FCC Part 1 Subpart I
FCC Part 2 Subpart J

CERTIFICATION TEST REPORT

FOR

MAGNETIC CHARGER

MODEL NO: A2548

FCC ID: BCGA2548

REPORT NUMBER: 13939155-E2V2

ISSUE DATE: AUGUST 21, 2021

Prepared for
APPLE INC.
1 APPLE PARK WAY
CUPERTINO, CA 95014, U.S.A

Prepared by
UL VERIFICATION SERVICES INC.
47173 BENICIA STREET
FREMONT, CA 94538, U.S.A.
TEL: (510) 771-1000
FAX: (510) 661-0888

ACCREDITED
CERT #0751.05

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	8/18/2021	Initial Issue	Chin Pang
V2	8/21/2021	Address TCB's questions on FCC ID, Section 5, Section 6.1, 6.2 & 6.3, Page 11, 18 & 24	Chin pang

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: APPLE INC.
1 APPLE PARK WAY
CUPERTINO, CA 95014, U.S.A

EUT DESCRIPTION: MAGNETIC CHARGER

MODEL: A2548

BRAND: APPLE

SERIAL NUMBER: DLC1284001M1HN123

SAMPLE RECEIPT DATE AUGUST 13, 2021

DATE TESTED: AUGUST 13-17, 2021

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
FCC PART 1 SUBPART I & PART 2 SUBPART J	Complies

UL Verification Services Inc. 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.

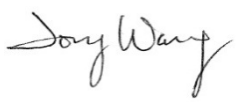
The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples 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.

This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, any agency of the Federal Government, or any agency of the U.S. government.

Reviewed By:

Chin Pang
Senior Engineer
UL Verification Service Inc.

Prepared By:



Tony Wang
Test Engineer
UL Verification Services Inc.

2. TEST METHODOLOGY

All measurements made in accordance with KDB 680106.

3. FACILITIES AND ACCREDITATION

UL LLC is accredited by A2LA, certification #0751.05, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
☐	Building 1: 47173 Benicia Street, Fremont, CA 94538	US0104	2324A	208313
☒	Building 2: 47266 Benicia Street, Fremont, CA 94538	US0104	22541	208313
☐	Building 4: 47658 Kato Rd, Fremont, CA 94538	US0104	2324B	208313

4. DECISION RULES AND MEASUREMENT UNCERTAINTY

4.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

4.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	U_{Lab}
Magnetic Field Reading (A/m)	+/-0.04284 (A/m)
Electric Field Reading (V/m)	+/-0.03682 (V/m)

Uncertainty figures are valid to a confidence level of 95.45%.

5. KDB 680106 D01 SECTION 5b EQUIPMENT APPROVAL CONSIDERATIONS

Requirement	Device
(1) Power transfer frequency is less than 1 MHz.	Yes. Operating Frequencies are 127.7KHz and 360KHz
(2) Output power from each primary coil is less than or equal to 15 watts.	Yes. The maximum power is 15 Watts
(3) The transfer system includes only single primary and secondary coils. This includes charging systems that may have multiple primary coils and clients that are able to detect and allow coupling only between individual pairs of coils.	Yes. The system includes a single primary and a secondary coil, the device is designed to charge a single client
(4) Client device is placed directly in contact with the transmitter.	Yes. The client device is placed directly in contact with the transmitter.
(5) Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).	Yes. It is a mobile device.
(6) The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.	The worst case leakage @127.7kHz is 8.04% @360KHz is 4.66%

6. EQUIPMENT UNDER TEST

6.1. DESCRIPTION OF EUT

The EUT is an inductive magnetic charger designed to charge wireless charging devices. The charging function operates at 127.7 kHz and 360 kHz. The charger supports charging at 15W, (Phone) and 1W (AirPods) power.

6.2. WORST-CASE CONFIGURATION AND MODE

The EUT was investigated on EUT with phone, EUT with Phone + silicone case and EUT with AirPods. Test was performed on EUT with AirPods at 127.7KHz and EUT with Phone + silicone case at 360KHz as the worst case after investigation, therefore, all spot check was investigated with phone + silicone case. The following configurations were tested at its natural orientation.

Config	Mode	Descriptions
1	Standby	Standby-EUT Alone powered by AC/DC adapter
2	Operating @360KHz. (~10%, 20~60%, and >90% Power Charging)	Direct contact during charging between the EUT & New Phone #1 and the EUT is powered by AC/DC adapter
3	Operating @360kHz. (~10%, 20~60%, and >90% Power Charging)	Direct contact during charging between the EUT & New Phone #1 with Silicone Case and the EUT is powered by AC/DC adapter
4	Operating @360kHz. (20~60% Power Charging)	Spot Check on direct contact during charging between the EUT & New Phone #2 + Silicone case , and the EUT is powered by AC/DC adapter
5	Operating @360kHz. (20~60% Power Charging)	Spot Check on direct contact during charging between the EUT & New Phone #3 + Silicone case, and the EUT is powered by AC/DC adapter
6	Operating @360kHz. (20~60% Power Charging)	Spot Check on direct contact during charging between the EUT & New Phone #4 + Silicone case , and the EUT is powered by AC/DC adapter
7	Operating @360kHz. (~10%, 20~60%, and >90% Power Charging)	Direct contact during charging between the EUT & Legacy Phone #5, A2341 and the EUT is powered by AC/DC adapter
8	Operating @360kHz. (~10%, 20~60%, and >90% Power Charging)	Direct contact during charging between the EUT & Legacy Phone #5 A2341 with Silicone Case and the EUT is powered by AC/DC adapter
9	Operating @360kHz. (20~60% Power Charging)	Spot Check on direct contact during charging between the EUT & Legacy Phone #6 A2172 + Silicone case and the EUT is powered by AC/DC adapter
10	Operating @360KHz (20-60% Power Charging)	Spot Check on direct contact during charging between the EUT & Legacy Phone #7 A2176 + Silicone Case and the EUT is powered by AC/DC adapter
11	Operating @360KHz (20-60% Power Charging)	Spot Check on direct contact during charging between the EUT & Legacy Phone #8 A2342 + Silicone case and the EUT is powered by AC/DC adapter
12	Operating @127.7KHz. (~10%, 20~60%, and >90% Power Charging)	Direct contact during charging between the EUT & AirPods A2190 and the EUT is powered by AC/DC adapter

6.3. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

SUPPORT EQUIPMENT & PERIPHERALS LIST				
No	**Description**	**Manufacturer**	**Model**	**Serial Number**
1	New Phone	Apple	Phone #1	KP74W9FCWJ
2	New Phone	Apple	Phone #2	W6MG6VR259
3	New Phone	Apple	Phone #3	HW3FV2XQ3G
4	New Phone	Apple	Phone #4	WMFV43V0VY
5	Legacy Phone	Apple	A2341-Phone #5	G6TD300F04PT
6	Legacy Phone	Apple	A2172-Phone #6	G6TD801U0CJV
7	Legacy Phone	Apple	A2176-Phone #7	C7CCV005Q920
8	Legacy Phone	Apple	A2342-Phone #8	G6TDH0480MWT
9	AirPods	Apple	A2190	HHWF40G71059
10	Silicone Case	N/A	N/A	C03191PE1MAEFLA0202
11	AC/DC adapter	Apple	A2305	C4H01050096PF4FAH
12	AC/DC adapter	Apple	A1882	FNT84460MNQJV3FA6

I/O CABLES

The EUT with lightning to USB-C cable powered by AC/DC Adapter.

