



TEST REPORT

Report Number : 13587908-E21V1

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

Models : A2641 (Parent Model)
A2645, A2643, A2644 (Variant Models)

FCC IDs : BCG-E4005A (Parent Model)
BCG-E4036A, BCG-E4035A (Variant Models)

IC IDs : 579C-E4005A (Parent Model)
579C-E4036A, 579C-E4035A (Variant Models)

EUT Description : SMARTPHONE

Test Standard(s) : FCC CFR 47 PART 15 SUBPART F §15.519
ISED RSS-220 ISSUE 1 AMENDMENT 1

Date Of Issue:

July 30, 2021

Prepared by:

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Revision History

Rev.	Issue Date	Revisions	Revised By
V1	07/30/2021	Initial Issue	Thu Chan

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: APPLE, INC.
ONE APPLE PARK WAY
CUPERTINO, CA 95014, USA

EUT DESCRIPTION: SMARTPHONE

MODELS: A2641
A2645, A2643, A2644 (Variant Models)

BRAND: APPLE

FCC IDs: BCG-E4005A (Parent Models)
BCG-E4036A, BCG-4035A (Variant Models)

IC IDs: 579C-E4005A (Parent Models)
579C-E4036A, 579C-4035A (Variant Models)

SERIAL NUMBERS: TQ7WDQDT7L; PT77J42YTP

SAMPLE RECEIPT DATE: MAY 14, 2021; JULY 29, 2021

DATE TESTED: MAY 14 – AUGUST 4, 2021

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC §15 Subpart F	Complies
ISED RSS-220 Issue 1 Amendment 1	Complies

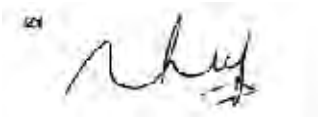
UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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.

Approved & Released For
UL Verification Services Inc. By:

Tested By:



Thu Chan
STAFF ENGINEER
UL Verification Services Inc.



Livius Darmawan
LABORATORY ENGINEER
UL Verification Services Inc.

2. TEST SUMMARY

This report contains data provided by the customer which can impact the validity of results. UL Verification Services Inc. is only responsible for the validity of results after the integration of the data provided by the customer.

FCC Clause	ISED Clause	Requirement	Result	Comment
See Comment		Duty Cycle	Reporting purposes only	ANSI C63.10 Section 11.6
-	RSS-GEN 6.7	99% OBW	Reporting purposes only	ANSI C63.10 Section 6.9.4
15.503 & 15.519 (b)	RSS-220 Sect. 2	-10 dB BW	Complies	ANSI C63.10 Section 10.1
15.519 (c) & (e)	RSS-220 Sect. 4 (c) & 5.3.1 (d)	Pk Power & Max Avg Emissions	Complies	ANSI C63.10 Section 10.3
15.519 (a)(1)	RSS-220 Sect. 5.3.1 (b)	Cessation Time	Complies	None
15.519 (c) & 15.209 (a)	RSS-220 Sect. 3.4	Emissions Below 960 MHz	Complies	ANSI C63.10 Section 10.2
15.519 (c) & (d)	RSS-220 Sect. 5.3.1 (d) & (e)	Emissions Above 960 MHz	Complies	ANSI C63.10 Section 10.3
15.207 (a)	RSS-Gen 8.8	AC Power Line Conducted Emissions	Complies	ANSI C63.10 Section 6.2

3. TEST METHODOLOGY

The tests documented in this report were performed in accordance with CFR Title 47 Part 15 Subpart F, KDB 393764 D01 UWB FAQ v02, ISED RSS-220 Issue 1 Amendment 1 and ANSI C63.10-2013 and RSS GEN Issue 5.

4. FACILITIES AND ACCREDITATION

UL Verification Services Inc. 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, USA	US0104	2324A	208313
☒	Building 2: 47266 Benicia Street, Fremont, CA 94538, USA	US0104	22541	208313
☒	Building 4: 47658 Kato Rd, Fremont, CA 94538, USA	US0104	2324B	208313

5. DECISION RULES AND MEASUREMENT UNCERTAINTY

5.1. 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.

5.2. 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.)

5.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	U _{LAB}
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.78 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 dB
Worst Case Radiated Disturbance, 9KHz to 30 MHz	2.84 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.73 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.51 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.29 dB

Uncertainty figures are valid to a confidence level of 95%.

5.4. SAMPLE CALCULATION

RADIATED EMISSION

Where relevant, the following sample calculation is provided:

$$\begin{aligned}\text{EIRP (dBm)} &= \text{Meter Reading (dBm)} + \text{Antenna Factor (dB/m)} + \text{Pre-Amp Gain/Cbl Loss (dB)} \\ &\quad + \text{dBm-to-dBm Unit Conversion Factor @ 3m} \\ &= -60 \text{ dBm} + 28 \text{ dB/m} + (-27) \text{ dB} + 11.8 \\ &= -48.3 \text{ dBm}\end{aligned}$$

6. EQUIPMENT UNDER TEST

6.1. DESCRIPTION OF EUT

The EUT is a smartphone with multimedia functions (music, application support, and video), cellular GSM, GPRS, EGPRS, UMTS, LTE, 5G, CDMA, IEEE 802.11a/b/g/n/ac/ax, Bluetooth, Ultra-Wideband, GPS and NFC. All models support at least one UICC based SIM. The second SIM is either an UICC based p-SIM (physical SIM) or e-SIM (electronic SIM). The device supports a built-in inductive charging transmitter and receiver. The rechargeable battery is not user accessible.

This test report addresses the UWB operational mode.

The EUT has a UWB transceiver with four integral antennas (ANT 0 = UWB1, ANT 1 = UWB2, ANT 2 = ANT6/UWB0 & ANT3 = UWB3). ANT0 and ANT1 only operates on 8 GHz (Channel 9). ANT2 and ANT3 operates on 6.5 GHz (Channel 5) and 8 GHz (Channel 9). The antennas are not user accessible. Six signal configurations (CONFIG 0,1,2,3,4 & 5) are available for each ANT/CH setting.

ANT	CH	CONFIG
0	9	0
0	9	1
0	9	2
0	9	3
0	9	4
0	9	5
1	9	0
1	9	1
1	9	2
1	9	3
1	9	4
1	9	5
2	5	0
2	5	1
2	5	2
2	5	3
2	5	4
2	5	5
2	9	0
2	9	1
2	9	2
2	9	3
2	9	4
2	9	5
3	5	0
3	5	1
3	5	2
3	5	3
3	5	4
3	5	5
3	9	0
3	9	1
3	9	2
3	9	3
3	9	4
3	9	5

Testing was performed on the parent model and is used to support the application for the parent and variants identified in this report based on the test plan submitted and approved via KDB inquiry by the FCC and by ISED-Canada.

The Model, FCC ID and IC ID covered by this report includes:

Parent Model: A2641; FCC ID: BCG-E4005A; IC ID: 579C-E4005A

Variant Models: A2645; FCC ID: BCG-E4036A; IC ID: 579C-E4036A

A2643; FCC ID: BCG-E4035A; IC ID: 579C-E4035A

A2644; FCC ID: BCG-E4036A; IC ID: 579C-E4036A

6.2. MAXIMUM OUTPUT POWER

Highest Average Powers based on ANT/CH.

ANT	CH	CONFIG	Average Power (dBm EIRP)
0	9	5	-42.24
1	9	1	-42.41
2	5	2	-42.39
2	9	0	-42.29
3	5	4	-42.49
3	9	3	-42.35

6.3. DESCRIPTION OF AVAILABLE ANTENNAS

Four integral antennas are employed and the antenna gains are listed as follow:

CH	Freq. Band	Gain (dBi)			
	(GHz)	ANT 0 (UWB1)	ANT 1 (UWB2)	ANT 2 (ANT6/UWB0)	ANT 3 (UWB3)
5	6.5	n/a	n/a	-1.9	0.8
9	8.0	-0.1	-1.0	-1.4	0.6

6.4. MODULATION

The UWB signal is BPSK pulsed modulated signal.

6.5. SOFTWARE AND FIRMWARE

The Software and Firmware version used at test is 19A272.

