

FCC SAR Test Report

Applicant: Datalogic S.r.l.

EUT Description: MOBILE COMPUTER/BARCODE READER

Model: CMFSWF

Brand: DATALOGIC

FCC ID: U4G-CMFSWF

Standards: FCC 47CFR §2.1093

Date of Receipt: 2026/01/06

Date of Test: 2026/01/17 to 2026/02/27

Date of Issue: 2026/03/09

TOWE. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

the results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of the model are manufactured with identical electrical and mechanical components. All sample tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. without written approval of TOWE, the test report shall not be reproduced except in full.



Jim Huang
Approved By:



Jack Li
Reviewed By:

Revision History

Rev.	Issue Date	Description	Revised by
01	2026/03/09	Original	Jack Li

Table of Contents

1	Summary of Test Results.....	5
2	Guidance Applied.....	6
3	Lab Information	6
3.1	Testing Location.....	6
3.2	Test Facility / Accreditations.....	6
3.3	Ambient Condition	6
4	Client Information.....	6
4.1	Applicant	6
4.2	Manufacturer	6
5	Product Information.....	7
5.1	Antenna Locations (Back View).....	7
5.2	Power reduction specification	8
5.2.1	Proximity Sensor Triggering Test	8
6	RF Exposure Limits	11
7	Introduction.....	12
7.1	SAR Definition.....	12
8	SAR Measurements System.....	13
8.1	The SAR Measurement Set-up.....	13
8.2	E-Field Probe.....	14
8.3	Data Acquisition Electronics (DAE).....	14
8.4	Phantom	15
8.5	Device Holder	16
8.6	Measurement procedure.....	17
8.6.1	Power reference measurement.....	17
8.6.2	Area scan.....	17
8.6.3	Zoom Scan.....	18
8.6.4	Power Drift Measurement	18
9	Test Equipment list	19
10	SAR measurement variability.....	20
11	System Verification	21
11.1	Tissue Verification	21
11.2	SAR System Check.....	22
11.2.1	System Check Result.....	22
11.2.2	Detailed System Check Result	22
11.3	PD System Verification	23
12	SAR General Measurement Procedures.....	24
12.1	SAR Testing with 802.11 Transmitters	24
12.1.1	Initial Test Position Procedure	24
12.1.2	Initial Test Configuration Procedure.....	24
12.1.3	Subsequent Test Configuration Procedures.....	25
12.1.4	2.4 GHz SAR Procedures.....	25
12.1.5	5 GHz SAR Procedures.....	26
12.1.6	OFDM Transmission Mode and SAR Test Channel Selection.....	26
13	Conducted Power	27
14	SAR Data Summary	39
14.1	SAR Measurement Result of WIFI 2.4G	40
14.2	SAR Measurement Result of WIFI 5G	41
14.3	SAR Measurement Result of WIFI 6G	43
14.4	SAR Measurement Result of BT	43
14.5	PD Measurement Result of WIFI 6G	44
14.6	SAR Measurement Result of NFC	44

15	Simultaneous Transmission Analysis	45
16	Measurement Uncertainty	47
17	Calibration Certificate	49
18	Test Setup Photos	49
Appendix A: System Check Plots		49
Appendix B: SAR Test Plots		49
Appendix C: Calibration certificate		49
Appendix D: Test Setup Photos		49

1 Summary of Test Results

Band	Highest SAR(W/kg)	
	Body 1g SAR	Extremity 10g SAR
WIFI 2.4G	0.33	1.10
WIFI 5G	0.35	2.01
WIFI 6G	0.09	0.16
BT	0.03	0.08
NFC	0.11	0.05
SAR Limited(W/kg)	1.6	4.0
Highest Simultaneous Transmission SAR(W/kg)		
Scenario	Body 1g SAR	Extremity 10g SAR
Summed SAR	0.38	2.01
SAR Limited(W/kg)	1.6	4.0

Band	Highest PD (W/m ²)
WIFI 6G	8.95
Limit	10.0

Highest Simultaneous Transmission with Multiple transmitters	Total Exposure Radio
SAR & Power Density	0.90
Radio Limit	1.0

2 Guidance Applied

FCC 47CFR §2.1093
ANSI/IEEE C95.1-1992
IEC/IEEE 62209-1528:2020
IEC/IEEE 63195-1:2022
IEC 62479:2010
FCC KDB 248227 D01 SAR Guidance for IEEE 802.11 Wi-Fi SAR v02r02
FCC KDB 648474 D04 Handset SAR v01r03
FCC KDB 447498 D01 General RF Exposure Guidance v06
FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
FCC KDB 865664 D02 RF Exposure Reporting v01r02
FCC KDB 616217 D04 SAR for laptop and tablets v01r02

3 Lab Information

3.1 Testing Location

These measurements tests were conducted at the Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. facility located at F401 and F101, Building E, Hongwei Industrial Zone, Liuxian 3rd Road, Bao'an District, Shenzhen, China. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014
Tel.: +86-755-27212361
Contact Email: info@towewireless.com

3.2 Test Facility / Accreditations

A2LA (Certificate Number: 7088.01)

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

FCC Designation No.: CN1353

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized as an accredited testing laboratory. Designation Number: CN1353.

ISED CAB identifier: CN0152

Sushi TOWE Wireless Testing(Shenzhen) Co., Ltd. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0152

Company Number: 31000

3.3 Ambient Condition

Temperature: 18°C~25°C

Relative Humidity: 30%~75%

4 Client Information

4.1 Applicant

Applicant:	Datalogic S.r.l.
Address:	Via San Vitalino, 13 40012 Lippo di Calderara di Reno (BO) - Italy

4.2 Manufacturer

Manufacturer:	Datalogic S.r.l.
Address:	Via San Vitalino, 13 40012 Lippo di Calderara di Reno (BO) - Italy

5 Product Information

EUT Description	MOBILE COMPUTER/BARCODE READER	
Model:	CMFSWF	
Hardware Version	V3	
Software Version	3.23.005.20260209 release-keys	
SN.	SUK3: 2606610a SUK2: c599b8e5 SUK6: c8e5f49f SUK11: e65d222a SUK13: c9e8cf9a SUK14: f0501366	
Device Capabilities:		
Band	Frequency Range (MHz)	Modulation Type
Wi-Fi 2.4G	2400~2483.5	802.11b/g/n/11ax
Wi-Fi 5G	5150~5250	802.11a/n/ac/ax
	5250~5350	
	5470~5725	
	5725~5850	
Wi-Fi 6G	5925~6425 6425~6525 6525~6875 6875~7125	802.11a/ax
NFC	13.56	ASK
Bluetooth	2400~2483.5	GFSK, π/4DQPSK, 8DPSK
Antenna Type	☐ External, ☒ Integrated	
Remark:		
1. The above EUT's information was declared by applicant, please refer to the specifications or user's manual for more detailed description.		
2. According to the Differences Statement for Different SKUs, there are 15 SKUs. The tested SKU is 3 and the worst data of SAR was spot checked in SKU2/SKU6/SKU11/SKU13/SKU14.		

5.1 Antenna Locations (Back View)

Please see Appendix D.

5.2 Power reduction specification

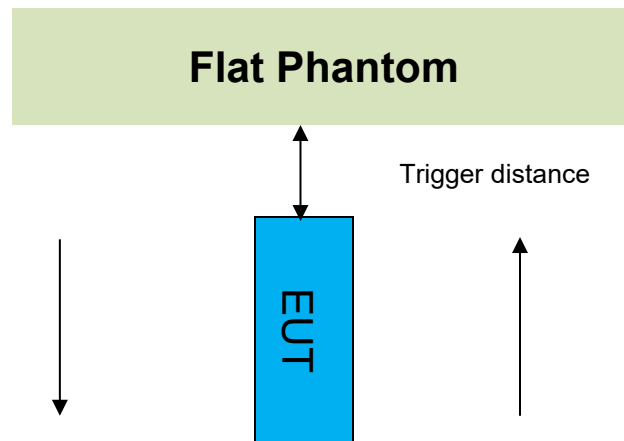
This device uses a single fixed level of power reduction through static table look-up for SAR compliance and it is triggered by a single event or operation:

- 1) The proximity sensor is used to indicate when the device is held close to a user's body exposure condition. It utilizes the proximity sensor to reduce the output power in specific wireless and operating modes WIFI 6G to ensure SAR compliance.

5.2.1 Proximity Sensor Triggering Test

1) Proximity sensor triggering distances

Proximity sensor triggering was applied to WIFI 6G. Proximity sensor triggering distance testing was performed in which the EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed.



Proximity Sensor Triggering Distance(mm)						
WIFI 6G Ant2						
Position	Front side	Back side	Left side	Right side	Top side	Bottom side
Minimum (mm)	/	/	/	18	/	/
WIFI 6G Ant3						
Minimum (mm)	/	/	13	/	/	/

Note:

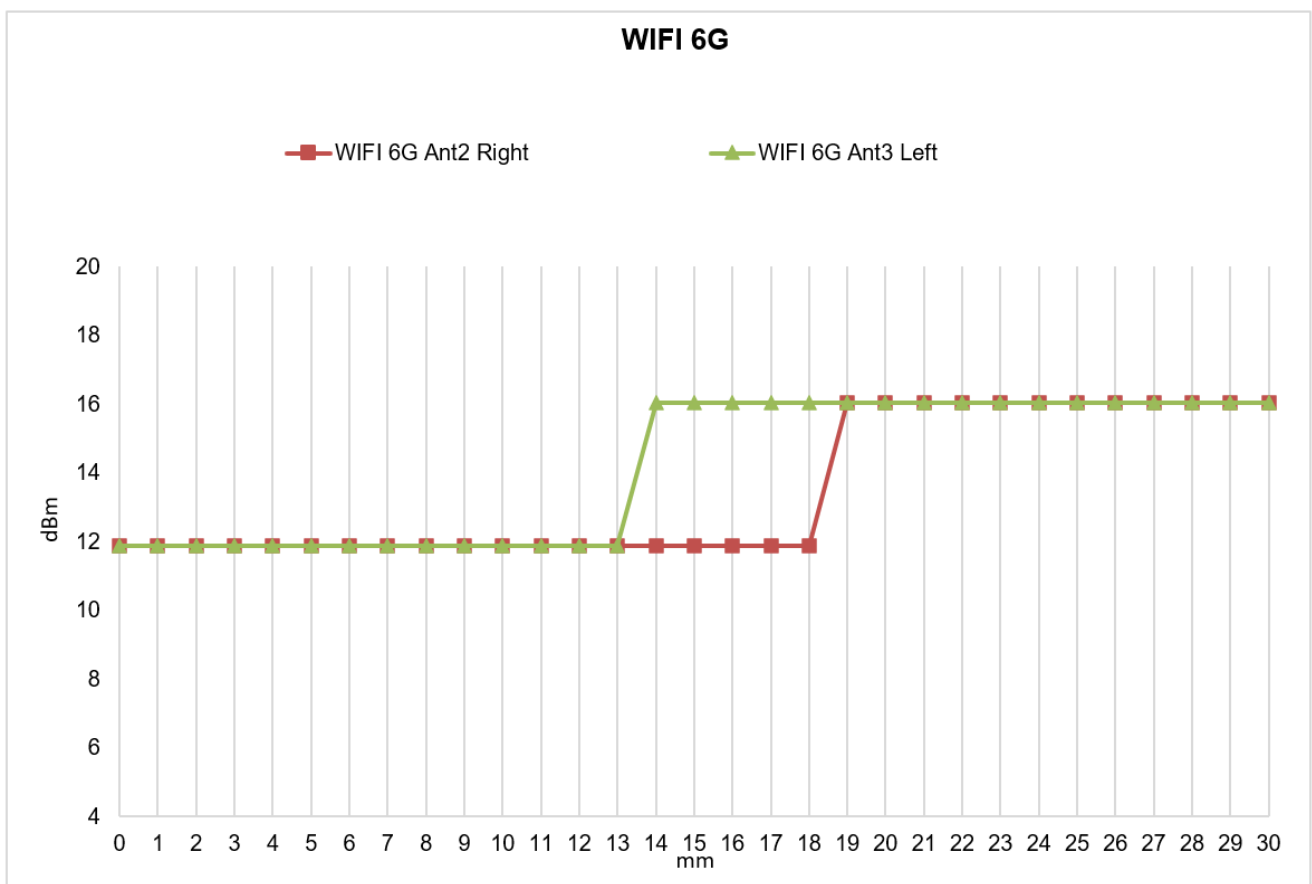
1, Only the 6GHz mode supports the proximity sensor, while the 2.4GHz/5GHz/BT and NFC do not support the proximity sensor.

2, SAR tests with proximity sensor power reduction are only required for the sides of frequency bands in the table above. For the other sides or other frequency bands of the device, SAR is still tested at the maximum power level with sensor off.

● DUT Moving Toward (Trigger) the Phantom:



● DUT Moving Away (Release) from the Phantom:



2) Proximity sensor coverage

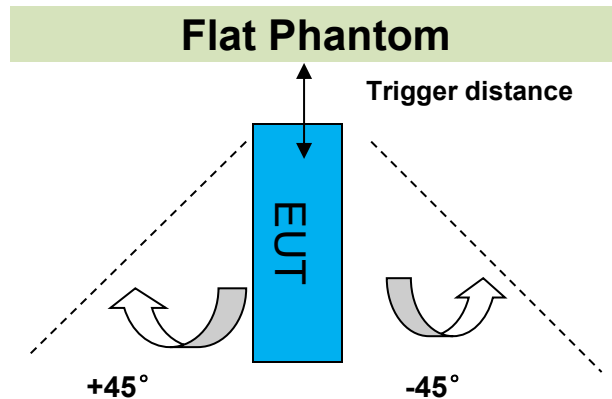
If a sensor is spatially offset from the antenna(s), it is necessary to verify sensor triggering for conditions where the antenna is next to the user but the sensor is laterally further away to ensure sensor coverage is sufficient for reducing the power to maintain compliance. For p-sensor coverage testing, the device is moved and “along the direction of maximum antenna and sensor offset”.

The proximity sensor and main antenna use same metallic electrode, so there is no spatial offset.

3) Device tilt angle influences to proximity sensor triggering

The influence of device tilt angles to proximity sensor triggering was determined by positioning each tablet edge that contains a transmitting antenna, perpendicular to the flat phantom.

Rotating the tablet around the edge next to the phantom in $\leq 10^\circ$ increments until the tablet is $\pm 45^\circ$ from the vertical position at 0° , and the maximum output power remains in the reduced mode.



The Sensor Triggering Distance(mm)		
Antenna	Ant2	Ant3
Position	Right Edge	Left Edge
Minimum	18	13

Summary of Tablet Tilt Angle Influence to Proximity Sensor Triggering for Bottom Side												
Ant	Minimum trigger distance at which power reduction was maintained over $\pm 45^\circ$	Power Reduction Status										
		-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°
Ant2	18mm	on	on	on	on	on	on	on	on	on	on	on
Ant3	13mm	on	on	on	on	on	on	on	on	on	on	on

6 RF Exposure Limits

Human Exposure	Uncontrolled Environment General Population (W/kg) or (mW/g)	Controlled Environment Occupational (W/kg) or (mW/g)
Spatial Peak SAR¹ (Brain/Trunk)	1.6	8.0
Spatial Average SAR² (Whole Body)	0.08	0.4
Spatial Peak SAR³ (Hands/Feet/Ankle/Wrist)	4.0	20.0

Note:

1, The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

2, The Spatial Average value of the SAR averaged over the whole body.

3, The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

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.

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.

RF Exposure Limit for above 6GHz

Per §1.1310 (d)(3), the MPE limits are applied for frequencies above 6 GHz. Power Density is expressed in units of W/m² or mW/cm².

Peak Spatially Averaged Power Density was evaluated over a circular area of 4cm² per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes.

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/cm² is 10.0 W/m².

7 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

7.1 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$SAR = \frac{d}{dt} \left(\frac{dW}{dm} \right) = \frac{d}{dt} \left(\frac{dW}{\rho dv} \right)$$

SAR is expressed in units of Watts per kilogram (W/kg):

$$SAR = \frac{\sigma E^2}{\rho}$$

Where:

σ is the conductivity of the tissue material (S/m)

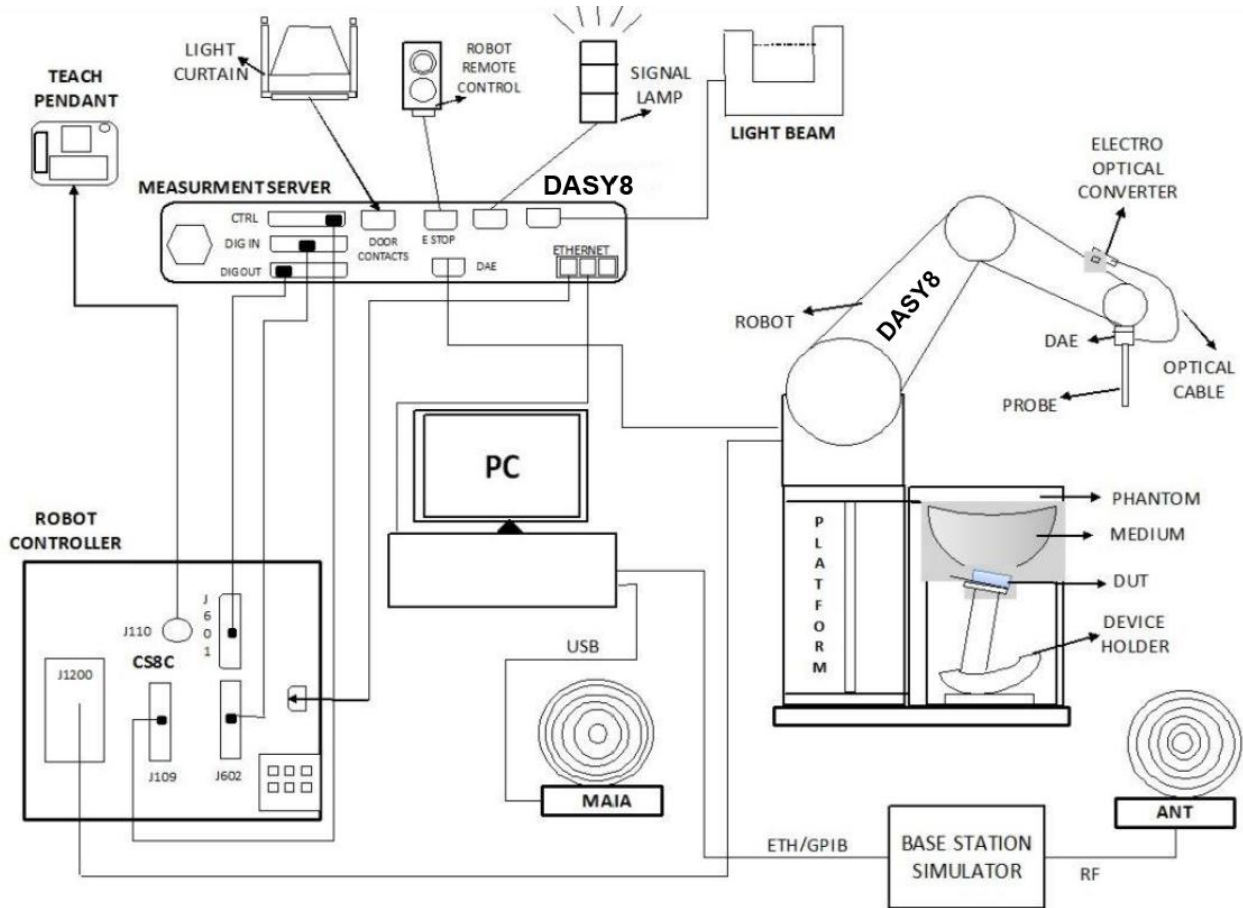
ρ is the mass density of the tissue material (kg/m³)

E is the RMS electrical field strength (V/m)

8 SAR Measurements System

8.1 The SAR Measurement Set-up

The DASY system used for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Windows 11 and the DASY8 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

8.2 E-Field Probe

	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available.
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/g)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm

8.3 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.
---	--

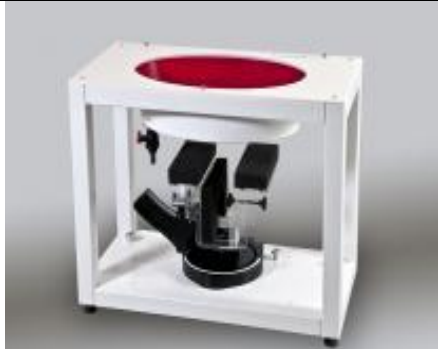
8.4 Phantom

SAM Twin Phantom:

Material	Vinylester, glass fiber reinforced (VE-GF)	
Shell Thickness	2 ± 0.2 mm (6 ± 0.2 mm at ear point)	
Dimensions (incl. Wooden Support)	Length: 1000 mm Width: 500 mm Height: adjustable feet	
Filling Volume	Approx. 25 liters	
Wooden Support	SPEAG standard phantom table	

The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

ELI Phantom:

Material	Vinylester, glass fiber reinforced (VE-GF)	
Shell Thickness	2.0 ± 0.2 mm (bottom plate)	
Dimensions	Major axis: 600 mm Minor axis: 400 mm	
Filling Volume	approx. 30 liters	
Wooden Support	SPEAG standard phantom table	
The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.		

