant3+4)				
		WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 6E MIMO (Ant3+4)				
	WiFi + BT/Thread	WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4)		Index1-1	Index1	
		WiFi 5G MIMO (Ant3+4) + Bluetooth/Thread (Ant3)				
		WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4+3)				
		WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4)				
		WiFi 6E MIMO (Ant3+4) + Bluetooth/Thread (Ant3)				
		WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4+3)				
	WWAN + WiFi	WWAN + WiFi 2.4G SISO (Ant3 or Ant4)		Index2-1		
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)				
		WWAN + WiFi 5G MIMO (Ant3+4)				
		WWAN + WiFi 6E MIMO (Ant3+4)				
		WWAN + WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 5G MIMO (Ant3+4)		Index2-2 (RSDB)		
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 5G MIMO (Ant3+4)				
		WWAN + WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 6E MIMO (Ant3+4)				
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 6E MIMO (Ant3+4)				
	WWAN + BT/Thread	WWAN + Bluetooth (Ant4)	Index 3		Index1	
		WWAN + Bluetooth/Thread (Ant3)				
		WWAN + Bluetooth (Ant4+3)				
	WWAN + WiFi + BT	WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4)			Index2-1	Index1
		WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant3)				
		WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4+3)				
		WWAN + WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4)				
		WWAN + WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant3)				
		WWAN + WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4+3)				
Body/Extremity	WWAN Standalone	WWAN + NFC	Index 5			
	WiFi Standalone	WiFi 2.4G SISO (Ant3 or Ant4) + NFC		Index3-1		
		WiFi 2.4G MIMO/CDD (Ant4+3) + NFC				
		WiFi 5G MIMO (Ant3+4) + NFC				
		WiFi 6E MIMO (Ant3+4) + NFC				
		WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 5G MIMO (Ant3+4) + NFC		Index3-2 (RSDB)		
		WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 5G MIMO (Ant3+4) + NFC				
		WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 6E MIMO (Ant3+4) + NFC				
		WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 6E MIMO (Ant3+4) + NFC				
	BT/Thread standalone	Bluetooth (Ant4) + NFC			Index4	
		Bluetooth/Thread (Ant3) + NFC				
		Bluetooth (Ant4+3) + NFC				
	WiFi + BT/Thread	WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4) + NFC		Index3-1	Index3	
		WiFi 5G MIMO (Ant3+4) + Bluetooth/Thread (Ant3) + NFC				
		WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4+3) + NFC				
		WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4) + NFC				
		WiFi 6E MIMO (Ant3+4) + Bluetooth/Thread (Ant3) + NFC				
WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4+3) + NFC						
WWAN + WiFi	WWAN + WiFi 2.4G SISO (Ant3 or Ant4) + NFC	Index 6	Index4-1			



		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3) + NFC		Index4-2 (RSDB)	
		WWAN + WiFi 5G MIMO (Ant3+4) + NFC			
		WWAN + WiFi 6E MIMO (Ant3+4) + NFC			
		WWAN + WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 5G MIMO (Ant3+4) + NFC			
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 5G MIMO (Ant3+4) + NFC			
		WWAN + WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 6E MIMO (Ant3+4) + NFC			
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 6E MIMO (Ant3+4) + NFC			
		WWAN + BT/Thread			
	WWAN + Bluetooth/Thread (Ant3) + NFC				
	WWAN + Bluetooth (Ant4+3) + NFC				
	WWAN + WiFi + BT/Thread	WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4) + NFC		Index4-1	Index2
		WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth/Thread (Ant3) + NFC			
		WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4+3) + NFC			
		WWAN + WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4) + NFC			
		WWAN + WiFi 6E MIMO (Ant3+4) + Bluetooth/Thread (Ant3) + NFC			
		WWAN + WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4+3) + NFC			
Hotspot	WWAN + WiFi	WWAN + WiFi 2.4G SISO (Ant3 or Ant4)	Index 4	Index4-1	
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)			
		WWAN + WiFi 5G MIMO (Ant3+4)		Index4-2 (RSDB)	
		WWAN + WiFi 6E MIMO (Ant3+4)			
		WWAN + WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 5G MIMO (Ant3+4)			
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 5G MIMO (Ant3+4)			
	WWAN + BT/Thread	WWAN + Bluetooth (Ant4)			Index2
		WWAN + Bluetooth/Thread (Ant3)			
		WWAN + Bluetooth (Ant4+3)			
	WWAN + WiFi + BT/Thread	WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4)		Index4-1	Index2
		WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth/Thread (Ant3)			
		WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4+3)			

<Open mode>

Exposure Condition	Mode	Capable TX Configurations	WWAN Power	WiFi Power	BT Power	
Head	WWAN Standalone	WWAN	Index 7			
	WiFi Standalone	WiFi 2.4G SISO (Ant3 or Ant4)		Index5-1		
		WiFi 2.4G MIMO/CDD (Ant4+3)				
		WiFi 5G MIMO (Ant3+4)				
		WiFi 6E MIMO (Ant3+4)				
		WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 5G MIMO (Ant3+4)		Index5-2 (RSDB)		
		WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 6E MIMO (Ant3+4)				
		WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 5G MIMO (Ant3+4)				
		WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 6E MIMO (Ant3+4)				
	WiFi + BT/Thread	WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4)		Index5-1	Index5	
		WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant3)				
		WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4+3)				
		WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4)				
		WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant3)				
		WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4+3)				
	WWAN + WiFi	WWAN + WiFi 2.4G SISO (Ant3 or Ant4)		Index5-1		
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)				
		WWAN + WiFi 5G MIMO (Ant3+4)				
		WWAN + WiFi 6E MIMO (Ant3+4)				
		WWAN + WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 5G MIMO (Ant3+4)		Index5-2 (RSDB)		
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 5G MIMO (Ant3+4)				
		WWAN + WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 6E MIMO (Ant3+4)				
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 6E MIMO (Ant3+4)				
	WWAN + BT/Thread	WWAN + Bluetooth (Ant4)	Index 7		Index5	
		WWAN + Bluetooth/Thread (Ant3)				
		WWAN + Bluetooth (Ant4+3)				
	WWAN + WiFi + BT/Thread	WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4)		Index5-1	Index5	
		WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant3)				
		WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4+3)				
		WWAN + WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4)				
		WWAN + WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant3)				
		WWAN + WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4+3)				
Body/Extremity	WWAN Standalone	WWAN + NFC	Index 10			
	WiFi Standalone	WiFi 2.4G SISO (Ant3 or Ant4) + NFC		Index8-1		
		WiFi 2.4G MIMO/CDD (Ant4+3) + NFC				
		WiFi 5G MIMO (Ant3+4) + NFC				
		WiFi 6E MIMO (Ant3+4) + NFC				
		WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 5G MIMO (Ant3+4) + NFC		Index8-2 (RSDB)		
		WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 5G MIMO (Ant3+4) + NFC				
		WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 6E MIMO (Ant3+4) + NFC				
		WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 6E MIMO (Ant3+4) + NFC				
	BT standalone/Thread	Bluetooth (Ant4) + NFC			Index8	
		Bluetooth/Thread (Ant3) + NFC				
		Bluetooth (Ant4+3) + NFC				
	WiFi + BT/Thread	WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4) + NFC		Index8-1	Index7	
		WiFi 5G MIMO (Ant3+4) + Bluetooth/Thread (Ant3) + NFC				
		WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4+3) + NFC				
		WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4) + NFC				
		WiFi 6E MIMO (Ant3+4) + Bluetooth/Thread (Ant3) + NFC				
		WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4+3) + NFC				
	WWAN + WiFi	WWAN + WiFi 2.4G SISO (Ant3 or Ant4) + NFC	Index 11	Index9-1		
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3) + NFC				
		WWAN + WiFi 5G MIMO (Ant3+4) + NFC				

		/Thread WWAN + WiFi 6E MIMO (Ant3+4) + NFC		Index9-2 (RSDB)	
		WWAN + WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 5G MIMO (Ant3+4) + NFC			
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 5G MIMO (Ant3+4) + NFC			
		WWAN + WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 6E MIMO (Ant3+4) + NFC			
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 6E MIMO (Ant3+4) + NFC			
	WWAN + BT/Thread	WWAN + Bluetooth (Ant4) + NFC			Index7
		WWAN + Bluetooth/Thread (Ant3) + NFC			
		WWAN + Bluetooth (Ant4+3) + NFC			
	WWAN + WiFi + BT/Thread	WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4) + NFC		Index9-1	Index6
		WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth/Thread (Ant3) + NFC			
		WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4+3) + NFC			
		WWAN + WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4) + NFC			
		WWAN + WiFi 6E MIMO (Ant3+4) + Bluetooth/Thread (Ant3) + NFC			
		WWAN + WiFi 6E MIMO (Ant3+4) + Bluetooth (Ant4+3) + NFC			
Hotspot	WWAN + WiFi	WWAN + WiFi 2.4G SISO (Ant3 or Ant4)	Index 9	Index9-1	
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3)			
		WWAN + WiFi 5G MIMO (Ant3+4)			
		WWAN + WiFi 6E MIMO (Ant3+4)			
		WWAN + WiFi 2.4G SISO (Ant3 or Ant4) + WiFi 5G MIMO (Ant3+4)			
		WWAN + WiFi 2.4G MIMO/CDD (Ant4+3) + WiFi 5G MIMO (Ant3+4)			
	WWAN + BT	WWAN + Bluetooth (Ant4)		Index9-2 (RSDB)	Index6
		WWAN + Bluetooth/Thread (Ant3)			
		WWAN + Bluetooth (Ant4+3)			
	WWAN + WiFi + BT/Thread	WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4)		Index9-1	Index6
		WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth/Thread (Ant3)			
		WWAN + WiFi 5G MIMO (Ant3+4) + Bluetooth (Ant4+3)			