TEST SETUP

The following configurations are tested:

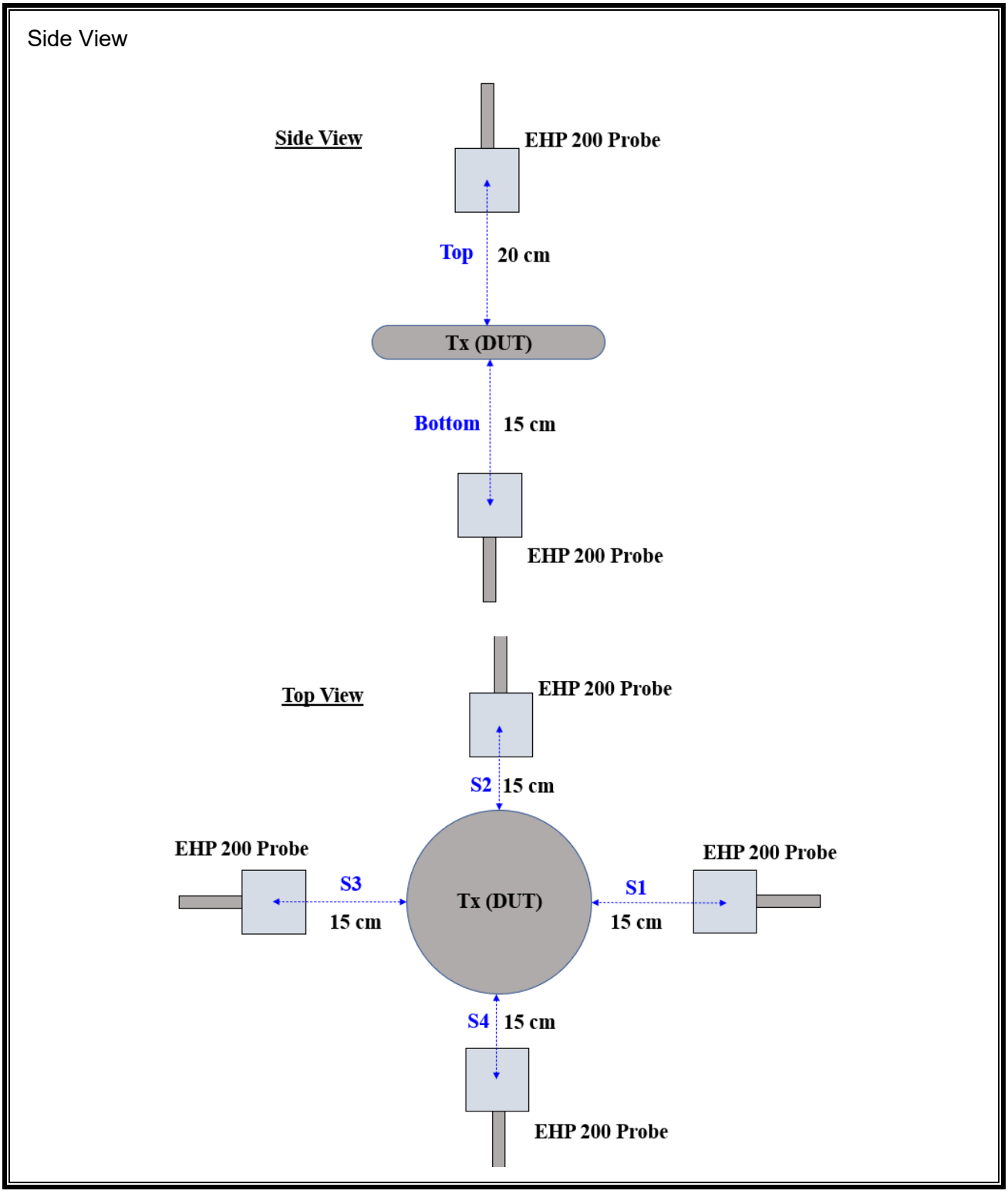
Configuration	Mode	Descriptions
1 (Standby)	EUT standalone	EUT with lightning to USB-C cable powered by AC/DC Adapter
2, 3, 7 & 8 (Full Test)	Operating @360KHz. (~10%, 20~60%, and >90% Power Charging)	EUT with lightning to USB-C cable powered by AC/DC Adapter & Wireless Charging to Legacy and New Phones and Silicone Case
4, 5, 6, 9, 10 & 11 (Spot Check)	Operating (20~60% Power Charging)	EUT with lightning to USB-C cable powered by AC/DC Adapter & Wireless Charging to Phone + Silicone Case
12 (Full Test)	Operating @127.70KHz. (~10%, 20~60%, and >90% Power Charging)	EUT with lightning to USB-C cable powered by AC/DC Adapter & Wireless Charging to AirPods.