8.5 Device Holder

The SAR measured in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5mm distance, a positioning uncertainty of $\pm 0.5\text{mm}$ would produce uncertainty in the SAR of $\pm 20\%$. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions at which the devices must be measured are defined by the standards. The DASY8 device holder along with the associated adaptors / options is designed to accommodate different types & sizes (laptops, tablets, phones) of test devices and yet provide accurate and repeatable positioning as described in the test standards.

The device holder is available in two configurations (see Figure 3.13.1): for hand held transmitters (mobile phones) – MD4HHTV5 – Mounting Device for Hand-Held Transmitters and for Body-Worn transmitters – MD4LAP5 – Mounting Device for laptops and other body worn transmitters.



(a) MD4HHTV5



(b) MD4LAPV5

Figure 3.13.1: Mounting Device for Hand-Held Devices and Laptop / Body-Worn Devices

8.6 Measurement procedure

8.6.1 Power reference measurement

The Power Reference Measurement and Power Drift Measurement jobs are useful jobs for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

8.6.2 Area scan

Measurement procedures for evaluating SAR from wireless handsets typically start with a coarse measurement grid to determine the approximate location of the local peak SAR values. This is known as the area-scan procedure. In addition, identify the positions of any local maxima with SAR values within 2 dB of the maximum value, and that will not be within the zoom scan of other peaks. Additional zoom scans shall be measured for such peaks only when the primary peak is within 2 dB of the SAR compliance limit.

Area scan parameters SAR measurement as below:

Parameter	DUT transmit frequency being tested	
	$f \leq 3 \text{ GHz}$	$3 \text{ GHz} < f \leq 10 \text{ GHz}$
Maximum distance between the measured points (geometric centre of the sensors) and the inner phantom surface (z_{M1} in Figure 20 in mm)	5 ± 1	$\delta \ln(2)/2 \pm 0,5^a$
Maximum spacing between adjacent measured points in mm (see O.8.3.1) ^b	20, or half of the corresponding zoom scan length, whichever is smaller	$60/f$, or half of the corresponding zoom scan length, whichever is smaller
Maximum angle between the probe axis and the phantom surface normal (α in Figure 20) ^c	5° (flat phantom only) 30° (other phantoms)	5° (flat phantom only) 20° (other phantoms)
Tolerance in the probe angle	1°	1°
^a δ is the penetration depth for a plane-wave incident normally on a planar half-space. ^b See Clause O.8 on how Δx and Δy may be selected for individual area scan requirements. ^c The probe angle relative to the phantom surface normal is restricted due to the degradation in the measurement accuracy in fields with steep spatial gradients. The measurement accuracy decreases with increasing probe angle and increasing frequency. This is the reason for the tighter probe angle restriction at frequencies above 3 GHz.		

8.6.3 Zoom Scan

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The Zoom Scan measures points (refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1 g and 10 g and displays these values next to the job's label.

Zoom Scan parameters SAR measurement as below:

Parameter	DUT transmit frequency being tested	
	$f \leq 3 \text{ GHz}$	$3 \text{ GHz} < f \leq 10 \text{ GHz}$
Maximum distance between the closest measured points and the phantom surface (z_{M1} in Figure 20 and Table 3, in mm)	5	$\delta \ln(2)/2^a$
Maximum angle between the probe axis and the phantom surface normal (α in Figure 20)	5° (flat phantom only) 30° (other phantoms)	5° (flat phantom only) 20° (other phantoms)
Maximum spacing between measured points in the x - and y -directions (Δx and Δy , in mm)	8	$24/f^b$
For uniform grids: Maximum spacing between measured points in the direction normal to the phantom shell (Δz_1 in Figure 20, in mm)	5	$10/(f - 1)$
For graded grids: Maximum spacing between the two closest measured points in the direction normal to the phantom shell (Δz_1 in Figure 20, in mm)	4	$12/f$
For graded grids: Maximum incremental increase in the spacing between measured points in the direction normal to the phantom shell ($R_z = \Delta z_2/\Delta z_1$ in Figure 20)	1,5	1,5
Minimum edge length of the zoom scan volume in the x - and y -directions (L_z in O.8.3.2, in mm)	30	22
Minimum edge length of the zoom scan volume in the direction normal to the phantom shell (L_h in O.8.3.2 in mm)	30	22
Tolerance in the probe angle	1°	1°
^a δ is the penetration depth for a plane-wave incident normally on a planar half-space.		
^b This is the maximum spacing allowed, which might not work for all circumstances.		

8.6.4 Power Drift Measurement

The Power Drift Measurement job measures the field at the same location as the most recent power reference measurement job within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement. Several drift measurements are possible for one reference measurement. This allows a user to monitor the power drift of the device under test that must remain within a maximum variation of $\pm 5\%$. Detail power drift measurement refer to appendix B.

9 Test Equipment list

Manufacturer	Equipment Name	Model	Serial Number	Calibration Date	Due Date of calibration
SPEAG	ELI	ELI V8.0	2227	NCR	NCR
SPEAG	Twin Phantom	SAM	2168	NCR	NCR
SPEAG	mmWave Phantom	mmWave	1121	NCR	NCR
SPEAG	E-Field Probe	EX3DV4	7858	2025/02/20	2026/02/19
SPEAG	E-Field Probe	EX3DV4	7812	2026/01/19	2027/01/18
SPEAG	EUmmWV Probe Tip Protection	EUmmWV4	9455	2025/06/30	2026/06/29
SPEAG	Data Acquisition Electronics	DAE4	1846	2026/01/07	2027/01/06
SPEAG	System Validation Kits	CLA13	1043	2024/01/03	2027/01/02
SPEAG	System Validation Kits	D2450V2	1099	2026/02/05	2029/02/04
SPEAG	System Validation Kits	D5GHzV2	1371	2026/02/09	2029/02/08
SPEAG	System Validation Kits	D6.5GHzV2	1096	2023/05/11	2026/05/10
SPEAG	System Validation Kits	10GHz	1055	2024/09/16	2027/09/15
SPEAG	Dielectric parameter probes	DAK12	1199	2025/01/20	2026/01/19
SPEAG	Dielectric parameter probes	DAK3.5	1341	2025/07/14	2026/07/13
Agilent	Network Analyzer	E5071B	MY42302220	2025/03/11	2026/03/10
Talent Microwave	Directional Coupler	TC-05180-10S	220420003	NCR	NCR
R&S	Signal Generator	SMR20	100648	2025/03/11	2026/03/10
QiJi	Preamplifier	YX28982301	TOWE-EQ-SR-021	NCR	NCR
R&S	Power Sensor	NRP-Z21	101651	2025/03/11	2026/03/10
R&S	Power Sensor	NRP-Z21	104189	2025/03/11	2026/03/10
HiSiDiKe	Thermometer	TP300	TOWE-EQ-SR-023	2025/03/12	2026/03/11
ShangHai BingYuLiuTi	Temperature and Humidity Indicator	HTC-1	TOWE-EQ-SR-024	2025/03/13	2026/03/12
BingYu	Temperature and Humidity Indicator	HTC-1	TOWE-EQ-SR-025	2025/06/04	2026/06/03

Note:

1. Referring to KDB 865664 D01v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipoles are also not physically damaged or repaired during the interval.
2. The justification data of dipole can be found in Appendix C. The return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration.

10 SAR measurement variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 or 2 W/kg (1-g or 10-g respectively); steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 or 2 W/kg (1-g or 10-g respectively), repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 or 3.6 W/kg ($\sim 10\%$ from the 1-g or 10-g respective SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 or 3.75 W/kg (1-g or 10-g respectively) and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20

11 System Verification

11.1 Tissue Verification

The Conductivity (σ) and Permittivity (ρ) are listed in bellow table. The temperature variation of the Tissue Simulate Liquids was $22\pm 2^{\circ}\text{C}$, the liquid depth of the ear reference point or the flat phantom was at least 15 cm (which is shown in Figure 12-1).

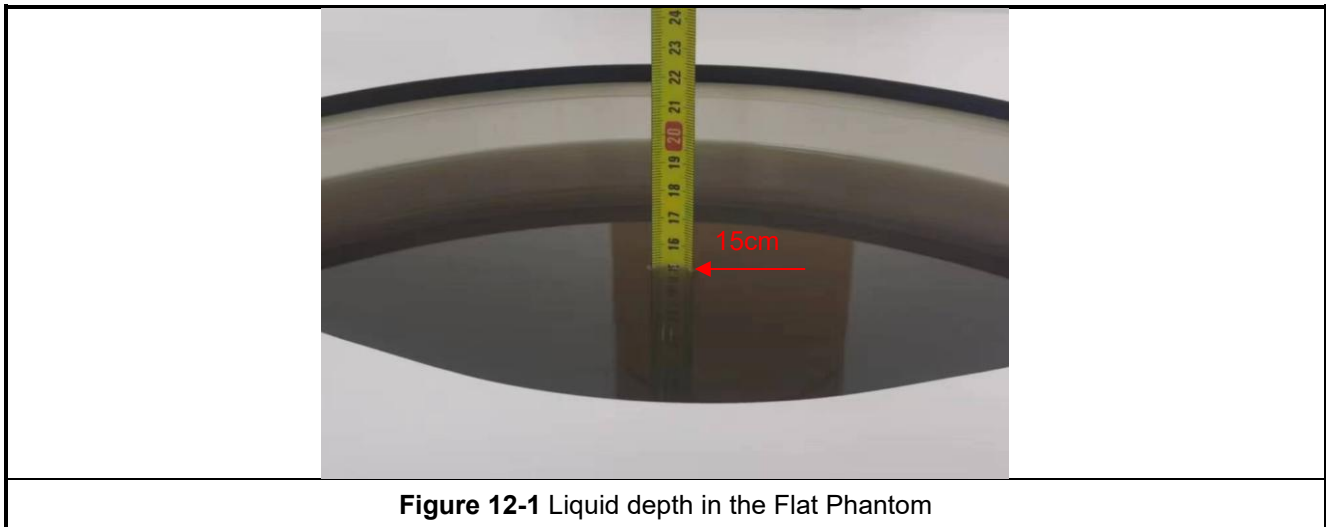


Figure 12-1 Liquid depth in the Flat Phantom

Frequency (MHz)	Tissue Type	Liquid Temp. ($^{\circ}\text{C}$)	Target Tissue		Measured Tissue		Deviation (Limit $\pm 5\%$)		Date
			Permittivity ϵ_r	Conductivity $\sigma(\text{S/m})$	Permittivity ϵ_r	Conductivity $\sigma(\text{S/m})$	$\Delta\epsilon_r$	$\Delta\sigma$	
13	Head	21.8	55.00	0.75	55.000	0.760	0.00%	1.33%	2026/01/17
2450	Head	22.1	39.20	1.80	40.100	1.810	2.30%	0.56%	2026/02/15
5200	Head	22.3	36.00	4.66	36.100	4.660	0.28%	0.00%	2026/02/21
5600	Head	22.3	35.50	5.07	35.100	5.120	-1.13%	0.99%	2026/02/21
5800	Head	22.3	35.30	5.27	35.000	5.300	-0.85%	0.57%	2026/02/21
6500	Head	22.2	34.50	6.07	35.100	6.150	1.74%	1.32%	2026/02/27

Table 1: Measurement Tissue Parameters

11.2 SAR System Check

Prior to SAR assessment, a SAR system Check measurement was performed to see if the measured SAR was within $\pm 10\%$ from the target SAR values. The System Performance Check Setup in Figure 12-3.

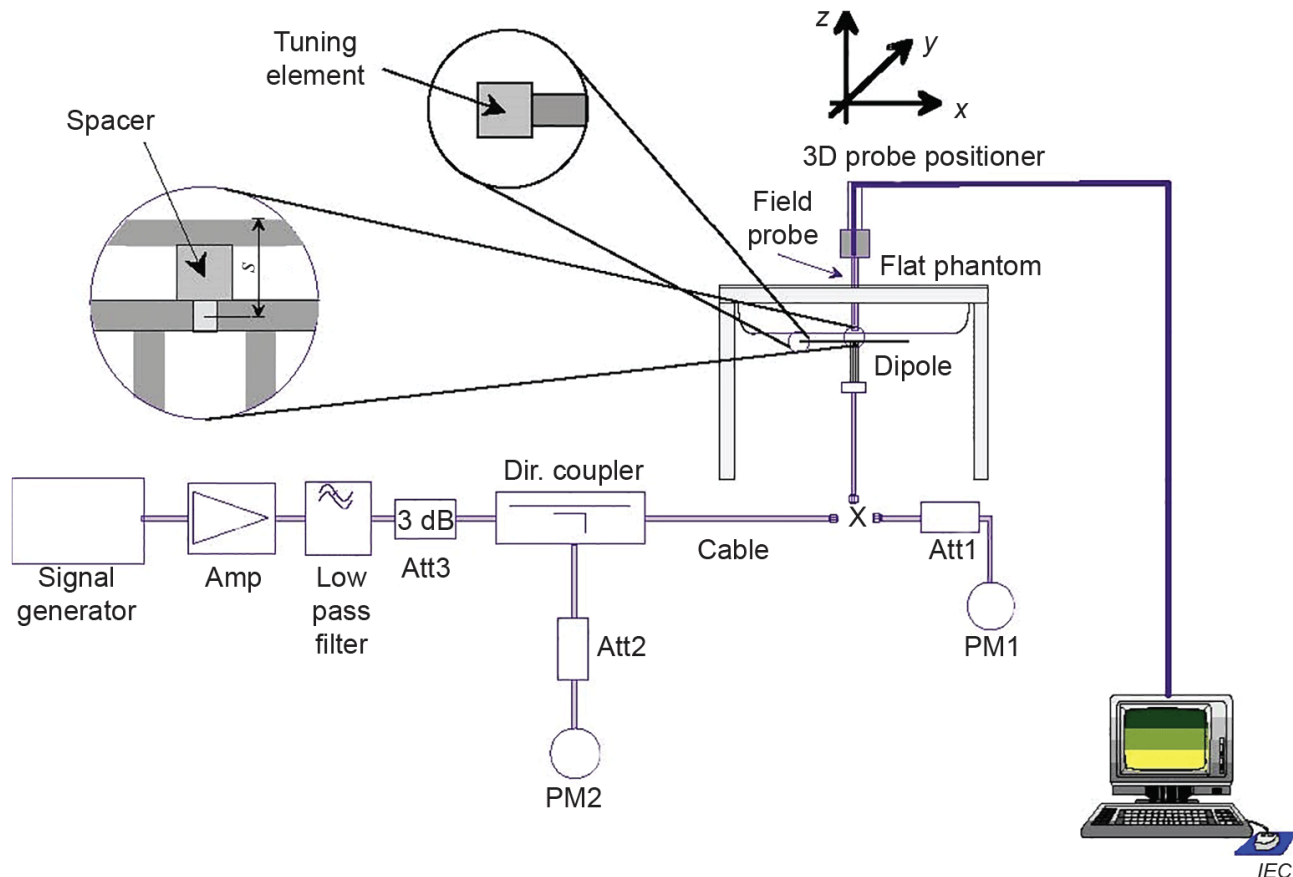


Figure 12-3 System Performance Check Setup

11.2.1 System Check Result

Frequency (MHz)	Tissue Type	Dipole	S/N	Target SAR (1W)		Measured SAR (100mW)		Measured SAR (normalized to 1W)		Deviation (Limit $\pm 10\%$)		Date
				1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	$\Delta 1g$	$\Delta 10g$	
13	Head	CLA-13	1043	0.484	0.297	0.047	0.029	0.470	0.290	-2.89%	-2.36%	2026/01/17
2450	Head	D2450V2	1099	52.70	24.70	5.25	2.47	52.50	24.70	-0.38%	0.00%	2026/02/15
5200	Head	D5GHzV2	1371	76.50	21.50	7.61	2.21	76.10	22.10	-0.52%	2.79%	2026/02/21
5600	Head	D5GHzV2	1371	82.10	23.10	8.03	2.29	80.30	22.90	-2.19%	-0.87%	2026/02/21
5800	Head	D5GHzV2	1371	78.60	22.10	7.79	2.22	77.90	22.20	-0.89%	0.45%	2026/02/21
6500	Head	D6.5GHzV2	1096	289.00	53.40	27.70	5.19	277.00	51.90	-4.15%	-2.81%	2026/02/27