7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

SUPPORT EQUIPMENT LIST			
Description	Manufacturer	Model	Serial Number
Laptop + Adapter	Apple	Mac Book Pro	C02TK02YJ10C
Kanzi – USB Adapter	Apple	--	31EF77
Laptop + Adapter	Apple	Mac Book Pro	C02YVBP0LVDD
Kanzi – USB Adapter	Apple	--	316C5F
Smartphone	Apple	A2484	C5916L79T3

I/O CABLES

I/O CABLES					
Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
AC	1	AC	Un-shielded	2	N/A
USB	1	USB	Un-shielded	1	N/A

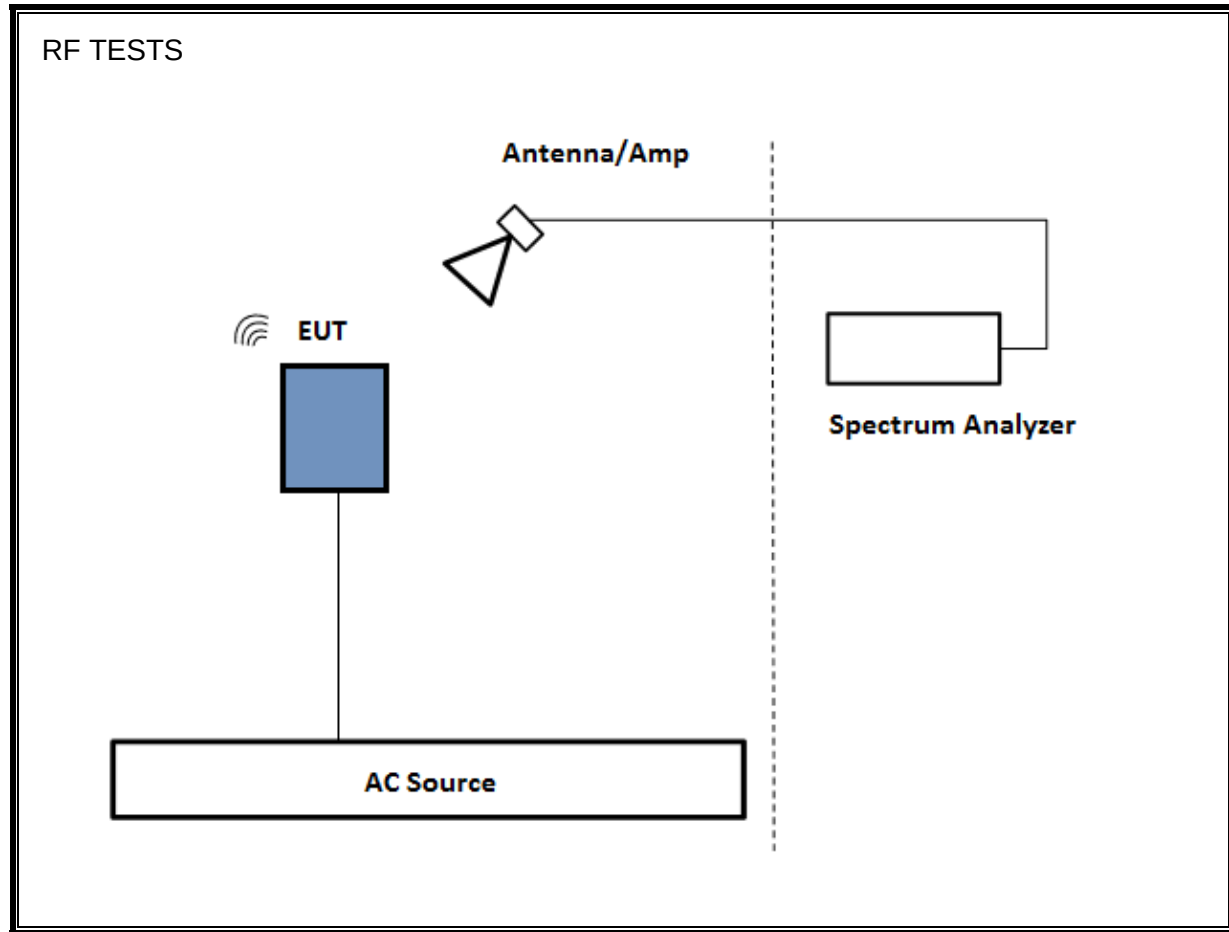
TEST SETUP

The EUT was examined at pre-scan test using a fundamental frequency in the portrait (z), landscape (y), and flatbed (x) position and the worst case orientation of individual ANT/CH/CONFIG setting was determined for final spurious emission measurement. Config 3, Payload 125 of both CH5 and CH9 on all 4 antennas were selected to test for unwanted emissions as the worst case after pre-scan.

Measurements of spurious average emissions were made with the device operating at a higher power than production power to ensure compliance. Measurements of the in-band signal (peak and average emissions, 10 dBc bandwidth, 99% bandwidth) were all made at the production power settings.

EUT was connected to AC power adapter in all test cases.

For simultaneous transmission on the same antenna of multiple channels in the UWB and WiFi, no noticeable new emission was found.

SETUP DIAGRAM FOR TESTS

8. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment List					
Description	Manufacturer	Model	Local ID	Cal Date	Cal Due
EMI Test Receiver	Rohde & Schwarz	ESW44	PRE0203383	2/24/2021	2/24/2022
Horn Antenna, 1-18 GHz	ETS Lindgren	3117	T120	4/7/2021	4/7/2022
Preamp, 1-18 GHz	Miteq	AFS42-00101800-25-S-42	PRE0183207	6/11/2020	6/11/2021*
PXA Signal Analyzer	Agilent	N9030A	T906	1/27/2021	1/27/2022
Hybrid Antenna, 30-2000 MHz	SunAR	JB3	T900	2/24/2021	2/24/2022
Preamp, 0.1-1300 MHz	Sonoma Inst.	310	T173	7/22/2020	7/22/2021*
Horn Antenna, 1-18 GHz	ETS Lindgren	3117	T712	3/22/2021	3/22/2022
Preamp, 1-18 GHz	Miteq	AFS42-00101800-25-S-42	PRE0183530	8/27/2020	8/27/2021
Antenna, Active Loop 9kHz-30MHz	ETS Lindgren	6502	T757	11/12/2020	11/12/2021
PXA Signal Analyzer	Agilent	N9030A	T1454	1/27/2021	1/27/2022
Preamplifier, 1-26.5GHz	Agilent	8449B	T404	4/19/2021	4/19/2022
Horn Antenna, 18-26.5GHz	ARA	MWH-1826/B	T449	4/22/2021	4/22/2022
Preamplifier, 26-40 GHz	Miteq	NSTTA2640-35-HG	T1864	4/19/2021	4/19/2022
Horn Antenna, 26-40 GHz	ARA	MWH-2640/B	PRE0183142	4/22/2021	4/22/2022
Low Pass Filter	Microtronics	LPM20143	188196	11/3/2020	11/3/2021
High Pass Filter, CH5	Wainwright Inst. GMBH	WHW2-7100-10000-18000-40DC	176232	11/3/2020	11/3/2021
High Pass Filter, CH9	Wainwright Inst. GMBH	WHW2-8165-11500-21000-40CD	176234	10/26/2020	10/26/2021
EMI Test Receiver 9kHz-7GHz	Rohde & Schwarz	ESR	T1436	2/19/2021	2/19/2022
Power Cable, Line Conducted Emissions	Pasternack Enterprises	RG233/U	202327	10/16/2020	10/16/2021
LISN for Conducted Emissions CISPR-16	FISCHER CUSTOM COMMUNICATIONS	FCC-LISN-50/250-25-2-01	PRE0186446	1/20/2021	1/20/2022
Radiated Software	UL	UL EMC	Ver 9.5.07, July 2020		
AC Line Conducted Software	UL	UL EMC	Ver 9.5.07, July 2020		

*Equipment was used to perform tests prior to the calibration due date.

9. APPLICABLE LIMITS AND TEST RESULTS

9.1. 99% BANDWIDTH

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

ANSI C63.10 Section 6.9.4

The transmitter output is connected to a spectrum analyzer. The RBW is in the range of 1% to 5% of the OBW bandwidth. The VBW is set to $\geq 3 \times \text{RBW}$. The sweep time is coupled.

Tabulated data provides the test results of all available test configurations. The plots of Ant 3, CONFIG 0, Payload 125 bandwidth measurement on CH5 and CH9 are presented and same measurement settings apply to the rest of test configurations.