MEASUREMENT SETUP

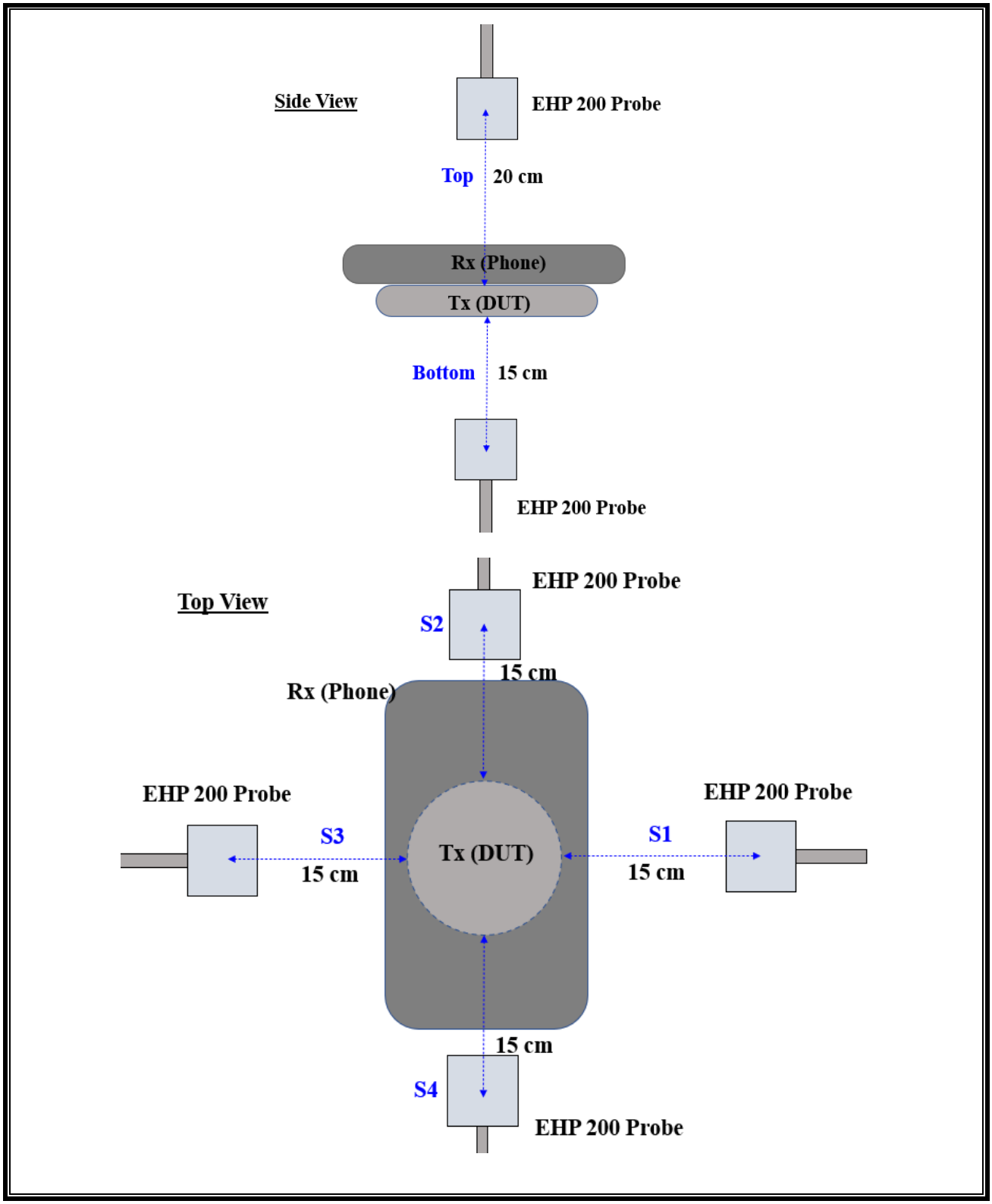
Measurements were taken from the top and all sides of the EUT per KDB680106 D01 v03.