Table 2: SAR System Check Result

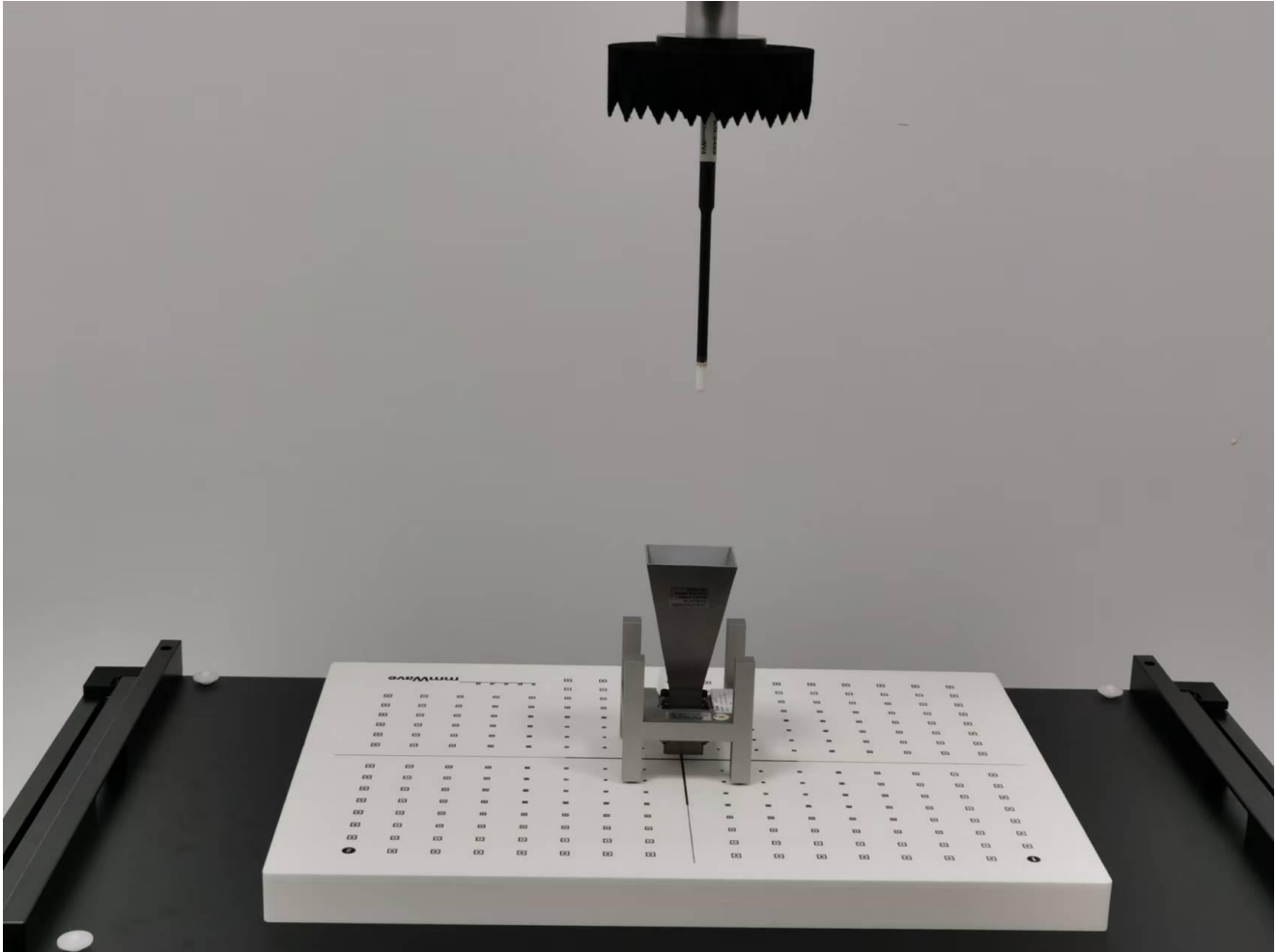
11.2.2 Detailed System Check Result

Please see Appendix A

11.3 PD 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 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.



System Verification Setup Photo

Frequency (GHz)	PD Verification Source	Distance (mm)	Measured 4cm ² (W/m ²)	Target 4cm ² (W/m ²)	Deviation (dB)	Measured Date
10G	10GHz_1055	10	57.30	56.20	0.08	2026/02/01
10G	10GHz_1055	10	59.00	56.20	0.21	2026/02/02

Detailed System Check Results Please see Appendix A.

12 SAR General Measurement Procedures

12.1 SAR Testing with 802.11 Transmitters

The normal network operating configurations of 802.11 transmitters are not suitable for SAR measurements. Unpredictable fluctuations in network traffic and antenna diversity conditions can introduce undesirable variations in SAR results. The SAR for these devices should be measured using chipset based test mode software to ensure the results are consistent and reliable. See KDB Publication 248227 D01 for more details.

A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement.

For WiFi SAR testing, a communication link is set up with some command for WiFi mode test. During the test, at the each test frequency channel, the EUT is operated at the RF continuous emission mode. Per KDB248227 D01, a minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

12.1.1 Initial Test Position Procedure

DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures. The initial test position procedure is described in the following:

1. When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other (remaining) test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band. SAR is also not required for that exposure configuration in the subsequent test configuration(s).
2. When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.
3. For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested. a) Additional power measurements may be required for this step, which should be limited to those necessary for identifying the subsequent highest output power channels.

12.1.2 Initial Test Configuration Procedure

An initial test configuration is determined for OFDM transmission modes according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. SAR is measured using the highest measured maximum output power channel. For configurations with the same specified or measured maximum output power, additional transmission mode and test channel selection procedures are required. SAR test reduction for subsequent highest output test channels is determined according to reported SAR of the initial test configuration.

For next to the ear, hotspot mode and UMC mini-tablet exposure configurations where multiple test positions are required, the initial test position procedure is applied to minimize the number of test positions required for SAR measurement using the initial test configuration transmission mode. For fixed exposure conditions that do not have multiple SAR test positions, SAR is measured in the transmission mode determined by the initial test configuration.

When the reported SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for subsequent next highest measured output power channel(s) in the initial test configuration until reported SAR is ≤ 1.2 W/kg or all required channels are tested.

12.1.3 Subsequent Test Configuration Procedures

For OFDM configurations in each frequency Band and aggregated Band, SAR is evaluated for initial test configuration using the fixed test position or the initial test position on procedure. When the highest reported SAR (for the initial test configuration), adjusted by the ratio of the specified maximum output power of the subsequent test configuration to initial test configuration, is ≤ 1.2 W/kg for 1g SAR and ≤ 3.0 W/kg for 10g SAR, no additional SAR tests for the subsequent test configurations are required.

12.1.4 2.4 GHz SAR Procedures

Separate SAR procedures are applied to DSSS and OFDM configurations in the 2.4 GHz band to simplify DSSS test requirements. For 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test positions.

A) 802.11b DSSS SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either a fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

1. When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS is that exposure configuration.
2. When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel; i.e., all channels require testing.

B) 2.4 GHz 802.11g/n OFDM SAR Test Exclusion Requirements

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, the measurement and test reduction procedures for OFDM are applied (section 5.3 of of KDB248227 D01). SAR is not required for the following 2.4 GHz OFDM conditions.

1. When KDB Publication 447498 SAR test exclusion applies to the OFDM configuration.
2. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg.

C) SAR Test Requirements for OFDM configurations

When SAR measurement is required for 802.11 g/n OFDM configurations, each standalone and frequency aggregated band is considered separately for SAR test reduction. In applying the initial test configuration and subsequent test configuration procedures, the 802.11 transmission configuration with the highest specified maximum output power and the channel within a test configuration with the highest measured maximum output power should be clearly distinguished to apply the procedures.

12.1.5 5 GHz SAR Procedures

12.1.5.1 U-NII-1 and U-NII-2A Bands

For devices that operate in only one of the U-NII-1 and U-NII-2A bands, the normally required SAR procedures for OFDM configurations are applied. For devices that operate in both U-NII bands using the same transmitter and antenna(s), SAR test reduction is determined according to the following:

- 1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, both bands are tested independently for SAR.
- 2) When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, both bands are tested independently for SAR.
- 3) The two U-NII bands may be aggregated to support a 160 MHz channel on channel number 50. Without additional testing, the maximum output power for this is limited to the lower of the maximum output power certified for the two bands. When SAR measurement is required for at least one of the bands and the highest reported SAR adjusted by the ratio of specified maximum output power of aggregated to standalone band is > 1.2 W/kg, SAR is required for the 160 MHz channel. This procedure does not apply to an aggregated band with maximum output higher than the standalone band(s); the aggregated band must be tested independently for SAR. SAR is not required when the 160 MHz channel is operating at a reduced maximum power and also qualifies for SAR test exclusion.

12.1.5.2 U-NII-2C and U-NII-3 Bands

The frequency range covered by these bands is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. When Terminal Doppler Weather Radar (TDWR) restriction applies, all channels that operate at 5.60 – 5.65 GHz must be included to apply the SAR test reduction and measurement procedures.

When the same transmitter and antenna(s) are used for U-NII-2C band and U-NII-3 band or 5.8 GHz band of §15.247, the bands may be aggregated to enable additional channels with 20, 40 or 80 MHz bandwidth to span across the band gap, as illustrated in Appendix B. The maximum output power for the additional band gap channels is limited to the lower of those certified for the bands. Unless band gap channels are permanently disabled, they must be considered for SAR testing. The frequency range covered by these bands is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. To maintain SAR measurement accuracy and to facilitate test reduction, the channels in U-NII-2C band above 5.65 GHz may be grouped with the 5.8 GHz channels in U-NII-3 or §15.247 band to enable two SAR probe calibration frequency points to cover the bands, including the band gap channels. When band gap channels are supported and the bands are not aggregated for SAR testing, band gap channels must be considered independently in each band according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

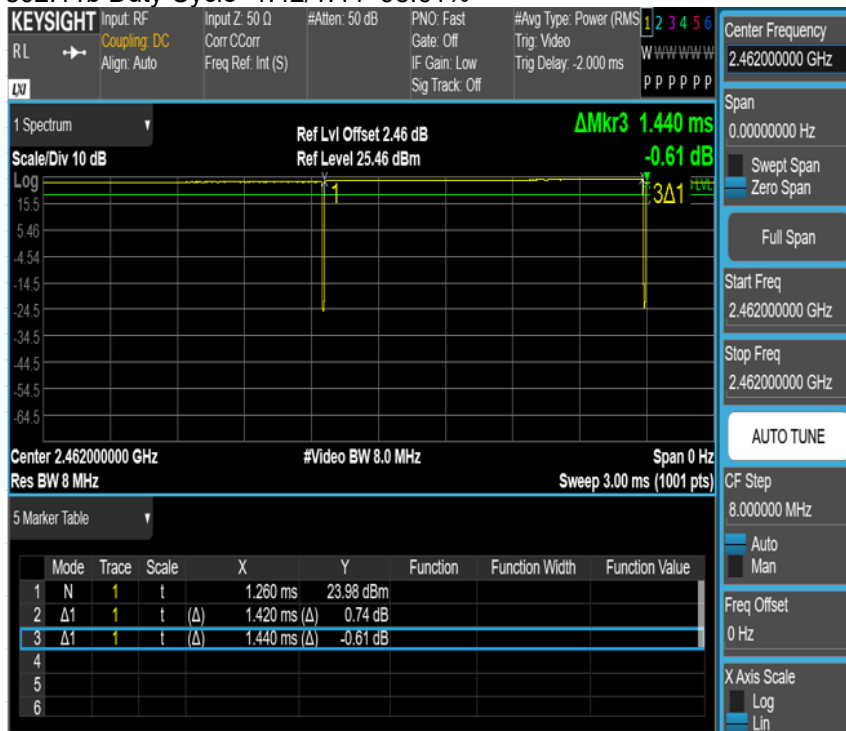
12.1.6 OFDM Transmission Mode and SAR Test Channel Selection

When the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11ac or 802.11g and 802.11n with the same channel bandwidth, modulation and data rate etc., the lower order 802.11 mode i.e., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

13 Conducted Power

Test Item	Test Mode	Freq (MHz)	Mode	RU#Size	RU#Index	Ant2		Ant3		MIMO	
						Average Conducted Power(dBm)	Tune up (dBm)	Average Conducted Power(dBm)	Tune up (dBm)	Average Conducted Power(dBm)	Tune up (dBm)
WIFI 2.4G	11b	2412	CDD	/	/	21.18	21.5	21.31	21.5	24.26	24.5
		2437		/	/	20.78	21.5	20.58	21.5	23.69	24.5
		2462		/	/	20.83	21.5	20.78	21.5	23.82	24.5
	11g	2412	CDD	/	/	19.46	20.5	19.75	20.5	22.62	23.5
		2437		/	/	19.58	20.5	19.99	20.5	22.80	23.5
		2462		/	/	19.41	20.5	19.92	20.5	22.68	23.5
	11n20	2412	MIMO	/	/	20.39	21.0	20.41	21.0	23.41	24.0
		2437		/	/	20.15	21.0	20.44	21.0	23.31	24.0
		2462		/	/	20.21	21.0	20.56	21.0	23.40	24.0
	11n40	2422	MIMO	/	/	17.98	18.5	18.26	18.5	21.13	21.5
		2437		/	/	17.77	18.5	17.94	18.5	20.87	21.5
		2452		/	/	17.68	18.5	17.79	18.5	20.75	21.5
	11ax20	2412	MIMO	/	/	19.25	20.5	19.56	20.5	22.42	23.5
		2437		/	/	19.37	20.5	19.75	20.5	22.57	23.5
		2462		/	/	19.28	20.5	19.74	20.5	22.53	23.5
	11ax40	2422	MIMO	/	/	17.63	18.0	17.88	18.0	20.77	21.0
		2437		/	/	17.43	18.0	17.49	18.0	20.47	21.0
		2452		/	/	17.38	18.0	17.47	18.0	20.44	21.0
	11ax20	2412	MIMO	26	0	15.28	16.5	15.93	16.5	18.63	19.5
		2437		26	4	15.38	16.5	15.44	16.5	18.42	19.5
		2462		26	8	15.75	16.5	15.64	16.5	18.71	19.5
		2412		52	37	15.21	16.5	15.73	16.5	18.49	19.5
		2437		52	39	15.35	16.5	15.48	16.5	18.43	19.5
		2462		52	40	15.64	16.5	15.56	16.5	18.61	19.5
		2412		106	53	15.42	16.5	15.82	16.5	18.63	19.5
		2437		106	53	15.64	16.5	15.71	16.5	18.69	19.5
		2462		106	54	15.65	16.5	15.63	16.5	18.65	19.5
	11ax40	2422	MIMO	242	61	12.26	13.0	12.49	13.0	15.39	16.0
		2437		242	61	12.25	13.0	12.37	13.0	15.32	16.0
		2452		242	62	12.33	13.0	12.23	13.0	15.29	16.0