General Note:

1. The FR2 plimit is fixed regardless of use cases.
2. The WLAN, Bluetooth and Thrad SAR test results referenced from the Part1 SAR Report No. FA3D2001D and using for Sim-Tx analysis with FR2.
3. The Sim-Tx configuration combination include in operation description will be match the title in the below Sum-Tx evaluation table
4. For LTE+5GNR+WiFi+BT/Thread, due to the TAS control, simultaneous transmission compliance can be assessed on LTE+WiFi/BT/Thread and 5GNR +WiFi/BT/Thread, and the validation of the time-averaging algorithm and compliance under the Tx varying transmission scenario for WWAN technologies are reported in Part 2 report. For 5GNR FR2 with WiFi, total exposure ratio is calculated as below formula, LTE/FR1 + WIFI/BT/Thread simultaneous transmission analysis referring from the report of FCC ID: A4RGGH2X (Sporton SAR Report No. FA3D2001D).

The $\left[\sum \text{ of (the highest measured or estimated SAR for each standalone antenna configuration adjusted for maximum tune-up tolerance) / 1.6 W/kg} \right] + \left[\sum \text{ of MPE ratios} \right] \text{ is } \leq 1.0.$

12.1 Simultaneous transmission analysis for WiFi/BT + 5G NR

*Ratio is highest ratio of (PD on desired exposure plane) / (PD on worst-surface) out of all beams and out of all channels illustrated in Power Density Simulation Report.

<Close Mode>

NR Band	Antenna Module	Exposure condition	Exposure Surface		Evaluation	Ratio*	PD_Design Target +Total uncertainty (W/m ²)	PD_Design Target +Total uncertainty)*Ratio (W/m ²)
					Distance			
					(mm)			
n258	Plane A sub-module	Head	Front Surface	S1	2 mm	0.42	7.5	3.15
n258	Plane B sub-module		Front Surface	S1	2 mm	0.23	7.5	1.74
n260	Plane A sub-module		Front Surface	S1	2 mm	0.37	7.5	2.78
n260	Plane B sub-module		Front Surface	S1	2 mm	0.24	7.5	1.77
n261	Plane A sub-module		Front Surface	S1	2 mm	0.34	7.5	2.52
n261	Plane B sub-module		Front Surface	S1	2 mm	0.07	7.5	0.52

NR Band	Antenna Module	Exposure condition	Exposure Surface		Evaluation	Ratio*	PD_Design Target +Total uncertainty (W/m ²)	PD_Design Target +Total uncertainty)*Ratio (W/m ²)
					Distance			
					(mm)			
n258	Plane A sub-module	Body Worn/Hotspot	worst-surface		10 mm	0.50	7.5	3.74
n258	Plane B sub-module		worst-surface		10 mm	0.53	7.5	3.98
n260	Plane A sub-module		worst-surface		10 mm	0.67	7.5	5.00
n260	Plane B sub-module		worst-surface		10 mm	0.46	7.5	3.46
n261	Plane A sub-module		worst-surface		10 mm	0.47	7.5	3.50
n261	Plane B sub-module		worst-surface		10 mm	0.48	7.5	3.64

NR Band	Antenna Module	Exposure condition	Exposure Surface		Evaluation	Ratio*	PD_Design Target +Total uncertainty	PD_Design Target +Total uncertainty)*Ratio
					Distance		(W/m^2)	(W/m^2)*Ratio
					(mm)			
n258	Plane A sub-module	Extremity	Front Surface	S1	2 mm	0.42	7.5	3.15
			Back Surface	S2	2 mm	0.59	7.5	4.40
			Right side	S3	2 mm	0.10	7.5	0.75
			Left side	S4	2 mm	0.04	7.5	0.27
			Top side	S5	2 mm	1.00	7.5	7.50
			Bottom side	S6	2 mm	Excluded		
n258	Plane B sub-module		Front Surface	S1	2 mm	0.23	7.5	1.74
			Back Surface	S2	2 mm	1.00	7.5	7.50
			Right side	S3	2 mm	0.268	7.5	2.01
			Left side	S4	2 mm	0.057	7.5	0.42
			Top side	S5	2 mm	0.694	7.5	5.21
			Bottom side	S6	2 mm	Excluded		
n260	Plane A sub-module		Front Surface	S1	2 mm	0.37	7.5	2.78
			Back Surface	S2	2 mm	0.73	7.5	5.45
			Right side	S3	2 mm	0.17	7.5	1.25
			Left side	S4	2 mm	0.05	7.5	0.34
			Top side	S5	2 mm	1.00	7.5	7.50
			Bottom side	S6	2 mm	Excluded		
n260	Plane B sub-module		Front Surface	S1	2 mm	0.24	7.5	1.77
			Back Surface	S2	2 mm	1.00	7.5	7.50
			Right side	S3	2 mm	0.06	7.5	0.46
			Left side	S4	2 mm	0.05	7.5	0.34
			Top side	S5	2 mm	0.17	7.5	1.25
			Bottom side	S6	2 mm	Excluded		
n261	Plane A sub-module		Front Surface	S1	2 mm	0.34	7.5	2.52
			Back Surface	S2	2 mm	0.55	7.5	4.10
			Right side	S3	2 mm	0.02	7.5	0.18
			Left side	S4	2 mm	0.08	7.5	0.61
			Top side	S5	2 mm	1.00	7.5	7.50
			Bottom side	S6	2 mm	Excluded		
n261	Plane B sub-module		Front Surface	S1	2 mm	0.07	7.5	0.52
			Back Surface	S2	2 mm	1.00	7.5	7.50
			Right side	S3	2 mm	0.05	7.5	0.40
			Left side	S4	2 mm	0.36	7.5	2.71
			Top side	S5	2 mm	0.66	7.5	4.93
			Bottom side	S6	2 mm	Excluded		

<Open Mode>

NR Band	Antenna Module	Exposure condition	Exposure Surface		Evaluation	Ratio*	PD_Design Target +Total uncertainty	PD_Design Target +Total uncertainty)*Ratio
					Distance			
					(mm)			
n258	Plane A sub-module	Head	Front Surface	S1	2 mm	0.56	7.5	4.19
n258	Plane B sub-module		Front Surface	S1	2 mm	1.00	7.5	7.50
n260	Plane A sub-module		Front Surface	S1	2 mm	0.72	7.5	5.37
n260	Plane B sub-module		Front Surface	S1	2 mm	1.00	7.5	7.50
n261	Plane A sub-module		Front Surface	S1	2 mm	0.50	7.5	3.74
n261	Plane B sub-module		Front Surface	S1	2 mm	1.00	7.5	7.50

NR Band	Antenna Module	Exposure condition	Exposure Surface		Evaluation	Ratio*	PD_Design Target +Total uncertainty	PD_Design Target +Total uncertainty)*Ratio
					Distance			
					(mm)			
n258	Plane A sub-module	Body Worn/Hotspot	worst-surface		10 mm	0.55	7.5	4.15
n258	Plane B sub-module		worst-surface		10 mm	0.61	7.5	4.54
n260	Plane A sub-module		worst-surface		10 mm	0.53	7.5	3.99
n260	Plane B sub-module		worst-surface		10 mm	0.34	7.5	2.55
n261	Plane A sub-module		worst-surface		10 mm	0.36	7.5	2.72
n261	Plane B sub-module		worst-surface		10 mm	0.42	7.5	3.18