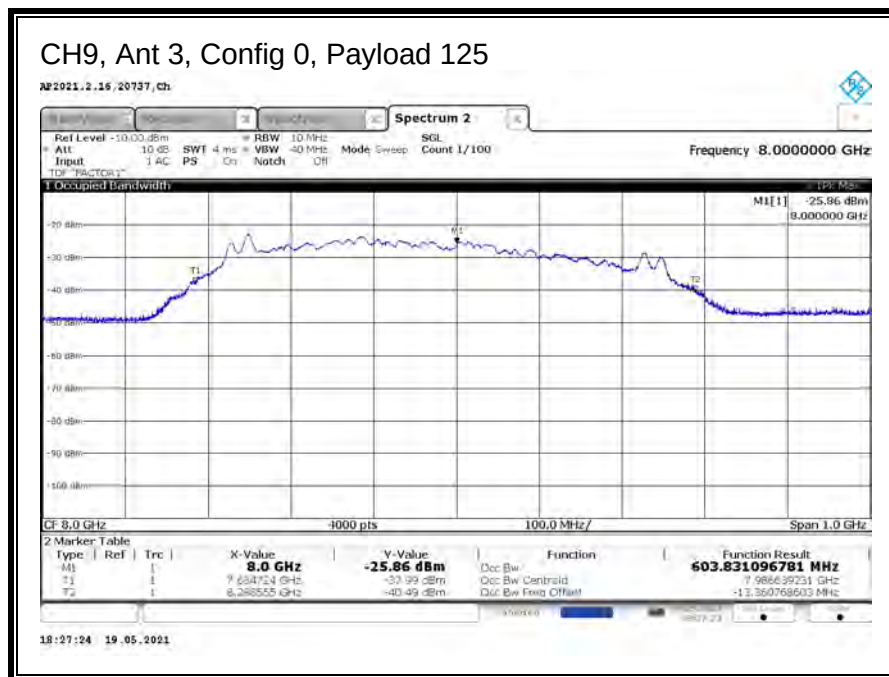
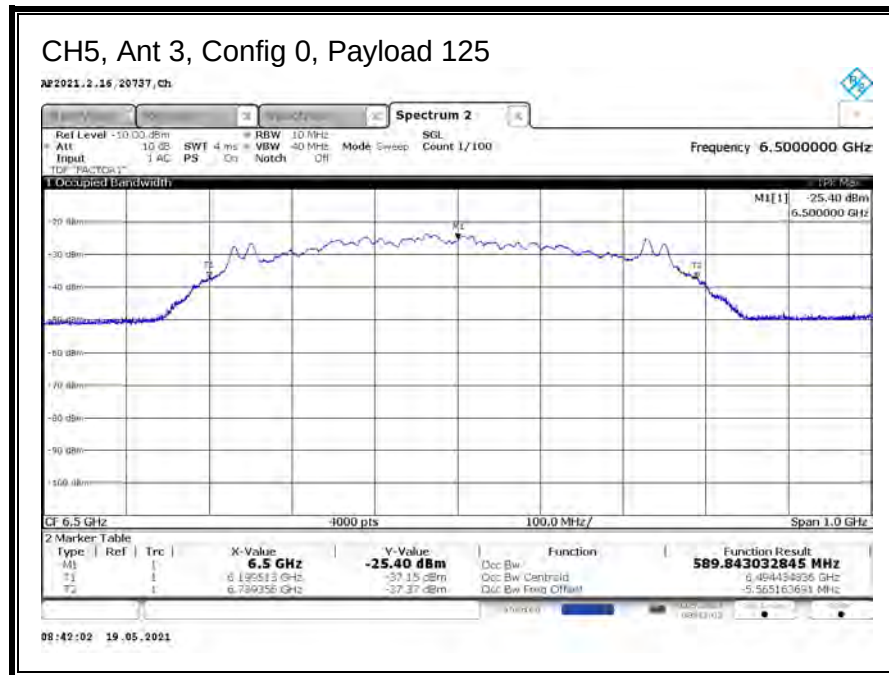
RESULTS

Employee IDs: 19419, 19190, 12471, 20737

Location: Chamber D

Test Date: 05/14/2021 – 08/04/2021

ANT	CH	CONFIG	Payload	EUT Orientation	Meas. Ant Polarity	99% BW (MHz)
0	9	0	125	Portrait	H	597.05
0	9	1	125	Portrait	H	600.97
0	9	2	125	Portrait	H	613.29
0	9	3	125	Portrait	H	606.56
0	9	4	0	Portrait	H	605.34
0	9	5	0	Portrait	H	605.83
1	9	0	125	Portrait	H	604.42
1	9	1	125	Portrait	H	595.93
1	9	2	125	Portrait	H	603.19
1	9	3	125	Portrait	H	615.18
1	9	4	0	Portrait	H	559.62
1	9	5	0	Portrait	H	558.41
2	5	0	125	Portrait	V	580.07
2	5	1	125	Portrait	V	576.89
2	5	2	125	Portrait	V	605.88
2	5	3	125	Portrait	V	607.75
2	5	4	0	Portrait	V	625.31
2	5	5	0	Portrait	V	593.48
2	9	0	125	Flatbed	V	617.28
2	9	1	125	Flatbed	V	615.57
2	9	2	125	Flatbed	V	634.11
2	9	3	125	Flatbed	V	636.34
2	9	4	0	Flatbed	V	635.26
2	9	5	0	Flatbed	V	630.51
3	5	0	125	Portrait	H	589.84
3	5	1	125	Portrait	H	584.71
3	5	2	125	Portrait	H	618.81
3	5	3	125	Portrait	H	618.44
3	5	4	0	Portrait	H	564.31
3	5	5	0	Portrait	H	600.71
3	9	0	125	Portrait	H	603.83
3	9	1	125	Portrait	H	596.69
3	9	2	125	Portrait	H	590.59
3	9	3	125	Portrait	H	590.52
3	9	4	0	Portrait	H	577.48
3	9	5	0	Portrait	H	572.29

99% BW

9.2. OPERATING BANDWIDTH

LIMITS

FCC

§15.503 (a) *UWB bandwidth*. For the purpose of this subpart, the UWB bandwidth is the frequency band bounded by the points that are 10 dB below the highest radiated emission, as based on the complete transmission system including the antenna. The upper boundary is designated f_H and the lower boundary is designated f_L . The frequency at which the highest radiated emission occurs is designated f_M .

§15.503 (b) *Center frequency*. The center frequency, f_C , equals $(f_H + f_L)/2$.

§15.503 (c) *Fractional bandwidth*. The fractional bandwidth equals $2(f_H - f_L)/(f_H + f_L)$.

§15.503 (d) *Ultra-wideband (UWB) transmitter*. An intentional radiator that, at any point in time, has a fractional bandwidth equal to or greater than 0.20 or has a UWB bandwidth equal to or greater than 500 MHz, regardless of the fractional bandwidth.

§15.519 (b) The UWB bandwidth of a device operating under the provisions of this section must be contained between 3100 MHz and 10,600 MHz.

RSS-220

Section 2 A *UWB device* is an intentional radiator that has either a *-10 dB bandwidth* of at least 500 MHz or a *-10 dB fractional bandwidth* greater than 0.2.

Section 5.1 (a) The -10 dB bandwidth of the device shall be totally contained in the band 3.1-10.6 GHz.

“-10 dB bandwidth B_{-10} ” and “-10 dB fractional bandwidth μ_{-10} ” are defined as follows:

$$B_{-10} = f_H - f_L$$

$$\mu_{-10} = B_{-10}/f_C$$

where:

f_M is the frequency of maximum UWB transmission;

f_H is the highest frequency at which the power spectral density of the UWB transmission is -10 dB relative to f_M ;

f_L is the lowest frequency at which the power spectral density of the UWB transmission is -10 dB relative to f_M ; and

$f_C = (f_H + f_L)/2$ is the centre frequency of the -10 dB bandwidth.

TEST PROCEDURE

ANSI C63.10 Clause 10.1

RSS-220 Section 2 of the Annex

Tabulated data provides the test results of all available test configurations. The plots of Ant 0, CONFIG 0, Payload 125 bandwidth measurement on CH5 and CH9 are presented and same measurement settings apply to the rest of test configurations.

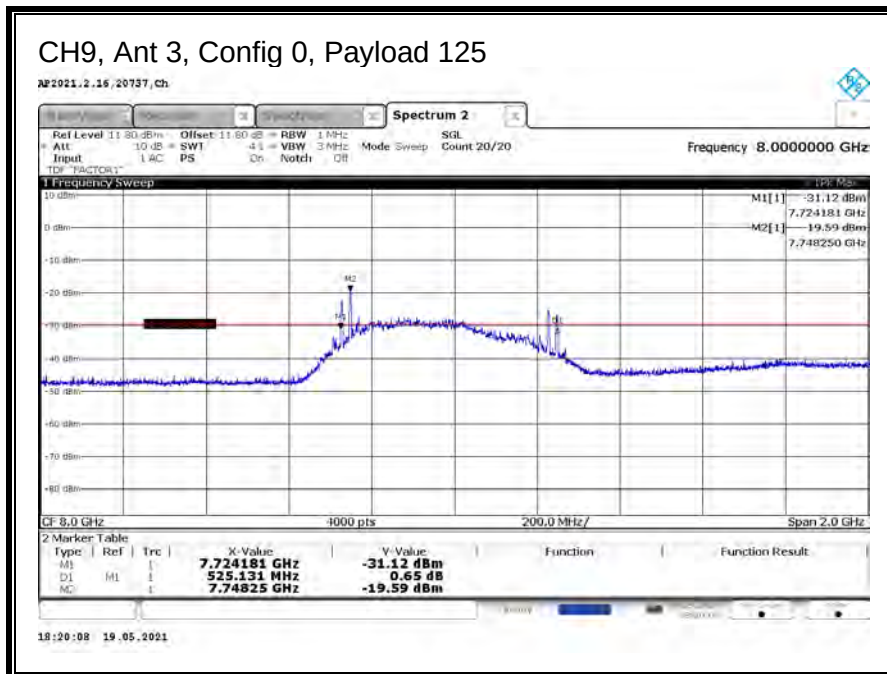
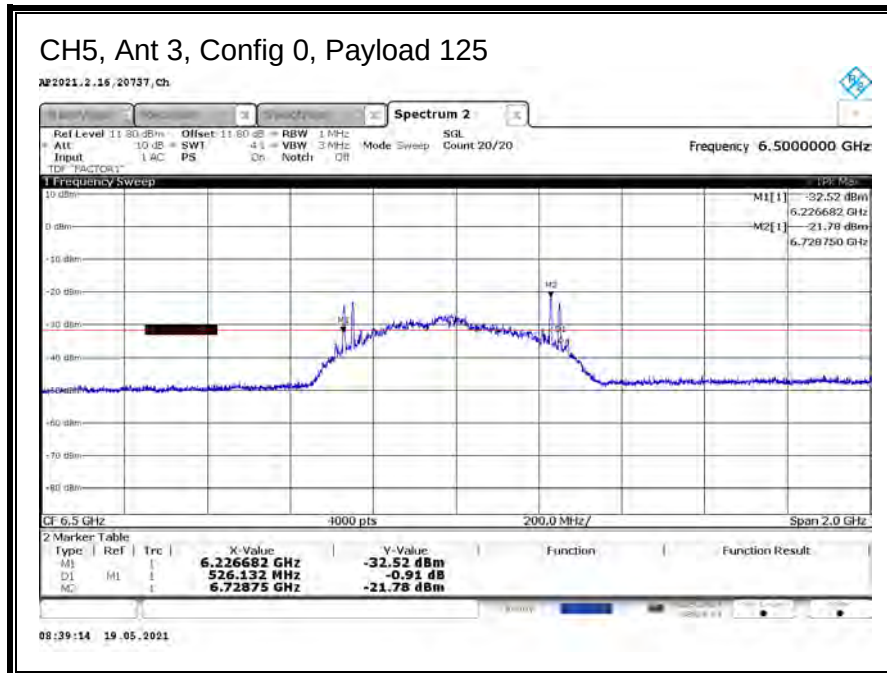
RESULTS