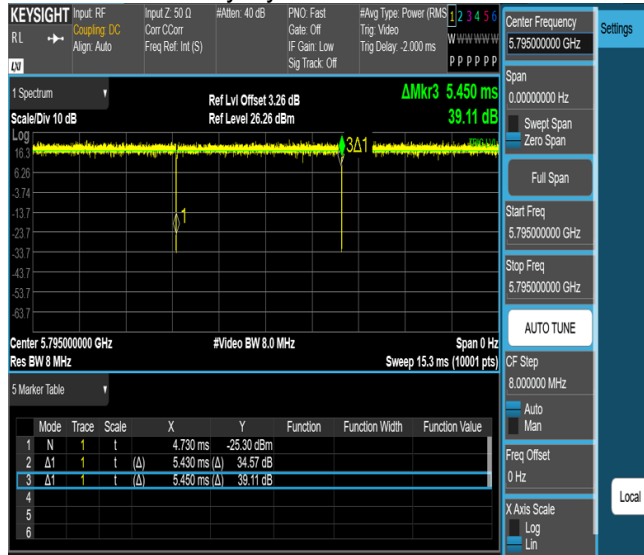
802.11b Duty Cycle=1.42/1.44=98.61%



TYPE	test mode	Test channel	Mode	RU#Size	RU#Index	Average Conducted Power(dBm)			Tune up (dBm)		
						Ant2	Ant3	MIMO	Ant2	Ant3	MIMO
5.2GWIFI U-NII-1	11a	5180	CDD	/	/	17.44	17.67	20.57	18.5	18.5	21.5
		5200		/	/	17.47	17.72	20.61	18.5	18.5	21.5
		5240		/	/	17.42	17.58	20.51	18.5	18.5	21.5
	11ac20	5180	CDD	/	/	18.27	18.25	21.27	18.5	18.5	21.5
		5200		/	/	18.31	18.26	21.30	18.5	18.5	21.5
		5240		/	/	18.01	18.15	21.09	18.5	18.5	21.5
	11ac40	5190	MIMO	/	/	18.23	18.46	21.36	18.5	18.5	21.5
		5230		/	/	18.09	18.37	21.24	18.5	18.5	21.5
	11ac80	5210	MIMO	/	/	17.56	17.66	20.62	18.0	18.0	21.0
	11ac160	5250	MIMO			14.39	14.22	17.32	14.5	14.5	17.5
	11ax20	5180	MIMO	/	/	18.44	18.23	21.35	18.5	18.5	21.5
		5200		/	/	18.43	18.24	21.35	18.5	18.5	21.5
		5240		/	/	18.18	18.15	21.18	18.5	18.5	21.5
	11ax40	5190	MIMO	/	/	18.75	18.42	21.60	19.0	19.0	22.0
		5230		/	/	18.60	18.45	21.54	19.0	19.0	22.0
	11ax80	5210	MIMO	/	/	17.06	17.18	20.13	17.5	17.5	20.5
	11ax160	5250	MIMO	/	/	14.43	14.25	17.35	14.5	14.5	17.5
	11ax20	5180	MIMO	26	0	9.82	9.53	12.69	10.5	10.5	13.5
		5200		26	4	9.49	9.17	12.34	10.5	10.5	13.5
		5240		26	8	10.05	9.67	12.87	10.5	10.5	13.5
		5180		52	37	12.53	12.31	15.43	13.0	13.0	16.0
		5200		52	39	12.43	12.11	15.28	13.0	13.0	16.0
		5240		52	40	12.96	12.45	15.72	13.0	13.0	16.0
		5180		106	53	15.59	15.36	18.49	16.0	16.0	19.0
		5200		106	53	15.63	15.32	18.49	16.0	16.0	19.0
	11ax40	5190	MIMO	242	61	16.83	16.58	19.72	17.0	17.0	20.0
		5230		242	62	16.75	16.63	19.70	17.0	17.0	20.0
	11ax80	5210	MIMO	484	65	15.54	15.45	18.51	16.0	16.0	19.0
				484	66	15.69	15.54	18.63	16.0	16.0	19.0
	11ax160	5250	MIMO	996	67	11.60	11.25	14.44	12.0	12.0	15.0
				996	68	11.84	11.33	14.60	12.0	12.0	15.0
5.3GWIFI U-NII-2A	11a	5260	CDD	/	/	17.35	17.25	20.31	18.0	18.0	21.0
		5300		/	/	17.56	17.45	20.52	18.0	18.0	21.0
		5320		/	/	17.59	17.45	20.53	18.0	18.0	21.0
	11ac20	5260	MIMO	/	/	16.99	16.95	19.98	18.0	18.0	21.0
		5300		/	/	17.16	17.14	20.16	18.0	18.0	21.0
		5320		/	/	17.23	17.13	20.19	18.0	18.0	21.0
	11ac40	5270	MIMO	/	/	17.38	17.12	20.26	18.0	18.0	21.0
		5310		/	/	17.54	17.31	20.44	18.0	18.0	21.0
	11ac80	5290	MIMO	/	/	17.12	16.93	20.04	17.5	17.5	20.5
	11ax20	5260	MIMO	/	/	17.88	17.56	20.73	18.5	18.5	21.5
		5300		/	/	18.06	17.86	20.97	18.5	18.5	21.5
		5320		/	/	18.14	17.87	21.02	18.5	18.5	21.5
	11ax40	5270	MIMO	/	/	17.61	17.45	20.54	18.0	18.0	21.0
		5310		/	/	17.77	17.57	20.68	18.0	18.0	21.0
	11ax80	5290	MIMO	/	/	17.08	16.88	19.99	17.5	17.5	20.5
	11ax20	5260	MIMO	26	0	9.86	9.31	12.60	10.5	10.5	13.5
		5300		26	4	9.55	9.06	12.32	10.5	10.5	13.5
		5320		26	8	10.08	9.61	12.86	10.5	10.5	13.5
		5260		52	37	12.68	12.13	15.42	13.0	13.0	16.0
		5300		52	39	12.46	12.05	15.27	13.0	13.0	16.0
		5320		52	40	12.78	12.37	15.59	13.0	13.0	16.0
		5260		106	53	15.09	14.52	17.82	15.5	15.5	18.5
		5300		106	53	15.17	14.69	17.95	15.5	15.5	18.5
	11ax40	5270	MIMO	242	61	16.74	16.48	19.62	17.0	17.0	20.0
		5310		242	62	16.89	16.61	19.76	17.0	17.0	20.0
	11ax80	5290	MIMO	484	65	13.23	12.91	16.08	13.5	13.5	16.5
				484	66	13.24	12.92	16.09	13.5	13.5	16.5
5.6GWIFI U-NII-2C	11a	5500	CDD	/	/	17.92	17.66	20.80	18.5	18.5	21.5
		5600		/	/	17.68	17.63	20.67	18.5	18.5	21.5
		5700		/	/	17.76	17.57	20.68	18.5	18.5	21.5
		5720		/	/	17.70	17.49	20.61	18.5	18.5	21.5
	11ac20	5500	MIMO	/	/	18.65	18.43	21.55	19.0	19.0	22.0
		5600		/	/	18.42	18.13	21.29	19.0	19.0	22.0
		5700		/	/	18.33	18.04	21.20	19.0	19.0	22.0

11ac40	5720	MIMO	/	/	18.31	17.99	21.16	19.0	19.0	22.0
	5510		/	/	18.65	18.46	21.57	19.0	19.0	22.0
	5590		/	/	18.46	18.39	21.44	19.0	19.0	22.0
	5670		/	/	18.42	18.35	21.40	19.0	19.0	22.0
	5710		/	/	18.54	18.34	21.45	19.0	19.0	22.0
11ac80	5530	MIMO	/	/	18.75	18.54	21.66	19.0	19.0	22.0
	5610		/	/	18.48	18.26	21.38	19.0	19.0	22.0
	5690		/	/	18.46	18.27	21.38	19.0	19.0	22.0
11ac160	5570	MIMO	/	/	16.17	15.51	18.86	16.5	16.5	19.5
11ax20	5500	MIMO	/	/	19.44	18.94	22.21	19.5	19.5	22.5
	5600		/	/	19.19	18.74	21.98	19.5	19.5	22.5
	5700		/	/	19.08	18.66	21.89	19.5	19.5	22.5
	5720		/	/	19.14	18.68	21.93	19.5	19.5	22.5
11ax40	5510	MIMO	/	/	18.35	18.13	21.25	18.5	18.5	21.5
	5590		/	/	18.16	18.11	21.15	18.5	18.5	21.5
	5670		/	/	18.16	18.12	21.15	18.5	18.5	21.5
	5710		/	/	18.21	18.03	21.13	18.5	18.5	21.5
11ax80	5530	MIMO	/	/	18.19	18.00	21.11	18.5	18.5	21.5
	5610		/	/	17.87	17.72	20.81	18.5	18.5	21.5
	5690		/	/	17.90	17.72	20.82	18.5	18.5	21.5
11ax160	5570	MIMO	/	/	16.19	15.63	18.93	16.5	16.5	19.5
11ax20	5500	MIMO	26	0	9.79	9.77	12.79	10.0	10.0	13.0
	5600		26	4	9.46	9.18	12.33	10.0	10.0	13.0
	5700		26	8	9.80	9.77	12.80	10.0	10.0	13.0
	5720		26	8	9.79	9.66	12.74	10.0	10.0	13.0
	5500		52	37	12.87	12.51	15.70	13.0	13.0	16.0
	5600		52	39	12.55	12.02	15.30	13.0	13.0	16.0
	5700		52	40	12.61	12.48	15.56	13.0	13.0	16.0
	5720		52	40	12.57	12.33	15.46	13.0	13.0	16.0
	5500		106	53	15.74	15.28	18.53	16.0	16.0	19.0
	5600		106	53	15.57	15.22	18.41	16.0	16.0	19.0
	5700		106	54	15.38	15.35	18.38	16.0	16.0	19.0
	5720		106	54	15.35	15.23	18.30	16.0	16.0	19.0
11ax40	5510	MIMO	242	61	14.73	14.84	17.80	15.0	15.0	18.0
	5590		242	61	14.84	14.78	17.82	15.0	15.0	18.0
	5670		242	62	14.75	14.80	17.79	15.0	15.0	18.0
	5710		242	62	14.69	14.81	17.76	15.0	15.0	18.0
11ax80	5530	MIMO	484	65	13.96	13.58	16.78	14.0	14.0	17.0
	5610		484	66	13.82	13.55	16.70	14.0	14.0	17.0
	5690		484	66	13.79	13.71	16.76	14.0	14.0	17.0
11ax160	5570	MIMO	996	67	12.52	11.93	15.25	13.0	13.0	16.0
			996	68	12.55	11.82	15.21	13.0	13.0	16.0
5.8GWIFI U-NII-3	11a	CDD	/	/	20.97	20.21	23.62	21.5	21.5	24.5
			/	/	21.05	20.30	23.70	21.5	21.5	24.5
			/	/	21.12	20.21	23.70	21.5	21.5	24.5
	11ac20	MIMO	/	/	20.56	19.84	23.23	21.0	21.0	24.0
			/	/	20.59	19.89	23.26	21.0	21.0	24.0
			/	/	20.71	19.88	23.33	21.0	21.0	24.0
	11ac40	MIMO	/	/	21.84	21.06	24.48	22.0	22.0	25.0
			/	/	21.98	21.13	24.59	22.0	22.0	25.0
	11ac80	MIMO	/	/	21.32	20.63	24.00	21.5	21.5	24.5
	11ax20	MIMO	/	/	20.79	20.02	23.43	21.0	21.0	24.0
			/	/	20.84	20.15	23.52	21.0	21.0	24.0
			/	/	20.98	20.09	23.57	21.0	21.0	24.0
	11ax40	MIMO	/	/	21.58	20.78	24.21	22.0	22.0	25.0
			/	/	21.61	20.75	24.21	22.0	22.0	25.0
	11ax80	MIMO	/	/	20.73	20.11	23.44	21.0	21.0	24.0
	11ax20	MIMO	26	0	20.88	20.33	23.62	21.0	21.0	24.0
			26	4	20.63	20.19	23.43	21.0	21.0	24.0
			26	8	20.96	20.42	23.71	21.0	21.0	24.0
			52	37	20.78	20.24	23.53	21.0	21.0	24.0
			52	39	20.67	20.23	23.47	21.0	21.0	24.0
			52	40	20.93	20.25	23.61	21.0	21.0	24.0
			106	53	20.82	20.27	23.56	21.0	21.0	24.0
			106	53	20.86	20.40	23.65	21.0	21.0	24.0
	11ax40	MIMO	106	54	20.95	20.28	23.64	21.0	21.0	24.0
			242	61	21.28	20.70	24.01	21.5	21.5	24.5
			242	62	21.29	20.65	23.99	21.5	21.5	24.5
	11ax80	MIMO	484	65	20.07	19.63	22.87	20.5	20.5	23.5
			484	66	20.13	19.44	22.81	20.5	20.5	23.5

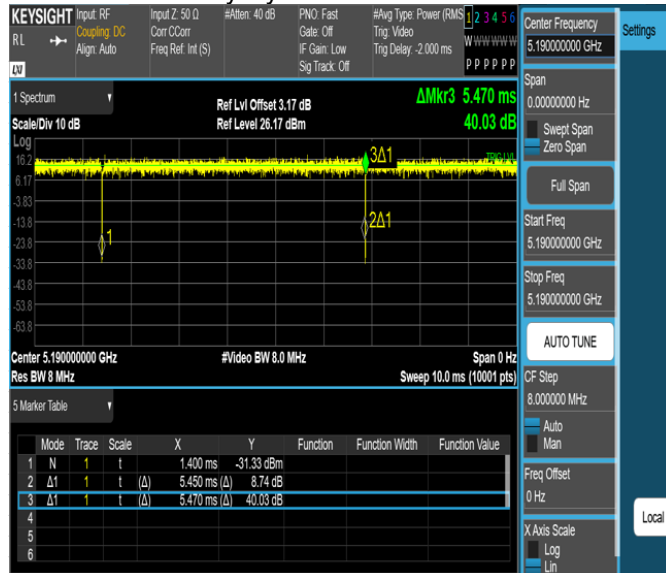
802.11ac 40M Duty Cycle=5.43/5.45=99.63%



802.11ax 20M Duty Cycle=5.44/5.46=99.63%



802.11ax 40M Duty Cycle=5.45/5.47=99.63%



WIFI 6G Standard Power Client:

WIFI 6G Sensor off											
Test mode		Freq (MHz)	ANT	RU#Size	RU#Index	Average Conducted Power(dBm)	Tune up (dBm)	Average Conducted Power(dBm)	Tune up (dBm)	Average Conducted Power(dBm)	Tune up (dBm)
11a	U-NII-5	5955	CDD	/	/	12.62	13.00	12.31	13.00	15.48	16.0
	U-NII-5	6175		/	/	12.51	13.00	11.84	13.00	15.20	16.0
	U-NII-5	6415		/	/	12.73	13.00	12.09	13.00	15.43	16.0
11a	U-NII-7	6535	CDD	/	/	12.85	13.00	12.13	13.00	15.52	16.0
	U-NII-7	6695		/	/	12.58	13.00	12.20	13.00	15.40	16.0
	U-NII-7	6855		/	/	12.70	13.00	11.98	13.00	15.37	16.0
11ax20	U-NII-5	5955	MIMO	/	/	12.55	13.00	12.24	13.00	15.41	16.0
	U-NII-5	6175		/	/	12.29	13.00	11.71	13.00	15.02	16.0
	U-NII-5	6415		/	/	12.55	13.00	11.98	13.00	15.28	16.0
11ax20	U-NII-7	6535	MIMO	/	/	12.69	13.00	12.02	13.00	15.38	16.0
	U-NII-7	6695		/	/	12.42	13.00	12.08	13.00	15.26	16.0
	U-NII-7	6855		/	/	12.58	13.00	11.81	13.00	15.22	16.0
11ax40	U-NII-5	5965	MIMO	/	/	13.11	13.50	12.78	13.50	15.96	16.5
	U-NII-5	6165		/	/	13.01	13.50	12.41	13.50	15.73	16.5
	U-NII-5	6405		/	/	13.26	13.50	12.58	13.50	15.94	16.5
11ax40	U-NII-7	6565	MIMO	/	/	13.14	13.50	12.49	13.50	15.84	16.5
	U-NII-7	6685		/	/	13.12	13.50	12.45	13.50	15.81	16.5
	U-NII-7	6845		/	/	13.31	13.50	12.15	13.50	15.78	16.5
11ax80	U-NII-5	5985	MIMO	/	/	12.49	13.00	12.36	13.00	15.44	16.0
	U-NII-5	6145		/	/	12.66	13.00	12.14	13.00	15.42	16.0
	U-NII-5	6385		/	/	12.90	13.00	12.36	13.00	15.65	16.0
11ax80	U-NII-7	6545	MIMO	/	/	12.44	13.00	12.07	13.00	15.27	16.0
	U-NII-7	6625		/	/	12.79	13.00	12.46	13.00	15.64	16.0
	U-NII-7	6705		/	/	12.60	13.00	12.27	13.00	15.45	16.0
11ax160	U-NII-5	6025	MIMO	/	/	12.94	13.50	12.57	13.50	15.77	16.5
	U-NII-5	6185		/	/	13.04	13.50	12.95	13.50	16.01	16.5
	U-NII-5	6345		/	/	12.75	13.50	12.82	13.50	15.80	16.5
11ax160	U-NII-7	6665	MIMO	/	/	13.18	13.50	12.80	13.50	16.00	16.5
	U-NII-7	6825		/	/	13.19	13.50	12.86	13.50	16.04	16.5
11ax20	U-NII-5	5955	MIMO	26	0	12.47	13.00	12.13	13.00	15.31	16.0
	U-NII-5	6175		26	4	11.87	13.00	11.41	13.00	14.66	16.0
	U-NII-5	6415		26	8	12.46	13.00	12.09	13.00	15.29	16.0
	U-NII-5	5955		52	37	12.27	13.00	11.95	13.00	15.12	16.0
	U-NII-5	6175		52	39	11.87	13.00	11.41	13.00	14.66	16.0
	U-NII-5	6415		52	40	12.32	13.00	11.94	13.00	15.14	16.0
	U-NII-5	5955		106	53	12.28	13.00	11.97	13.00	15.14	16.0
	U-NII-5	6175		106	53	12.12	13.00	11.69	13.00	14.92	16.0
11ax20	U-NII-5	6415	MIMO	106	54	12.40	13.00	11.92	13.00	15.18	16.0
	U-NII-7	6535		26	0	12.64	13.00	11.96	13.00	15.32	16.0
	U-NII-7	6695		26	4	12.12	13.00	11.61	13.00	14.88	16.0
	U-NII-7	6855		26	8	12.72	13.00	11.59	13.00	15.20	16.0
	U-NII-7	6535		52	37	12.49	13.00	11.83	13.00	15.18	16.0
	U-NII-7	6695		52	39	12.21	13.00	11.81	13.00	15.02	16.0
	U-NII-7	6855		52	40	12.54	13.00	11.48	13.00	15.05	16.0
	U-NII-7	6535		106	53	12.54	13.00	11.86	13.00	15.22	16.0
11ax40	U-NII-7	6695	MIMO	106	53	12.42	13.00	12.07	13.00	15.26	16.0
	U-NII-7	6855		106	54	12.57	13.00	11.49	13.00	15.07	16.0
	U-NII-5	5965		242	61	12.27	13.00	11.90	13.00	15.10	16.0
	U-NII-5	6165		242	61	12.17	13.00	11.64	13.00	14.92	16.0
	U-NII-5	6405		242	62	12.35	13.00	11.90	13.00	15.14	16.0
	U-NII-7	6565		242	61	12.51	13.00	11.87	13.00	15.21	16.0
	U-NII-7	6685		242	61	12.52	13.00	12.01	13.00	15.28	16.0
	U-NII-7	6845		242	62	12.58	13.00	11.38	13.00	15.03	16.0
11ax80	U-NII-5	5985	MIMO	484	65	12.16	13.00	11.74	13.00	14.97	16.0
	U-NII-5	6145		484	65	12.28	13.00	11.64	13.00	14.98	16.0
	U-NII-5	6385		484	66	12.40	13.00	11.90	13.00	15.17	16.0
11ax80	U-NII-7	6625	MIMO	484	65	12.61	13.00	12.23	13.00	15.43	16.0
	U-NII-7	6705		484	65	12.48	13.00	12.19	13.00	15.35	16.0
	U-NII-7	6785		484	65	12.39	13.00	11.75	13.00	15.09	16.0

11ax160	U-NII-5	6025	MIMO	996	67	12.01	13.00	11.69	13.00	14.86	16.0
	U-NII-5	6185		996	67	12.32	13.00	11.85	13.00	15.10	16.0
	U-NII-5	6345		996	68	11.71	13.00	12.07	13.00	14.90	16.0
11ax160	U-NII-7	6665	MIMO	996	67	12.62	13.00	12.12	13.00	15.39	16.0
	U-NII-7	6825		996	68	11.95	13.00	11.41	13.00	14.70	16.0