NR Band	Antenna Module	Exposure condition	Exposure Surface		Evaluation	Ratio*	PD_Design Target	PD_Design Target
					Distance		+Total uncertainty	+Total
					(mm)		(W/m^2)	uncertainty)*Ratio
n258	Plane A sub-module	Extremity	Front Surface	S1	2 mm	0.56	7.5	4.19
			Back Surface	S2	2 mm	0.63	7.5	4.74
			Right side	S3	2 mm	0.03	7.5	0.23
			Left side	S4	2 mm	Excluded		
			Top side	S5	2 mm	1.00	7.5	7.50
			Bottom side	S6	2 mm	Excluded		
n258	Plane B sub-module		Front Surface	S1	2 mm	1.00	7.5	7.50
			Back Surface	S2	2 mm	0.13	7.5	0.97
			Right side	S3	2 mm	0.053	7.5	0.39
			Left side	S4	2 mm	Excluded		
			Top side	S5	2 mm	0.422	7.5	3.16
			Bottom side	S6	2 mm	Excluded		
n260	Plane A sub-module		Front Surface	S1	2 mm	0.72	7.5	5.37
			Back Surface	S2	2 mm	0.52	7.5	3.89
			Right side	S3	2 mm	0.04	7.5	0.29
			Left side	S4	2 mm	Excluded		
			Top side	S5	2 mm	1.00	7.5	7.50
			Bottom side	S6	2 mm	Excluded		
n260	Plane B sub-module		Front Surface	S1	2 mm	1.00	7.5	7.50
			Back Surface	S2	2 mm	0.16	7.5	1.18
			Right side	S3	2 mm	0.03	7.5	0.20
			Left side	S4	2 mm	Excluded		
			Top side	S5	2 mm	0.41	7.5	3.06
			Bottom side	S6	2 mm	Excluded		
n261	Plane A sub-module		Front Surface	S1	2 mm	0.50	7.5	3.74
			Back Surface	S2	2 mm	0.25	7.5	1.87
			Right side	S3	2 mm	0.04	7.5	0.28
			Left side	S4	2 mm	Excluded		
			Top side	S5	2 mm	1.00	7.5	7.50
			Bottom side	S6	2 mm	Excluded		
n261	Plane B sub-module		Front Surface	S1	2 mm	1.00	7.5	7.50
			Back Surface	S2	2 mm	0.06	7.5	0.47
			Right side	S3	2 mm	0.05	7.5	0.37
			Left side	S4	2 mm	Excluded		
			Top side	S5	2 mm	0.30	7.5	2.25
			Bottom side	S6	2 mm	Excluded		



<Head Exposure Condition>

<5G NR FR2, WLAN Index 2-1, BT Index 1_Close Mode>

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio					
			2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3+4	5/6GHz WLAN Ant 3+4	Bluetooth /Thread Ant 3	Bluetooth Ant 4	Bluetooth Ant 3+4	PD	1+8 Summed	2+8 Summed	3+8 Summed	4+5+8 Summed	4+6+8 Summed	4+7+8 Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	4cm ² (W/m ²)						
n258	Antenna Module A	Right Cheek	0.075	0.521	0.529	0.379	0.056	0.284	0.287	3.150	0.362	0.641	0.646	0.587	0.729	0.731
		Right Tilted	0.063	0.749	0.649	0.388	0.077	0.367	0.351	3.150	0.354	0.783	0.721	0.606	0.787	0.777
		Left Cheek	0.105	0.540	0.575	0.302	0.089	0.279	0.302	3.150	0.381	0.653	0.674	0.559	0.678	0.693
		Left Tilted	0.052	0.651	0.602	0.349	0.046	0.344	0.336	3.150	0.348	0.722	0.691	0.562	0.748	0.743
n258	Antenna Module B	Right Cheek	0.075	0.521	0.529	0.379	0.056	0.284	0.287	1.740	0.221	0.500	0.505	0.446	0.588	0.590
		Right Tilted	0.063	0.749	0.649	0.388	0.077	0.367	0.351	1.740	0.213	0.642	0.580	0.465	0.646	0.636
		Left Cheek	0.105	0.540	0.575	0.302	0.089	0.279	0.302	1.740	0.240	0.512	0.533	0.418	0.537	0.552
		Left Tilted	0.052	0.651	0.602	0.349	0.046	0.344	0.336	1.740	0.207	0.581	0.550	0.421	0.607	0.602
n260	Antenna Module A	Right Cheek	0.075	0.521	0.529	0.379	0.056	0.284	0.287	2.780	0.325	0.604	0.609	0.550	0.692	0.694
		Right Tilted	0.063	0.749	0.649	0.388	0.077	0.367	0.351	2.780	0.317	0.746	0.684	0.569	0.750	0.740
		Left Cheek	0.105	0.540	0.575	0.302	0.089	0.279	0.302	2.780	0.344	0.616	0.637	0.522	0.641	0.656
		Left Tilted	0.052	0.651	0.602	0.349	0.046	0.344	0.336	2.780	0.311	0.685	0.654	0.525	0.711	0.706
n260	Antenna Module B	Right Cheek	0.075	0.521	0.529	0.379	0.056	0.284	0.287	1.770	0.224	0.503	0.508	0.449	0.591	0.593
		Right Tilted	0.063	0.749	0.649	0.388	0.077	0.367	0.351	1.770	0.216	0.645	0.583	0.468	0.649	0.639
		Left Cheek	0.105	0.540	0.575	0.302	0.089	0.279	0.302	1.770	0.243	0.515	0.536	0.421	0.540	0.555
		Left Tilted	0.052	0.651	0.602	0.349	0.046	0.344	0.336	1.770	0.210	0.584	0.553	0.424	0.610	0.605
n261	Antenna Module A	Right Cheek	0.075	0.521	0.529	0.379	0.056	0.284	0.287	2.520	0.299	0.578	0.583	0.524	0.666	0.668
		Right Tilted	0.063	0.749	0.649	0.388	0.077	0.367	0.351	2.520	0.291	0.720	0.658	0.543	0.724	0.714
		Left Cheek	0.105	0.540	0.575	0.302	0.089	0.279	0.302	2.520	0.318	0.590	0.611	0.496	0.615	0.630
		Left Tilted	0.052	0.651	0.602	0.349	0.046	0.344	0.336	2.520	0.285	0.659	0.628	0.499	0.685	0.680
n261	Antenna Module B	Right Cheek	0.075	0.521	0.529	0.379	0.056	0.284	0.287	0.520	0.099	0.378	0.383	0.324	0.466	0.468
		Right Tilted	0.063	0.749	0.649	0.388	0.077	0.367	0.351	0.520	0.091	0.520	0.458	0.343	0.524	0.514
		Left Cheek	0.105	0.540	0.575	0.302	0.089	0.279	0.302	0.520	0.118	0.390	0.411	0.296	0.415	0.430
		Left Tilted	0.052	0.651	0.602	0.349	0.046	0.344	0.336	0.520	0.085	0.459	0.428	0.299	0.485	0.480

<5G NR FR2, WLAN Index 2-2 Close Mode>

WWAN Band		Exposure Position	1	2	3	4	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio		
			2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3+4	5/6GHz WLAN Ant 3+4	PD	1+4+8 Summed	2+4+8 Summed	3+4+8 Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	4cm ² (W/m ²)			
n258	Antenna Module A	Right Cheek	0.075	0.260	0.150	0.379	3.150	0.599	0.714	0.646
		Right Tilted	0.063	0.334	0.200	0.388	3.150	0.354	0.524	0.440
		Left Cheek	0.105	0.274	0.178	0.302	3.150	0.381	0.486	0.426
		Left Tilted	0.052	0.318	0.179	0.349	3.150	0.348	0.514	0.427
n258	Antenna Module B	Right Cheek	0.075	0.260	0.150	0.379	1.740	0.221	0.337	0.268
		Right Tilted	0.063	0.334	0.200	0.388	1.740	0.213	0.383	0.299
		Left Cheek	0.105	0.274	0.178	0.302	1.740	0.240	0.345	0.285
		Left Tilted	0.052	0.318	0.179	0.349	1.740	0.207	0.373	0.286
n260	Antenna Module A	Right Cheek	0.075	0.260	0.150	0.379	2.780	0.325	0.441	0.372
		Right Tilted	0.063	0.334	0.200	0.388	2.780	0.317	0.487	0.403
		Left Cheek	0.105	0.274	0.178	0.302	2.780	0.344	0.449	0.389
		Left Tilted	0.052	0.318	0.179	0.349	2.780	0.311	0.477	0.390
n260	Antenna Module B	Right Cheek	0.075	0.260	0.150	0.379	1.770	0.224	0.340	0.271
		Right Tilted	0.063	0.334	0.200	0.388	1.770	0.216	0.386	0.302
		Left Cheek	0.105	0.274	0.178	0.302	1.770	0.243	0.348	0.288
		Left Tilted	0.052	0.318	0.179	0.349	1.770	0.210	0.376	0.289
n261	Antenna Module A	Right Cheek	0.075	0.260	0.150	0.379	2.520	0.299	0.415	0.346
		Right Tilted	0.063	0.334	0.200	0.388	2.520	0.291	0.461	0.377
		Left Cheek	0.105	0.274	0.178	0.302	2.520	0.318	0.423	0.363
		Left Tilted	0.052	0.318	0.179	0.349	2.520	0.285	0.451	0.364
n261	Antenna Module B	Right Cheek	0.075	0.260	0.150	0.379	0.520	0.099	0.215	0.146
		Right Tilted	0.063	0.334	0.200	0.388	0.520	0.091	0.261	0.177
		Left Cheek	0.105	0.274	0.178	0.302	0.520	0.118	0.223	0.163
		Left Tilted	0.052	0.318	0.179	0.349	0.520	0.085	0.251	0.164