Employee IDs: 19419, 19190, 12471, 20737

Location: Chamber D

Test Date: 05/14/2021 – 05/24/2021

ANT	CH	CONFIG	Payload	EUT Orientation	Meas. Ant Polarity	FM (GHz)	FL (GHz)	FH (GHz)	FC (GHz)	OBW (MHz)	Min. OBW (MHz)	OBW Margin (MHz)	OBW Pass/Fail
0	9	0	125	Portrait	H	7.748	7.724	8.250	7.987	525.63	500	25.63	P
0	9	1	125	Portrait	H	7.748	7.724	8.250	7.987	525.63	500	25.63	P
0	9	2	125	Portrait	H	7.748	7.725	8.249	7.987	523.63	500	23.63	P
0	9	3	125	Portrait	H	7.748	7.726	8.248	7.987	522.63	500	22.63	P
0	9	4	0	Portrait	H	7.748	7.724	8.249	7.987	525.13	500	25.13	P
0	9	5	0	Portrait	H	7.748	7.723	8.251	7.987	527.63	500	27.63	P
1	9	0	125	Portrait	H	7.748	7.724	8.250	7.987	525.63	500	25.63	P
1	9	1	125	Portrait	H	7.748	7.724	8.250	7.987	526.13	500	26.13	P
1	9	2	125	Portrait	H	7.748	7.725	8.249	7.987	523.63	500	23.63	P
1	9	3	125	Portrait	H	7.748	7.727	8.248	7.987	521.63	500	21.63	P
1	9	4	0	Portrait	H	7.748	7.724	8.249	7.987	525.13	500	25.13	P
1	9	5	0	Portrait	H	7.749	7.723	8.250	7.987	527.13	500	27.13	P
2	5	0	125	Portrait	V	6.250	6.226	6.752	6.489	526.13	500	26.13	P
2	5	1	125	Portrait	V	6.250	6.226	6.752	6.489	526.13	500	26.13	P
2	5	2	125	Portrait	V	6.251	6.228	6.751	6.489	523.63	500	23.63	P
2	5	3	125	Portrait	V	6.250	6.228	6.751	6.489	522.63	500	22.63	P
2	5	4	0	Portrait	V	6.250	6.226	6.752	6.489	525.63	500	25.63	P
2	5	5	0	Portrait	V	6.225	6.251	6.779	6.515	528.13	500	28.13	P
2	9	0	125	Flatbed	V	7.748	7.724	8.250	7.987	526.13	500	26.13	P
2	9	1	125	Flatbed	V	7.748	7.724	8.250	7.987	526.13	500	26.13	P
2	9	2	125	Flatbed	V	7.748	7.725	8.249	7.987	523.63	500	23.63	P
2	9	3	125	Flatbed	V	7.748	7.726	8.248	7.987	522.13	500	22.13	P
2	9	4	0	Flatbed	V	7.748	7.724	8.250	7.987	526.13	500	26.13	P
2	9	5	0	Flatbed	V	7.748	7.723	8.251	7.987	528.13	500	28.13	P
3	5	0	125	Portrait	H	6.729	6.227	6.753	6.490	526.13	500	26.13	P
3	5	1	125	Portrait	H	6.729	6.227	6.753	6.490	526.13	500	26.13	P
3	5	2	125	Portrait	H	6.729	6.228	6.751	6.490	523.13	500	23.13	P
3	5	3	125	Portrait	H	6.729	6.229	6.751	6.490	522.13	500	22.13	P
3	5	4	0	Portrait	H	6.729	6.227	6.753	6.490	526.13	500	26.13	P
3	5	5	0	Portrait	H	6.729	6.226	6.754	6.490	528.13	500	28.13	P
3	9	0	125	Portrait	H	7.748	7.724	8.249	7.987	525.13	500	25.13	P
3	9	1	125	Portrait	H	7.748	7.724	8.249	7.987	525.13	500	25.13	P
3	9	2	125	Portrait	H	7.748	7.725	8.248	7.987	523.13	500	23.13	P
3	9	3	125	Portrait	H	7.748	7.726	8.248	7.987	522.13	500	22.13	P
3	9	4	0	Portrait	H	7.748	7.724	8.249	7.987	525.13	500	25.13	P
3	9	5	0	Portrait	H	7.748	7.723	8.250	7.987	527.13	500	27.13	P

RESULTS

9.3. PEAK POWER AND MAXIMUM AVERAGE EMISSIONS

LIMITS

FCC

15.519 (e) There is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on the frequency at which the highest radiated emission occurs, f_m . That limit is 0 dBm EIRP.

15.519 (c) The radiated emissions above 960 MHz from a device operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz:

Frequency in MHz	EIRP in dBm
3100 - 10600	-41.3

RSS-220

Annex, Section 4 (c) Peak measurements shall be made in addition to average measurements. Transmissions shall not exceed 0 dBm e.i.r.p. in any 50 MHz bandwidth when the average limit is -41.3 dBm/MHz.

Section 5.3.1 (d) Radiated emissions above 960 MHz from a device shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz.

Frequency	E.I.R.P. in a Resolution Bandwidth of 1 MHz
4.75 – 10.6 GHz	-41.3 dBm

TEST PROCEDURE

ANSI C63.10 Clause 10.3.

RSS-220 Annex

Peak EIPR power is measured using RBW of 50 MHz.

The radiated emissions of 6 - 9 GHz frequency band are performed at 3-meter test distance.

Tabulated data provides the test results of all available test configurations. The plots of Ant 0, CONFIG 0, Payload 125 power measurement on CH5 and CH9 are presented and same measurement settings apply to the rest of test configurations.