WIFI 6G Sensor on						WIFI 6G Ant2		WIFI 6G Ant3		WIFI 6G MIMO	
Test mode		Freq (MHz)	Mode	RU#Size	RU#Index	Average Conducted Power(dBm)	Tune up (dBm)	Average Conducted Power(dBm)	Tune up (dBm)	Average Conducted Power(dBm)	Tune up (dBm)
11a	U-NII-5	5955	CDD	/	/	8.69	9.00	8.65	9.00	11.68	12.0
	U-NII-5	6175		/	/	8.28	9.00	7.82	9.00	11.07	12.0
	U-NII-5	6415		/	/	8.48	9.00	7.94	9.00	11.23	12.0
11a	U-NII-7	6535	CDD	/	/	8.52	9.00	8.09	9.00	11.32	12.0
	U-NII-7	6695		/	/	8.61	9.00	8.06	9.00	11.35	12.0
	U-NII-7	6855		/	/	8.87	9.00	7.68	9.00	11.33	12.0
	U-NII-7	6875		/	/	8.43	9.00	6.87	9.00	10.73	12.0
11ax20	U-NII-5	5955	MIMO	/	/	8.62	9.00	8.60	9.00	11.62	12.0
	U-NII-5	6175		/	/	8.25	9.00	7.78	9.00	11.03	12.0
	U-NII-5	6415		/	/	8.18	9.00	7.71	9.00	10.96	12.0
11ax20	U-NII-7	6535	MIMO	/	/	8.35	9.00	8.04	9.00	11.21	12.0
	U-NII-7	6695		/	/	8.53	9.00	7.99	9.00	11.28	12.0
	U-NII-7	6855		/	/	8.56	9.00	7.58	9.00	11.11	12.0
	U-NII-7	6875		/	/	8.46	9.00	7.53	9.00	11.03	12.0
11ax40	U-NII-5	5965	MIMO	/	/	9.01	9.50	8.70	9.50	11.87	12.5
	U-NII-5	6165		/	/	8.95	9.50	8.28	9.50	11.64	12.5
	U-NII-5	6405		/	/	9.06	9.50	8.33	9.50	11.72	12.5
11ax40	U-NII-7	6565	MIMO	/	/	8.86	9.50	8.52	9.50	11.70	12.5
	U-NII-7	6685		/	/	8.95	9.50	8.40	9.50	11.69	12.5
	U-NII-7	6845		/	/	9.19	9.50	8.07	9.50	11.68	12.5
11ax80	U-NII-5	5985	MIMO	/	/	8.68	9.00	8.42	9.00	11.56	12.0
	U-NII-5	6145		/	/	8.71	9.00	7.83	9.00	11.30	12.0
	U-NII-5	6385		/	/	8.73	9.00	8.01	9.00	11.40	12.0
11ax80	U-NII-7	6545	MIMO	/	/	8.40	9.00	8.08	9.00	11.25	12.0
	U-NII-7	6625		/	/	8.91	9.00	8.17	9.00	11.57	12.0
	U-NII-7	6705		/	/	8.75	9.00	8.13	9.00	11.46	12.0
	U-NII-7	6785		/	/	8.83	9.00	8.03	9.00	11.46	12.0
	U-NII-7	6865		/	/	8.51	9.00	7.62	9.00	11.10	12.0
11ax160	U-NII-5	6025	MIMO	/	/	8.82	9.50	8.42	9.50	11.63	12.5
	U-NII-5	6185		/	/	9.01	9.50	8.70	9.50	11.87	12.5
	U-NII-5	6345		/	/	8.73	9.50	8.65	9.50	11.70	12.5
11ax160	U-NII-7	6665	MIMO	/	/	9.02	9.50	8.54	9.50	11.80	12.5
	U-NII-7	6825		/	/	9.08	9.50	8.66	9.50	11.89	12.5
11ax20	U-NII-5	5955	MIMO	26	0	8.44	9.00	8.22	9.00	11.34	12.0
	U-NII-5	6175		26	4	7.81	9.00	7.29	9.00	10.57	12.0
	U-NII-5	6415		26	8	8.50	9.00	8.12	9.00	11.32	12.0
	U-NII-5	5955		52	37	8.31	9.00	8.05	9.00	11.19	12.0
	U-NII-5	6175		52	39	7.73	9.00	7.52	9.00	10.64	12.0
	U-NII-5	6415		52	40	8.39	9.00	7.90	9.00	11.16	12.0
	U-NII-5	5955		106	53	8.26	9.00	7.96	9.00	11.12	12.0
	U-NII-5	6175		106	53	8.26	9.00	7.78	9.00	11.04	12.0
	U-NII-5	6415		106	54	8.51	9.00	8.02	9.00	11.28	12.0
11ax20	U-NII-7	6535	MIMO	26	0	8.52	9.00	7.83	9.00	11.20	12.0
	U-NII-7	6695		26	4	7.97	9.00	7.72	9.00	10.86	12.0
	U-NII-7	6855		26	8	8.79	9.00	7.54	9.00	11.22	12.0
	U-NII-7	6875		26	8	8.46	9.00	7.78	9.00	11.14	12.0
	U-NII-7	6535		52	37	8.06	9.00	7.78	9.00	10.93	12.0
	U-NII-7	6695		52	39	8.58	9.00	7.43	9.00	11.05	12.0
	U-NII-7	6855		52	40	8.58	9.00	7.81	9.00	11.22	12.0
	U-NII-7	6875		52	40	8.46	9.00	8.15	9.00	11.32	12.0
	U-NII-7	6875		106	54	8.48	9.00	7.48	9.00	11.02	12.0
11ax40	U-NII-5	5965	MIMO	242	61	8.32	9.00	7.94	9.00	11.14	12.0
	U-NII-5	6165		242	61	8.22	9.00	7.65	9.00	10.95	12.0
	U-NII-5	6405		242	62	8.41	9.00	8.03	9.00	11.23	12.0
11ax40	U-NII-7	6565	MIMO	242	61	8.57	9.00	7.97	9.00	11.29	12.0
	U-NII-7	6685		242	61	8.48	9.00	7.86	9.00	11.19	12.0
	U-NII-7	6845		242	62	8.60	9.00	7.40	9.00	11.05	12.0
11ax80	U-NII-5	5985	MIMO	484	65	8.31	9.00	7.87	9.00	11.11	12.0

	U-NII-5	6145		484	65	8.39	9.00	7.76	9.00	11.10	12.0
	U-NII-5	6385		484	66	8.47	9.00	8.01	9.00	11.26	12.0
11ax80	U-NII-7	6545	MIMO	484	65	8.69	9.00	8.24	9.00	11.48	12.0
	U-NII-7	6785		484	66	8.59	9.00	8.07	9.00	11.35	12.0
	U-NII-7	6865		484	66	8.33	9.00	7.84	9.00	11.10	12.0
11ax160	U-NII-5	6025	MIMO	996	67	8.01	9.00	7.77	9.00	10.90	12.0
	U-NII-5	6185		996	67	8.41	9.00	7.93	9.00	11.19	12.0
	U-NII-5	6345		996	68	7.65	9.00	8.07	9.00	10.88	12.0
11ax160	U-NII-7	6665	MIMO	996	67	8.69	9.00	7.98	9.00	11.36	12.0
	U-NII-7	6825		996	68	7.92	9.00	7.29	9.00	10.63	12.0

WIFI 6G Indoor Power Client:

WIFI 6G Sensor off						WIFI 6G Ant2		WIFI 6G Ant3		WIFI 6G MIMO	
Test mode		Freq (MHz)	Mode	RU#Size	RU#Index	Average Conducted Power(dBm)	Tune up (dBm)	Average Conducted Power(dBm)	Tune up (dBm)	Average Conducted Power(dBm)	Tune up (dBm)
11a	U-NII-5	5955	CDD	/	/	4.68	5.0	4.53	5.0	7.62	8.0
	U-NII-5	6175		/	/	4.36	5.0	4.46	5.0	7.42	8.0
	U-NII-5	6415		/	/	4.52	5.0	4.29	5.0	7.42	8.0
11a	U-NII-6	6435	CDD	/	/	3.03	3.5	3.12	3.5	6.09	6.5
	U-NII-6	6475		/	/	3.02	3.5	2.62	3.5	5.83	6.5
	U-NII-6	6515		/	/	2.78	3.5	2.63	3.5	5.72	6.5
11a	U-NII-7	6535	CDD	/	/	2.73	3.5	2.64	3.5	5.70	6.5
	U-NII-7	6695		/	/	3.12	3.5	2.74	3.5	5.94	6.5
	U-NII-7	6855		/	/	3.01	3.5	3.09	3.5	6.06	6.5
	U-NII-7	6875		/	/	3.09	3.5	2.98	3.5	6.05	6.5
11a	U-NII-8	6895	CDD	/	/	3.93	4.0	3.64	4.0	6.80	7.0
	U-NII-8	6995		/	/	3.36	4.0	3.22	4.0	6.30	7.0
	U-NII-8	7095		/	/	3.23	4.0	3.13	4.0	6.19	7.0
	U-NII-8	7115		/	/	3.08	4.0	3.08	4.0	6.09	7.0
11ax20	U-NII-5	5955	MIMO	/	/	4.03	4.5	4.36	4.5	7.21	7.5
	U-NII-5	6175		/	/	4.00	4.5	4.15	4.5	7.09	7.5
	U-NII-5	6415		/	/	4.01	4.5	4.06	4.5	7.05	7.5
11ax20	U-NII-6	6435	MIMO	/	/	3.12	4.0	2.95	4.0	6.05	7.0
	U-NII-6	6475		/	/	3.95	4.0	3.53	4.0	6.76	7.0
	U-NII-6	6515		/	/	3.69	4.0	3.72	4.0	6.72	7.0
11ax20	U-NII-7	6535	MIMO	/	/	3.64	4.0	3.63	4.0	6.65	7.0
	U-NII-7	6695		/	/	3.16	4.0	2.98	4.0	6.08	7.0
	U-NII-7	6855		/	/	3.45	4.0	3.64	4.0	6.56	7.0
	U-NII-7	6875		/	/	3.41	4.0	3.59	4.0	6.51	7.0
11ax20	U-NII-8	6895	MIMO	/	/	4.38	4.5	4.48	4.5	7.44	7.5
	U-NII-8	6995		/	/	4.33	4.5	4.44	4.5	7.40	7.5
	U-NII-8	7095		/	/	4.31	4.5	4.45	4.5	7.39	7.5
	U-NII-8	7115		/	/	-1.44	-1.00	-1.61	-1.00	1.49	2.0
11ax40	U-NII-5	5965	MIMO	/	/	6.65	7.5	6.61	7.5	9.64	10.5
	U-NII-5	6165		/	/	6.97	7.5	6.93	7.5	9.96	10.5
	U-NII-5	6405		/	/	7.09	7.5	6.83	7.5	9.97	10.5
11ax40	U-NII-6	6445	MIMO	/	/	7.08	7.5	6.56	7.5	9.84	10.5
	U-NII-6	6485		/	/	7.12	7.5	6.64	7.5	9.90	10.5
	U-NII-6	6525		/	/	6.99	7.5	6.68	7.5	9.85	10.5
11ax40	U-NII-7	6565	MIMO	/	/	6.42	7.0	6.54	7.0	9.49	10.0
	U-NII-7	6685		/	/	6.31	7.0	6.63	7.0	9.48	10.0
	U-NII-7	6845		/	/	6.50	7.0	6.63	7.0	9.58	10.0
11ax40	U-NII-8	6885	MIMO	/	/	6.45	7.0	6.61	7.0	9.54	10.0
	U-NII-8	6925		/	/	6.36	7.0	6.47	7.0	9.43	10.0
	U-NII-8	7005		/	/	6.23	7.0	6.36	7.0	9.31	10.0
	U-NII-8	7085		/	/	6.37	7.0	6.52	7.0	9.46	10.0
11ax80	U-NII-5	5985	MIMO	/	/	9.99	10.0	9.84	10.0	12.93	13.0
	U-NII-5	6145		/	/	9.85	10.0	9.67	10.0	12.77	13.0
	U-NII-5	6385		/	/	9.74	10.0	9.33	10.0	12.55	13.0
11ax80	U-NII-6	6465	MIMO	/	/	9.45	9.5	8.84	9.5	12.17	12.5
11ax80	U-NII-7	6545	MIMO	/	/	8.56	9.5	8.89	9.5	11.74	12.5
	U-NII-7	6625		/	/	8.59	9.5	9.03	9.5	11.83	12.5
	U-NII-7	6705		/	/	8.86	9.5	8.57	9.5	11.73	12.5
	U-NII-7	6785		/	/	9.09	9.5	8.51	9.5	11.82	12.5
	U-NII-7	6865		/	/	9.25	9.5	8.53	9.5	11.92	12.5
11ax80	U-NII-8	6945	MIMO	/	/	8.34	9.0	8.63	9.0	11.50	12.0
	U-NII-8	7025		/	/	8.87	9.0	8.63	9.0	11.76	12.0

11ax160	U-NII-5	6025	MIMO	/	/	11.87	12.0	11.75	12.0	14.82	15.0
	U-NII-5	6185		/	/	11.54	12.0	11.24	12.0	14.40	15.0
	U-NII-5	6345		/	/	11.34	12.0	11.39	12.0	14.38	15.0
11ax160	U-NII-6	6505	MIMO	/	/	11.46	11.5	11.44	11.5	14.46	14.5
11ax160	U-NII-7	6665	MIMO	/	/	11.63	12.00	11.17	12.00	14.42	15.0
	U-NII-7	6825		/	/	11.63	12.00	11.32	12.00	14.49	15.0
11ax160	U-NII-8	6985	MIMO	/	/	11.73	12.0	11.52	12.0	14.64	15.0
11ax20	U-NII-5	5955	MIMO	26	0	-4.27	-4.00	-4.23	-4.00	-1.24	-1.0
	U-NII-5	6175		26	4	-4.18	-4.00	-4.11	-4.00	-1.13	-1.0
	U-NII-5	6415		26	8	-4.45	-4.00	-4.03	-4.00	-1.22	-1.0
	U-NII-5	5955		52	37	-0.14	0.50	0.16	0.50	3.02	3.5
	U-NII-5	6175		52	39	-0.46	0.50	-0.43	0.50	2.57	3.5
	U-NII-5	6415		52	40	-0.16	0.50	-0.54	0.50	2.66	3.5
	U-NII-5	5955		106	53	2.82	3.00	2.96	3.00	5.90	6.0
	U-NII-5	6175		106	53	2.62	3.00	2.71	3.00	5.68	6.0
	U-NII-5	6415		106	54	2.91	3.00	2.82	3.00	5.88	6.0
11ax20	U-NII-6	6435	MIMO	26	0	-3.93	-3.00	-4.08	-3.00	-0.99	0.0
	U-NII-6	6475		26	4	-3.58	-3.00	-3.59	-3.00	-0.57	0.0
	U-NII-6	6515		26	8	-3.66	-3.00	-3.39	-3.00	-0.51	0.0
	U-NII-6	6435		52	37	-2.36	-2.00	-2.32	-2.00	0.67	1.0
	U-NII-6	6475		52	39	-2.45	-2.00	-2.44	-2.00	0.57	1.0
	U-NII-6	6515		52	40	-2.27	-2.00	-2.03	-2.00	0.86	1.0
	U-NII-6	6435		106	53	1.31	2.00	1.18	2.00	4.26	5.0
	U-NII-6	6475		106	53	1.32	2.00	1.23	2.00	4.29	5.0
	U-NII-6	6515		106	54	1.54	2.00	1.61	2.00	4.59	5.0
11ax20	U-NII-7	6535	MIMO	26	0	-4.52	-4.00	-4.80	-4.00	-1.65	-1.0
	U-NII-7	6695		26	4	-4.09	-4.00	-4.01	-4.00	-1.04	-1.0
	U-NII-7	6855		26	8	-4.57	-4.00	-5.01	-4.00	-1.77	-1.0
	U-NII-7	6875		26	8	-4.95	-4.00	-4.99	-4.00	-1.96	-1.0
	U-NII-7	6535		52	37	-1.66	-1.50	-1.94	-1.50	1.21	1.5
	U-NII-7	6695		52	39	-1.79	-1.50	-1.89	-1.50	1.17	1.5
	U-NII-7	6855		52	40	-1.62	-1.50	-1.82	-1.50	1.29	1.5
	U-NII-7	6875		52	40	-1.60	-1.50	-2.19	-1.50	1.13	1.5
	U-NII-7	6535		106	53	0.80	1.00	0.28	1.00	3.56	4.0
	U-NII-7	6695		106	53	0.85	1.00	0.74	1.00	3.81	4.0
	U-NII-7	6855		106	54	0.59	1.00	0.16	1.00	3.39	4.0
	U-NII-7	6875		106	54	0.61	1.00	0.20	1.00	3.42	4.0
11ax20	U-NII-8	6895	MIMO	26	0	-4.40	-4.00	-4.85	-4.00	-1.61	-1.0
	U-NII-8	6995		26	4	-4.80	-4.00	-4.38	-4.00	-1.57	-1.0
	U-NII-8	7095		26	8	-4.30	-4.00	-4.53	-4.00	-1.40	-1.0
	U-NII-8	7115		26	8	-12.47	-12.00	-12.51	-12.00	-9.48	-9.0
	U-NII-8	6895		52	37	-1.61	-1.00	-1.20	-1.00	1.61	2.0
	U-NII-8	6995		52	39	-1.21	-1.00	-1.42	-1.00	1.70	2.0
	U-NII-8	7095		52	40	-1.39	-1.00	-1.33	-1.00	1.65	2.0
	U-NII-8	7115		52	40	-8.45	-8.00	-8.46	-8.00	-5.44	-5.0
	U-NII-8	6895		106	53	0.74	1.00	0.48	1.00	3.62	4.0
	U-NII-8	6995		106	53	0.57	1.00	0.04	1.00	3.32	4.0
	U-NII-8	7095		106	54	0.96	1.00	0.32	1.00	3.66	4.0
	U-NII-8	7115		106	54	-8.02	-7.50	-8.06	-7.50	-5.03	-4.5
11ax40	U-NII-5	5965	MIMO	242	61	6.22	6.50	5.76	6.50	9.01	9.5
	U-NII-5	6165		242	61	6.16	6.50	5.62	6.50	8.91	9.5
	U-NII-5	6405		242	62	5.73	6.50	5.69	6.50	8.72	9.5
11ax40	U-NII-6	6445	MIMO	242	61	5.33	5.50	4.85	5.50	8.11	8.5
	U-NII-6	6485		242	61	5.12	5.50	4.88	5.50	8.01	8.5
	U-NII-6	6525		242	62	4.93	5.50	4.94	5.50	7.95	8.5
11ax40	U-NII-7	6565	MIMO	242	61	5.15	5.50	4.95	5.50	8.06	8.5
	U-NII-7	6685		242	61	5.13	5.50	4.54	5.50	7.86	8.5
	U-NII-7	6845		242	62	4.68	5.50	4.68	5.50	7.69	8.5
11ax40	U-NII-8	6885	MIMO	242	61	5.65	6.00	5.90	6.00	8.79	9.0
	U-NII-8	6925		242	61	5.60	6.00	5.85	6.00	8.74	9.0
	U-NII-8	7005		242	62	5.48	6.00	5.60	6.00	8.55	9.0
	U-NII-8	7085		242	62	5.63	6.00	5.66	6.00	8.66	9.0
11ax80	U-NII-5	5985	MIMO	484	65	9.33	10.00	9.22	10.00	12.29	13.0
	U-NII-5	6145		484	65	9.45	10.00	9.75	10.00	12.61	13.0
	U-NII-5	6385		484	66	8.89	10.00	9.81	10.00	12.38	13.0
11ax80	U-NII-6	6465	MIMO	484	65	8.25	8.50	8.18	8.50	11.23	11.5
	U-NII-6			484	66	8.11	8.50	8.12	8.50	11.13	11.5
11ax80	U-NII-7	6545	MIMO	484	65	8.63	9.00	8.54	9.00	11.60	12.0