<5GNR FR2, WLAN Index 5-1, BT Index 5 Open Mode>

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio					
			2.4GHz WLAN Ant 3 1g SAR (W/kg)	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3+4 1g SAR (W/kg)	5/6GHz WLAN Ant 3+4 1g SAR (W/kg)	Bluetooth /Thread Ant 3 1g SAR (W/kg)	Bluetooth Ant 4 1g SAR (W/kg)	Bluetooth Ant 3+4 1g SAR (W/kg)	PD 4cm ² (W/m ²)	1+8 Summed	2+8 Summed	3+8 Summed	4+5+8 Summed	4+6+8 Summed	4+7+8 Summed
n258	Antenna Module A	Right Cheek	0.129	0.269	0.268	0.163	0.183	0.129	0.144	4.190	0.500	0.587	0.587	0.635	0.602	0.611
		Right Tilted	0.001	0.225	0.229	0.199	0.037	0.110	0.133	4.190	0.420	0.560	0.562	0.567	0.612	0.627
		Left Cheek	0.001	0.358	0.263	0.166	0.124	0.154	0.166	4.190	0.420	0.643	0.583	0.600	0.619	0.627
		Left Tilted	0.001	0.389	0.369	0.198	0.035	0.160	0.189	4.190	0.420	0.662	0.650	0.565	0.643	0.661
n258	Antenna Module B	Right Cheek	0.129	0.269	0.268	0.163	0.183	0.129	0.144	7.500	0.831	0.918	0.918	0.966	0.933	0.942
		Right Tilted	0.001	0.225	0.229	0.199	0.037	0.110	0.133	7.500	0.751	0.891	0.893	0.898	0.943	0.958
		Left Cheek	0.001	0.358	0.263	0.166	0.124	0.154	0.166	7.500	0.751	0.974	0.914	0.931	0.950	0.958
		Left Tilted	0.001	0.389	0.369	0.198	0.035	0.160	0.189	7.500	0.751	0.993	0.981	0.896	0.974	0.992
n260	Antenna Module A	Right Cheek	0.129	0.269	0.268	0.163	0.183	0.129	0.144	5.370	0.618	0.705	0.705	0.753	0.720	0.729
		Right Tilted	0.001	0.225	0.229	0.199	0.037	0.110	0.133	5.370	0.538	0.678	0.680	0.685	0.730	0.745
		Left Cheek	0.001	0.358	0.263	0.166	0.124	0.154	0.166	5.370	0.538	0.761	0.701	0.718	0.737	0.745
		Left Tilted	0.001	0.389	0.369	0.198	0.035	0.160	0.189	5.370	0.538	0.780	0.768	0.683	0.761	0.779
n260	Antenna Module B	Right Cheek	0.129	0.269	0.268	0.163	0.183	0.129	0.144	7.500	0.831	0.918	0.918	0.966	0.933	0.942
		Right Tilted	0.001	0.225	0.229	0.199	0.037	0.110	0.133	7.500	0.751	0.891	0.893	0.898	0.943	0.958
		Left Cheek	0.001	0.358	0.263	0.166	0.124	0.154	0.166	7.500	0.751	0.974	0.914	0.931	0.950	0.958
		Left Tilted	0.001	0.389	0.369	0.198	0.035	0.160	0.189	7.500	0.751	0.993	0.981	0.896	0.974	0.992
n261	Antenna Module A	Right Cheek	0.129	0.269	0.268	0.163	0.183	0.129	0.144	3.740	0.455	0.542	0.542	0.590	0.557	0.566
		Right Tilted	0.001	0.225	0.229	0.199	0.037	0.110	0.133	3.740	0.375	0.515	0.517	0.522	0.567	0.582
		Left Cheek	0.001	0.358	0.263	0.166	0.124	0.154	0.166	3.740	0.375	0.598	0.538	0.555	0.574	0.582
		Left Tilted	0.001	0.389	0.369	0.198	0.035	0.160	0.189	3.740	0.375	0.617	0.605	0.520	0.598	0.616
n261	Antenna Module B	Right Cheek	0.129	0.269	0.268	0.163	0.183	0.129	0.144	7.500	0.831	0.918	0.918	0.966	0.933	0.942
		Right Tilted	0.001	0.225	0.229	0.199	0.037	0.110	0.133	7.500	0.751	0.891	0.893	0.898	0.943	0.958
		Left Cheek	0.001	0.358	0.263	0.166	0.124	0.154	0.166	7.500	0.751	0.974	0.914	0.931	0.950	0.958
		Left Tilted	0.001	0.389	0.369	0.198	0.035	0.160	0.189	7.500	0.751	0.993	0.981	0.896	0.974	0.992

<5GNR FR2, WLAN Index 5-2_Open Mode>

WWAN Band		Exposure Position	1	2	3	4	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio		
			2.4GHz WLAN Ant 3 1g SAR (W/kg)	2.4GHz WLAN Ant 4 1g SAR (W/kg)	2.4GHz WLAN Ant 3+4 1g SAR (W/kg)	5/6GHz WLAN Ant 3+4 1g SAR (W/kg)	PD 4cm ² (W/m ²)	1+4+8	2+4+8	3+4+8
			Summed	Summed	Summed	Summed	Summed	Summed	Summed	Summed
n258	Antenna Module A	Right Cheek	0.129	0.137	0.140	0.163	4.190	0.602	0.607	0.608
		Right Tilted	0.001	0.115	0.120	0.199	4.190	0.420	0.491	0.494
		Left Cheek	0.001	0.182	0.138	0.166	4.190	0.420	0.533	0.505
		Left Tilted	0.001	0.198	0.193	0.198	4.190	0.420	0.543	0.540
n258	Antenna Module B	Right Cheek	0.129	0.137	0.140	0.163	7.500	0.831	0.836	0.838
		Right Tilted	0.001	0.115	0.120	0.199	7.500	0.751	0.822	0.825
		Left Cheek	0.001	0.182	0.138	0.166	7.500	0.751	0.864	0.836
		Left Tilted	0.001	0.198	0.193	0.198	7.500	0.751	0.874	0.871
n260	Antenna Module A	Right Cheek	0.129	0.137	0.140	0.163	5.370	0.618	0.623	0.625
		Right Tilted	0.001	0.115	0.120	0.199	5.370	0.538	0.609	0.612
		Left Cheek	0.001	0.182	0.138	0.166	5.370	0.538	0.651	0.623
		Left Tilted	0.001	0.198	0.193	0.198	5.370	0.538	0.661	0.658
n260	Antenna Module B	Right Cheek	0.129	0.137	0.140	0.163	7.500	0.831	0.836	0.838
		Right Tilted	0.001	0.115	0.120	0.199	7.500	0.751	0.822	0.825
		Left Cheek	0.001	0.182	0.138	0.166	7.500	0.751	0.864	0.836
		Left Tilted	0.001	0.198	0.193	0.198	7.500	0.751	0.874	0.871
n261	Antenna Module A	Right Cheek	0.129	0.137	0.140	0.163	3.740	0.455	0.460	0.462
		Right Tilted	0.001	0.115	0.120	0.199	3.740	0.375	0.446	0.449
		Left Cheek	0.001	0.182	0.138	0.166	3.740	0.375	0.488	0.460
		Left Tilted	0.001	0.198	0.193	0.198	3.740	0.375	0.498	0.495
n261	Antenna Module B	Right Cheek	0.129	0.137	0.140	0.163	7.500	0.831	0.836	0.838
		Right Tilted	0.001	0.115	0.120	0.199	7.500	0.751	0.822	0.825
		Left Cheek	0.001	0.182	0.138	0.166	7.500	0.751	0.864	0.836
		Left Tilted	0.001	0.198	0.193	0.198	7.500	0.751	0.874	0.871

