



NEAR-FIELD POWER DENSITY EVALUATION REPORT

Applicant Name

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Date of Testing

03/25/2025-04/02/2025

Test Site/Location

Element, Columbia, MD, USA

Document Serial No:

1M2502210015-04.A3L

FCC ID:

A3LSMF966U

APPLICANT:

SAMSUNG ELECTRONICS CO., LTD.

DUT Type:

Portable Handset

Application Type:

Certification

FCC Rule Part(s):

CFR §2.1093

Model:

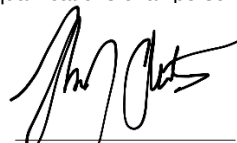
SM-F966U

Additional Model(s):

SM-F966U1

Band & Mode	Tx Frequency	Measured psPD	Reported psPD
	MHz	mW/cm ²	mW/cm ²
n258	24250 - 24450; 24750 - 25250	0.526	0.891
n261	27500 - 28350	0.581	0.891
n260	37000 - 40000	0.588	0.891
Verdict		PASS	

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them. Test results reported herein relate only to the item(s) tested.



RJ Ortañez
Executive Vice President



CERTIFICATE # 2041.01

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APPENDIX B: SYSTEM VERIFICATION PLOTS

APPENDIX C: DUT ANTENNA DIAGRAM AND TEST SETUP PHOTOGRAPHS

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1 DEVICE UNDER TEST

1.1 NR FR2 Checklist

NR FR2 Operations Information							
Form Factor		Portable Handset					
Subcarrier Spacing (kHz)		120					
Total Number of Supported Uplink CCs (SISO)		4					
Total Number of Supported Uplink CCs (MIMO)		4					
Total Number of Supported DL CCs		8					
CP-OFDM Modulations Supported in UL		PI/2 BPSK, QPSK, 16QAM, 64QAM					
DFT-s-OFDM Modulations Supported in UL		PI/2 BPSK, QPSK, 16QAM, 64QAM					
LTE Anchor Bands		n258: 2/5/12/66/71, n261: 2/5/12/13/48/66, n260: 2/5/12/13/14/30/48/66					
NR FR1 Anchor Bands		n258: 2/12/25/41/66/77, n261: 2/5/25/41/48/66/77, n260: 2/5/12/25/30/41/48/66/77					
Duplex Type (mmWave)		TDD					
NR FR2 Channels & Frequencies							
NR Band	Bandwidth (MHz)	Low		Mid		High	
		Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
n258	100	2018333	24350.04	2025833	24800.04	2032499	25200.00
n258	50	2018333	24350.04	2025833	24800.04	2032915	25224.96
n261	100	2071667	27550.08	2077915	27924.96	2084165	28299.96
n261	50	2071249	27525.00	2077915	27924.96	2084581	28324.92
n260	100	2229999	37050.00	2254165	38499.96	2278331	39949.92
n260	50	2229599	37026.00	2254165	38499.96	2278749	39975.00

1.2 Time-Averaging Algorithm for RF Exposure Compliance

The device is enabled with Qualcomm® Smart Transmit GEN2 feature. This feature performs time averaging algorithm in real time to control and manage transmitting power and ensure the time-averaged RF exposure is in compliance with FCC requirements all the time. Refer to Compliance Summary document for detailed description of Qualcomm® Smart Transmit.

The Smart Transmit algorithm maintains the time-averaged transmit power, in turn, time-averaged RF exposure of *SAR_design_target* or *PD_design_target*, below the predefined time-averaged power limit (i.e., P_{limit} for sub-6 radio and WLAN radio, and *input.power.limit* for 5G mmW NR), for each characterized technology and band (see RF Exposure Part 0 Test Report).

Smart Transmit allows the device to transmit at higher power instantaneously when needed, but manages power limiting to maintain time-averaged transmit power to *input.power.limit*.

The purpose of this report (Part 1 test) is to demonstrate that the EUT meets FCC PD limits when transmitting in static transmission scenario at maximum allowable time-averaged power level given by *input.power.limit*.

The *input.power.limit* used for Folder Closed Part 1 PD testing reflects the Folder Closed configuration, selected based on EM-simulation identified worst-case beam and surface conditions. However, during normal operation, Smart Transmit references the codebook entry for the Folder Open (RT SAR) state, as this is the DSI configured for real-time operation. The Folder Open codebook contains lower *input.power.limit* values than those in the Folder Closed configuration, resulting in a more conservative RF exposure under Smart Transmit time-averaged control.

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1.3 Power Density Design Target and Uncertainty

Power Density Design Specifications	
<i>PD_design_target</i> (mW/m ²)	0.724
Design Related Total Uncertainty (dB)	1.4

The PD_design_target per mmWave beam was established during characterization to ensure compliance with the regulatory limit (10 W/m²), after incorporating a conservative total uncertainty margin of 1.4 dB. This margin accounts for simulation-to-measurement correlation, device build variation, PD probe calibration, and phantom setup effects, following Qualcomm methodology as described in Qualcomm guidance.

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1.4 Input Power Specifications

All power density measurements for this device were performed at the *input.power.limit* given in below tables. Input power is per antenna element and polarization for each antenna module. When input.power.limit is calculated to be above the maximum input power, the device is limited to the maximum input power.