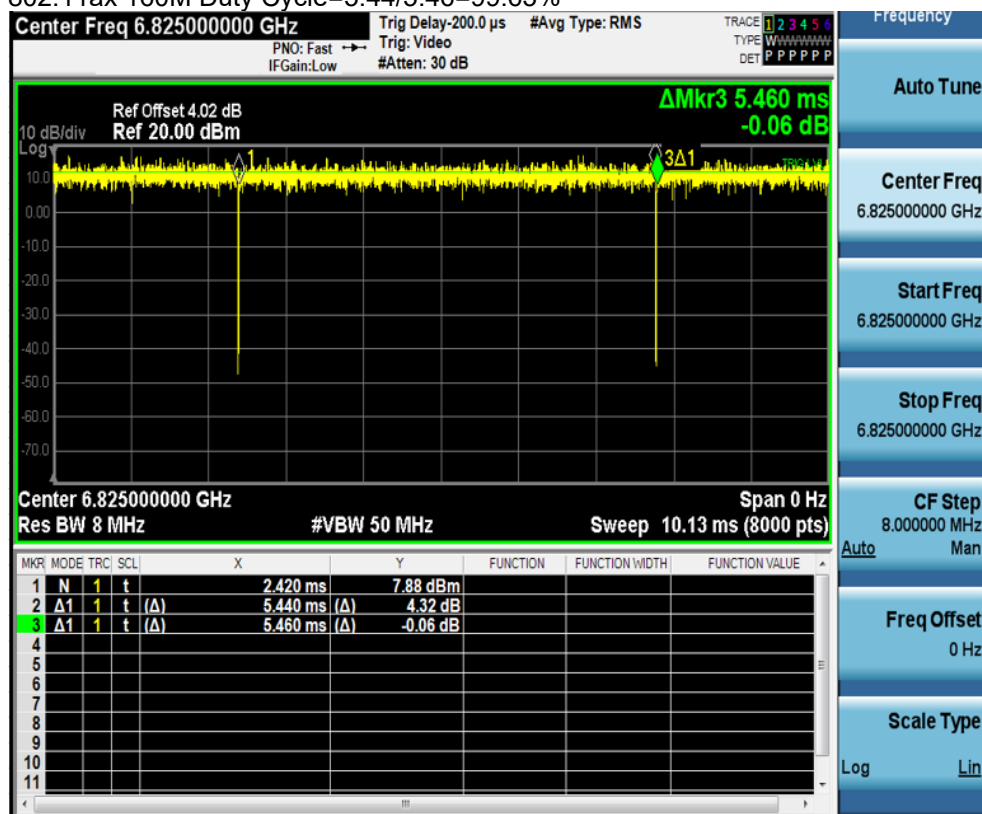
	U-NII-7	6625		484	65	8.68	9.00	8.15	9.00	11.43	12.0
	U-NII-7	6705		484	65	8.53	9.00	8.12	9.00	11.34	12.0
	U-NII-7	6785		484	66	8.67	9.00	8.30	9.00	11.50	12.0
	U-NII-7	6865		484	66	8.21	9.00	8.12	9.00	11.18	12.0
11ax80	U-NII-8	6945	MIMO	484	65	8.49	8.50	8.18	8.50	11.35	11.5
	U-NII-8	7025		484	66	8.36	8.50	8.06	8.50	11.22	11.5
11ax160	U-NII-5	6025	MIMO	996	67	9.62	11.50	10.00	11.50	12.82	14.5
	U-NII-5	6185		996	67	11.05	11.50	10.52	11.50	13.80	14.5
	U-NII-5	6345		996	68	10.74	11.50	10.76	11.50	13.76	14.5
11ax160	U-NII-6	6505	MIMO	996	67	10.64	11.00	10.45	11.00	13.56	14.0
	U-NII-6			996	68	10.82	11.00	10.85	11.00	13.85	14.0
11ax160	U-NII-7	6665	MIMO	996	67	11.12	11.50	10.06	11.50	13.63	14.5
	U-NII-7	6825		996	68	10.98	11.50	10.25	11.50	13.64	14.5
11ax160	U-NII-8	6985	MIMO	996	67	11.86	12.00	11.92	12.00	14.90	15.0
	U-NII-8			996	68	11.49	12.00	11.53	12.00	14.52	15.0

WIFI 6G Sensor on						WIFI 6G Ant2		WIFI 6G Ant3		WIFI 6G MIMO	
Test mode		Freq (MHz)	Mode	RU#Size	RU#Index	Average Conducted Power(dBm)	Tune up (dBm)	Average Conducted Power(dBm)	Tune up (dBm)	Average Conducted Power(dBm)	Tune up (dBm)
11a	U-NII-5	5955	CDD	/	/	4.68	5.0	4.53	5.0	7.62	8.0
	U-NII-5	6175		/	/	4.36	5.0	4.46	5.0	7.42	8.0
	U-NII-5	6415		/	/	4.52	5.0	4.29	5.0	7.42	8.0
11a	U-NII-6	6435	CDD	/	/	3.03	3.5	3.12	3.5	6.09	6.5
	U-NII-6	6475		/	/	3.02	3.5	2.62	3.5	5.83	6.5
	U-NII-6	6515		/	/	2.78	3.5	2.63	3.5	5.72	6.5
11a	U-NII-7	6535	CDD	/	/	2.73	3.5	2.64	3.5	5.70	6.5
	U-NII-7	6695		/	/	3.12	3.5	2.74	3.5	5.94	6.5
	U-NII-7	6855		/	/	3.01	3.5	3.09	3.5	6.06	6.5
	U-NII-7	6875		/	/	3.09	3.5	2.98	3.5	6.05	6.5
11a	U-NII-8	6895	CDD	/	/	3.93	4.0	3.64	4.0	6.80	7.0
	U-NII-8	6995		/	/	3.36	4.0	3.22	4.0	6.30	7.0
	U-NII-8	7095		/	/	3.23	4.0	3.13	4.0	6.19	7.0
	U-NII-8	7115		/	/	3.08	4.0	3.08	4.0	6.09	7.0
11ax20	U-NII-5	5955	MIMO	/	/	4.03	4.5	4.36	4.5	7.21	7.5
	U-NII-5	6175		/	/	4.00	4.5	4.15	4.5	7.09	7.5
	U-NII-5	6415		/	/	4.01	4.5	4.06	4.5	7.05	7.5
11ax20	U-NII-6	6435	MIMO	/	/	3.12	4.0	2.95	4.0	6.05	7.0
	U-NII-6	6475		/	/	3.95	4.0	3.53	4.0	6.76	7.0
	U-NII-6	6515		/	/	3.69	4.0	3.72	4.0	6.72	7.0
11ax20	U-NII-7	6535	MIMO	/	/	3.64	4.0	3.63	4.0	6.65	7.0
	U-NII-7	6695		/	/	3.16	4.0	2.98	4.0	6.08	7.0
	U-NII-7	6855		/	/	3.45	4.0	3.64	4.0	6.56	7.0
	U-NII-7	6875		/	/	3.41	4.0	3.59	4.0	6.51	7.0
11ax20	U-NII-8	6895	MIMO	/	/	4.38	4.5	4.48	4.5	7.44	7.5
	U-NII-8	6995		/	/	4.33	4.5	4.44	4.5	7.40	7.5
	U-NII-8	7095		/	/	4.31	4.5	4.45	4.5	7.39	7.5
	U-NII-8	7115		/	/	-1.44	-1.00	-1.61	-1.00	1.49	2.0
11ax40	U-NII-5	5965	MIMO	/	/	6.65	7.5	6.61	7.5	9.64	10.5
	U-NII-5	6165		/	/	6.97	7.5	6.93	7.5	9.96	10.5
	U-NII-5	6405		/	/	7.09	7.5	6.83	7.5	9.97	10.5
11ax40	U-NII-6	6445	MIMO	/	/	7.08	7.5	6.56	7.5	9.84	10.5
	U-NII-6	6485		/	/	7.12	7.5	6.64	7.5	9.90	10.5
	U-NII-6	6525		/	/	6.99	7.5	6.68	7.5	9.85	10.5
11ax40	U-NII-7	6565	MIMO	/	/	6.42	7.0	6.54	7.0	9.49	10.0
	U-NII-7	6685		/	/	6.31	7.0	6.63	7.0	9.48	10.0
	U-NII-7	6845		/	/	6.50	7.0	6.63	7.0	9.58	10.0
11ax40	U-NII-8	6885	MIMO	/	/	6.45	7.0	6.61	7.0	9.54	10.0
	U-NII-8	6925		/	/	6.36	7.0	6.47	7.0	9.43	10.0
	U-NII-8	7005		/	/	6.23	7.0	6.36	7.0	9.31	10.0
	U-NII-8	7085		/	/	6.37	7.0	6.52	7.0	9.46	10.0
11ax80	U-NII-5	5985	MIMO	/	/	8.91	9.0	8.70	9.0	11.82	12.0
	U-NII-5	6145		/	/	8.75	9.0	8.63	9.0	11.70	12.0
	U-NII-5	6385		/	/	8.64	9.0	8.38	9.0	11.52	12.0
11ax80	U-NII-6	6465	MIMO	/	/	8.83	9.0	8.25	9.0	11.56	12.0
11ax80	U-NII-7	6545	MIMO	/	/	8.12	9.0	8.25	9.0	11.20	12.0
	U-NII-7	6625		/	/	8.00	9.0	8.60	9.0	11.32	12.0
	U-NII-7	6705		/	/	8.26	9.0	8.11	9.0	11.20	12.0

	U-NII-7	6785		/	/	8.48	9.0	7.99	9.0	11.25	12.0
	U-NII-7	6865		/	/	8.82	9.0	8.08	9.0	11.48	12.0
11ax80	U-NII-8	6945	MIMO	/	/	8.34	9.0	8.63	9.0	11.50	12.0
	U-NII-8	7025		/	/	8.87	9.0	8.63	9.0	11.76	12.0
11ax160	U-NII-5	6025	MIMO	/	/	8.88	9.0	8.67	9.0	11.79	12.0
	U-NII-5	6185		/	/	8.43	9.0	8.15	9.0	11.30	12.0
	U-NII-5	6345		/	/	8.23	9.0	8.29	9.0	11.27	12.0
11ax160	U-NII-6	6505	MIMO	/	/	8.95	9.0	8.86	9.0	11.92	12.0
11ax160	U-NII-7	6665	MIMO	/	/	8.48	9.0	8.05	9.0	11.28	12.0
	U-NII-7	6825		/	/	8.53	9.0	8.38	9.0	11.47	12.0
11ax160	U-NII-8	6985	MIMO	/	/	8.59	9.0	8.62	9.0	11.62	12.0
11ax20	U-NII-5	5955	MIMO	26	0	-4.27	-4.00	-4.23	-4.00	-1.24	-1.0
	U-NII-5	6175		26	4	-4.18	-4.00	-4.11	-4.00	-1.13	-1.0
	U-NII-5	6415		26	8	-4.45	-4.00	-4.03	-4.00	-1.22	-1.0
	U-NII-5	5955		52	37	-0.14	0.50	0.16	0.50	3.02	3.5
	U-NII-5	6175		52	39	-0.46	0.50	-0.43	0.50	2.57	3.5
	U-NII-5	6415		52	40	-0.16	0.50	-0.54	0.50	2.66	3.5
	U-NII-5	5955		106	53	2.82	3.00	2.96	3.00	5.90	6.0
	U-NII-5	6175		106	53	2.62	3.00	2.71	3.00	5.68	6.0
11ax20	U-NII-5	6415	MIMO	106	54	2.91	3.00	2.82	3.00	5.88	6.0
	U-NII-6	6435		26	0	-3.93	-3.00	-4.08	-3.00	-0.99	0.0
	U-NII-6	6475		26	4	-3.58	-3.00	-3.59	-3.00	-0.57	0.0
	U-NII-6	6515		26	8	-3.66	-3.00	-3.39	-3.00	-0.51	0.0
	U-NII-6	6435		52	37	-2.36	-2.00	-2.32	-2.00	0.67	1.0
	U-NII-6	6475		52	39	-2.45	-2.00	-2.44	-2.00	0.57	1.0
	U-NII-6	6515		52	40	-2.27	-2.00	-2.03	-2.00	0.86	1.0
	U-NII-6	6435		106	53	1.31	2.00	1.18	2.00	4.26	5.0
11ax20	U-NII-6	6475	MIMO	106	53	1.32	2.00	1.23	2.00	4.29	5.0
	U-NII-6	6515		106	54	1.54	2.00	1.61	2.00	4.59	5.0
	U-NII-7	6535		26	0	-4.52	-4.00	-4.80	-4.00	-1.65	-1.0
	U-NII-7	6695		26	4	-4.09	-4.00	-4.01	-4.00	-1.04	-1.0
	U-NII-7	6855		26	8	-4.57	-4.00	-5.01	-4.00	-1.77	-1.0
	U-NII-7	6875		26	8	-4.95	-4.00	-4.99	-4.00	-1.96	-1.0
	U-NII-7	6535		52	37	-1.66	-1.50	-1.94	-1.50	1.21	1.5
	U-NII-7	6695		52	39	-1.79	-1.50	-1.89	-1.50	1.17	1.5
11ax20	U-NII-7	6855	MIMO	52	40	-1.62	-1.50	-1.82	-1.50	1.29	1.5
	U-NII-7	6875		52	40	-1.60	-1.50	-2.19	-1.50	1.13	1.5
	U-NII-7	6535		106	53	0.80	1.00	0.28	1.00	3.56	4.0
	U-NII-7	6695		106	53	0.85	1.00	0.74	1.00	3.81	4.0
	U-NII-7	6855		106	54	0.59	1.00	0.16	1.00	3.39	4.0
	U-NII-7	6875		106	54	0.61	1.00	0.20	1.00	3.42	4.0
	U-NII-8	6895	MIMO	26	0	-4.40	-4.00	-4.85	-4.00	-1.61	-1.0
	U-NII-8	6995		26	4	-4.80	-4.00	-4.38	-4.00	-1.57	-1.0
11ax20	U-NII-8	7095		26	8	-4.30	-4.00	-4.53	-4.00	-1.40	-1.0
	U-NII-8	7115		26	8	-12.47	-12.00	-12.51	-12.00	-9.48	-9.0
	U-NII-8	6895		52	37	-1.61	-1.00	-1.20	-1.00	1.61	2.0
	U-NII-8	6995		52	39	-1.21	-1.00	-1.42	-1.00	1.70	2.0
	U-NII-8	7095		52	40	-1.39	-1.00	-1.33	-1.00	1.65	2.0
	U-NII-8	7115		52	40	-8.45	-8.00	-8.46	-8.00	-5.44	-5.0
	U-NII-8	6895		106	53	0.74	1.00	0.48	1.00	3.62	4.0
	U-NII-8	6995		106	53	0.57	1.00	0.04	1.00	3.32	4.0
11ax40	U-NII-8	7095	MIMO	106	54	0.96	1.00	0.32	1.00	3.66	4.0
	U-NII-8	7115		106	54	-8.02	-7.50	-8.06	-7.50	-5.03	-4.5
	U-NII-5	5965		242	61	6.22	6.50	5.76	6.50	9.01	9.5
11ax40	U-NII-5	6165	MIMO	242	61	6.16	6.50	5.62	6.50	8.91	9.5
	U-NII-5	6405		242	62	5.73	6.50	5.69	6.50	8.72	9.5
11ax40	U-NII-6	6445	MIMO	242	61	5.33	5.50	4.85	5.50	8.11	8.5
	U-NII-6	6485		242	61	5.12	5.50	4.88	5.50	8.01	8.5
	U-NII-6	6525		242	62	4.93	5.50	4.94	5.50	7.95	8.5
11ax40	U-NII-7	6565	MIMO	242	61	5.15	5.50	4.95	5.50	8.06	8.5
	U-NII-7	6685		242	61	5.13	5.50	4.54	5.50	7.86	8.5
	U-NII-7	6845		242	62	4.68	5.50	4.68	5.50	7.69	8.5
11ax40	U-NII-8	6885	MIMO	242	61	5.65	6.00	5.90	6.00	8.79	9.0
	U-NII-8	6925		242	61	5.60	6.00	5.85	6.00	8.74	9.0
	U-NII-8	7005		242	62	5.48	6.00	5.60	6.00	8.55	9.0
	U-NII-8	7085		242	62	5.63	6.00	5.66	6.00	8.66	9.0
11ax80	U-NII-5	5985	MIMO	484	65	8.36	9.0	8.23	9.0	11.31	12.0
	U-NII-5	6145		484	65	8.53	9.0	8.77	9.0	11.66	12.0

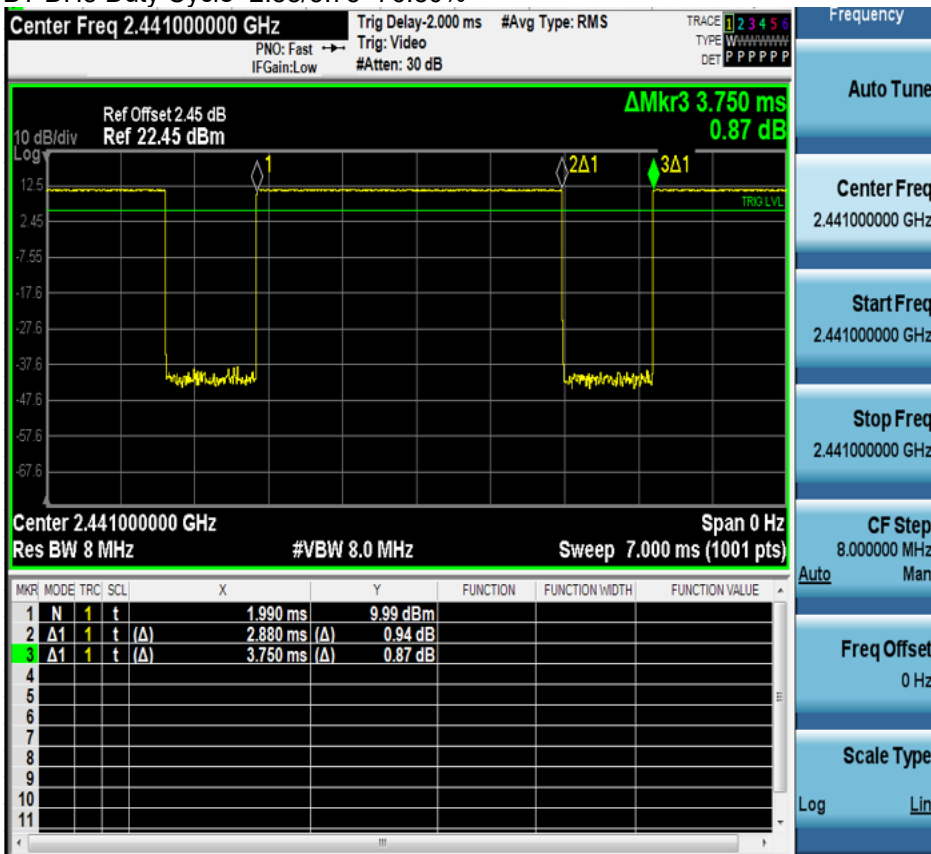
	U-NII-5	6385		484	66	7.99	9.0	8.90	9.0	11.48	12.0
11ax80	U-NII-6	6465	MIMO	484	65	8.25	8.50	8.18	8.50	11.23	11.5
	U-NII-6			484	66	8.11	8.50	8.12	8.50	11.13	11.5
	U-NII-6			484	66	8.11	8.50	8.12	8.50	11.13	11.5
11ax80	U-NII-7	6545	MIMO	484	65	8.63	9.00	8.54	9.00	11.60	12.0
	U-NII-7	6625		484	65	8.68	9.00	8.15	9.00	11.43	12.0
	U-NII-7	6705		484	65	8.53	9.00	8.12	9.00	11.34	12.0
	U-NII-7	6785		484	66	8.67	9.00	8.30	9.00	11.50	12.0
	U-NII-7	6865		484	66	8.21	9.00	8.12	9.00	11.18	12.0
11ax80	U-NII-8	6945	MIMO	484	65	8.49	8.50	8.18	8.50	11.35	11.5
	U-NII-8	7025		484	66	8.36	8.50	8.06	8.50	11.22	11.5
	U-NII-8	7025		484	66	8.36	8.50	8.06	8.50	11.22	11.5
11ax160	U-NII-5	6025	MIMO	996	67	6.98	9.0	7.53	9.0	10.27	12.0
	U-NII-5	6185		996	67	8.60	9.0	7.99	9.0	11.32	12.0
	U-NII-5	6345		996	68	8.19	9.0	8.32	9.0	11.27	12.0
11ax160	U-NII-6	6505	MIMO	996	67	8.49	9.0	8.54	9.0	11.53	12.0
	U-NII-6			996	68	8.89	9.0	8.77	9.0	11.84	12.0
	U-NII-6			996	68	8.89	9.0	8.77	9.0	11.84	12.0
11ax160	U-NII-7	6665	MIMO	996	67	8.56	9.0	7.61	9.0	11.12	12.0
	U-NII-7	6825		996	68	8.37	9.0	7.65	9.0	11.04	12.0
	U-NII-7	6825		996	68	8.37	9.0	7.65	9.0	11.04	12.0
11ax160	U-NII-8	6985	MIMO	996	67	8.83	9.0	8.81	9.0	11.83	12.0
	U-NII-8			996	67	8.83	9.0	8.81	9.0	11.83	12.0
	U-NII-8			996	68	8.49	9.0	8.42	9.0	11.47	12.0