**<Hotspot Exposure Condition>****<5G NR FR2, WLAN Index 4-1, BT Index 2_Close Mode>**

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio					
			2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3+4	5GHz WLAN Ant 3+4	Bluetooth /Thread Ant 3	Bluetooth Ant 4	Bluetooth Ant 3+4	PD	1+8 Summed	2+8 Summed	3+8 Summed	4+5+8 Summed	4+6+8 Summed	4+7+8 Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	4cm ² (W/m ²)						
n258	Antenna Module A	Front	0.001	0.528	0.528	0.065	0.001	0.211	0.242	3.740	0.375	0.704	0.704	0.415	0.547	0.566
		Back	0.081	0.438	0.427	0.280	0.110	0.255	0.332	3.740	0.425	0.648	0.641	0.618	0.708	0.757
		Left side	0.001	0.001	0.001	0.064	0.001	0.001	0.001	3.740	0.375	0.375	0.375	0.415	0.415	0.415
		Right side	0.074	0.043	0.223	0.063	0.099	0.001	0.056	3.740	0.420	0.401	0.513	0.475	0.414	0.448
		Top side	0.001	0.708	0.740	0.296	0.001	0.355	0.235	3.740	0.375	0.817	0.837	0.560	0.781	0.706
		Bottom side								3.740	0.374	0.374	0.374	0.374	0.374	0.374
n258	Antenna Module B	Front	0.001	0.528	0.528	0.065	0.001	0.211	0.242	3.980	0.399	0.728	0.728	0.439	0.571	0.590
		Back	0.081	0.438	0.427	0.280	0.110	0.255	0.332	3.980	0.449	0.672	0.665	0.642	0.732	0.781
		Left side	0.001	0.001	0.001	0.064	0.001	0.001	0.001	3.980	0.399	0.399	0.399	0.439	0.439	0.439
		Right side	0.074	0.043	0.223	0.063	0.099	0.001	0.056	3.980	0.444	0.425	0.537	0.499	0.438	0.472
		Top side	0.001	0.708	0.740	0.296	0.001	0.355	0.235	3.980	0.399	0.841	0.861	0.584	0.805	0.730
		Bottom side								3.980	0.398	0.398	0.398	0.398	0.398	0.398
n260	Antenna Module A	Front	0.001	0.528	0.528	0.065	0.001	0.211	0.242	5.000	0.501	0.830	0.830	0.541	0.673	0.692
		Back	0.081	0.438	0.427	0.280	0.110	0.255	0.332	5.000	0.551	0.774	0.767	0.744	0.834	0.883
		Left side	0.001	0.001	0.001	0.064	0.001	0.001	0.001	5.000	0.501	0.501	0.501	0.541	0.541	0.541
		Right side	0.074	0.043	0.223	0.063	0.099	0.001	0.056	5.000	0.546	0.527	0.639	0.601	0.540	0.574
		Top side	0.001	0.708	0.740	0.296	0.001	0.355	0.235	5.000	0.501	0.943	0.963	0.686	0.907	0.832
		Bottom side								5.000	0.500	0.500	0.500	0.500	0.500	0.500
n260	Antenna Module B	Front	0.001	0.528	0.528	0.065	0.001	0.211	0.242	3.460	0.347	0.676	0.676	0.387	0.519	0.538
		Back	0.081	0.438	0.427	0.280	0.110	0.255	0.332	3.460	0.397	0.620	0.613	0.590	0.680	0.729
		Left side	0.001	0.001	0.001	0.064	0.001	0.001	0.001	3.460	0.347	0.347	0.347	0.387	0.387	0.387
		Right side	0.074	0.043	0.223	0.063	0.099	0.001	0.056	3.460	0.392	0.373	0.485	0.447	0.386	0.420
		Top side	0.001	0.708	0.740	0.296	0.001	0.355	0.235	3.460	0.347	0.789	0.809	0.532	0.753	0.678
		Bottom side								3.460	0.346	0.346	0.346	0.346	0.346	0.346
n261	Antenna Module A	Front	0.001	0.528	0.528	0.065	0.001	0.211	0.242	3.500	0.351	0.680	0.680	0.391	0.523	0.542
		Back	0.081	0.438	0.427	0.280	0.110	0.255	0.332	3.500	0.401	0.624	0.617	0.594	0.684	0.733
		Left side	0.001	0.001	0.001	0.064	0.001	0.001	0.001	3.500	0.351	0.351	0.351	0.391	0.391	0.391
		Right side	0.074	0.043	0.223	0.063	0.099	0.001	0.056	3.500	0.396	0.377	0.489	0.451	0.390	0.424
		Top side	0.001	0.708	0.740	0.296	0.001	0.355	0.235	3.500	0.351	0.793	0.813	0.536	0.757	0.682
		Bottom side								3.500	0.350	0.350	0.350	0.350	0.350	0.350
n261	Antenna Module B	Front	0.001	0.528	0.528	0.065	0.001	0.211	0.242	3.640	0.365	0.694	0.694	0.405	0.537	0.556
		Back	0.081	0.438	0.427	0.280	0.110	0.255	0.332	3.640	0.415	0.638	0.631	0.608	0.698	0.747
		Left side	0.001	0.001	0.001	0.064	0.001	0.001	0.001	3.640	0.365	0.365	0.365	0.405	0.405	0.405
		Right side	0.074	0.043	0.223	0.063	0.099	0.001	0.056	3.640	0.410	0.391	0.503	0.465	0.404	0.438
		Top side	0.001	0.708	0.740	0.296	0.001	0.355	0.235	3.640	0.365	0.807	0.827	0.550	0.771	0.696
		Bottom side								3.640	0.364	0.364	0.364	0.364	0.364	0.364

**<5GNR FR2, WLAN Index 4-2 Close Mode>**

WWAN Band		Exposure Position	1	2	3	4	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio		
			2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3+4	5GHz WLAN Ant 3+4	PD	1+4+8 Summed	2+4+8 Summed	3+4+8 Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	4cm²(W/m²)			
n258	Antenna Module A	Front	0.001	0.255	0.232	0.065	3.740	0.415	0.574	0.560
		Back	0.033	0.196	0.150	0.280	3.740	0.570	0.672	0.643
		Left side	0.001	0.001	0.001	0.064	3.740	0.415	0.415	0.415
		Right side	0.029	0.013	0.076	0.063	3.740	0.432	0.422	0.461
		Top side	0.001	0.341	0.327	0.296	3.740	0.560	0.772	0.763
		Bottom side					3.740	0.374	0.374	0.374
n258	Antenna Module B	Front	0.001	0.255	0.232	0.065	3.980	0.439	0.598	0.584
		Back	0.033	0.196	0.150	0.280	3.980	0.594	0.696	0.667
		Left side	0.001	0.001	0.001	0.064	3.980	0.439	0.439	0.439
		Right side	0.029	0.013	0.076	0.063	3.980	0.456	0.446	0.485
		Top side	0.001	0.341	0.327	0.296	3.980	0.584	0.796	0.787
		Bottom side					3.980	0.398	0.398	0.398
n260	Antenna Module A	Front	0.001	0.255	0.232	0.065	5.000	0.541	0.700	0.686
		Back	0.033	0.196	0.150	0.280	5.000	0.696	0.798	0.769
		Left side	0.001	0.001	0.001	0.064	5.000	0.541	0.541	0.541
		Right side	0.029	0.013	0.076	0.063	5.000	0.558	0.548	0.587
		Top side	0.001	0.341	0.327	0.296	5.000	0.686	0.898	0.889
		Bottom side					5.000	0.500	0.500	0.500
n260	Antenna Module B	Front	0.001	0.255	0.232	0.065	3.460	0.387	0.546	0.532
		Back	0.033	0.196	0.150	0.280	3.460	0.542	0.644	0.615
		Left side	0.001	0.001	0.001	0.064	3.460	0.387	0.387	0.387
		Right side	0.029	0.013	0.076	0.063	3.460	0.404	0.394	0.433
		Top side	0.001	0.341	0.327	0.296	3.460	0.532	0.744	0.735
		Bottom side					3.460	0.346	0.346	0.346
n261	Antenna Module A	Front	0.001	0.255	0.232	0.065	3.500	0.391	0.550	0.536
		Back	0.033	0.196	0.150	0.280	3.500	0.546	0.648	0.619
		Left side	0.001	0.001	0.001	0.064	3.500	0.391	0.391	0.391
		Right side	0.029	0.013	0.076	0.063	3.500	0.408	0.398	0.437
		Top side	0.001	0.341	0.327	0.296	3.500	0.536	0.748	0.739
		Bottom side					3.500	0.350	0.350	0.350
n261	Antenna Module B	Front	0.001	0.255	0.232	0.065	3.640	0.405	0.564	0.550
		Back	0.033	0.196	0.150	0.280	3.640	0.560	0.662	0.633
		Left side	0.001	0.001	0.001	0.064	3.640	0.405	0.405	0.405
		Right side	0.029	0.013	0.076	0.063	3.640	0.422	0.412	0.451
		Top side	0.001	0.341	0.327	0.296	3.640	0.550	0.762	0.753
		Bottom side					3.640	0.364	0.364	0.364