Table 1-1
5G mmWave NR n258 Antenna J Patch input.power.limit - Open

Band	Beam ID	Paired With	input.power.limit
n258	0		11.2
n258	1		11.6
n258	2		11.4
n258	3		11.6
n258	4		11.3
n258	5		9.7
n258	6		6.9
n258	7		6.8
n258	8		6.9
n258	9		7.4
n258	10		6.9
n258	11		8.0
n258	12		4.8
n258	13		3.4
n258	14		3.5
n258	15		3.6
n258	16		4.0
n258	17		4.1
n258	18		3.2
n258	19		3.2
n258	20		3.7
n258	256		10.4
n258	257		10.2
n258	258		10.5
n258	259		10.4
n258	260		10.5
n258	261		7.3
n258	262		6.2
n258	263		6.4
n258	264		7.4
n258	265		6.3
n258	266		6.1
n258	267		6.4
n258	268		2.4
n258	269		2.4
n258	270		2.5
n258	271		2.4
n258	272		2.6
n258	273		2.3
n258	274		2.5
n258	275		2.4
n258	276		2.4
n258	0	256	7.3
n258	1	257	7.5
n258	2	258	7.7
n258	3	259	7.6
n258	4	260	7.6
n258	5	261	4.5
n258	6	262	3.2
n258	7	263	3.3
n258	8	264	3.7
n258	9	265	3.2
n258	10	266	3.3
n258	11	267	3.6
n258	12	268	-0.6
n258	13	269	-0.5
n258	14	270	-0.2
n258	15	271	-0.4
n258	16	272	-0.4
n258	17	273	-0.6
n258	18	274	-0.3
n258	19	275	-0.4
n258	20	276	-0.5

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Table 1-2
5G mmWave NR n258 Antenna J Patch input.power.limit – Closed

Band	Beam ID	Paired With	input.power.limit
n258	0		15.0
n258	1		15.9
n258	2		14.9
n258	3		15.8
n258	4		14.4
n258	5		11.5
n258	6		11.5
n258	7		12.3
n258	8		12.1
n258	9		11.9
n258	10		11.1
n258	11		10.5
n258	12		6.7
n258	13		7.4
n258	14		7.7
n258	15		7.7
n258	16		6.8
n258	17		6.8
n258	18		8.4
n258	19		7.7
n258	20		7.0
n258	256		11.9
n258	257		11.5
n258	258		12.0
n258	259		11.5
n258	260		12.9
n258	261		9.0
n258	262		8.1
n258	263		7.8
n258	264		8.5
n258	265		8.0
n258	266		6.8
n258	267		7.8
n258	268		5.6
n258	269		3.2
n258	270		2.8
n258	271		3.4
n258	272		5.0
n258	273		4.1
n258	274		3.1
n258	275		3.2
n258	276		3.9
n258	0	256	9.2
n258	1	257	9.5
n258	2	258	9.7
n258	3	259	9.7
n258	4	260	9.5
n258	5	261	5.9
n258	6	262	6.1
n258	7	263	6.6
n258	8	264	6.5
n258	9	265	5.7
n258	10	266	5.5
n258	11	267	6.1
n258	12	268	2.4
n258	13	269	0.7
n258	14	270	0.7
n258	15	271	1.3
n258	16	272	2.5
n258	17	273	1.2
n258	18	274	1.1
n258	19	275	1.2
n258	20	276	1.4

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Table 1-3
5G mmWave NR n261 Antenna J Patch *input.power.limit* - Open

Band	Beam ID	Paired With	input.power.limit
n261	0		14.7
n261	1		11.4
n261	2		12.1
n261	3		11.1
n261	4		12.6
n261	5		9.2
n261	6		8.1
n261	7		7.7
n261	8		8.3
n261	9		7.9
n261	10		10.1
n261	11		11.6
n261	12		7.3
n261	13		4.3
n261	14		3.8
n261	15		3.9
n261	16		6.4
n261	17		6.0
n261	18		3.6
n261	19		3.6
n261	20		6.4
n261	256		11.5
n261	257		10.4
n261	258		10.7
n261	259		10.7
n261	260		11.1
n261	261		8.6
n261	262		6.6
n261	263		6.2
n261	264		7.7
n261	265		7.1
n261	266		6.5
n261	267		6.7
n261	268		3.7
n261	269		2.6
n261	270		2.5
n261	271		2.2
n261	272		3.6
n261	273		2.9
n261	274		2.5
n261	275		2.6
n261	276		2.7
n261	0	256	10.1
n261	1	257	7.5
n261	2	258	7.7
n261	3	259	7.6
n261	4	260	8.5
n261	5	261	5.7
n261	6	262	4.3
n261	7	263	3.8
n261	8	264	4.8
n261	9	265	4.1
n261	10	266	4.7
n261	11	267	5.1
n261	12	268	1.5
n261	13	269	0.0
n261	14	270	-0.1
n261	15	271	-0.1
n261	16	272	1.6
n261	17	273	0.7
n261	18	274	-0.2
n261	19	275	-0.1
n261	20	276	0.7

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Table 1-4
5G mmWave NR n261 Antenna J Patch *input.power.limit* - Closed

Band	Beam ID	Paired With	<i>input.power.limit</i>
n261	0		15.0
n261	1		11.5
n261	2		12.1
n261	3		11.1
n261	4		12.8
n261	5		9.4
n261	6		8.3
n261	7		7.7
n261	8		8.4
n261	9		8.0
n261	10		10.1
n261	11		11.9
n261	12		7.1
n261	13		4.6
n261	14		3.8
n261	15		3.9
n261	16		6.5
n261	17		6.4
n261	18		3.6
n261	19		3.6
n261	20		6.6
n261	256		11.5
n261	257		10.5
n261	258		10.8
n261	259		10.7
n261	260		11.3
n261	261		8.6
n261	262		6.6
n261	263		6.2
n261	264		7.8
n261	265		7.2
n261	266		6.5
n261	267		6.6
n261	268		4.0
n261	269		2.9
n261	270		2.5
n261	271		2.1
n261	272		3.8
n261	273		3.3
n261	274		2.7
n261	275		2.6
n261	276		2.6
n261	0	256	10.0
n261	1	257	7.5
n261	2	258	7.8
n261	3	259	7.5
n261	4	260	8.7
n261	5	261	5.9
n261	6	262	4.4
n261	7	263	3.7
n261	8	264	4.7
n261	9	265	4.1
n261	10	266	4.7
n261	11	267	5.1
n261	12	268	1.8
n261	13	269	0.2
n261	14	270	-0.2
n261	15	271	-0.1
n261	16	272	1.7
n261	17	273	1.0
n261	18	274	-0.1
n261	19	275	0.0
n261	20	276	0.8