802.11ax 160M Duty Cycle=5.44/5.46=99.63%



Test Item	Test Mode	Freq (MHz)	Average Conducted Power(dBm)	Tune up (dBm)
BT	DH5	2402	9.27	10.50
		2441	10.14	10.50
		2480	7.91	8.50
	2DH5	2402	6.79	8.50
		2441	7.89	8.50
		2480	5.66	6.50
	3DH5	2402	6.78	8.50
		2441	7.72	8.50
		2480	5.66	6.50
BLE	1M	2402	-0.37	1.50
		2440	0.85	1.50
		2480	-0.92	0.00
	2M	2402	-0.39	1.50
		2440	0.83	1.50
		2480	-0.94	0.00

BT DH5 Duty Cycle=2.88/3.75=76.80%



14 SAR Data Summary

General Notes:

- 1) The Highest Reported SAR Plot refer to Appendix B.
- 2) Per KDB 447498 D01, testing of other required channels within the operating mode of a frequency band is not required when the reported 1g or 10g SAR for the mid-band or highest output power channel is:
 - $\leq 0.8\text{W/kg}$ for 1g or 2.0W/kg for 10g respectively, when the transmission band is $\leq 100\text{MHz}$.
 - $\leq 0.6\text{ W/kg}$ or 1.5 W/kg , for 1g or 10g respectively, when the transmission band is between 100 MHz and 200MHz.
 - $\leq 0.4\text{ W/kg}$ or 1.0 W/kg , for 1g or 10g respectively, when the transmission band is $\geq 200\text{MHz}$.

For WIFI 5G:

- 1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. As the highest reported SAR for a test configuration is $\leq 1.2\text{ W/kg}$, SAR is not required for U-NII-1 band for that configuration.

For NFC:

- 1) Standalone SAR testing for NFC will be performed with active mode and max power mode by test software with 100% duty cycle at 0mm separation distance.

For WIFI 6G:

- 1) Absorbed power density (APD) using a 4cm^2 averaging area is reported based on SAR measurements.
- 2) Per FCC guidance and equipment manufacturer guidance, the power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty $> 30\%$. Total expanded uncertainty of 2.67 dB (84.93%) was used to determine the psPD measurement scaling factor.
- 3) Per April 2021 TCB Workshop, For the highest SAR test configurations also measure incident PD (total) using power-density reconstruction method in 2 mm closest measurement plane.
- 4) IPD is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge.
- 5) The measurement procedure consists of measuring the PD_{inc} at two different distances: 2 mm (compliance distance) and $\lambda/5$. The grid extents should be large enough to fully capture the transmitted energy. The grid step should be fine enough to demonstrate that the integrated Power Density iPD_n fulfil the criterion described below. Since iPD ratio between the two distances is $\geq -1\text{dB}$, the grid step (0.0625) was sufficient for determining compliance at $d=2\text{mm}$.

$$10 \cdot \log_{10} \frac{iPD_n(2\text{mm})}{iPD_n(\lambda/5)} \geq -1$$

14.1 SAR Measurement Result of WIFI 2.4G

MIMO Test Results												
RF Exposure Condition	Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 10g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 10g SAR (W/kg)
Extremity	Front side	0	802.11b	SKU3	1/2412	0.255	98.61%	1.014	24.26	24.50	1.057	0.273
Extremity	Back side	0	802.11b	SKU3	1/2412	0.295	98.61%	1.014	24.26	24.50	1.057	0.316
Extremity	Left side	0	802.11b	SKU3	1/2412	1.030	98.61%	1.014	24.26	24.50	1.057	1.104
Extremity	Right side	0	802.11b	SKU3	1/2412	0.574	98.61%	1.014	24.26	24.50	1.057	0.615
Extremity	Top side	0	802.11b	SKU3	1/2412	0.399	98.61%	1.014	24.26	24.50	1.057	0.428
Extremity	Bottom side	0	802.11b	SKU3	1/2412	0.007	98.61%	1.014	24.26	24.50	1.057	0.008
Extremity	Left side	0	802.11b	SKU3	6/2437	0.811	98.61%	1.014	23.69	24.50	1.205	0.991
Extremity	Left side	0	802.11b	SKU3	11/2462	0.900	98.61%	1.014	23.82	24.50	1.169	1.067
Extremity	Left side	0	802.11b	SKU3	1/2412	0.970	98.61%	1.014	24.26	24.50	1.057	1.039
Extremity	Left side	0	802.11b	SKU2	1/2412	0.979	98.61%	1.014	24.26	24.50	1.057	1.049
Extremity	Left side	0	802.11b	SKU6	1/2412	0.851	98.61%	1.014	24.26	24.50	1.057	0.912
Extremity	Left side	0	802.11b	SKU11	1/2412	0.858	98.61%	1.014	24.26	24.50	1.057	0.919
Extremity	Left side	0	802.11b	SKU13	1/2412	0.679	98.61%	1.014	24.26	24.50	1.057	0.728
Extremity	Left side	0	802.11b	SKU14	1/2412	0.705	98.61%	1.014	24.26	24.50	1.057	0.755
RF Exposure Condition	Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body	Front Side-back clip	0	802.11b	SKU3	1/2412	0.312	98.61%	1.014	24.26	24.50	1.057	0.334
Body	Front Side-back clip	0	802.11b	SKU2	1/2412	0.281	98.61%	1.014	24.26	24.50	1.057	0.301
Body	Front Side-back clip	0	802.11b	SKU6	1/2412	0.295	98.61%	1.014	24.26	24.50	1.057	0.316
Body	Front Side-back clip	0	802.11b	SKU11	1/2412	0.296	98.61%	1.014	24.26	24.50	1.057	0.317
Body	Front Side-back clip	0	802.11b	SKU13	1/2412	0.302	98.61%	1.014	24.26	24.50	1.057	0.324
Body	Front Side-back clip	0	802.11b	SKU14	1/2412	0.299	98.61%	1.014	24.26	24.50	1.057	0.320

Table 3: SAR of WIFI 2.4G.

14.2 SAR Measurement Result of WIFI 5G

MIMO Test Results												
RF Exposure Condition	Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 10g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 10g SAR (W/kg)
U-NII-1												
Extremity	Front side	0	802.11ax 40M	SKU3	38/5190	0.086	99.63%	1.004	21.60	22.0	1.096	0.095
Extremity	Back side	0	802.11ax 40M	SKU3	38/5190	0.166	99.63%	1.004	21.60	22.0	1.096	0.183
Extremity	Left side	0	802.11ax 40M	SKU3	38/5190	1.210	99.63%	1.004	21.60	22.0	1.096	1.332
Extremity	Right side	0	802.11ax 40M	SKU3	38/5190	0.541	99.63%	1.004	21.60	22.0	1.096	0.596
Extremity	Top side	0	802.11ax 40M	SKU3	38/5190	0.145	99.63%	1.004	21.60	22.0	1.096	0.160
Extremity	Bottom side	0	802.11ax 40M	SKU3	38/5190	0.006	99.63%	1.004	21.60	22.0	1.096	0.007
Extremity	Left side	0	802.11ax 40M	SKU3	46/5230	0.658	99.63%	1.004	21.54	22.0	1.112	0.734
Extremity	Left side	0	802.11ax 40M	SKU2	38/5190	0.984	99.63%	1.004	21.60	22.0	1.096	1.083
Extremity	Left side	0	802.11ax 40M	SKU6	38/5190	1.150	99.63%	1.004	21.60	22.0	1.096	1.266
Extremity	Left side	0	802.11ax 40M	SKU11	38/5190	0.771	99.63%	1.004	21.60	22.0	1.096	0.849
Extremity	Left side	0	802.11ax 40M	SKU13	38/5190	1.080	99.63%	1.004	21.60	22.0	1.096	1.189
Extremity	Left side	0	802.11ax 40M	SKU14	38/5190	0.922	99.63%	1.004	21.60	22.0	1.096	1.015
RF Exposure Condition	Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body	Front Side-back clip	0	802.11ax 40M	SKU3	38/5190	0.219	99.63%	1.004	21.60	22.0	1.096	0.241
Body	Front Side-back clip	0	802.11ax 40M	SKU2	38/5190	0.154	99.63%	1.004	21.60	22.0	1.096	0.170
Body	Front Side-back clip	0	802.11ax 40M	SKU6	38/5190	0.179	99.63%	1.004	21.60	22.0	1.096	0.197
Body	Front Side-back clip	0	802.11ax 40M	SKU11	38/5190	0.170	99.63%	1.004	21.60	22.0	1.096	0.187
Body	Front Side-back clip	0	802.11ax 40M	SKU13	38/5190	0.194	99.63%	1.004	21.60	22.0	1.096	0.214
Body	Front Side-back clip	0	802.11ax 40M	SKU14	38/5190	0.165	99.63%	1.004	21.60	22.0	1.096	0.182
RF Exposure Condition	Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 10g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 10g SAR (W/kg)
U-NII-2C												
Extremity	Front side	0	802.11ax 20M	SKU3	100/5500	0.122	99.63%	1.004	22.21	22.5	1.069	0.131
Extremity	Back side	0	802.11ax 20M	SKU3	100/5500	0.371	99.63%	1.004	22.21	22.5	1.069	0.398
Extremity	Left side	0	802.11ax 20M	SKU3	100/5500	1.260	99.63%	1.004	22.21	22.5	1.069	1.352
Extremity	Right side	0	802.11ax 20M	SKU3	100/5500	0.809	99.63%	1.004	22.21	22.5	1.069	0.868
Extremity	Top side	0	802.11ax 20M	SKU3	100/5500	0.181	99.63%	1.004	22.21	22.5	1.069	0.194
Extremity	Bottom side	0	802.11ax 20M	SKU3	100/5500	0.009	99.63%	1.004	22.21	22.5	1.069	0.010
Extremity	Left side	0	802.11ax 20M	SKU3	120/5600	0.802	99.63%	1.004	21.98	22.5	1.127	0.908
Extremity	Left side	0	802.11ax 20M	SKU3	144/5720	0.730	99.63%	1.004	21.93	22.5	1.140	0.836
Extremity	Left side	0	802.11ax 20M	SKU2	100/5500	0.913	99.63%	1.004	22.21	22.5	1.069	0.980
Extremity	Left side	0	802.11ax 20M	SKU6	100/5500	0.974	99.63%	1.004	22.21	22.5	1.069	1.045
Extremity	Left side	0	802.11ax 20M	SKU11	100/5500	1.170	99.63%	1.004	22.21	22.5	1.069	1.256
Extremity	Left side	0	802.11ax 20M	SKU13	100/5500	0.807	99.63%	1.004	22.21	22.5	1.069	0.866
Extremity	Left side	0	802.11ax 20M	SKU14	100/5500	0.821	99.63%	1.004	22.21	22.5	1.069	0.881
RF Exposure Condition	Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body	Front Side-back clip	0	802.11ax 20M	SKU3	100/5500	0.254	99.63%	1.004	22.21	22.5	1.069	0.273
Body	Front Side-back clip	0	802.11ax 20M	SKU2	100/5500	0.237	99.63%	1.004	22.21	22.5	1.069	0.254
Body	Front Side-back clip	0	802.11ax 20M	SKU6	100/5500	0.229	99.63%	1.004	22.21	22.5	1.069	0.246
Body	Front Side-back clip	0	802.11ax 20M	SKU11	100/5500	0.190	99.63%	1.004	22.21	22.5	1.069	0.204
Body	Front Side-back clip	0	802.11ax 20M	SKU13	100/5500	0.253	99.63%	1.004	22.21	22.5	1.069	0.272
Body	Front Side-back clip	0	802.11ax 20M	SKU14	100/5500	0.215	99.63%	1.004	22.21	22.5	1.069	0.231

RF Exposure Condition	Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 10g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 10g SAR (W/kg)
U-NII-3												
Extremity	Front side	0	802.11ac 40M	SKU3	159/5795	0.232	99.63%	1.004	24.59	25.0	1.099	0.256
Extremity	Back side	0	802.11ac 40M	SKU3	159/5795	0.513	99.63%	1.004	24.59	25.0	1.099	0.566
Extremity	Left side	0	802.11ac 40M	SKU3	159/5795	1.820	99.63%	1.004	24.59	25.0	1.099	2.008
Extremity	Right side	0	802.11ac 40M	SKU3	159/5795	1.240	99.63%	1.004	24.59	25.0	1.099	1.368
Extremity	Top side	0	802.11ac 40M	SKU3	159/5795	0.500	99.63%	1.004	24.59	25.0	1.099	0.552
Extremity	Bottom side	0	802.11ac 40M	SKU3	159/5795	0.030	99.63%	1.004	24.59	25.0	1.099	0.033
Extremity	Left side	0	802.11ac 40M	SKU3	151/5755	1.360	99.63%	1.004	24.48	25.0	1.127	1.539
Extremity	Left side	0	802.11ac 40M	SKU2	159/5795	1.420	99.63%	1.004	24.59	25.0	1.099	1.567
Extremity	Left side	0	802.11ac 40M	SKU6	159/5795	1.610	99.63%	1.004	24.59	25.0	1.099	1.776
Extremity	Left side	0	802.11ac 40M	SKU11	159/5795	1.700	99.63%	1.004	24.59	25.0	1.099	1.876
Extremity	Left side	0	802.11ac 40M	SKU13	159/5795	1.680	99.63%	1.004	24.59	25.0	1.099	1.854
Extremity	Left side	0	802.11ac 40M	SKU14	159/5795	1.150	99.63%	1.004	24.59	25.0	1.099	1.269
RF Exposure Condition	Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power (dBm)	Tune up Limit (dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body	Front Side-back clip	0	802.11ac 40M	SKU3	159/5795	0.320	99.63%	1.004	24.59	25.0	1.099	0.353
Body	Front Side-back clip	0	802.11ac 40M	SKU2	159/5795	0.291	99.63%	1.004	24.59	25.0	1.099	0.321
Body	Front Side-back clip	0	802.11ac 40M	SKU6	159/5795	0.284	99.63%	1.004	24.59	25.0	1.099	0.313
Body	Front Side-back clip	0	802.11ac 40M	SKU11	159/5795	0.303	99.63%	1.004	24.59	25.0	1.099	0.334
Body	Front Side-back clip	0	802.11ac 40M	SKU13	159/5795	0.273	99.63%	1.004	24.59	25.0	1.099	0.301
Body	Front Side-back clip	0	802.11ac 40M	SKU14	159/5795	0.221	99.63%	1.004	24.59	25.0	1.099	0.244

Table 4: SAR of WIFI 5G.