CONFIGURATION 1 : STANDBY MODE

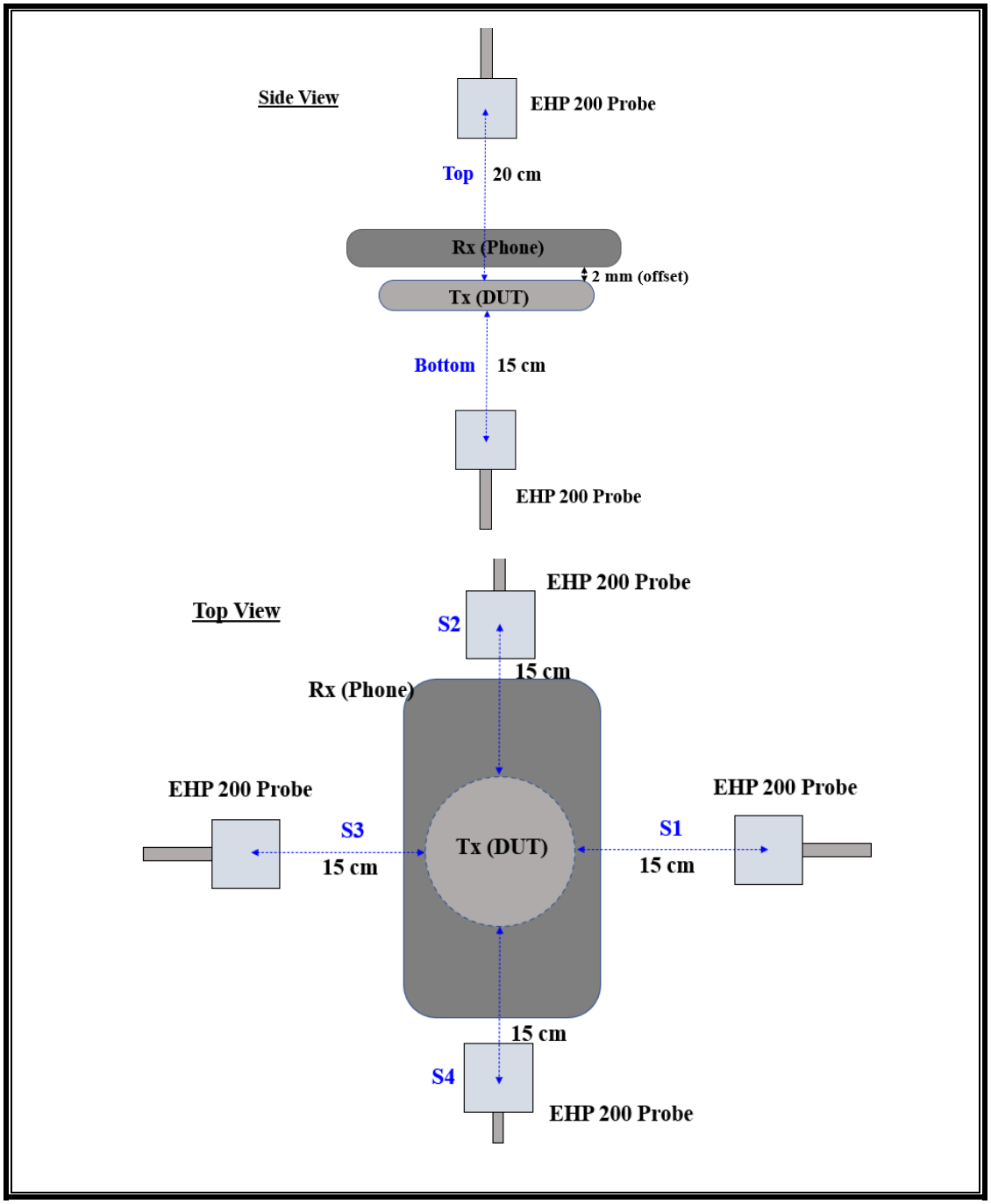
Side View



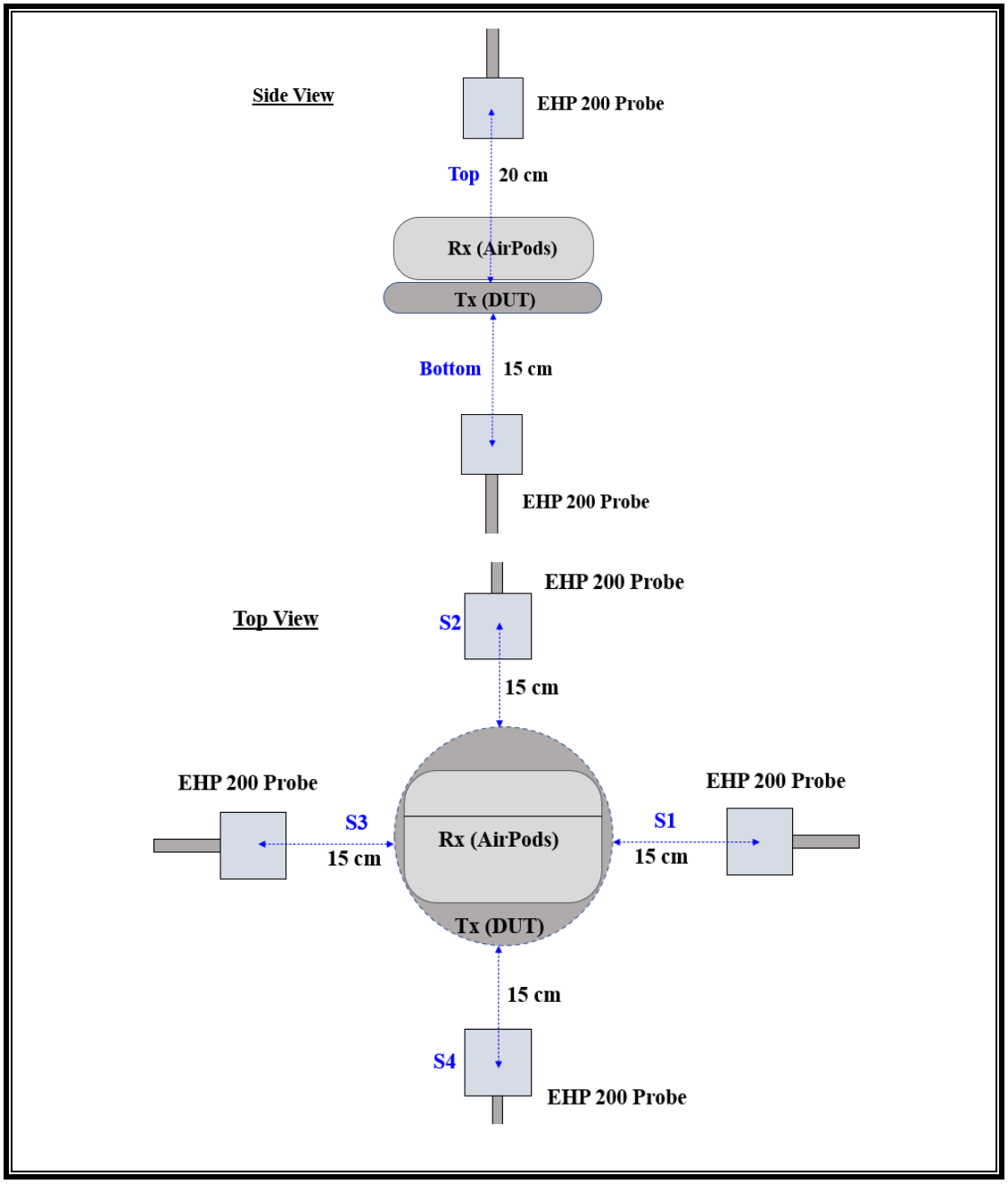
Configuration 2 & 7: Operating Mode With Legacy and New Phone



CONFIGURATION 3, 4, 5, 6, 8, 9, 10 & 11: EUT WITH Phone + Case



CONFIGURATION 12: EUT WITH AirPods



7. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was used for the tests documented in this report:

Test Equipment List						
Description	**Manufacturer**	**Model**	**S/N**	**Label ID**	**Cal Due**	**Cal Date**
Electric and Magnetic Field Probe	Narda	EHP-200A	160WX41008	T1085	03/16/2022	03/16/2021
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent (Keysight) Technologies	N9030A-544	MY52350176	T1210	01/22/2022	01/22/2021

8. DUTY CYCLE

LIMITS

None; for reporting purposes only.

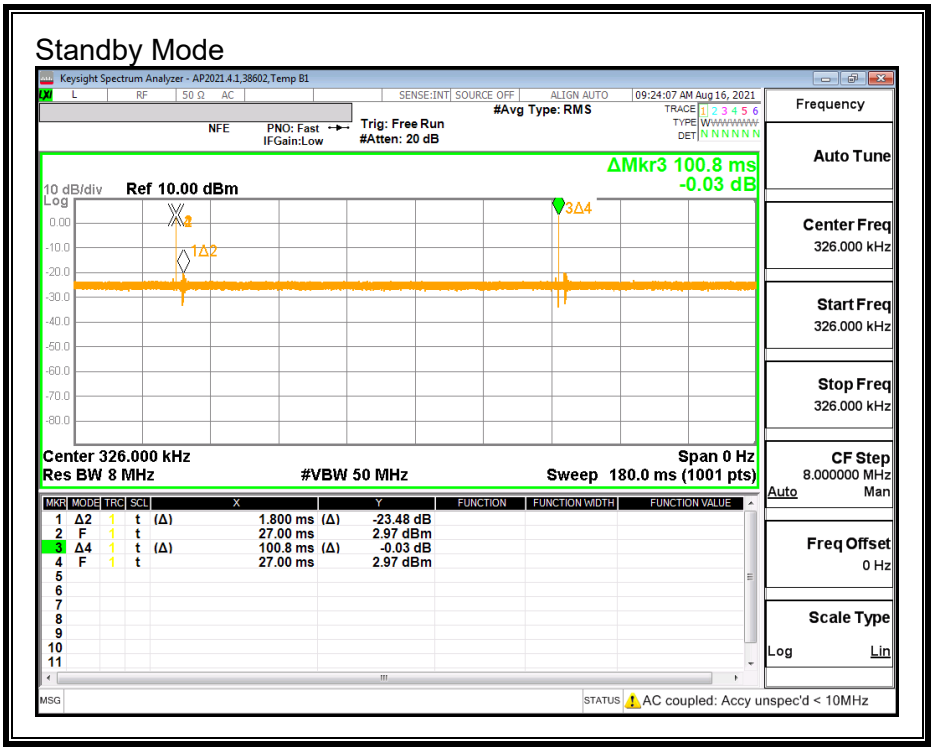
PROCEDURE

Zero-Span Spectrum Analyzer Method.