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Table 1
5G mmWave NR n260 Antenna J Patch *input.power.limit* - Open

Band	Beam ID	Paired With	input.power.limit
n260	0		14.6
n260	1		14.0
n260	2		13.9
n260	3		13.8
n260	4		13.2
n260	5		12.2
n260	6		10.6
n260	7		9.3
n260	8		10.6
n260	9		11.8
n260	10		10.8
n260	11		9.6
n260	12		8.0
n260	13		8.4
n260	14		6.4
n260	15		6.1
n260	16		7.6
n260	17		7.8
n260	18		7.9
n260	19		5.5
n260	20		6.4
n260	256		13.3
n260	257		12.1
n260	258		12.3
n260	259		12.9
n260	260		13.6
n260	261		10.7
n260	262		9.1
n260	263		10.6
n260	264		11.3
n260	265		10.6
n260	266		8.5
n260	267		10.3
n260	268		6.9
n260	269		6.4
n260	270		4.5
n260	271		6.7
n260	272		7.1
n260	273		7.1
n260	274		5.3
n260	275		5.9
n260	276		7.1
n260	0	256	10.5
n260	1	257	9.9
n260	2	258	10.0
n260	3	259	10.1
n260	4	260	10.1
n260	5	261	7.9
n260	6	262	6.8
n260	7	263	6.6
n260	8	264	7.8
n260	9	265	7.2
n260	10	266	6.2
n260	11	267	7.6
n260	12	268	3.3
n260	13	269	3.8
n260	14	270	2.3
n260	15	271	3.0
n260	16	272	3.8
n260	17	273	3.2
n260	18	274	2.9
n260	19	275	2.4
n260	20	276	2.7

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Table 2
5G mmWave NR n260 Antenna J Patch *input.power.limit* - Closed

Band	Beam ID	Paired With	input.power.limit
n260	0		14.5
n260	1		14.0
n260	2		14.0
n260	3		13.6
n260	4		13.2
n260	5		12.0
n260	6		10.7
n260	7		8.9
n260	8		10.8
n260	9		11.7
n260	10		10.8
n260	11		9.2
n260	12		8.1
n260	13		8.8
n260	14		6.5
n260	15		5.9
n260	16		7.6
n260	17		7.7
n260	18		8.2
n260	19		5.5
n260	20		6.6
n260	256		13.4
n260	257		12.1
n260	258		12.4
n260	259		13.0
n260	260		14.0
n260	261		10.7
n260	262		9.1
n260	263		10.6
n260	264		11.7
n260	265		10.6
n260	266		8.5
n260	267		10.3
n260	268		6.9
n260	269		6.4
n260	270		4.6
n260	271		6.9
n260	272		6.9
n260	273		7.4
n260	274		5.3
n260	275		5.8
n260	276		7.2
n260	0	256	10.5
n260	1	257	9.9
n260	2	258	10.1
n260	3	259	9.9
n260	4	260	10.3
n260	5	261	7.8
n260	6	262	7.0
n260	7	263	6.5
n260	8	264	7.8
n260	9	265	7.3
n260	10	266	6.2
n260	11	267	7.4
n260	12	268	3.3
n260	13	269	3.8
n260	14	270	2.3
n260	15	271	2.8
n260	16	272	3.7
n260	17	273	3.5
n260	18	274	2.9
n260	19	275	2.4
n260	20	276	2.8

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1.5 DUT Antenna Locations

The table below indicates the surfaces evaluated for near field power density (part 1) evaluation. Refer to RF Exposure Part 0 Test Report for justification of these worst-surfaces.

Table 1-5
Device Surfaces - Open

Band	Antenna	Back	Front	Top	Bottom	Right	Left
n258	J	Yes	Yes	Yes	No	Yes	No
n261	J	Yes	No	No	No	Yes	No
n260	J	Yes	No	No	No	Yes	No

Table 1-6
Device Surfaces - Closed

Band	Antenna	Back	Front	Top	Bottom	Right	Left
n258	J	Yes	No	Yes	No	Yes	No
n261	J	Yes	No	No	No	Yes	No
n260	J	Yes	No	No	No	Yes	No

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1.6 Simultaneous Transmission Capabilities

According to FCC KDB Publication 447498 D01v06, transmitters are considered to be operating simultaneously when there is overlapping transmission, with the exception of transmissions during network hand-offs with maximum hand-off duration less than 30 seconds.

This device contains multiple transmitters that may operate simultaneously, and therefore requires a simultaneous transmission analysis according to FCC KDB Publication 447498 D01v06 4.3.2 procedures. Please see Part 1 SAR Multi-TX and Antenna SAR Considerations Appendix for simultaneous transmission analysis.

1.7 Guidance Applied

- November 2017, October 2018, April 2019, November 2019 TCBC Workshop Notes
- SPEAG DASY6 System Handbook
- IEC/IEEE 63195-1:2022
- FCC KDB 865664 D02 v01r04
- FCC KDB 447498 D01 v02r01

1.8 Bibliography

**Table 1-7
Bibliography**

Report Type	Report Serial Number
FCC SAR Evaluation Report (Part 1)	1M2502210015-01.A3L
Power Density Part 0 Test Report	
RF Exposure Part 2 Test Report	1M2502210015-03.A3L
RF Exposure Compliance Summary Report	1M2502210015-05.A3L
Power Density Simulation Report	

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2 MEASUREMENT SYSTEM

2.1 Measurement Setup

Peak spatially averaged power density (psPD) measurements for mmWave frequencies were performed using the DASY6 with cDASY6 5G module. The DASY6 is made by Schmid & Partner Engineering AG (SPEAG) in Zurich, Switzerland and consists of a high precision robotics system (Staubli), robot controller, desktop computer, near-field probe, probe alignment sensor, and the 5G phantom. The robot is a six-axis industrial robot, performing precise movements to position the probe to the location (points) of maximum electromagnetic field (EMF).