14.3 SAR Measurement Result of WIFI 6G

MIMO Test Results														
RF Exposure Condition	Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 10g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 10g SAR (W/kg)	Measured APD (W/m ²)	Reported APD (W/m ²)
Extremity	Front side	0	802.11ax 160M	SKU3	175/6825	0.017	99.63%	1.004	16.04	16.50	1.112	0.019	0.389	0.434
Extremity	Back side	0	802.11ax 160M	SKU3	175/6825	0.092	99.63%	1.004	16.04	16.50	1.112	0.103	2.070	2.310
Extremity	Left side	0	802.11ax 160M	SKU3	175/6825	0.083	99.63%	1.004	11.89	12.50	1.151	0.096	1.880	2.172
Extremity	Left side	12	802.11ax 160M	SKU3	175/6825	0.139	99.63%	1.004	16.04	16.50	1.112	0.155	3.080	3.438
Extremity	Right side	0	802.11ax 160M	SKU3	175/6825	0.076	99.63%	1.004	11.89	12.50	1.151	0.088	1.750	2.022
Extremity	Right side	17	802.11ax 160M	SKU3	175/6825	0.058	99.63%	1.004	16.04	16.50	1.112	0.065	1.270	1.418
Extremity	Top side	0	802.11ax 160M	SKU3	175/6825	0.065	99.63%	1.004	16.04	16.50	1.112	0.073	1.450	1.618
Extremity	Bottom side	0	802.11ax 160M	SKU3	175/6825	0.002	99.63%	1.004	16.04	16.50	1.112	0.002	0.017	0.019
Extremity	Left side	12	802.11ax 160M	SKU3	15/6025	0.053	99.63%	1.004	15.77	16.50	1.183	0.063	1.190	1.413
Extremity	Left side	12	802.11ax 160M	SKU3	47/6185	0.073	99.63%	1.004	16.01	16.50	1.119	0.082	1.630	1.832
Extremity	Left side	12	802.11ax 160M	SKU3	79/6345	0.073	99.63%	1.004	15.80	16.50	1.175	0.086	1.630	1.923
Extremity	Left side	12	802.11ax 160M	SKU3	143/6665	0.104	99.63%	1.004	16.00	16.50	1.122	0.117	2.310	2.602
Extremity	Left side	12	802.11ax 160M	SKU2	175/6825	0.114	99.63%	1.004	16.04	16.50	1.112	0.127	2.530	2.824
Extremity	Left side	12	802.11ax 160M	SKU6	175/6825	0.113	99.63%	1.004	16.04	16.50	1.112	0.126	2.490	2.779
Extremity	Left side	12	802.11ax 160M	SKU11	175/6825	0.109	99.63%	1.004	16.04	16.50	1.112	0.122	2.450	2.735
Extremity	Left side	12	802.11ax 160M	SKU13	175/6825	0.102	99.63%	1.004	16.04	16.50	1.112	0.114	2.260	2.523
Extremity	Left side	12	802.11ax 160M	SKU14	175/6825	0.115	99.63%	1.004	16.04	16.50	1.112	0.128	2.540	2.835
RF Exposure Condition	Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)	Measured APD (W/m ²)	Reported APD (W/m ²)
Body	Front Side-back clip	0	802.11ax 160M	SKU3	175/6825	0.080	99.63%	1.004	16.04	16.50	1.112	0.089	0.627	0.700
Body	Front Side-back clip	0	802.11ax 160M	SKU2	175/6825	0.056	99.63%	1.004	16.04	16.50	1.112	0.062	0.434	0.484
Body	Front Side-back clip	0	802.11ax 160M	SKU6	175/6825	0.064	99.63%	1.004	16.04	16.50	1.112	0.071	0.522	0.583
Body	Front Side-back clip	0	802.11ax 160M	SKU11	175/6825	0.055	99.63%	1.004	16.04	16.50	1.112	0.061	0.418	0.467
Body	Front Side-back clip	0	802.11ax 160M	SKU13	175/6825	0.044	99.63%	1.004	16.04	16.50	1.112	0.049	0.343	0.383
Body	Front Side-back clip	0	802.11ax 160M	SKU14	175/6825	0.052	99.63%	1.004	16.04	16.50	1.112	0.058	0.411	0.459

Table 5: SAR of WIFI 6G.

14.4 SAR Measurement Result of BT

Test Results												
RF Exposure Condition	Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 10g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 10g SAR (W/kg)
Extremity	Front side	0	DH5	SKU3	39/2441	0.018	76.80%	1.302	10.14	10.50	1.086	0.025
Extremity	Back side	0	DH5	SKU3	39/2441	0.011	76.80%	1.302	10.14	10.50	1.086	0.016
Extremity	Left side	0	DH5	SKU3	39/2441	0.001	76.80%	1.302	10.14	10.50	1.086	0.001
Extremity	Right side	0	DH5	SKU3	39/2441	0.053	76.80%	1.302	10.14	10.50	1.086	0.075
Extremity	Top side	0	DH5	SKU3	39/2441	0.022	76.80%	1.302	10.14	10.50	1.086	0.031
Extremity	Bottom side	0	DH5	SKU3	39/2441	0.001	76.80%	1.302	10.14	10.50	1.086	0.001
Extremity	Right side	0	DH5	SKU3	0/2402	0.042	76.80%	1.302	9.27	10.50	1.327	0.073
Extremity	Right side	0	DH5	SKU3	78/2480	0.048	76.80%	1.302	7.91	8.50	1.146	0.072
Extremity	Right side	0	DH5	SKU2	39/2441	0.049	76.80%	1.302	10.14	10.50	1.086	0.069
Extremity	Right side	0	DH5	SKU6	39/2441	0.050	76.80%	1.302	10.14	10.50	1.086	0.071
Extremity	Right side	0	DH5	SKU11	39/2441	0.049	76.80%	1.302	10.14	10.50	1.086	0.069
Extremity	Right side	0	DH5	SKU13	39/2441	0.051	76.80%	1.302	10.14	10.50	1.086	0.072
Extremity	Right side	0	DH5	SKU14	39/2441	0.051	76.80%	1.302	10.14	10.50	1.086	0.072
RF Exposure Condition	Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 1g	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body	Front Side-back clip	0	DH5	SKU3	39/2441	0.022	76.80%	1.302	10.14	10.50	1.086	0.031
Body	Front Side-back clip	0	DH5	SKU2	39/2441	0.019	76.80%	1.302	10.14	10.50	1.086	0.027
Body	Front Side-back clip	0	DH5	SKU6	39/2441	0.021	76.80%	1.302	10.14	10.50	1.086	0.030
Body	Front Side-back clip	0	DH5	SKU11	39/2441	0.018	76.80%	1.302	10.14	10.50	1.086	0.025
Body	Front Side-back clip	0	DH5	SKU13	39/2441	0.020	76.80%	1.302	10.14	10.50	1.086	0.028
Body	Front Side-back clip	0	DH5	SKU14	39/2441	0.020	76.80%	1.302	10.14	10.50	1.086	0.028

Table 6: SAR of BT.

14.5 PD Measurement Result of WIFI 6G

Test position	Mode	Ch./Freq. (MHz)	Gap (mm)	Grid Step (λ)	Conducted Power(dBm)	Tune up Limit(dBm)	iPDn	iPD ratio (≥ -1)	Normal psPD (W/m ²)	Total psPD (W/m ²)
Left side	802.11ax 160M	175/6825	2.0	0.0625	11.89	12.50	29.4	1.22	2.330	2.820
Left side	802.11ax 160M	175/6825	8.8	0.125	11.89	12.50	22.2		1.210	1.370

MIMO Test Results															
Test position	Mode	Sample	Ch./Freq. (MHz)	Gap (mm)	Grid Step (λ)	Normal psPD (W/m^2)	Total psPD (W/m^2)	Duty Cycle	Duty Cycle Scaling Factor	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Scaling Factor for Measurement Uncertainty	Reported Normal psPD (W/m^2)	Reported Total psPD (W/m^2)
Front side	802.11ax 160M	SKU3	175/6825	2.000	0.0625	0.977	1.500	99.63%	1.004	16.04	16.50	1.112	1.5493	1.690	2.594
Back side	802.11ax 160M	SKU3	175/6825	2.000	0.0625	2.810	3.540	99.63%	1.004	16.04	16.50	1.112	1.5493	4.859	6.122
Left side	802.11ax 160M	SKU3	175/6825	2.000	0.0625	2.330	2.820	99.63%	1.004	11.89	12.50	1.151	1.5493	4.171	5.048
Left side	802.11ax 160M	SKU3	175/6825	12.000	0.0625	4.340	4.730	99.63%	1.004	16.04	16.50	1.112	1.5493	7.505	8.180
Right side	802.11ax 160M	SKU3	175/6825	2.000	0.0625	1.770	2.280	99.63%	1.004	11.89	12.50	1.151	1.5493	3.168	4.081
Right side	802.11ax 160M	SKU3	175/6825	17.000	0.0625	1.800	2.040	99.63%	1.004	16.04	16.50	1.112	1.5493	3.113	3.528
Top side	802.11ax 160M	SKU3	175/6825	2.000	0.0625	2.050	3.210	99.63%	1.004	16.04	16.50	1.112	1.5493	3.545	5.551
Bottom side	802.11ax 160M	SKU3	175/6825	2.000	0.0625	0.251	0.378	99.63%	1.004	16.04	16.50	1.112	1.5493	0.434	0.654
Left side	802.11ax 160M	SKU3	15/6025	12.000	0.0625	3.690	4.130	99.63%	1.004	15.77	16.50	1.183	1.5493	6.790	7.600
Left side	802.11ax 160M	SKU3	47/6185	12.000	0.0625	4.790	5.140	99.63%	1.004	16.01	16.50	1.119	1.5493	8.341	8.950
Left side	802.11ax 160M	SKU3	79/6345	12.000	0.0625	3.560	3.920	99.63%	1.004	15.80	16.50	1.175	1.5493	6.506	7.164
Left side	802.11ax 160M	SKU3	143/6665	12.000	0.0625	3.680	4.180	99.63%	1.004	16.00	16.50	1.122	1.5493	6.423	7.295
Left side	802.11ax 160M	SKU2	47/6185	12.000	0.0625	4.360	4.610	99.63%	1.004	16.01	16.50	1.119	1.5493	7.592	8.027
Left side	802.11ax 160M	SKU6	47/6185	12.000	0.0625	4.310	4.670	99.63%	1.004	16.01	16.50	1.119	1.5493	7.505	8.132
Left side	802.11ax 160M	SKU11	47/6185	12.000	0.0625	4.670	5.010	99.63%	1.004	16.01	16.50	1.119	1.5493	8.132	8.724
Left side	802.11ax 160M	SKU13	47/6185	12.000	0.0625	3.920	4.210	99.63%	1.004	16.01	16.50	1.119	1.5493	6.826	7.331
Left side	802.11ax 160M	SKU14	47/6185	12.000	0.0625	3.690	3.980	99.63%	1.004	16.01	16.50	1.119	1.5493	6.425	6.930

Table 7: PD of WIFI 6G.

14.6 SAR Measurement Result of NFC

Test Results						
Test position	Distance (mm)	Mode	Sample	Ch./Freq. (MHz)	SAR (W/kg) 1g	SAR (W/kg) 10g
Front side	0	NFC (ASK)	SKU3	13.56MHz	0.002	0.001
Back side	0	NFC (ASK)	SKU3	13.56MHz	0.012	0.009
Left side	0	NFC (ASK)	SKU3	13.56MHz	0.002	0.001
Right side	0	NFC (ASK)	SKU3	13.56MHz	0.003	0.002
Top side	0	NFC (ASK)	SKU3	13.56MHz	0.106	0.054
Bottom side	0	NFC (ASK)	SKU3	13.56MHz	0.002	0.001
Top side	0	NFC (ASK)	SKU2	13.56MHz	0.006	0.002
Top side	0	NFC (ASK)	SKU6	13.56MHz	0.106	0.053
Top side	0	NFC (ASK)	SKU11	13.56MHz	0.105	0.053
Top side	0	NFC (ASK)	SKU13	13.56MHz	0.016	0.012
Top side	0	NFC (ASK)	SKU14	13.56MHz	0.101	0.051

Table 8: SAR of NFC.

15 Simultaneous Transmission Analysis

The Simultaneous Transmission Possibilities of this device are as below:

NO.	Simultaneous Tx Combination	
1	WLAN 2.4GHz(chain 1) + BT(chain 0)	Y
2	WLAN 5GHz(chain 0) + BT(chain 0)	Y
3	WLAN 5GHz(chain 1) + BT(chain 0)	Y
4	WLAN 5GHz MIMO + BT(chain 0)	Y
5	WLAN 6GHz(chain 0) + BT(chain 0)	Y
6	WLAN 6GHz(chain 1) + BT(chain 0)	Y
7	WLAN 6GHz MIMO + BT(chain 0)	Y
8	WLAN 2.4GHz + NFC	N
9	WLAN 5GHz + NFC	N
10	WLAN 6GHz + NFC	N
11	BT + NFC	N

Summed SAR Analysis:

RF Exposure Condition	Test position	SAR _{max} (W/kg)				Summed SAR			Limit (W/kg)
		WIFI 2.4G	WIFI 5G	WIFI 6G	BT				
		1	2	3	4	1+4	2+4	3+4	
Extremity	Front side	0.273	0.256	0.019	0.025	0.298	0.281	0.044	4.0
	Back side	0.316	0.566	0.103	0.016	0.332	0.582	0.119	
	Left side	1.104	2.008	0.155	0.001	1.105	2.009	0.156	
	Right side	0.615	1.368	0.088	0.075	0.690	1.443	0.163	
	Top side	0.428	0.552	0.073	0.031	0.459	0.583	0.104	
	Bottom side	0.008	0.033	0.002	0.001	0.009	0.034	0.003	
Body	Front side	0.334	0.353	0.089	0.031	0.365	0.384	0.120	1.6

Total Exposure Radio Analysis:

The fields generated by the antennas can be correlated or uncorrelated. At different frequencies, fields are always uncorrelated, and the aggregate power density contributions can be summed according to spatially averaged values of corresponding sources at any point in space, r , to determine the total exposure ratio (TER). Assuming I sources, the TER at each point in space is equal to

$$TER^{uncorr}(r) = \sum_{i=1}^I ER_i = \sum_{i=1}^I \frac{S_{av,i}(r, f_i)}{S_{lim}(f_i)}$$

Where $S_{av,i}$ is the power density for the source I operating at a frequency f_i and S_{lim} is the power density limit as specified by the relevant standard.

Exposure from transmitters operating above and below 6GHz, where 6GHz denotes the transmission frequency where the basic restrictions change from being defined in terms of SAR to being defined in terms of power density, therefore uncorrelated and the TER is determined as

$$TER^{uncorr}(r) = \sum_{i=1}^I ER_i = \sum_{i=1}^I \frac{S_{av,i}(r, f_i)}{S_{lim}(f_i)}$$

According to the FCC guidance in TCBC workshop and IEC TR 63170, the total exposure ratio calculated by taking ratio of maximum reported SAR divided by SAR limit and adding it to maximum measured power density by its limit. Numerical sum of the ratios should be less 1. Therefore the simultaneous transmission should be follows:

$$TER = \sum_{n=1}^N \frac{SAR_n}{SAR_{n,limit}} + \sum_{n=1}^N \frac{S_{m,avg}}{S_{m,limit}} < 1$$

For transmitters operating above 6000 MHz, it is necessary to perform an assessment against the PD (basic restriction up to 10 GHz and reference levels beyond). The exposure ratio for the m -th transmitter is given by:

$$\max \left[\frac{SAR_m}{SAR_{limit}}, \frac{APD_m}{APD_{limit}} \right] \quad 5925 \text{ MHz} < f_m \leq 10 \text{ GHz}$$

Where:

SAR_m is the SAR value for the n -th transmitter/test frequency.

SAR_{limit} is the basic restriction limit that is applicable to the n -th transmitter/test frequency.

APD is the APD value for the m -th transmitter/test frequency.

APD_{limit} is the basic restriction limit that is applicable for the m -th transmitter/test frequency.

Total Exposure Ratio:

Test position	Test position	WIFI 6G		BT		Total Exposure Ratio	Exposure Ratio Limit
		Power Density (mW/cm ²)	Exposure Ratio	SAR_{max} (W/kg)	Exposure Ratio		
		3	5	4	6		
Exposure Ratio	Front side	2.594	0.259	0.025	0.006	0.266	1.0
	Back side	6.122	0.612	0.016	0.004	0.616	
	Left side	8.950	0.895	0.001	0.000	0.895	
	Right side	4.081	0.408	0.075	0.019	0.427	
	Top side	5.551	0.555	0.031	0.008	0.563	
	Bottom side	0.654	0.065	0.001	0.000	0.066	

16 Measurement Uncertainty

The expanded SAR measurement uncertainty must be $\leq 30\%$, for a confidence interval of $k = 2$.

Input quantity X_i (source of uncertainty)	Unc. ($\pm$)	Prob. Dist. PDF _i	Unc. $a(x_i)$	C_i (1g)	C_i (10g)	U_i (1g) (%)	U_i (10g) (%)
Measurement system errors							
Probe calibration	18.6	N ($k = 2$)	2	1	1	9.3	9.3
Probe calibration drift	1.7	R	$\sqrt{3}$	1	1	1.0	1.0
Probe linearity and detection limit	0.9	R	$\sqrt{3}$	1	1	0.5	0.5
Broadband signal	0.5	R	$\sqrt{3}$	1	1	0.3	0.3
Probe isotropy	3.2	R	$\sqrt{3}$	1	1	1.8	1.8
Other probe and data acquisition errors	0.6	N	1	1	1	0.6	0.6
RF ambient and noise	3.0	R	$\sqrt{3}$	1	1	1.7	1.7
Probe positioning errors	0.5	N	1	0.33	0.33	0.2	0.2
Data processing errors	4.0	R	$\sqrt{3}$	1	1	2.3	2.3
Phantom and device (DUT or validation antenna) errors							
Measurement of phantom conductivity(σ)	2.5	N	1	0.78	0.71	2.0	1.8
Temperature effects (medium)	2.7	R	$\sqrt{3}$	0.78	0.71	1.2	1.1
Shell permittivity	14.0	R	$\sqrt{3}$	0.5	0.5	4.0	4.0
Distance between the radiating element of the DUT and the phantom medium	2.0	N	1	2	2	4.0	4.0
Repeatability of positioning the DUT or source against the phantom	2.9	N	1	1	1	2.9	2.9
Device holder effects	3.6	N	1	1	1	3.6	3.6
Effect of operating mode on probe sensitivity	2.4	R	$\sqrt{3}$	1	1	1.4	1.4
Time-average SAR	0.0	R	$\sqrt{3}$	1	1	0.0	0.0
Variation in SAR due to drift in output of DUT	2.5	N	1	1	1	2.5	2.5
Validation antenna uncertainty (validation measurement only)	0.0	N	1	1	1	0.0	0.0
Uncertainty in accepted power (validation measurement only)	0.0	N	1	1	1	0.0	0.0
Corrections to the SAR result (if applied)							
Phantom deviation from target (ϵ', σ)	1.9	N	1	1	0.84	1.9	1.6
SAR scaling	0.0	R	$\sqrt{3}$	1	1	0.0	0.0
Combined uncertainty	\					14.30	14.20
Expanded uncertainty and effective degrees of freedom ($k = 2$)	\					28.59	28.39

Applicable for Power Density Measurements						
a	b	c	d	e	f=b*e/d	g
Error Description	Uncertainty Value (±dB)	Probability	Div.	Ci	Standard Uncertainty (±dB)	Vi (Veff)
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 ≤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 dependance	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	2.00	R	1.732	1	1.15	∞
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	0.00	∞
Modulation response	0.40	R	1.732	1	0.23	∞
Integration time	0.00	R	1.732	1	0.00	∞
Response time	0.00	R	1.732	1	0.00	∞
Device holder influence	0.10	R	1.732	1	0.06	∞
DUT alignment	0.00	R	1.732	1	0.00	∞
RF ambient conditions	0.04	R	1.732	1	0.02	∞
Ambient reflections	0.04	R	1.732	1	0.02	∞
Immunity / secondary reception	0.00	R	1.732	1	0.00	∞
Drift of the DUT		R	1.732	1	0.00	∞
Combined Std. Uncertainty					1.33	
Expanded STD Uncertainty (95%), K=2					2.67	

17 Calibration Certificate

Please see the Appendix C

18 Test Setup Photos

Please see the Appendix D

Appendix A: System Check Plots

Appendix B: SAR Test Plots

Appendix C: Calibration certificate

Appendix D: Test Setup Photos

--- The End ---