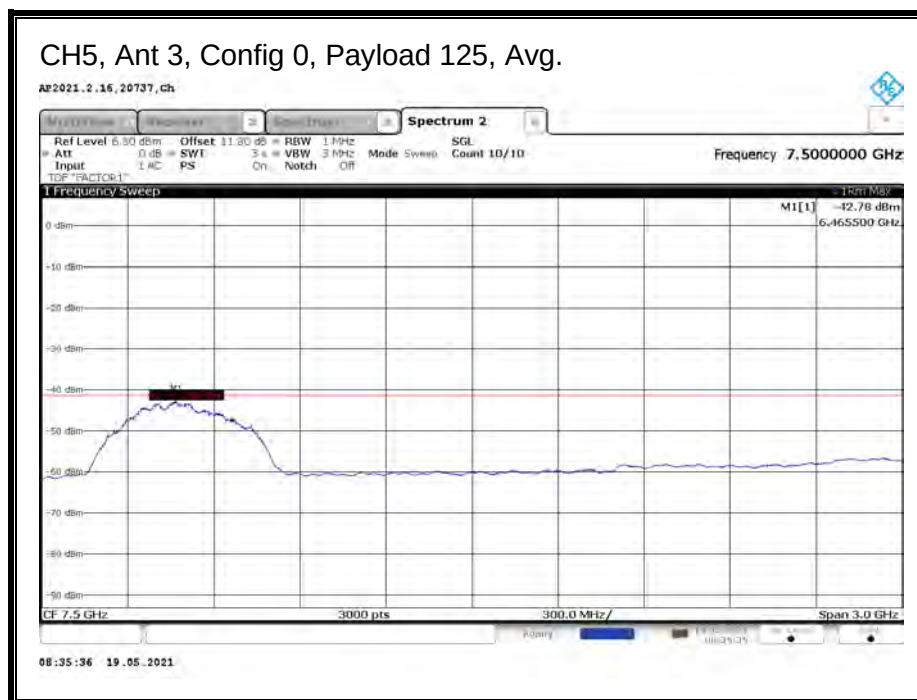
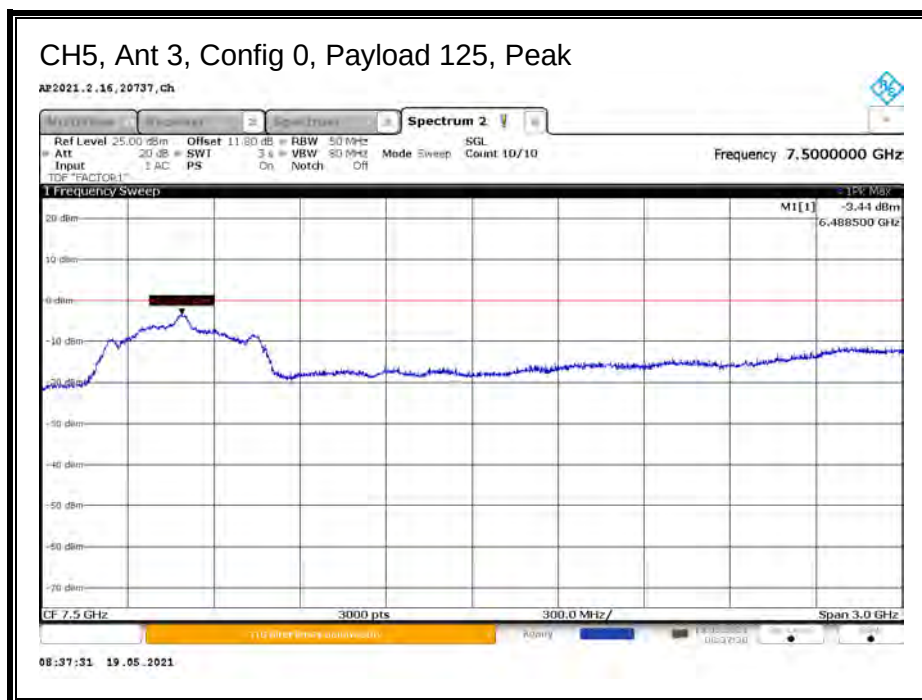
RESULTS

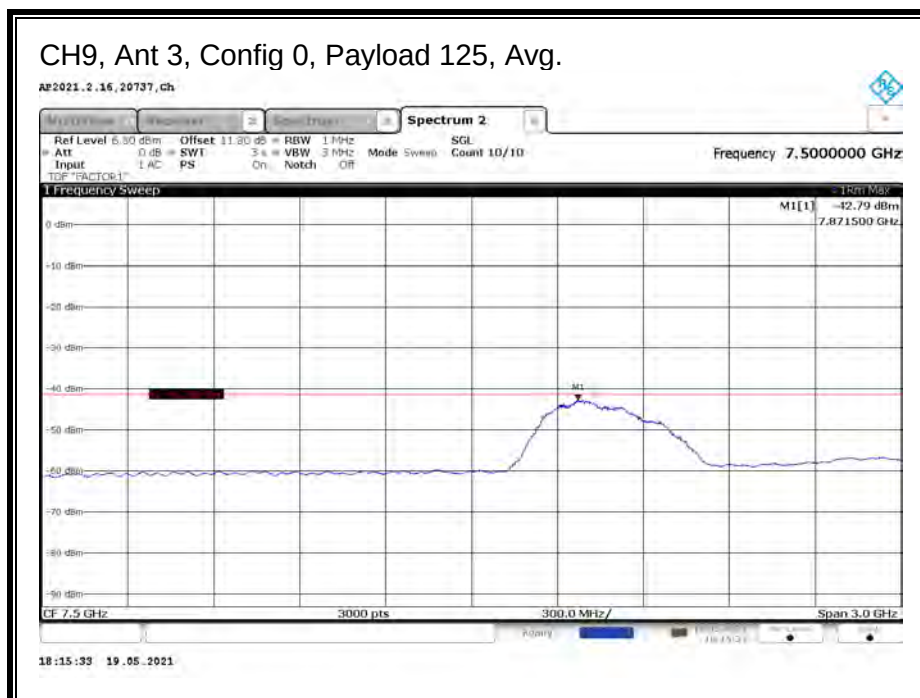
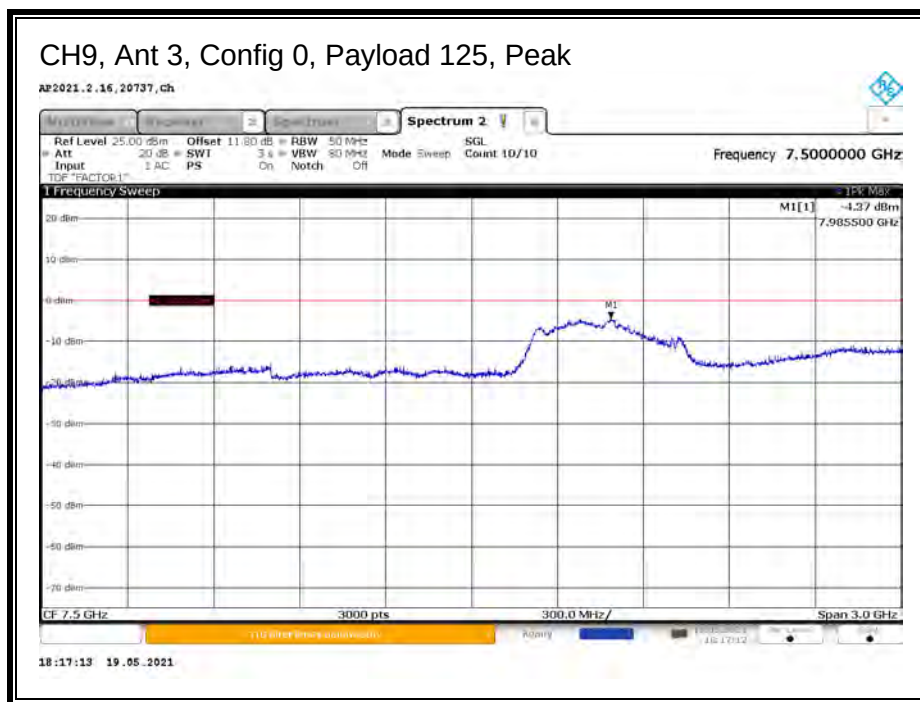
Employee IDs: 19419, 19190, 12471, 20737