2.2 SPEAG EUmWVx Probe / E-Field 5G Probe

The EUmWVx probe consists of two dipoles optimally arranged to obtain pseudo-vector information.

Frequency Range	750 MHz – 110 GHz
Dynamic Range	< 20 V/m – 10,000 V/m with PRE-10 (min < 50 V/m – 3,000 V/m)
Position Precision	< 0.2 mm (cDASY6)
Dimensions	Probe Overall Length: 320 mm Probe Body Diameter: 8 mm Probe Tip Length: 23 mm Probe Tip Diameter: Encapsulation 8 mm Distance from Probe Tip to Sensor X Calibration Point: 1.5 mm Distance from Probe Tip to Sensor Y Calibration Point: 1.5 mm
Applications	E-field measurements of 5G devices and other mm-wave transmitters operating above 10 GHz in < 2 mm distance from device (free-space) Power density, H-field and far-field analysis using total field reconstruction
Compatibility	cDASY6 + 5G-Module SW

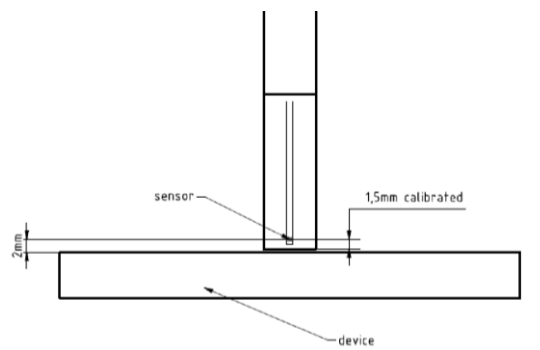
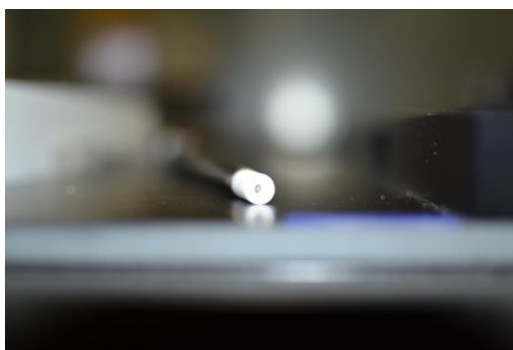


Figure 2-1
EUmWVx Probe

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2.3 Peak Spatially Averaged Power Density Assessment Based on E-field Measurements

Within a short distance from the transmitting source, power density was determined based on both electric and magnetic fields. Generally, the magnitude and phase of two components of either the E-field or H-field were needed on a sufficiently large surface to fully characterize the total E-field and H-field distributions. Nevertheless, solutions based on direct measurement of E-field and H-field can be used to compute power density. The general measurement approach used for this device was:

- The local E field on the measurement surface was measured at a reference location where the field is well above the noise level. This reference level was used at the end of this procedure to assess output power drift of the DUT during the measurement.
- The electric field on the measurement surface was scanned. Measurements are conducted according to the instructions provided by the measurement system manufacturer. Measurement spatial resolution can depend on the measured field characteristic and measurement methodology used by the system. The planar scan step size was configured at $\lambda/4$.
- For cDASY6, H-field was calculated from the measured E-field using a reconstruction algorithm. As the power density calculation requires knowledge of both amplitude and phase, reconstruction algorithms can also be used to obtain field information from the measured E-field data (e.g. the phase from the amplitude if only the amplitude is measured). H-field and phase data was reconstructed from repeated measurements (three per measurement point) on two measurement planes separated by $\lambda/4$.
- The total Peak spatially averaged power density (psPD) distribution on the evaluation surface is determined per the below equation. The spatial averaging area, A , is specified by the applicable exposure limits or regulatory requirements. A circular shape was used.

$$psPD = \frac{1}{2A_{av}} \iint_{A_{av}} || Re\{E \times H^*\} || dA$$

- The maximum spatial-average on the evaluation surface is the final quantity to determine compliance against applicable limits.
- The local E field reference value, at the same location as step 2, was re-measured after the scan was complete to calculate the power drift. If the drift deviated by more than 5%, the power density test and drift measurements were repeated.

2.4 Reconstruction Algorithm

Computation of the power density in general requires measurement information from the both E-field and H-field amplitudes and phases in the plane of incidence. Reconstruction of these quantities from pseudo-vector E-field measurements is feasible according to the manufacturer, as they are determined via Maxwell's equations. As such, the SPEAG reconstruction approach was based on the Gerchberg-Saxton algorithm, which benefits from the availability of the E-field polarization ellipse information obtained with the EUmmWVx probe.

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3 RF EXPOSURE LIMITS FOR POWER DENSITY

3.1 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.

3.2 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. This 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.

3.3 RF Exposure Limits for Frequencies Above 6 GHz

Per §1.1310 (d)(3), the MPE limits are applied for frequencies above 6 GHz. Power Density is expressed in units of W/m^2 or mW/cm^2 .

Peak Spatially Averaged Power Density was evaluated over a circular area of 4 cm^2 per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes.