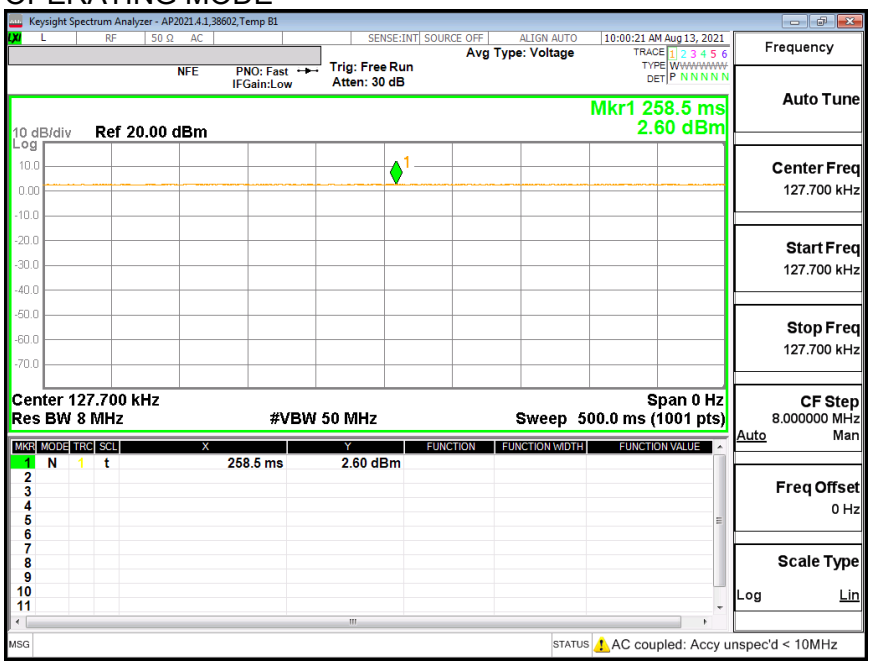
ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)
Standby (Config 1)	1.80	100.80	0.02	1.79%	17.48
Operating(Config 2)	100.00	100.00	1.00	100.00%	0.00

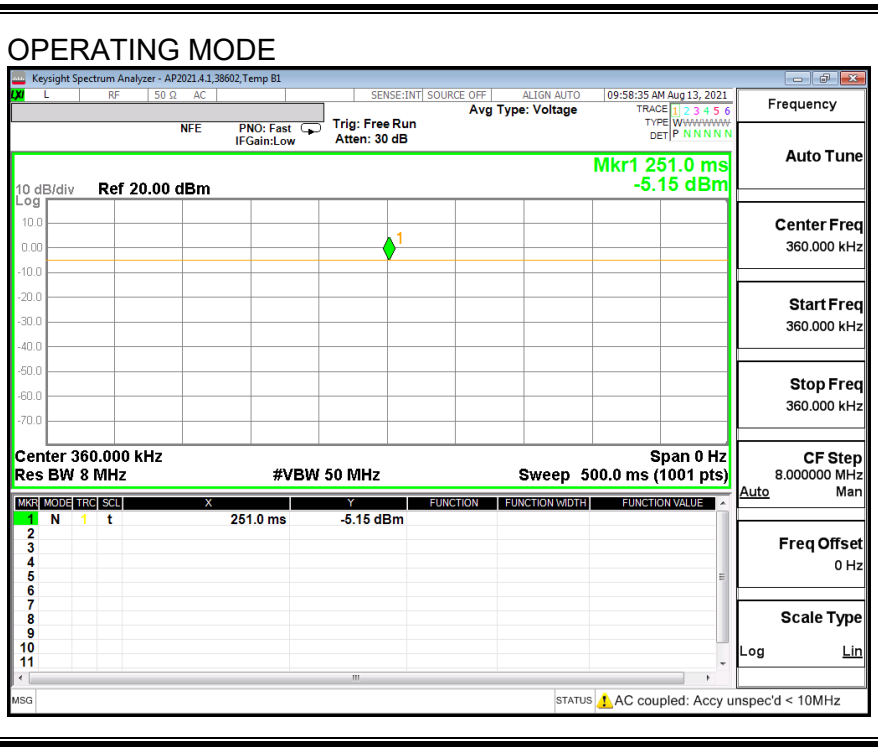
Standby Mode



OPERATING MODE



OPERATING MODE



9. MAXIMUM PERMISSIBLE RF EXPOSURE

9.1. FCC LIMITS AND SUMMARY

§1.1310 The criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio-frequency (RF) radiation as specified in §1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of §2.1093 of this chapter.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

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

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)—Continued

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
30–300	27.5	0.073	0.2	30
300–1500			f/1500	30
1500–100,000			1.0	30

f = frequency in MHz
* = Plane-wave equivalent power density
NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.
NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

9.1.1. FCC RF Exposure Summary of Results

ID	38602	Date:	8/16-17/2021

FCC RF Exposure Summary of Results

Configuration #1: STANDBY MODE

Electric Field Limit			Magnetic Field Limit		
FCC RF Exposure Limit	Maximum Average (V/m)	Percentage (%)	FCC RF Exposure	Maximum Average (A/m)	Percentage (%)
614	0.021	0.003%	1.63	0.003	0.18%

Configuration #2: EUT WITH NEW PHONE # 1

Electric Field Limit			Magnetic Field Limit		
FCC RF Exposure Limit	Maximum Average (V/m)	Percentage (%)	FCC RF Exposure	Maximum Average (A/m)	Percentage (%)
614	0.259	0.04%	1.63	0.022	1.35%

Configuration #3: EUT WITH NEW PHONE #1 + SILICONE CASE

Electric Field Limit			Magnetic Field Limit		
FCC RF Exposure Limit	Maximum Average (V/m)	Percentage (%)	FCC RF Exposure	Maximum Average (A/m)	Percentage (%)
614	0.707	0.12%	1.63	0.076	4.66%

Configuration #4: EUT WITH NEW PHONE #2 + SILICONE CASE

Electric Field Limit			Magnetic Field Limit		
FCC RF Exposure Limit	Maximum Average (V/m)	Percentage (%)	FCC RF Exposure	Maximum Average (A/m)	Percentage (%)
614	0.507	0.08%	1.63	0.057	3.50%