**<5GNR FR2, WLAN Index 9-1, BT Index 6_Open Mode>**

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio					
			2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3+4	5GHz WLAN Ant 3+4	Bluetooth /Thread Ant 3	Bluetooth Ant 4	Bluetooth Ant 3+4	PD	1+8 Summed	2+8 Summed	3+8 Summed	4+5+8 Summed	4+6+8 Summed	4+7+8 Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	4cm ² (W/m ²)						
n258	Antenna Module A	Front	0.325	0.586	0.761	0.345	0.367	0.366	0.367	4.150	0.618	0.781	0.891	0.860	0.859	0.860
		Back	0.228	0.342	0.441	0.211	0.198	0.216	0.200	4.150	0.558	0.629	0.691	0.671	0.682	0.672
		Left side								4.150	0.415	0.415	0.415	0.415	0.415	0.415
		Right side	0.457	0.038	0.347	0.107	0.258	0.024	0.115	4.150	0.701	0.439	0.632	0.643	0.497	0.554
		Top side	0.129	0.365	0.491	0.366	0.057	0.171	0.220	4.150	0.496	0.643	0.722	0.679	0.751	0.781
		Bottom side								4.150	0.415	0.415	0.415	0.415	0.415	0.415
n258	Antenna Module B	Front	0.325	0.586	0.761	0.345	0.367	0.366	0.367	4.540	0.657	0.820	0.930	0.899	0.898	0.899
		Back	0.228	0.342	0.441	0.211	0.198	0.216	0.200	4.540	0.597	0.668	0.730	0.710	0.721	0.711
		Left side								4.540	0.454	0.454	0.454	0.454	0.454	0.454
		Right side	0.457	0.038	0.347	0.107	0.258	0.024	0.115	4.540	0.740	0.478	0.671	0.682	0.536	0.593
		Top side	0.129	0.365	0.491	0.366	0.057	0.171	0.220	4.540	0.535	0.682	0.761	0.718	0.790	0.820
		Bottom side								4.540	0.454	0.454	0.454	0.454	0.454	0.454
n260	Antenna Module A	Front	0.325	0.586	0.761	0.345	0.367	0.366	0.367	3.990	0.602	0.765	0.875	0.844	0.843	0.844
		Back	0.228	0.342	0.441	0.211	0.198	0.216	0.200	3.990	0.542	0.613	0.675	0.655	0.666	0.656
		Left side								3.990	0.399	0.399	0.399	0.399	0.399	0.399
		Right side	0.457	0.038	0.347	0.107	0.258	0.024	0.115	3.990	0.685	0.423	0.616	0.627	0.481	0.538
		Top side	0.129	0.365	0.491	0.366	0.057	0.171	0.220	3.990	0.480	0.627	0.706	0.663	0.735	0.765
		Bottom side								3.990	0.399	0.399	0.399	0.399	0.399	0.399
n260	Antenna Module B	Front	0.325	0.586	0.761	0.345	0.367	0.366	0.367	2.550	0.458	0.621	0.731	0.700	0.699	0.700
		Back	0.228	0.342	0.441	0.211	0.198	0.216	0.200	2.550	0.398	0.469	0.531	0.511	0.522	0.512
		Left side								2.550	0.255	0.255	0.255	0.255	0.255	0.255
		Right side	0.457	0.038	0.347	0.107	0.258	0.024	0.115	2.550	0.541	0.279	0.472	0.483	0.337	0.394
		Top side	0.129	0.365	0.491	0.366	0.057	0.171	0.220	2.550	0.336	0.483	0.562	0.519	0.591	0.621
		Bottom side								2.550	0.255	0.255	0.255	0.255	0.255	0.255
n261	Antenna Module A	Front	0.325	0.586	0.761	0.345	0.367	0.366	0.367	2.720	0.475	0.638	0.748	0.717	0.716	0.717
		Back	0.228	0.342	0.441	0.211	0.198	0.216	0.200	2.720	0.415	0.486	0.548	0.528	0.539	0.529
		Left side								2.720	0.272	0.272	0.272	0.272	0.272	0.272
		Right side	0.457	0.038	0.347	0.107	0.258	0.024	0.115	2.720	0.558	0.296	0.489	0.500	0.354	0.411
		Top side	0.129	0.365	0.491	0.366	0.057	0.171	0.220	2.720	0.353	0.500	0.579	0.536	0.608	0.638
		Bottom side								2.720	0.272	0.272	0.272	0.272	0.272	0.272
n261	Antenna Module B	Front	0.325	0.586	0.761	0.345	0.367	0.366	0.367	3.180	0.521	0.684	0.794	0.763	0.762	0.763
		Back	0.228	0.342	0.441	0.211	0.198	0.216	0.200	3.180	0.461	0.532	0.594	0.574	0.585	0.575
		Left side								3.180	0.318	0.318	0.318	0.318	0.318	0.318
		Right side	0.457	0.038	0.347	0.107	0.258	0.024	0.115	3.180	0.604	0.342	0.535	0.546	0.400	0.457
		Top side	0.129	0.365	0.491	0.366	0.057	0.171	0.220	3.180	0.399	0.546	0.625	0.582	0.654	0.684
		Bottom side								3.180	0.318	0.318	0.318	0.318	0.318	0.318

**<5G NR FR2, WLAN Index 9-2_Open Mode>**

WWAN Band		Exposure Position	1	2	3	4	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio		
			2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3+4	5GHz WLAN Ant 3+4	PD	1+4+8 Summed	2+4+8 Summed	3+4+8 Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	4cm ² (W/m ²)			
n258	Antenna Module A	Front	0.154	0.287	0.359	0.345	4.150	0.727	0.810	0.855
		Back	0.112	0.157	0.203	0.211	4.150	0.617	0.645	0.674
		Left side					4.150	0.415	0.415	0.415
		Right side	0.201	0.014	0.175	0.107	4.150	0.608	0.491	0.591
		Top side	0.053	0.174	0.236	0.366	4.150	0.677	0.753	0.791
		Bottom side					4.150	0.415	0.415	0.415
n258	Antenna Module B	Front	0.154	0.287	0.359	0.345	4.540	0.766	0.849	0.894
		Back	0.112	0.157	0.203	0.211	4.540	0.656	0.684	0.713
		Left side					4.540	0.454	0.454	0.454
		Right side	0.201	0.014	0.175	0.107	4.540	0.647	0.530	0.630
		Top side	0.053	0.174	0.236	0.366	4.540	0.716	0.792	0.830
		Bottom side					4.540	0.454	0.454	0.454
n260	Antenna Module A	Front	0.154	0.287	0.359	0.345	3.990	0.711	0.794	0.839
		Back	0.112	0.157	0.203	0.211	3.990	0.601	0.629	0.658
		Left side					3.990	0.399	0.399	0.399
		Right side	0.201	0.014	0.175	0.107	3.990	0.592	0.475	0.575
		Top side	0.053	0.174	0.236	0.366	3.990	0.661	0.737	0.775
		Bottom side					3.990	0.399	0.399	0.399
n260	Antenna Module B	Front	0.154	0.287	0.359	0.345	2.550	0.567	0.650	0.695
		Back	0.112	0.157	0.203	0.211	2.550	0.457	0.485	0.514
		Left side					2.550	0.255	0.255	0.255
		Right side	0.201	0.014	0.175	0.107	2.550	0.448	0.331	0.431
		Top side	0.053	0.174	0.236	0.366	2.550	0.517	0.593	0.631
		Bottom side					2.550	0.255	0.255	0.255
n261	Antenna Module A	Front	0.154	0.287	0.359	0.345	2.720	0.584	0.667	0.712
		Back	0.112	0.157	0.203	0.211	2.720	0.474	0.502	0.531
		Left side					2.720	0.272	0.272	0.272
		Right side	0.201	0.014	0.175	0.107	2.720	0.465	0.348	0.448
		Top side	0.053	0.174	0.236	0.366	2.720	0.534	0.610	0.648
		Bottom side					2.720	0.272	0.272	0.272
n261	Antenna Module B	Front	0.154	0.287	0.359	0.345	3.180	0.630	0.713	0.758
		Back	0.112	0.157	0.203	0.211	3.180	0.520	0.548	0.577
		Left side					3.180	0.318	0.318	0.318
		Right side	0.201	0.014	0.175	0.107	3.180	0.511	0.394	0.494
		Top side	0.053	0.174	0.236	0.366	3.180	0.580	0.656	0.694
		Bottom side					3.180	0.318	0.318	0.318