Table 3-1
Human Exposure Limits Specified in FCC 47 CFR §1.1310

Human Exposure to Radiofrequency (RF) Radiation Limits		
Frequency Range [MHz]	Power Density [mW/cm ²]	Average Time [Minutes]
(A) Limits For Occupational / Controlled Environments		
1,500 – 100,000	5.0	6
(B) Limits For General Population / Uncontrolled Environments		
1,500 – 100,000	1.0	30

Note: 1.0 mW/cm^2 is 10 W/m^2

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4 SYSTEM VERIFICATION

4.1 Test System Verification

The system was verified to be within ± 0.66 dB of the power density targets on the calibration certificate according to the test system specification in the user's manual and calibration facility recommendation. The 0.66 dB deviation threshold represents the expanded uncertainty for system performance checks using SPEAG's mmWave verification sources. The same spatial resolution and measurement region used in the source calibration was applied during the system check.

The measured power density distribution of verification source was also confirmed through visual inspection to have no noticeable differences, both spatially (shape) and numerically (level) from the distribution provided by the manufacturer, per November 2017 TCBC Workshop Notes.

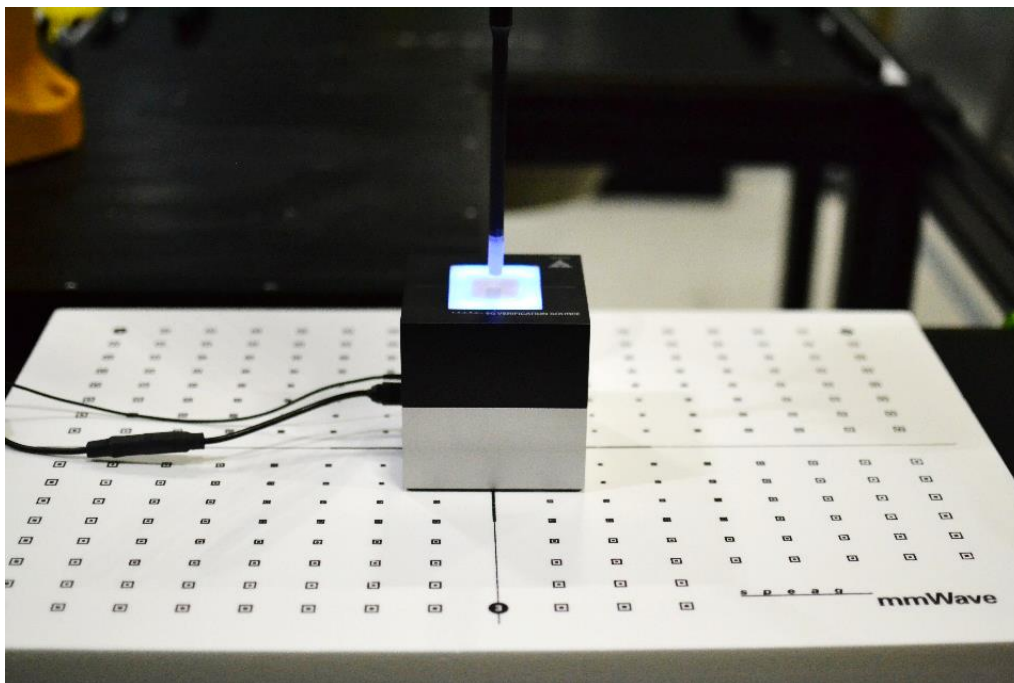


Figure 4-1
System Verification Setup Photo

Table 4-2
30 GHz Verifications

System	Frequency	Date	Source S/N	Probe S/N	Normal psPD (W/m ² over 4 cm ²)		Deviation (dB)	Total psPD (W/m ² over 4 cm ²)		Deviation (dB)	Plot #
					Measured	Target		Measured	Target		
Q	30	03/25/2025	1044	9389	34.70	34.00	0.09	35.40	34.00	0.18	B1
N	30	03/28/2025	1044	9421	37.40	34.00	0.41	38.00	34.00	0.48	B2
N	30	03/31/2025	1044	9421	37.00	34.00	0.37	37.60	34.00	0.44	B3
N	30	04/02/2025	1044	9421	37.00	34.00	0.37	37.40	34.00	0.41	B4

Note: A **10 mm distance spacing** was used from the reference horn antenna aperture to the probe element. This includes 4.45 mm from the reference antenna horn aperture to the surface of the verification source plus 5.55 mm from the surface to the probe. The SPEAG software requires a setting of "5.55 mm" for the correct set up.

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5 POWER DENSITY DATA @ INPUT.POWER.LIMIT

5.1 Power Density Results

Power density measurements were performed with DUT transmitting at *input.power.limit* for one single beam for each polarization (H & V) and one beam-pair, for each antenna on each worst-surface.

Table 5-1
5G mmWave NR Band n258 - Open

MEASUREMENT RESULTS															
Band	Module	Antenna Type	Frequency	Channel	Beam ID 1	Beam ID 2	input.power.limit	Signal Type	DUT S/N	Power Drift	Distance	DUT Surface	Normal psPD	Total psPD	Plot #
			MHz		V	H				dB			mW/cm²	mW/cm²	
n258	J	Patch	24800.04	Mid	16	-	4.0	CW	0576M	0.15	2	Back	0.180	0.196	
n258	J	Patch	25200.00	High	-	270	2.5	CW	0576M	-0.21	2	Back	0.370	0.424	
n258	J	Patch	24350.04	Low	13	269	-0.5	CW	0576M	0.34	2	Back	0.113	0.145	
n258	J	Patch	24350.04	Low	12	-	4.8	CW	0576M	0.11	2	Front	0.118	0.169	
n258	J	Patch	24350.04	Low	12	268	-0.6	CW	0576M	0.16	2	Front	0.050	0.075	
n258	J	Patch	24800.04	Mid	16	-	4.0	CW	0576M	-0.06	2	Top	0.133	0.164	
n258	J	Patch	24350.04	Low	16	272	-0.4	CW	0576M	0.13	2	Top	0.133	0.145	
n258	J	Patch	24800.04	Mid	12	-	4.8	CW	0576M	-0.06	2	Right	0.218	0.295	
n258	J	Patch	25200.00	High	-	270	2.5	CW	0576M	0.14	2	Right	0.406	0.446	A1
n258	J	Patch	24350.04	Low	13	269	-0.5	CW	0576M	-0.07	2	Right	0.195	0.226	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population									Power Density 1 mW/cm² averaged over 4 cm²						