Configuration #5: EUT WITH NEW PHONE #3 + SILICONE CASE

Electric Field Limit			Magnetic Field Limit		
FCC RF Exposure Limit	Maximum Average (V/m)	Percentage (%)	FCC RF Exposure	Maximum Average (A/m)	Percentage (%)
614	0.557	0.09%	1.63	0.061	3.74%

Configuration #6: EUT WITH NEW PHONE #4 + SILICONE CASE

Electric Field Limit			Magnetic Field Limit		
FCC RF Exposure Limit	Maximum Average (V/m)	Percentage (%)	FCC RF Exposure	Maximum Average (A/m)	Percentage (%)
614	0.591	0.10%	1.63	0.065	3.99%

Configuration #7: EUT WITH LEGACY PHONE #5

Electric Field Limit			Magnetic Field Limit		
FCC RF Exposure Limit	Maximum Average (V/m)	Percentage (%)	FCC RF Exposure	Maximum Average (A/m)	Percentage (%)
614	0.498	0.08%	1.63	0.061	3.74%

Configuration #8: EUT WITH LEGACY PHONE #5 + SILICONE CASE

Electric Field Limit			Magnetic Field Limit		
FCC RF Exposure Limit	Maximum Average (V/m)	Percentage (%)	FCC RF Exposure	Maximum Average (A/m)	Percentage (%)
614	0.616	0.10%	1.63	0.072	4.42%

Configuration #9: EUT WITH LEGACY PHONE #6 + SILICONE CASE

Electric Field Limit			Magnetic Field Limit		
FCC RF Exposure Limit	Maximum Average (V/m)	Percentage (%)	FCC RF Exposure	Maximum Average (A/m)	Percentage (%)
614	0.545	0.09%	1.63	0.063	3.87%

Configuration #10: EUT WITH LEGACY PHONE #7 + SILICONE CASE

Electric Field Limit			Magnetic Field Limit		
FCC RF Exposure Limit	Maximum Average (V/m)	Percentage (%)	FCC RF Exposure	Maximum Average (A/m)	Percentage (%)
614	0.533	0.09%	1.63	0.059	3.62%

Configuration #11: EUT WITH LEGACY PHONE #8 + SILICONE CASE

Electric Field Limit			Magnetic Field Limit		
FCC RF Exposure Limit	Maximum Average (V/m)	Percentage (%)	FCC RF Exposure	Maximum Average (A/m)	Percentage (%)
614	0.525	0.09%	1.63	0.055	3.37%

Configuration #12: EUT WITH AirPods

Electric Field Limit			Magnetic Field Limit		
FCC RF Exposure Limit	Maximum Average (V/m)	Percentage (%)	FCC RF Exposure	Maximum Average (A/m)	Percentage (%)
614	0.416	0.07%	1.63	0.131	8.04%

E- FIELD AND H- FIELD MEASUREMENTS

Note: Peak measurements were performed. RMS values were calculated from the peak measurement. Please refer to the formula for calculating the RMS values: [Field Strength x √Duty Cycle].

Configuration #1: STANDBY MODE

FCC Limit

Configuration	Test Mode	Measuring Distance (cm)	Electric Field Limit (V/m)	Electric Field Reading (V/m)				Magnetic Field Limit (A/m)	Magnetic Field Reading (A/m)			
			FCC	Location	Peak	Duty Cycle %	FCC Average	FCC	Location	Peak	Duty Cycle %	FCC Average
1	Standby	**15 cm** surrounding the device (S1 - S4,Bottom) and **20 cm** above the top surface of the EUT	614	S1	0.131	1.79	0.017	1.63	S1	0.016	1.79	0.002
				S2	0.157		0.021		S2	0.018		0.002
				S3	0.156		0.021		S3	0.018		0.002
				S4	0.137		0.018		S4	0.017		0.002
				Bottom	0.145		0.019		Bottom	0.020		0.003
				Top	0.148		0.020		Top	0.018		0.002
				Max	0.157		0.021		Max	0.020		0.003

Configuration #2: EUT WITH New Phone #1

FCC Limit

Configuration	Test Mode	Measuring Distance (cm)	Electric Field Limit (V/m)	Electric Field Reading (V/m)				Magnetic Field Limit (A/m)	Magnetic Field Reading (A/m)			
			FCC	Location	Peak	Duty Cycle %	FCC Average	FCC	Location	Peak	Duty Cycle %	FCC Average
2	Operating Real Product (Power <10% Charging)	15 cm surrounding the device (S1 - S4,Bottom) and 20 cm above the top surface of the EUT	614	S1	0.164	100	0.164	1.63	S1	0.018	100	0.018
				S2	0.164		0.164		S2	0.019		0.019
				S3	0.173		0.173		S3	0.018		0.018
				S4	0.168		0.168		S4	0.020		0.020
				Bottom	0.180		0.180		Bottom	0.021		0.021
				Top	0.252		0.252		Top	0.018		0.018
				Max	0.252		0.252		Max	0.021		0.021
	Operating Real Product (Power ~ 20% - 60% Charging)			S1	0.164	100	0.164		S1	0.020	100	0.020
				S2	0.167		0.167		S2	0.022		0.022
				S3	0.186		0.186		S3	0.020		0.020
				S4	0.168		0.168		S4	0.021		0.021
				Bottom	0.189		0.189		Bottom	0.022		**0.022**
				Top	0.259		**0.259**		Top	0.018		0.018
				Max	0.259		**0.259**		Max	0.022		**0.022**
	Operating Real Product (Power >90% Charging)			S1	0.164	100	0.164		S1	0.018	100	0.018
				S2	0.164		0.164		S2	0.020		0.020
				S3	0.180		0.180		S3	0.019		0.019
				S4	0.168		0.168		S4	0.020		0.020
				Bottom	0.180		0.180		Bottom	0.021		0.021
				Top	0.252		0.252		Top	0.018		0.018
				Max	0.252		0.252		Max	0.021		0.021