**<Body-Worn Exposure Condition>****<5G NR FR2, WLAN Index 4-1, BT Index 2 _Close Mode>**

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio					
			2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3+4	5/6GHz WLAN Ant 3+4	Bluetooth /Thread Ant 3	Bluetooth Ant 4	Bluetooth Ant 3+4	PD	1+8 Summed	2+8 Summed	3+8 Summed	4+5+8 Summed	4+6+8 Summed	4+7+8 Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	4cm ² (W/m ²)						
n258	Antenna Module A	Front	0.001	0.528	0.528	0.087	0.001	0.211	0.242	3.740	0.375	0.704	0.704	0.429	0.560	0.580
		Back	0.081	0.438	0.427	0.233	0.110	0.255	0.332	3.740	0.425	0.648	0.641	0.588	0.679	0.727
n258	Antenna Module B	Front	0.001	0.528	0.528	0.087	0.001	0.211	0.242	3.980	0.399	0.728	0.728	0.453	0.584	0.604
		Back	0.081	0.438	0.427	0.233	0.110	0.255	0.332	3.980	0.449	0.672	0.665	0.612	0.703	0.751
n260	Antenna Module A	Front	0.001	0.528	0.528	0.087	0.001	0.211	0.242	5.000	0.501	0.830	0.830	0.555	0.686	0.706
		Back	0.081	0.438	0.427	0.233	0.110	0.255	0.332	5.000	0.551	0.774	0.767	0.714	0.805	0.853
n260	Antenna Module B	Front	0.001	0.528	0.528	0.087	0.001	0.211	0.242	3.460	0.347	0.676	0.676	0.401	0.532	0.552
		Back	0.081	0.438	0.427	0.233	0.110	0.255	0.332	3.460	0.397	0.620	0.613	0.560	0.651	0.699
n261	Antenna Module A	Front	0.001	0.528	0.528	0.087	0.001	0.211	0.242	3.500	0.351	0.680	0.680	0.405	0.536	0.556
		Back	0.081	0.438	0.427	0.233	0.110	0.255	0.332	3.500	0.401	0.624	0.617	0.564	0.655	0.703
n261	Antenna Module B	Front	0.001	0.528	0.528	0.087	0.001	0.211	0.242	3.640	0.365	0.694	0.694	0.419	0.550	0.570
		Back	0.081	0.438	0.427	0.233	0.110	0.255	0.332	3.640	0.415	0.638	0.631	0.578	0.669	0.717

<5G NR FR2, WLAN Index 4-2 _Close Mode>

WWAN Band		Exposure Position	1	2	3	4	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio		
			2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3+4	5/6GHz WLAN Ant 3+4	PD	1+4+8 Summed	2+4+8 Summed	3+4+8 Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	4cm ² (W/m ²)			
n258	Antenna Module A	Front	0.001	0.255	0.232	0.087	3.740	0.429	0.588	0.573
		Back	0.033	0.196	0.150	0.233	3.740	0.540	0.642	0.613
n258	Antenna Module B	Front	0.001	0.255	0.232	0.087	3.980	0.453	0.612	0.597
		Back	0.033	0.196	0.150	0.233	3.980	0.564	0.666	0.637
n260	Antenna Module A	Front	0.001	0.255	0.232	0.087	5.000	0.555	0.714	0.699
		Back	0.033	0.196	0.150	0.233	5.000	0.666	0.768	0.739
n260	Antenna Module B	Front	0.001	0.255	0.232	0.087	3.460	0.401	0.560	0.545
		Back	0.033	0.196	0.150	0.233	3.460	0.512	0.614	0.585
n261	Antenna Module A	Front	0.001	0.255	0.232	0.087	3.500	0.405	0.564	0.549
		Back	0.033	0.196	0.150	0.233	3.500	0.516	0.618	0.589
n261	Antenna Module B	Front	0.001	0.255	0.232	0.087	3.640	0.419	0.578	0.563
		Back	0.033	0.196	0.150	0.233	3.640	0.530	0.632	0.603

**<5GNR FR2, WLAN Index 9-1, BT Index 6 Open Mode>**

WWAN Band		Exposure Position	1	2	3	4	5	6	7	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio					
			2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3+4	5/6GHz WLAN Ant 3+4	Bluetooth /Thread Ant 3	Bluetooth Ant 4	Bluetooth Ant 3+4	PD	1+8 Summed	2+8 Summed	3+8 Summed	4+5+8 Summed	4+6+8 Summed	4+7+8 Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	4cm ² (W/m ²)						
n258	Antenna Module A	Front	0.325	0.586	0.761	0.332	0.367	0.366	0.367	4.150	0.618	0.781	0.891	0.852	0.851	0.852
		Back	0.228	0.342	0.441	0.247	0.198	0.216	0.200	4.150	0.558	0.629	0.691	0.693	0.704	0.694
n258	Antenna Module B	Front	0.325	0.586	0.761	0.332	0.367	0.366	0.367	4.540	0.657	0.820	0.930	0.891	0.890	0.891
		Back	0.228	0.342	0.441	0.247	0.198	0.216	0.200	4.540	0.597	0.668	0.730	0.732	0.743	0.733
n260	Antenna Module A	Front	0.325	0.586	0.761	0.332	0.367	0.366	0.367	3.990	0.602	0.765	0.875	0.836	0.835	0.836
		Back	0.228	0.342	0.441	0.247	0.198	0.216	0.200	3.990	0.542	0.613	0.675	0.677	0.688	0.678
n260	Antenna Module B	Front	0.325	0.586	0.761	0.332	0.367	0.366	0.367	2.550	0.458	0.621	0.731	0.692	0.691	0.692
		Back	0.228	0.342	0.441	0.247	0.198	0.216	0.200	2.550	0.398	0.469	0.531	0.533	0.544	0.534
n261	Antenna Module A	Front	0.325	0.586	0.761	0.332	0.367	0.366	0.367	2.720	0.475	0.638	0.748	0.709	0.708	0.709
		Back	0.228	0.342	0.441	0.247	0.198	0.216	0.200	2.720	0.415	0.486	0.548	0.550	0.561	0.551
n261	Antenna Module B	Front	0.325	0.586	0.761	0.332	0.367	0.366	0.367	3.180	0.521	0.684	0.794	0.755	0.754	0.755
		Back	0.228	0.342	0.441	0.247	0.198	0.216	0.200	3.180	0.461	0.532	0.594	0.596	0.607	0.597

<5GNR FR2, WLAN Index 9-2 Open Mode>

WWAN Band		Exposure Position	1	2	3	4	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio		
			2.4GHz WLAN Ant 3	2.4GHz WLAN Ant 4	2.4GHz WLAN Ant 3+4	5/6GHz WLAN Ant 3+4	PD	1+4+8 Summed	2+4+8 Summed	3+4+8 Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	4cm ² (W/m ²)			
n258	Antenna Module A	Front	0.154	0.287	0.359	0.332	4.150	0.719	0.802	0.847
		Back	0.112	0.157	0.203	0.247	4.150	0.639	0.668	0.696
n258	Antenna Module B	Front	0.154	0.287	0.359	0.332	4.540	0.758	0.841	0.886
		Back	0.112	0.157	0.203	0.247	4.540	0.678	0.707	0.735
n260	Antenna Module A	Front	0.154	0.287	0.359	0.332	3.990	0.703	0.786	0.831
		Back	0.112	0.157	0.203	0.247	3.990	0.623	0.652	0.680
n260	Antenna Module B	Front	0.154	0.287	0.359	0.332	2.550	0.559	0.642	0.687
		Back	0.112	0.157	0.203	0.247	2.550	0.479	0.508	0.536
n261	Antenna Module A	Front	0.154	0.287	0.359	0.332	2.720	0.576	0.659	0.704
		Back	0.112	0.157	0.203	0.247	2.720	0.496	0.525	0.553
n261	Antenna Module B	Front	0.154	0.287	0.359	0.332	3.180	0.622	0.705	0.750
		Back	0.112	0.157	0.203	0.247	3.180	0.542	0.571	0.599

<5GNR FR2, BT Index 3 Close Mode>

WWAN Band		Exposure Position	5	6	7	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio		
			Bluetooth /Thread Ant 3	Bluetooth Ant 4	Bluetooth Ant 3+4	PD	5+8 Summed	6+8 Summed	7+8 Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	4cm ² (W/m ²)			
n258	Antenna Module A	Front	0.001	0.310	0.241	3.740	0.375	0.568	0.525
		Back	0.110	0.374	0.473	3.740	0.443	0.608	0.670
n258	Antenna Module B	Front	0.001	0.310	0.241	3.980	0.399	0.592	0.549
		Back	0.110	0.374	0.473	3.980	0.467	0.632	0.694
n260	Antenna Module A	Front	0.001	0.310	0.241	5.000	0.501	0.694	0.651
		Back	0.110	0.374	0.473	5.000	0.569	0.734	0.796
n260	Antenna Module B	Front	0.001	0.310	0.241	3.460	0.347	0.540	0.497
		Back	0.110	0.374	0.473	3.460	0.415	0.580	0.642
n261	Antenna Module A	Front	0.001	0.310	0.241	3.500	0.351	0.544	0.501
		Back	0.110	0.374	0.473	3.500	0.419	0.584	0.646
n261	Antenna Module B	Front	0.001	0.310	0.241	3.640	0.365	0.558	0.515
		Back	0.110	0.374	0.473	3.640	0.433	0.598	0.660