Table 5-2
5G mmWave NR Band n258 - Closed

MEASUREMENT RESULTS															
Band	Module	Antenna Type	Frequency	Channel	Beam ID 1	Beam ID 2	input.power.limit	Signal Type	DUT S/N	Power Drift	Distance	DUT Surface	Normal psPD	Total psPD	Plot #
			MHz		V	H				dB			mW/cm²	mW/cm²	
n258	J	Patch	24800.04	Mid	12	-	6.7	CW	0576M	0.08	2	Back	0.400	0.507	
n258	J	Patch	25200.00	High	-	270	2.8	CW	0576M	0.00	2	Back	0.483	0.526	A2
n258	J	Patch	24350.04	Low	13	269	0.7	CW	0576M	0.00	2	Back	0.321	0.366	
n258	J	Patch	25200.00	High	16	-	6.8	CW	0576M	0.01	2	Top	0.212	0.252	
n258	J	Patch	25200.00	High	16	272	2.5	CW	0576M	0.18	2	Top	0.158	0.182	
n258	J	Patch	24800.04	Mid	12	-	6.7	CW	0576M	-0.14	2	Right	0.261	0.365	
n258	J	Patch	25200.00	High	-	270	2.8	CW	0576M	0.13	2	Right	0.375	0.428	
n258	J	Patch	24350.04	High	14	270	0.7	CW	0576M	0.19	2	Right	0.214	0.220	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population									Power Density 1 mW/cm² averaged over 4 cm²						

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Table 5-3
5G mmWave NR Band n261 - Open

MEASUREMENT RESULTS															
Band	Module	Antenna Type	Frequency	Channel	Beam ID 1	Beam ID 2	input.power.limit	Signal Type	DUT S/N	Power Drift	Distance	DUT Surface	Normal psPD	Total psPD	Plot #
			MHz		V	H	dBm			dB			mW/cm²	mW/cm²	
n261	J	Patch	27924.96	Mid	18	-	3.6	CW	0576M	0.12	2	Back	0.262	0.326	
n261	J	Patch	27550.08	Low	-	271	2.2	CW	0576M	0.05	2	Back	0.416	0.503	
n261	J	Patch	27924.96	Mid	18	274	-0.2	CW	0576M	-0.02	2	Back	0.361	0.399	
n261	J	Patch	27924.96	Mid	19	-	3.6	CW	0576M	0.20	2	Right	0.276	0.360	
n261	J	Patch	27924.96	Mid	-	269	2.6	CW	0576M	0.11	2	Right	0.472	0.581	A3
n261	J	Patch	27924.96	Mid	18	274	-0.2	CW	0576M	0.13	2	Right	0.266	0.329	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population									Power Density 1 mW/cm² averaged over 4 cm²²						

Table 5-4
5G mmWave NR Band n261 – Closed

MEASUREMENT RESULTS															
Band	Module	Antenna Type	Frequency	Channel	Beam ID 1	Beam ID 2	input.power.limit	Signal Type	DUT S/N	Power Drift	Distance	DUT Surface	Normal psPD	Total psPD	Plot #
			MHz		V	H	dBm			dB			mW/cm²	mW/cm²	
n261	J	Patch	27924.96	Mid	19	-	3.6	CW	0576M	0.02	2	Back	0.375	0.447	
n261	J	Patch	27924.96	Mid	-	271	2.1	CW	0576M	-0.06	2	Back	0.505	0.573	A4
n261	J	Patch	27550.08	Low	18	274	-0.1	CW	0576M	0.04	2	Back	0.364	0.419	
n261	J	Patch	27924.96	Mid	19	-	3.6	CW	0576M	0.06	2	Right	0.270	0.331	
n261	J	Patch	27924.96	Mid	-	271	2.1	CW	0576M	0.61	2	Right	0.395	0.481	
n261	J	Patch	28299.96	High	18	274	-0.1	CW	0576M	0.21	2	Right	0.343	0.416	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population									Power Density 1 mW/cm² averaged over 4 cm²						

Table 5-5
5G mmWave NR Band n260 - Open

MEASUREMENT RESULTS															
Band	Module	Antenna Type	Frequency	Channel	Beam ID 1	Beam ID 2	input.power.limit	Signal Type	DUT S/N	Power Drift	Distance	DUT Surface	Normal psPD	Total psPD	Plot #
			MHz		V	H	dBm			dB			mW/cm²	mW/cm²	
n260	J	Patch	38499.96	Mid	19	-	5.5	CW	0576M	-0.08	2	Back	0.541	0.570	
n260	J	Patch	38499.96	Mid	-	270	4.5	CW	0576M	-0.06	2	Back	0.476	0.583	A5
n260	J	Patch	38499.96	Mid	14	270	2.3	CW	0576M	-0.03	2	Back	0.454	0.558	
n260	J	Patch	38499.96	Mid	19	-	5.5	CW	0576M	-0.17	2	Right	0.465	0.557	
n260	J	Patch	38499.96	Mid	-	270	4.5	CW	0576M	-0.08	2	Right	0.240	0.338	
n260	J	Patch	38499.96	Mid	14	270	2.3	CW	0576M	-0.17	2	Right	0.358	0.515	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population									Power Density 1 mW/cm² averaged over 4 cm²						

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Table 5-6
5G mmWave NR Band n260 - Closed