Location: Chamber D

Test Date: 05/14/2021 – 05/24/2021

ANT	CH	CONFIG	Payload	EUT Orientation	Meas. Ant. Polarity	Peak EIRP Power				Average EIRP Power			
						FM (GHz)	Peak Power (dBm/50MHz)	Peak Limit (0 dBm/50 MHz)	Margin (dB)	FM (GHz)	Avg Power (dBm/MHz)	Avg Limit (dBm/MHz)	Margin (dB)
0	9	0	125	Portrait	H	7.9915	-3.38	0	-3.38	7.9115	-42.37	-41.3	-1.07
0	9	1	125	Portrait	H	7.9895	-2.88	0	-2.88	7.9125	-42.45	-41.3	-1.15
0	9	2	125	Portrait	H	8.0045	-6.94	0	-6.94	7.8725	-42.62	-41.3	-1.32
0	9	3	125	Portrait	H	7.9895	-6.73	0	-6.73	7.9125	-42.83	-41.3	-1.53
0	9	4	0	Portrait	H	7.7415	-7.98	0	-7.98	7.9165	-42.83	-41.3	-1.53
0	9	5	0	Portrait	H	7.7405	-5.52	0	-5.52	7.9085	-42.24	-41.3	-0.94
1	9	0	125	Portrait	H	7.9983	-3.65	0	-3.65	8.0215	-42.56	-41.3	-1.26
1	9	1	125	Portrait	H	8.0245	-2.59	0	-2.59	8.0215	-42.41	-41.3	-1.11
1	9	2	125	Portrait	H	7.9825	-6.84	0	-6.84	8.0145	-42.81	-41.3	-1.51
1	9	3	125	Portrait	H	7.9875	-6.57	0	-6.57	7.8885	-42.61	-41.3	-1.31
1	9	4	0	Portrait	H	7.7325	-5.84	0	-5.84	7.9035	-42.58	-41.3	-1.28
1	9	5	0	Portrait	H	7.7385	-4.33	0	-4.33	7.9035	-42.67	-41.3	-1.37
2	5	0	125	Portrait	V	6.4805	-3.18	0	-3.18	6.5135	-42.77	-41.3	-1.47
2	5	1	125	Portrait	V	6.4795	-2.06	0	-2.06	6.5145	-42.44	-41.3	-1.14
2	5	2	125	Portrait	V	6.4875	-6.32	0	-6.32	6.5115	-42.39	-41.3	-1.09
2	5	3	125	Portrait	V	6.4935	-5.91	0	-5.91	6.5065	-42.56	-41.3	-1.26
2	5	4	0	Portrait	V	6.2445	-6.63	0	-6.63	6.5105	-42.66	-41.3	-1.36
2	5	5	0	Portrait	V	6.2435	-4.82	0	-4.82	6.5115	-42.84	-41.3	-1.54
2	9	0	125	Flatbed	V	8.0465	-3.05	0	-3.05	8.0365	-42.29	-41.3	-0.99
2	9	1	125	Flatbed	V	8.0405	-2.54	0	-2.54	8.0265	-42.82	-41.3	-1.52
2	9	2	125	Flatbed	V	7.9835	-6.67	0	-6.67	8.0275	-42.88	-41.3	-1.58
2	9	3	125	Flatbed	V	7.9895	-6.98	0	-6.98	8.0255	-42.72	-41.3	-1.42
2	9	4	0	Flatbed	V	8.2245	-4.21	0	-4.21	8.0295	-42.54	-41.3	-1.24
2	9	5	0	Flatbed	V	8.2205	-2.76	0	-2.76	8.0275	-42.32	-41.3	-1.02
3	5	0	125	Portrait	H	6.4885	-3.44	0	-3.44	6.4655	-42.78	-41.3	-1.48
3	5	1	125	Portrait	H	6.4865	-2.28	0	-2.28	6.4655	-42.53	-41.3	-1.23
3	5	2	125	Portrait	H	6.4865	-6.70	0	-6.70	6.4655	-42.71	-41.3	-1.41
3	5	3	125	Portrait	H	6.4845	-6.02	0	-6.02	6.4625	-42.57	-41.3	-1.27
3	5	4	0	Portrait	H	6.7425	-7.24	0	-7.24	6.4695	-42.49	-41.3	-1.19
3	5	5	0	Portrait	H	6.7335	-6.27	0	-6.27	6.4615	-42.54	-41.3	-1.24
3	9	0	125	Portrait	H	7.9855	-4.37	0	-4.37	7.88715	-42.79	-41.3	-1.49
3	9	1	125	Portrait	H	7.9845	-3.77	0	-3.77	7.8865	-42.78	-41.3	-1.48
3	9	2	125	Portrait	H	7.9915	-7.42	0	-7.42	7.8815	-42.60	-41.3	-1.30
3	9	3	125	Portrait	H	7.9905	-6.70	0	-6.70	7.9125	-42.35	-41.3	-1.05
3	9	4	0	Portrait	H	7.7395	-5.92	0	-5.92	7.9045	-42.62	-41.3	-1.32
3	9	5	0	Portrait	H	7.7435	-3.61	0	-3.61	7.8905	-42.35	-41.3	-1.05

RESULTS



9.4. CESSATION TIME

LIMITS

FCC

§15.519(a)(1) A UWB device operating under the provisions of this section shall transmit only when it is sending information to an associated receiver. The UWB intentional radiator shall cease transmission within 10 seconds unless it receives an acknowledgement from the associated receiver that its transmission is being received. An acknowledgment of reception must continue to be received by the UWB intentional radiator at least every 10 seconds or the UWB device must cease transmitting.

RSS-220

Section 5.3.1 (b) The device is to transmit only when it is sending information to an associated receiver. The device shall cease transmission of information within 10 seconds unless it receives an acknowledgement from the associated receiver that its transmission is being received. An acknowledgment of reception must continue to be received by the UWB device at least every 10 seconds or the UWB device shall cease transmitting any information other than periodic signals used for the establishment or re-establishment of a communication link with an associated receiver.

TEST PROCEDURES

*Initiator = EUT

*Responder = associated receiver

Transmissions are monitored for two cases:

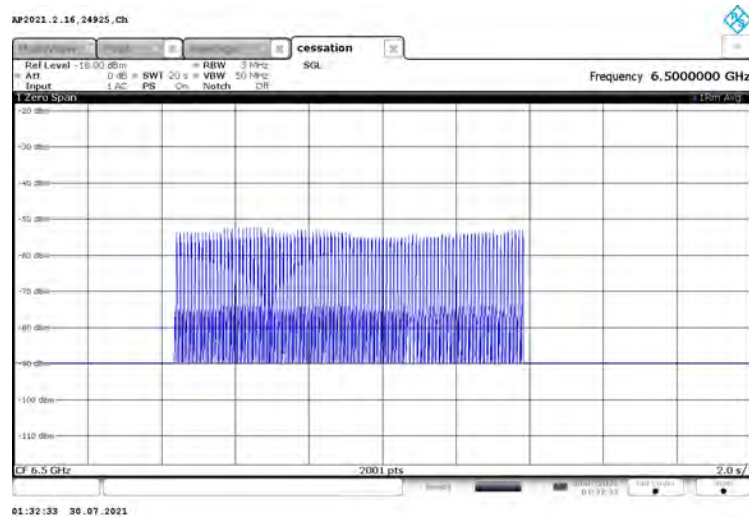
1. The Initiator ends the UWB link.
2. The Responder ends the UWB link.

RESULTS

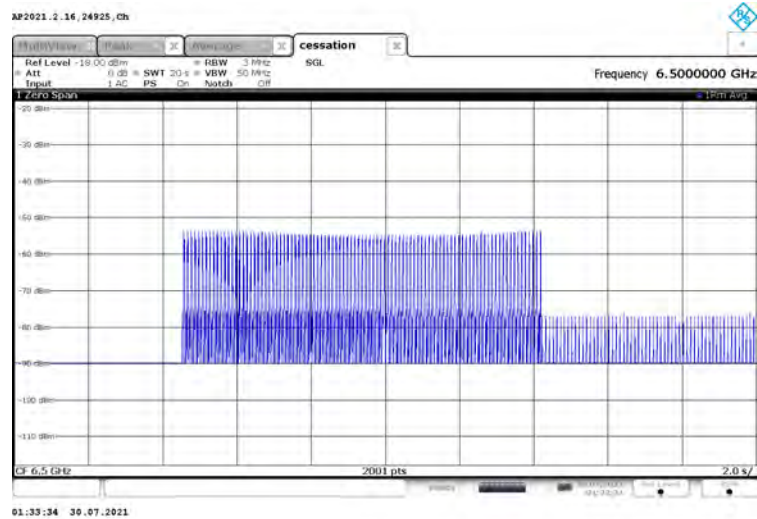
Employee ID: 19419
Location: Chamber D
Test Date: 07/29/2021

Signal Levels on all Plots

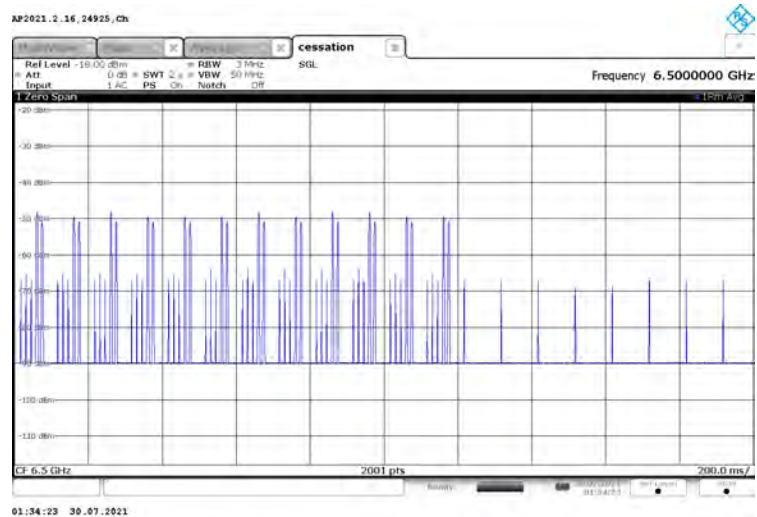
- Initiator is Low Amplitude
- Responder is High Amplitude

Case 1: Initiator ends the UWB link**RESULT**

- All devices, including the Responder, cease transmissions.

Case 2: Responder ends the UWB link**RESULT**

- Responder ends the link, Initiator stops Acknowledgements but continues Polling.
- Responder ceases transmissions, does not respond to Polling Signals.

Zoom-in Plot during On-Off Transition**RESULT**

- Shows Link Traffic, Acknowledgements and Polling Signals while Link is established.
- Shows Polling Signals after Link has ended.