**<5G NR FR2, BT Index 7_Open Mode>**

WWAN Band		Exposure Position	5	6	7	8	Reported SAR/1.6 + PD/10 Summation Total Exposure ratio		
			Bluetooth /Thread Ant 3	Bluetooth Ant 4	Bluetooth Ant 3+4	PD	5+8 Summed	6+8 Summed	7+8 Summed
			1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	4cm ² (W/m ²)			
n258	Antenna Module A	Front	0.367	0.425	0.505	4.150	0.644	0.681	0.731
		Back	0.198	0.287	0.287	4.150	0.539	0.594	0.594
n258	Antenna Module B	Front	0.367	0.425	0.505	4.540	0.683	0.720	0.770
		Back	0.198	0.287	0.287	4.540	0.578	0.633	0.633
n260	Antenna Module A	Front	0.367	0.425	0.505	3.990	0.628	0.665	0.715
		Back	0.198	0.287	0.287	3.990	0.523	0.578	0.578
n260	Antenna Module B	Front	0.367	0.425	0.505	2.550	0.484	0.521	0.571
		Back	0.198	0.287	0.287	2.550	0.379	0.434	0.434
n261	Antenna Module A	Front	0.367	0.425	0.505	2.720	0.501	0.538	0.588
		Back	0.198	0.287	0.287	2.720	0.396	0.451	0.451
n261	Antenna Module B	Front	0.367	0.425	0.505	3.180	0.547	0.584	0.634
		Back	0.198	0.287	0.287	3.180	0.442	0.497	0.497

<Product Specific Exposure Condition>
General Note:

1. Since WIFI 2.4GHz and Bluetooth Hotspot SAR is less than 1.2W/kg, therefore 10-g extremity SAR is not required.

<5G NR FR2, WLAN Index 4-2_Close Mode>

WWAN Band		Exposure Position	4	9	8	Reported SAR/4.0 + PD/10 Summation Total Exposure ratio
			5/6GHz WLAN Ant 3+4	NFC	PD	4+8+9 Summed
			10g SAR (W/kg)	10g SAR (W/kg)	4cm ² (W/m ²)	
n258	Antenna Module A	Front	0.221	0.001	3.150	0.371
		Back	0.270	0.044	4.400	0.519
		Left side	0.357	0.001	0.750	0.165
		Right side	0.296	0.001	0.270	0.101
		Top side	0.792	0.001	7.500	0.948
		Bottom side				0.000
n258	Antenna Module B	Front	0.221	0.001	1.740	0.230
		Back	0.270	0.044	7.500	0.829
		Left side	0.357	0.001	2.010	0.291
		Right side	0.296	0.001	0.420	0.116
		Top side	0.792	0.001	5.210	0.719
		Bottom side				0.000
n260	Antenna Module A	Front	0.221	0.001	2.780	0.334
		Back	0.270	0.044	5.450	0.624
		Left side	0.357	0.001	1.250	0.215
		Right side	0.296	0.001	0.340	0.108
		Top side	0.792	0.001	7.500	0.948
		Bottom side				0.000
n260	Antenna Module B	Front	0.221	0.001	1.770	0.233
		Back	0.270	0.044	7.500	0.829
		Left side	0.357	0.001	0.460	0.136
		Right side	0.296	0.001	0.340	0.108
		Top side	0.792	0.001	1.250	0.323
		Bottom side				0.000
n261	Antenna Module A	Front	0.221	0.001	2.520	0.308
		Back	0.270	0.044	4.100	0.489
		Left side	0.357	0.001	0.180	0.108
		Right side	0.296	0.001	0.610	0.135
		Top side	0.792	0.001	7.500	0.948
		Bottom side				0.000
n261	Antenna Module B	Front	0.221	0.001	0.520	0.108
		Back	0.270	0.044	7.500	0.829
		Left side	0.357	0.001	0.400	0.130
		Right side	0.296	0.001	2.710	0.345
		Top side	0.792	0.001	4.930	0.691
		Bottom side				0.000

**<5GNR FR2, WLAN Index 9-2_Open Mode>**

WWAN Band		Exposure Position	4	9	8	Reported SAR/4.0 + PD/10 Summation Total Exposure ratio
			5/6GHz WLAN Ant 3+4 10g SAR (W/kg)	NFC 10g SAR (W/kg)	PD 4cm^2(W/m^2)	4+8+9 Summed
n258	Antenna Module A	Front	0.432	0.041	4.190	0.537
		Back	0.486	0.001	4.740	0.596
		Left side		0.001	0.230	0.023
		Right side	0.329	0.001		0.083
		Top side	0.794	0.001	7.500	0.949
		Bottom side				0.000
n258	Antenna Module B	Front	0.432	0.041	7.500	0.868
		Back	0.486	0.001	0.970	0.219
		Left side		0.001	0.390	0.039
		Right side	0.329	0.001		0.083
		Top side	0.794	0.001	3.160	0.515
		Bottom side				0.000
n260	Antenna Module A	Front	0.432	0.041	5.370	0.655
		Back	0.486	0.001	3.890	0.511
		Left side		0.001	0.290	0.029
		Right side	0.329	0.001		0.083
		Top side	0.794	0.001	7.500	0.949
		Bottom side				0.000
n260	Antenna Module B	Front	0.432	0.041	7.500	0.868
		Back	0.486	0.001	1.180	0.240
		Left side		0.001	0.200	0.020
		Right side	0.329	0.001		0.083
		Top side	0.794	0.001	3.060	0.505
		Bottom side				0.000
n261	Antenna Module A	Front	0.432	0.041	3.740	0.492
		Back	0.486	0.001	1.870	0.309
		Left side		0.001	0.280	0.028
		Right side	0.329	0.001		0.083
		Top side	0.794	0.001	7.500	0.949
		Bottom side				0.000
n261	Antenna Module B	Front	0.432	0.041	7.500	0.868
		Back	0.486	0.001	0.470	0.169
		Left side		0.001	0.370	0.037
		Right side	0.329	0.001		0.083
		Top side	0.794	0.001	2.250	0.424
		Bottom side				0.000

Test Engineer : Putzie Chen, Mood Huang and Jacky Chen

13. Uncertainty Assessment

The budget is valid for evaluation distances $> \lambda/2\pi$. For specific tests and configurations, the Uncertainty could be considerably smaller.

cDASY6 Module mmWave Uncertainty Budget Evaluation Distances to the Antennas $> \lambda/2\pi$					
Error Description	Uncertainty Value ($\pm$ dB)	Probability	Divisor	(Ci)	Standard Uncertainty ($\pm$ dB)
Uncertainty terms dependent on the measurement system					
Probe Calibration	0.49	N	1	1	0.49
Probe correction	0.00	R	1.732	1	0.00
Frequency response ($BW \leq 1$ GHz)	0.20	R	1.732	1	0.12
Sensor cross coupling	0.00	R	1.732	1	0.00
Isotropy	0.50	R	1.732	1	0.29
Linearity	0.20	R	1.732	1	0.12
Probe scattering	0.00	R	1.732	1	0.00
Probe positioning offset	0.30	R	1.732	1	0.17
Probe positioning repeatability	0.04	R	1.732	1	0.02
Sensor mechanical offset	0.00	R	1.732	1	0.00
Probe spatial resolution	0.00	R	1.732	1	0.00
Field impedance dependence	0.00	R	1.732	1	0.00
Amplitude and phase drift	0.00	R	1.732	1	0.00
Amplitude and phase noise	0.04	R	1.732	1	0.02
Measurement area truncation	0.00	R	1.732	1	0.00
Data acquisition	0.03	N	1	1	0.03
Sampling	0.00	R	1.732	1	0.00
Field reconstruction	0.60	R	1.732	1	0.35
Forward transformation	0.00	R	1.732	1	0.00
Power density scaling	0.00	R	1.732	1	0.00
Spatial averaging	0.10	R	1.732	1	0.06
System detection limit	0.04	R	1.732	1	0.02
Uncertainty terms dependent on the DUT and environmental factors					
Probe coupling with DUT	0.00	R	1.732	1	0.0
Modulation response	0.40	R	1.732	1	0.2
Integration time	0.00	R	1.732	1	0.0
Response time	0.00	R	1.732	1	0.0
Device holder influence	0.10	R	1.732	1	0.1
DUT alignment	0.00	R	1.732	1	0.0
RF ambient conditions	0.04	R	1.732	1	0.0
Ambient reflections	0.04	R	1.732	1	0.0
Immunity / secondary reception	0.00	R	1.732	1	0.0
Drift of the DUT		R	1.732	1	
Combined Std. Uncertainty					0.76 dB
Expanded STD Uncertainty (95%)					1.52 dB



14. References

- [1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"
- [2] FCC KDB 447498 D01 v06, "Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies", Oct 2015
- [3] FCC KDB 865664 D02 v01r02, "RF Exposure Compliance Reporting and Documentation Considerations" Oct 2015.
- [4] FCC KDB 648474 D04 v01r03, "SAR Evaluation Considerations for Wireless Handsets", Oct 2015.