MEASUREMENT RESULTS															
Band	Module	Antenna Type	Frequency	Channel	Beam ID 1	Beam ID 2	input.power.limit	Signal Type	DUT S/N	Power Drift	Distance	DUT Surface	Normal psPD	Total psPD	Plot #
			MHz		V	H	dBm			dB			mW/cm ²	mW/cm ²	
n260	J	Patch	38499.96	Mid	19	-	5.5	CW	0576M	0.00	2	Back	0.509	0.576	
n260	J	Patch	38499.96	Mid	-	270	4.6	CW	0576M	0.12	2	Back	0.488	0.584	
n260	J	Patch	38499.96	Mid	14	270	2.3	CW	0576M	0.14	2	Back	0.455	0.550	
n260	J	Patch	38499.96	Mid	19	-	5.5	CW	0576M	0.06	2	Right	0.564	0.588	A6
n260	J	Patch	38499.96	Mid	-	270	4.6	CW	0576M	0.11	2	Right	0.343	0.481	
n260	J	Patch	38499.96	Mid	14	270	2.3	CW	0576M	0.09	2	Right	0.378	0.457	
47 CFR §1.1310 - SAFETY LIMIT Spatial Average Uncontrolled Exposure / General Population									Power Density 1 mW/cm ² averaged over 4 cm ²						

5.2 Power Density Test Notes

General Notes:

- The manufacturer has confirmed that the devices tested have the same physical, mechanical and thermal characteristics and are within operational tolerances expected for production units.
- Batteries are fully charged at the beginning of the measurements. The DUT was connected to a wall charger for some measurements due to the test duration. It was confirmed that the charger plugged into this DUT did not impact the near-field PD test results.
- Power density was calculated by repeated E-field measurements on two measurement planes separated by $\lambda/4$.
- DUT was configured to transmit with a manufacturer provided test software to control specific antenna(s), Beam ID(s), and signal type to ensure the test configurations constant for the entire evaluation.
- Input.power.limit* parameter for 5G mmW NR radio was calculated in RF Exposure Part 0 test report.
- This device is enabled with Qualcomm® Smart Transmit feature to control and manage transmitting power in real time and to ensure that the time-averaged RF exposure from WWAN and WLAN is in compliance with FCC requirements. Per FCC guidance for devices enabled with Qualcomm® Smart Transmit feature, 4G LTE/5G NR FR1, WLAN/BT, and 5G mmW NR FR2 simultaneous transmission scenario does not need to be evaluated under Total Exposure Ratio (TER). The validation of the time-averaging algorithm and compliance under the Tx varying transmission scenario for WWAN and WLAN technologies are reported in Part 2 report.
- Per FCC guidance for devices enabled with Qualcomm® Smart Transmit feature, simultaneous transmission analysis is evaluated by combining the exposure from each WWAN and WLAN antenna. 5G mmW NR and NFC/UWB simultaneous transmission scenario is evaluated under the SAR Part 1 Multi-TX and Antenna SAR Considerations Appendix.
- The Beam IDs with the highest initial simulated power density for each surface and distance were selected for Part 1 PD measurements, and PD measurements were limited to worst-case surfaces and channels based on EM simulation analysis under Option 1 of Qualcomm guidance.
- The device was configured to transmit CW wave signal for testing. Per FCC guidance for devices enabled with Qualcomm® Smart Transmit feature, additional testing was not required for different modulations (CP-OFDM: QPSK, 16QAM, 64QAM, DFT-s-OFDM: PI/2 BPSK, QPSK, 16QAM, 64QAM), RB configurations, component carriers, channel configurations (low channel, mid channel, high channel) since the smart transmit algorithm monitors powers on a per symbol basis, which is independent of these signal characteristics.
- The device was configured to MIMO configuration with H and V polarization beams transmitting together.

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6 EQUIPMENT LIST

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
-	WL25-1	Conducted Cable Set (25GHz)	N/A	N/A	N/A	WL25-1
-	WL40-1	Conducted Cable Set (40GHz)	N/A	N/A	N/A	WL40-1
Agilent	N9038A	MXE EMI Receiver	N/A	N/A	N/A	MY51210133
EMCO	3160-09	Small Horn (18 - 26.5GHz)	N/A	N/A	N/A	00135427
Emco	3116	Horn Antenna (18 - 40GHz)	N/A	N/A	N/A	9203-2178
Rohde & Schwarz	SFUNIT-Rx	Shielded Filter Unit	N/A	N/A	N/A	102133
Rohde & Schwarz	FSW67	Signal / Spectrum Analyzer	N/A	N/A	N/A	103200
SPEAG	EUmmWV4	EUmmWV4 Probe	01/08/2025	Annual	01/08/2026	9389
SPEAG	EUmmWV4	EUmmWV4 Probe	03/12/2025	Annual	03/12/2026	9421
SPEAG	SM 003 100 AA	30GHz System Verification Ka- Band Source Antenna	05/07/2024	Annual	05/07/2025	1044
SPEAG	DAE4ip	Dasy Data Acquisition Electronics	12/04/2024	Annual	12/04/2025	1213
SPEAG	DAE4ip	Dasy Data Acquisition Electronics	09/10/2024	Annual	09/10/2025	1449
Agilent	N9030A	PXA Signal Analyzer (44GHz)	N/A	N/A	N/A	MY52350166
Emco	3115	Horn Antenna (1-18GHz)	N/A	N/A	N/A	9704-5182
Keysight Technologies	N9030A	3Hz-44GHz PXA Signal Analyzer	N/A	N/A	N/A	MY49430494
Rohde & Schwarz	180-442-KF	Horn (Small)	N/A	N/A	N/A	U157403-01
Rohde & Schwarz	ESU26	EMI Test Receiver (26.5GHz)	N/A	N/A	N/A	100342
Rohde & Schwarz	SFUNIT-Rx	Shielded Filter Unit	N/A	N/A	N/A	102134
Sunol	JB5	Bi-Log Antenna (30M - 5GHz)	N/A	N/A	N/A	A051107
Virginia Diodes Inc	SAX252	Spectrum Analyzer Extension Module	N/A	N/A	N/A	SAX252
Virginia Diodes Inc	SAX253	Spectrum Analyzer Extension Module	N/A	N/A	N/A	SAX253
Virginia Diodes Inc	SAX254	Spectrum Analyzer Extension Module	N/A	N/A	N/A	SAX254

Note:

- Each equipment item was used solely within its respective calibration period.