Configuration #3: EUT WITH Phone #1 With Silicone Case

FCC Limit

Configuration	Test Mode	Measuring Distance (cm)	Electric Field Limit (V/m)	Electric Field Reading (V/m)				Magnetic Field Limit (A/m)	Magnetic Field Reading (A/m)			
			FCC	Location	Peak	Duty Cycle %	FCC Average	FCC	Location	Peak	Duty Cycle %	FCC Average
3	Operating Real Product (Power <10% Charging)	15 cm surrounding the device (S1 - S4,Bottom) and 20 cm above the top surface of the EUT	614	S1	0.398	100	0.398	1.63	S1	0.047	100	0.047
				S2	0.391		0.391		S2	0.049		0.049
				S3	0.391		0.391		S3	0.051		0.051
				S4	0.391		0.391		S4	0.051		0.051
				Bottom	0.388		0.388		Bottom	0.051		0.051
				Top	0.380		0.380		Top	0.049		0.049
				Max	0.398		0.398		Max	0.051		0.051
	Operating Real Product (Power ~ 20% - 60% Charging)			S1	0.707		**0.707**		S1	0.061		0.061
				S2	0.591		0.591		S2	0.049		0.049
				S3	0.407		0.407		S3	0.051		0.051
				S4	0.598		0.598		S4	0.061		0.061
				Bottom	0.491		0.491		Bottom	0.076		**0.076**
				Top	0.488		0.488		Top	0.047		0.047
				Max	0.707		**0.707**		Max	0.076		**0.076**
	Operating Real Product (Power >90% Charging)			S1	0.498		0.498		S1	0.049		0.049
				S2	0.491		0.491		S2	0.049		0.049
				S3	0.431		0.431		S3	0.051		0.051
				S4	0.491		0.491		S4	0.051		0.051
				Bottom	0.391		0.391		Bottom	0.052		0.052
				Top	0.500		0.500		Top	0.059		0.059
				Max	0.500		0.500		Max	0.052		0.052

Configuration #4: EUT WITH Phone #2 + Silicone Case

FCC Limit

Configuration	Test Mode	Measuring Distance (cm)	Electric Field Limit (V/m)	Electric Field Reading (V/m)				Magnetic Field Limit (A/m)	Magnetic Field Reading (A/m)			
			FCC	Location	Peak	Duty Cycle %	FCC Average	FCC	Location	Peak	Duty Cycle %	FCC Average
4	Operating Real Product (Power ~ 20% - 60% Charging)	15 cm surrounding the device (S1 - S4,Bottom) and 20 cm above the top surface of the EUT	614	S1	0.391	100	0.391	1.63	S1	0.049	100	0.049
				S2	0.507		**0.507**		S2	0.057		**0.057**
				S3	0.391		0.391		S3	0.049		0.049
				S4	0.393		0.393		S4	0.053		0.053
				Bottom	0.400		0.400		Bottom	0.047		0.047
				Top	0.393		0.393		Top	0.049		0.049
				Max	0.507		**0.507**		Max	0.057		**0.057**

Configuration #5: EUT WITH Phone #3 +Silicone Case

FCC Limit

Configuration	Test Mode	Measuring Distance (cm)	Electric Field Limit (V/m)	Electric Field Reading (V/m)				Magnetic Field Limit (A/m)	Magnetic Field Reading (A/m)			
			FCC	Location	Peak	Duty Cycle %	FCC Average	FCC	Location	Peak	Duty Cycle %	FCC Average
5	Operating Real Product (Power ~ 20% - 60% Charging)	15 cm surrounding the device (S1 - S4,Bottom) and 20 cm above the top surface of the EUT	614	S1	0.398	100	0.398	1.63	S1	0.051	100	0.051
				S2	0.391		0.391		S2	0.052		0.052
				S3	0.391		0.391		S3	0.061		**0.061**
				S4	0.451		0.451		S4	0.050		0.050
				Bottom	0.557		**0.557**		Bottom	0.049		0.049
				Top	0.398		0.398		Top	0.049		0.049
				Max	0.557		**0.557**		Max	0.061		**0.061**

Configuration #6: EUT WITH Phone # 4 +Silicone Case

FCC Limit

Configuration	Test Mode	Measuring Distance (cm)	Electric Field Limit (V/m)	Electric Field Reading (V/m)				Magnetic Field Limit (A/m)	Magnetic Field Reading (A/m)			
			FCC	Location	Peak	Duty Cycle %	FCC Average	FCC	Location	Peak	Duty Cycle %	FCC Average
6	Operating Real Product (Power ~ 20% - 60% Charging)	**15 cm** surrounding the device (S1 - S4,Bottom) and **20 cm** above the top surface of the EUT	614	S1	0.591	100	**0.591**	1.63	S1	0.049	100	0.049
				S2	0.388		0.388		S2	0.049		0.049
				S3	0.491		0.491		S3	0.065		**0.065**
				S4	0.491		0.491		S4	0.048		0.048
				Bottom	0.478		0.478		Bottom	0.059		0.059
				Top	0.441		0.441		Top	0.049		0.049
				Max	0.591		**0.591**		Max	0.065		**0.065**

Configuration #7: EUT WITH LEGACY Phone # 5

FCC Limit

Configuration	Test Mode	Measuring Distance (cm)	Electric Field Limit (V/m)	Electric Field Reading (V/m)				Magnetic Field Limit (A/m)	Magnetic Field Reading (A/m)			
			FCC	Location	Peak	Duty Cycle %	FCC Average	FCC	Location	Peak	Duty Cycle %	FCC Average
7	Operating Real Product (Power <10% Charging)	15 cm surrounding the device (S1 - S4,Bottom) and 20 cm above the top surface of the EUT	614	S1	0.364	100	0.364	1.63	S1	0.049	100	0.049
				S2	0.380		0.380		S2	0.049		0.049
				S3	0.391		0.391		S3	0.050		0.050
				S4	0.391		0.391		S4	0.050		0.050
				Bottom	0.388		0.388		Bottom	0.049		0.049
				Top	0.382		0.382		Top	0.049		0.049
				Max	0.391		0.391		Max	0.050		0.050
	Operating Real Product (Power ~ 20% - 60% Charging)			S1	0.428	100	0.428		S1	0.050	100	0.050
				S2	0.391		0.391		S2	0.056		0.056
				S3	0.432		0.432		S3	0.049		0.049
				S4	0.391		0.391		S4	0.050		0.050
				Bottom	0.498		**0.498**		Bottom	0.061		**0.061**
				Top	0.382		0.382		Top	0.049		0.049
				Max	0.498		**0.498**		Max	0.061		**0.061**
	Operating Real Product (Power >90% Charging)			S1	0.385	100	0.385		S1	0.049	100	0.049
				S2	0.383		0.383		S2	0.050		0.050
				S3	0.383		0.383		S3	0.049		0.049
				S4	0.391		0.391		S4	0.054		0.054
				Bottom	0.397		0.397		Bottom	0.050		0.050
				Top	0.380		0.380		Top	0.049		0.049
				Max	0.397		0.397		Max	0.050		0.050