9.5. EMISSIONS BELOW 960 MHz

LIMITS

FCC

§15.519 (c) The radiated emissions at or below 960 MHz from a device operating under the provisions of this section shall not exceed the emission levels in §15.209. The radiated emissions above 960 MHz from a device operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz:

15.209 (a)

Frequency (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100**	3
88-216	150**	3
216-960	200**	3

RSS-220

Section 3.4 Radiated emissions at or below 960 MHz for all subclasses of UWB device shall not exceed the following limits. Measurements of radiated emissions at and below 960 MHz are to be made using a CISPR quasi-peak detector. CISPR measurement bandwidth specifications are to be used.

Frequency (MHz)	Field Strength (Microvolts/m)	Measurement Distance (Metres)	E.i.r.p. (dBmW)
0.009-0.490	2,400/F (F in kHz)	300	$10 \log (17.28 / F^2)$ (F in kHz)
0.490-1.705	24,000/F (F in kHz)	30	$10 \log (17.28 / F^2)$ (F in kHz)
1.705-30	30	30	-45.7
30-88	100	3	-55.2
88-216	150	3	-51.7
216-960	200	3	-49.2

Note: The emission limits for the bands 9-90 kHz and 110-490 kHz are based on measurements employing an average emissions detector.

TEST PROCEDURE

ANSI C63.10 Clause 10.2

RSS-220 Annex

Measurements are made with the antenna feeding a spectrum analyzer via a preamplifier and cables, at a maximum distance of 3m from the EUT.

For below 30 MHz testing, investigation was done on three antenna orientations: RX antenna Face-on, Face-off and horizontal (parallel to ground). The worst-case configurations were determined on RX antenna Face-on and Face-off; therefore, all final tests were performed using these two orientations.

Although these tests were performed other than open area test site, adequate comparison measurements were confirmed against 30 meter open area test site. Therefore, sufficient tests were made to demonstrate that the alternative site produces results that correlate with the ones of tests made in an open field based on KDB 414788.

A final test is made at any frequencies at which emissions are found. During this final scan, the antenna is kept no further from the EUT than the maximum distance calculated for each band that yields a minimum system noise floor.

RESULTS

Employee IDs: 24544; 12471

Location: Chamber F

Test Date: 05/14/2021 – 06/16/2021

Emissions Summary

Ant	CH	Config	Payload	Power Setting	Frequency Range	
					9 kHz - 30 MHz	30 - 960 MHz
0	9	3	125	Max	PASS	PASS
1	9	3	125	Max	PASS	PASS
2	5	3	125	Max	PASS	PASS
2	9	3	125	Max	PASS	PASS
3	5	3	125	Max	PASS	PASS
3	9	3	125	Max	PASS	PASS

ANT. 1, CH9, Config 3

UL Fremont - Chamber F

2021 Jun 15 21:56:47

RF Emissions
Config: EUT + Charger
Mode: AT CH9 CF63 PL125
Tested by: 24544

Peak Limit (dBuV/m)

Avg Limit (dBuV/m)

RF Limit (dBuV/m)

1

2

3

Frequency (MHz)

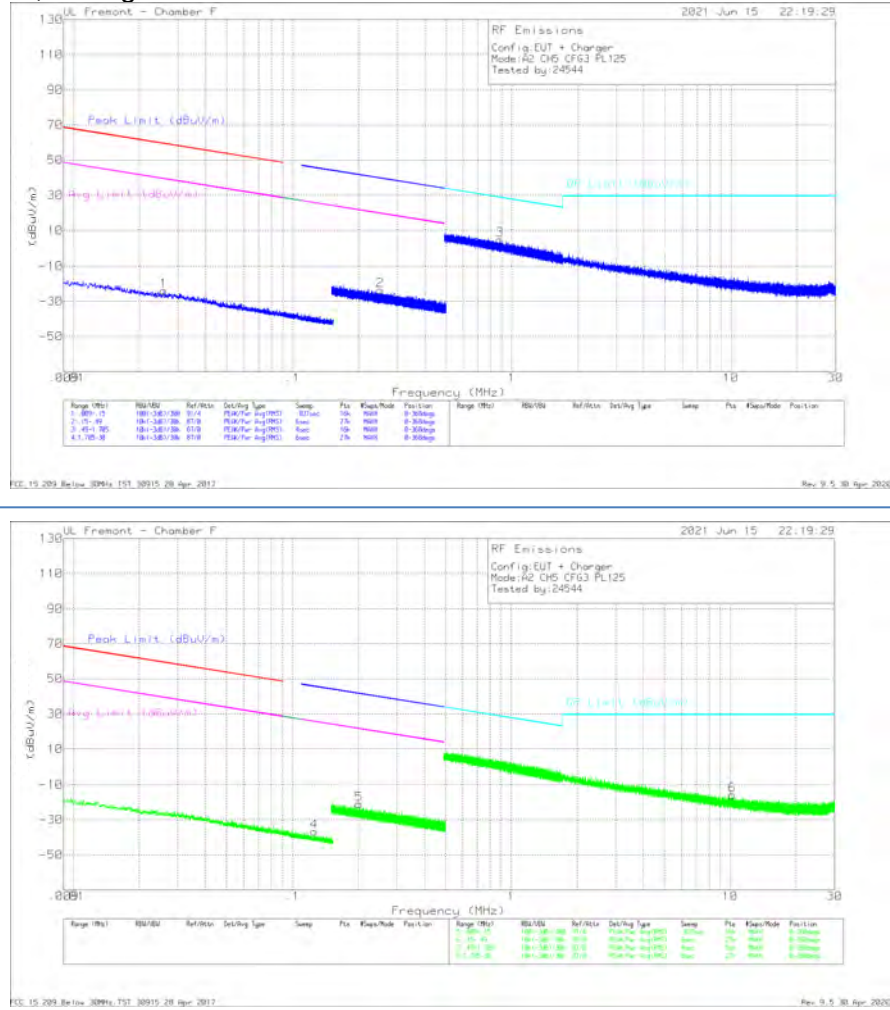
Range (MHz)	Min dBV	Ref dBm	Det/Units	Setup	Pre	Power Mode	Position
0.001 - 0.01	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
0.01 - 0.1	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
0.1 - 1	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
1 - 10	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
10 - 100	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
100 - 1000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
1000 - 10000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
10000 - 100000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
100000 - 1000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
1000000 - 10000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
10000000 - 100000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
100000000 - 1000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
1000000000 - 10000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
10000000000 - 100000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
100000000000 - 1000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
1000000000000 - 10000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
10000000000000 - 100000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
100000000000000 - 1000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
1000000000000000 - 10000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
10000000000000000 - 100000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
100000000000000000 - 1000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
1000000000000000000 - 10000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
10000000000000000000 - 100000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
100000000000000000000 - 1000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
1000000000000000000000 - 10000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
10000000000000000000000 - 100000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
100000000000000000000000 - 1000000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
1000000000000000000000000 - 10000000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
10000000000000000000000000 - 100000000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
100000000000000000000000000 - 1000000000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
1000000000000000000000000000 - 10000000000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
10000000000000000000000000000 - 100000000000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
100000000000000000000000000000 - 1000000000000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
1000000000000000000000000000000 - 10000000000000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
10000000000000000000000000000000 - 100000000000000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
100000000000000000000000000000000 - 1000000000000000000000000000000000	-140	-140	dBm/Hz	Pre	Pre	Pre	Pre
10000							

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dBm)	Cables (dB)	Dist Corr 300m	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Antenna Face
1	.02072	41.96	Pk	14.9	0	-80	-23.14	61.26	-84.4	41.26	-64.4	-	-	-	-	0-360	On
2	.34764	42.37	Pk	11.3	.1	-80	-26.23	-	-	-	-	36.79	-63.02	16.79	-43.02	0-360	On
4	.01385	45.22	Pk	17.3	0	-80	-17.48	64.76	-82.24	44.76	-62.24	-	-	-	-	0-360	Off
5	.46737	40.51	Pk	11.1	.1	-80	-28.29	-	-	-	-	34.21	-62.5	14.21	-42.5	0-360	Off

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dBm)	Cables (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Antenna Face
3	.65591	35.79	Pk	11.3	.1	-40	7.19	31.27	-24.08	0-360	On
6	17.97834	11.55	Pk	10.4	.5	-40	-17.55	29.5	-47.05	0-360	Off