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7 MEASUREMENT UNCERTAINTIES

a	b	c	d	e	f = c x f/e	g
Uncertainty Component	Unc. (± dB)	Prob. Dist.	Div.	c _i	u _i (± dB)	v _i
Measurement System						
Calibration	0.49	N	1	1	0.49	∞
Probe Correction	0.00	R	1.73	1	0.00	∞
Frequency Response	0.20	R	1.73	1	0.12	∞
Sensor Cross Coupling	0.00	R	1.73	1	0.00	∞
Isotropy	0.50	R	1.73	1	0.29	∞
Linearity	0.20	R	1.73	1	0.12	∞
Probe Scattering	0.00	R	1.73	1	0.00	∞
Probe Positioning offset	0.30	R	1.73	1	0.17	∞
Probe Positioning Repeatability	0.04	R	1.73	1	0.02	∞
Sensor Mechanical Offset	0.00	R	1.73	1	0.00	∞
Probe Spatial Resolution	0.00	R	1.73	1	0.00	∞
Field Impedance Dependence	0.00	R	1.73	1	0.00	∞
Amplitude and Phase Drift	0.00	R	1.73	1	0.00	∞
Amplitude and Phase Noise	0.04	R	1.73	1	0.02	∞
Measurement Area Truncation	0.00	R	1.73	1	0.00	∞
Data Acquisition	0.03	N	1	1	0.03	∞
Sampling	0.00	R	1.73	1	0.00	∞
Field Reconstruction	0.60	R	1.73	1	0.35	∞
Forward Transformation	0.00	R	1.73	1	0.00	∞
Power Density Scaling	0.00	R	1.73	1	0.00	∞
Spatial Averaging	0.10	R	1.73	1	0.06	∞
System Detection Limit	0.04	R	1.73	1	0.02	∞
Test Sample Related						
Probe Coupling with DUT	0.00	R	1.73	1	0.00	∞
Modulation Response	0.40	R	1.73	1	0.23	∞
Integration Time	0.00	R	1.73	1	0.00	∞
Response Time	0.00	R	1.73	1	0.00	∞
Device Holder Influence	0.10	R	1.73	1	0.06	∞
DUT alignment	0.00	R	1.73	1	0.00	∞
RF Ambient Conditions	0.04	R	1.73	1	0.02	∞
Ambient Reflections	0.04	R	1.73	1	0.02	∞
Immunity/Secondary Reception	0.00	R	1.73	1	0.00	∞
Drift of DUT	0.21	R	1.73	1	0.12	∞
Combined Standard Uncertainty (k=1)					RSS	0.76
Expanded Uncertainty (95% CONFIDENCE LEVEL)					k=2	1.52

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8 CONCLUSION

8.1 Measurement Conclusion

The power density measurements and total exposure ratio analysis indicate that the DUT complies with the RF radiation exposure limits of the FCC, with respect to all parameters subject to this test. These measurements were taken to simulate the RF effects of RF exposure under worst-case conditions. Precise laboratory measures were taken to assure repeatability of the tests. The results and statements relate only to the item(s) tested.

Please note that the RF Exposure and distribution of electromagnetic energy in the body are very complex phenomena that depend on the mass, shape, and size of the body, the orientation of the body with respect to the field vectors, and the electrical properties of both the body and the environment. Other variables that may play a substantial role in possible biological effects are those that characterize the environment (e.g. ambient temperature, air velocity, relative humidity, and body insulation) and those that characterize the individual (e.g. age, gender, activity level, debilitation, or disease). Because various factors may interact with one another to vary the specific biological outcome of an exposure to electromagnetic fields, any protection guide should consider maximal amplification of biological effects as a result of field-body interactions, environmental conditions, and physiological variables.

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9 REFERENCES

- [1] ANSI/IEEE C95.1-1992, American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 3kHz to 300GHz, New York: IEEE, Sept. 1992.
- [2] IEC/IEEE 63195-1:2022, Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz)
- [3] IEC TR 62630 : 2010, Guidance for Evaluating Exposure from Multiple Electromagnetic Sources
- [4] K. Pokovic, T. Schmid, J. Frohlich, and N. Kuster. Novel Probes and Evaluation Procedures to Assess Field Magnitude and Polarization. IEEE Transactions on Electromagnetic Compatibility 42(2): 240 -244, 2000
- [5] R. W. Gerchberg and W. O. Saxton. A Practical Algorithm for the Determination of Phase from Image and Diffraction Plane Pictures. Optik 35(2): 237 – 246, 1972
- [6] A. P. Anderson and S. Sali. New Possibilities for Phaseless Microwave Diagnostics. Part 1: Error Reduction Techniques. IEE Proceedings H – Microwaves, Antennas and Propagation 132(5): 290 – 298, 1985
- [7] FCC KDB 865664 D02 v01r04: SAR Measurement Requirements for 100 MHz to 6 GHz. Federal Communications Commission – Office of Engineering and Technology, Laboratory Division.
- [8] FCC KDB 447498 D01 v02r01: RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices. Federal Communications Commission – Office of Engineering and Technology, Laboratory Division.
- [9] November 2017 Telecommunications Certification Body Council (TCBC) Workshop Notes
- [10] October 2018 Telecommunications Certification Body Council (TCBC) Workshop Notes
- [11] April 2019 Telecommunications Certification Body Council (TCBC) Workshop Notes
- [12] November 2019 Telecommunications Certification Body Council (TCBC) Workshop Notes
- [13] SPEAG DASY6 System Handbook (September 2019)

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