Configuration #8: EUT WITH LEGACY Phone # 5 + Silicone Case

FCC Limit

Configuration	Test Mode	Measuring Distance (cm)	Electric Field Limit (V/m)	Electric Field Reading (V/m)				Magnetic Field Limit (A/m)	Magnetic Field Reading (A/m)			
			FCC	Location	Peak	Duty Cycle %	FCC Average	FCC	Location	Peak	Duty Cycle %	FCC Average
8	Operating Real Product (Power <10% Charging)	15 cm surrounding the device (S1 - S4,Bottom) and 20 cm above the top surface of the EUT	614	S1	0.483	100	0.483	1.63	S1	0.059	100	0.059
				S2	0.483		0.483		S2	0.055		0.055
				S3	0.480		0.480		S3	0.057		0.057
				S4	0.400		0.400		S4	0.056		0.056
				Bottom	0.488		0.488		Bottom	0.054		0.054
				Top	0.449		0.449		Top	0.062		0.062
				Max	0.488		0.488		Max	0.062		0.062
	Operating Real Product (Power ~ 20% - 60% Charging)			S1	0.500	100	0.500		S1	0.055	100	0.055
				S2	0.582		0.582		S2	0.050		0.050
				S3	0.485		0.485		S3	0.051		0.051
				S4	0.616		**0.616**		S4	0.072		**0.072**
				Bottom	0.491		0.491		Bottom	0.059		0.059
				Top	0.462		0.462		Top	0.059		0.059
				Max	0.616		**0.616**		Max	0.072		**0.072**
	Operating Real Product (Power >90% Charging)			S1	0.400	100	0.400		S1	0.060	100	0.060
				S2	0.382		0.382		S2	0.049		0.049
				S3	0.388		0.388		S3	0.058		0.058
				S4	0.502		0.502		S4	0.057		0.057
				Bottom	0.491		0.491		Bottom	0.056		0.056
				Top	0.440		0.440		Top	0.048		0.048
				Max	0.502		0.502		Max	0.060		0.060

Configuration #9: EUT WITH LEGACY Phone # 6 + Silicone Case

FCC Limit

Configuration	Test Mode	Measuring Distance (cm)	Electric Field Limit (V/m)	Electric Field Reading (V/m)				Magnetic Field Limit (A/m)	Magnetic Field Reading (A/m)			
			FCC	Location	Peak	Duty Cycle %	FCC Average	FCC	Location	Peak	Duty Cycle %	FCC Average
9	Operating Real Product (Power ~ 20% - 60% Charging)	15 cm surrounding the device (S1 - S4,Bottom) and 20 cm above the top surface of the EUT	614	S1	0.391	100	0.391	1.63	S1	0.051	100	0.051
				S2	0.391		0.391		S2	0.050		0.050
				S3	0.545		**0.545**		S3	0.063		**0.063**
				S4	0.400		0.400		S4	0.049		0.049
				Bottom	0.391		0.391		Bottom	0.057		0.057
				Top	0.391		0.391		Top	0.049		0.049
				Max	0.545		**0.545**		Max	0.063		**0.063**

Configuration #10: EUT WITH LEGACY Phone # 7 + Silicone Case

FCC Limit

Configuration	Test Mode	Measuring Distance (cm)	Electric Field Limit (V/m)	Electric Field Reading (V/m)				Magnetic Field Limit (A/m)	Magnetic Field Reading (A/m)			
			FCC	Location	Peak	Duty Cycle %	FCC Average	FCC	Location	Peak	Duty Cycle %	FCC Average
10	Operating Real Product (Power ~ 20% - 60% Charging)	15 cm surrounding the device (S1 - S4,Bottom) and 20 cm above the top surface of the EUT	614	S1	0.400	100	0.400	1.63	S1	0.051	100	0.051
				S2	0.421		0.421		S2	0.055		0.055
				S3	0.398		0.398		S3	0.053		0.053
				S4	0.388		0.388		S4	0.049		0.049
				Bottom	0.407		0.407		Bottom	0.059		**0.059**
				Top	0.533		**0.533**		Top	0.051		0.051
				Max	0.533		**0.533**		Max	0.059		**0.059**

Configuration #11: EUT WITH LEGACY Phone # 8 + Silicone Case

FCC Limit

Configuration	Test Mode	Measuring Distance (cm)	Electric Field Limit (V/m)	Electric Field Reading (V/m)				Magnetic Field Limit (A/m)	Magnetic Field Reading (A/m)			
			FCC	Location	Peak	Duty Cycle %	FCC Average	FCC	Location	Peak	Duty Cycle %	FCC Average
11	Operating Real Product (Power ~ 20% - 60% Charging)	15 cm surrounding the device (S1 - S4,Bottom) and 20 cm above the top surface of the EUT	614	S1	0.391	100	0.391	1.63	S1	0.049	100	0.049
				S2	0.382		0.382		S2	0.051		0.051
				S3	0.525		**0.525**		S3	0.055		**0.055**
				S4	0.388		0.388		S4	0.051		0.051
				Bottom	0.407		0.407		Bottom	0.049		0.049
				Top	0.403		0.403		Top	0.049		0.049
				Max	0.525		**0.525**		Max	0.055		**0.055**

Configuration #12: EUT WITH AirPods

FCC Limit

Configuration	Test Mode	Measuring Distance (cm)	Electric Field Limit (V/m)	Electric Field Reading (V/m)				Magnetic Field Limit (A/m)	Magnetic Field Reading (A/m)			
			FCC	Location	Peak	Duty Cycle %	FCC Average	FCC	Location	Peak	Duty Cycle %	FCC Average
12	Operating Real Product (Power <10% Charging)	15 cm surrounding the device (S1 - S4,Bottom) and 20 cm above the top surface of the EUT	614	S1	0.389	100	0.389	1.63	S1	0.053	100	0.053
				S2	0.383		0.383		S2	0.099		0.099
				S3	0.389		0.389		S3	0.051		0.051
				S4	0.380		0.380		S4	0.095		0.095
				Bottom	0.383		0.383		Bottom	0.126		0.126
				Top	0.398		0.398		Top	0.055		0.055
				Max	0.398		0.398		Max	0.126		0.126
	Operating Real Product (Power ~ 20% - 60% Charging)			S1	0.416	100	**0.416**		S1	0.054	100	0.054
				S2	0.389		0.389		S2	0.100		0.100
				S3	0.389		0.389		S3	0.055		0.055
				S4	0.398		0.398		S4	0.101		0.101
				Bottom	0.398		0.398		Bottom	0.131		**0.131**
				Top	0.398		0.398		Top	0.055		0.055
				Max	0.416		**0.416**		Max	0.131		**0.131**
	Operating Real Product (Power >90% Charging)			S1	0.398	100	0.398		S1	0.052	100	0.052
				S2	0.381		0.381		S2	0.103		0.103
				S3	0.388		0.388		S3	0.055		0.055
				S4	0.396		0.396		S4	0.100		0.100
				Bottom	0.398		0.398		Bottom	0.112		0.112
				Top	0.398		0.398		Top	0.055		0.055
				Max	0.398		0.398		Max	0.112		0.112

10. SETUP PHOTO

Please see setup photo report 13939155-EP1V1

END OF REPORT