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ANT. 2, CH5, Config 3



Trace Markers

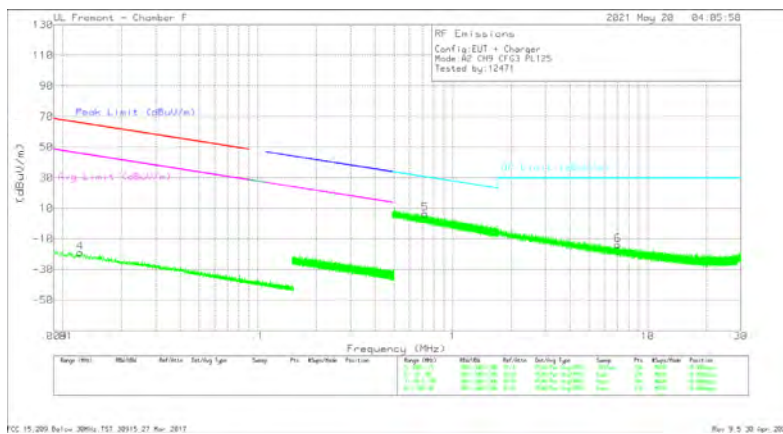
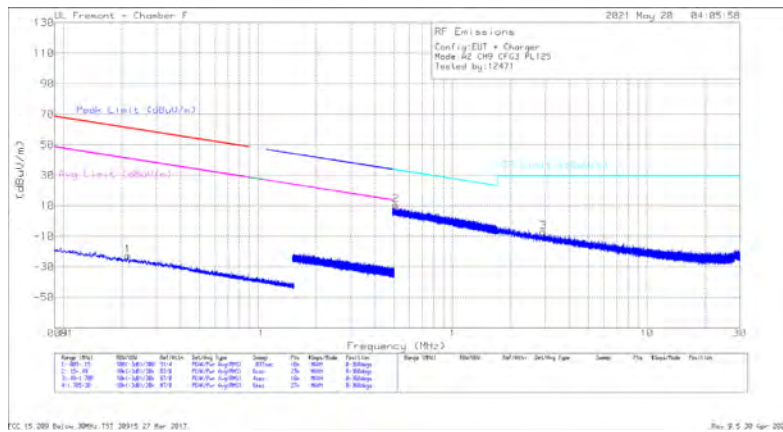
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dBm)	Cables (dB)	Dist Corr 300m	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Antenna Face
1	.02582	41.22	Pk	14.8	0	-80	-23.98	59.35	-83.33	39.35	-63.33	-	-	-	-	0-360	On
2	.25062	44.92	Pk	11.3	.1	-80	-23.68	-	-	-	-	39.63	-63.31	19.63	-43.31	0-360	On
4	.1259	31.52	Pk	11.7	0	-80	-36.78	-	-	-	-	45.63	-82.41	25.63	-62.41	0-360	Off
5	.20143	47.43	Pk	11.4	.1	-80	-21.07	-	-	-	-	41.54	-62.61	21.54	-42.61	0-360	Off

Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dBm)	Cables (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Antenna Face
3	.88239	33.17	Pk	11.4	.1	-40	4.67	28.71	-24.04	0-360	On
6	10.21266	12.79	Pk	10.9	.4	-40	-15.91	29.5	-45.41	0-360	Off

Pk - Peak detector

ANT. 2, CH9, Config 3



Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dBm)	Cables (dB)	Dist Corr 300m	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Antenna Face
1	.02138	42.6	Pk	14.9	0	-80	-22.5	60.99	-83.49	40.99	-63.49	0-360	On
4	.01232	43.24	Pk	18	0	-80	-18.76	65.77	-84.53	45.77	-64.53	0-360	Off

Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dBm)	Cables (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Antenna Face
2	.51113	39.5	Pk	10.8	.1	-40	10.4	33.43	-23.03	0-360	On
3	2.93116	21.92	Pk	10.8	.2	-40	-7.08	29.5	-36.58	0-360	On
5	.7218	35.63	Pk	10.8	.1	-40	6.53	30.45	-23.92	0-360	Off
6	7.03408	15.06	Pk	10.8	.3	-40	-13.84	29.5	-43.34	0-360	Off

Pk - Peak detector

UL Present - Chamber F

2021 May 20 04:26:42

RF Emissions

Config: EUT + Charger

Mode: A3 CIS C73 FL125

Tested by: 12471

Peak Limit (dBuV/m)

Avg Limit (dBuV/m)

EMC Test Results

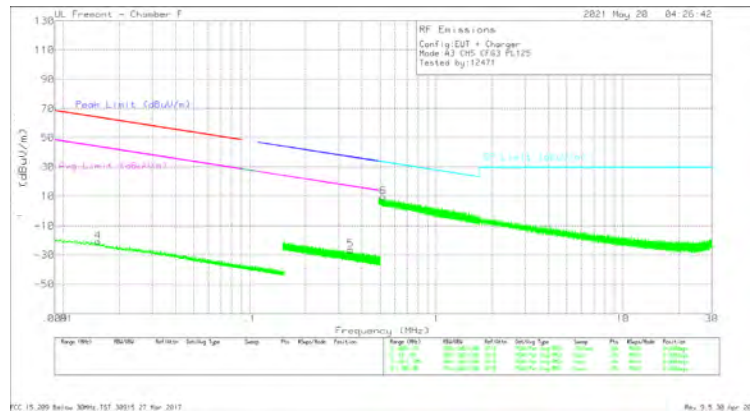
Frequency (MHz)

Emission (dBuV/m)

Range (MHz)	Min (dBuV/m)	Max (dBuV/m)	Test Type	Comp	Pre	Range (MHz)	Min (dBuV/m)	Max (dBuV/m)	Test Type
0.1 - 0.5	-100	-100	Pre-Test	Pre	Pre	0.5 - 1.0	-100	-100	Pre-Test
1.0 - 5.0	-100	-100	Pre-Test	Pre	Pre	5.0 - 10.0	-100	-100	Pre-Test
10.0 - 20.0	-100	-100	Pre-Test	Pre	Pre	20.0 - 30.0	-100	-100	Pre-Test
30.0 - 100.0	-100	-100	Pre-Test	Pre	Pre	100.0 - 300.0	-100	-100	Pre-Test

FCC 15.209 Radio 3000 757 30915 27 Mar 2017

Page 3 of 38 pages



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dBm)	Cables (dB)	Dist Corr 300m	Corrected Reading (dBuV)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Antenna Face
1	.03101	41.31	Pk	14	0	-80	-24.69	57.76	-82.45	37.76	-62.45	-	-	-	-	0-360	On
4	.01537	42.54	Pk	16.8	0	-80	-20.66	63.85	-84.51	43.85	-64.51	-	-	-	-	0-360	Off
5	.34708	42.62	Pk	10.9	1	-80	-26.38	-	-	-	-	36.8	-63.18	16.8	-43.18	0-360	Off

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dBm)	Cables (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Antenna Face
2	.82144	34.06	Pk	10.8	.1	-40	4.96	29.33	-24.37	0-360	On
3	4.42875	18.51	Pk	10.9	.2	-40	-10.39	29.5	-39.89	0-360	On
6	5.1941	38.6	Pk	10.8	.1	-40	9.5	33.3	-23.8	0-360	Off

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UL Emission - Chamber F

RF Emissions

Config: EUT - Charger
Mode: R3 CH5 CPG3 PL125
Tsted by: 12421

2021 May 20 04:26:42

Peak L1N15 (dBuV/m)

Avg L1N15 (dBuV/m)

SP L1N15 (dBuV/m)

1

2

Frequency (MHz)

Range (MHz)	Min dBm	Max dBm	Filtering Type	Sweep	Pre	Phase Noise	Post Filter
1. 100.00	-100.00	-10.00	Flat	200Hz	0dB	0dB	0dB
2. 10.00	-100.00	-10.00	Flat	200Hz	0dB	0dB	0dB
3. 10.00	-100.00	-10.00	Flat	200Hz	0dB	0dB	0dB
4. 10.00	-100.00	-10.00	Flat	200Hz	0dB	0dB	0dB

Range (MHz) Min dBm Max dBm Filtering Type Sweep Pre Phase Noise Post Filter

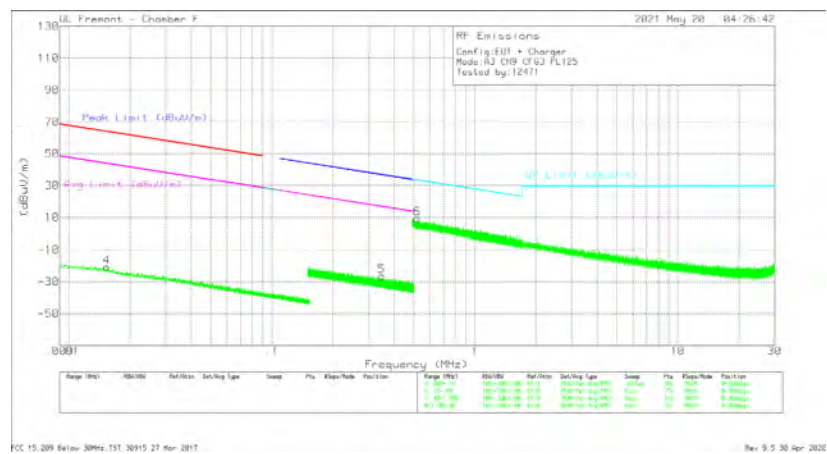
1. 100.00 -100.00 -10.00 Flat 200Hz 0dB 0dB 0dB

2. 10.00 -100.00 -10.00 Flat 200Hz 0dB 0dB 0dB

3. 10.00 -100.00 -10.00 Flat 200Hz 0dB 0dB 0dB

4. 10.00 -100.00 -10.00 Flat 200Hz 0dB 0dB 0dB

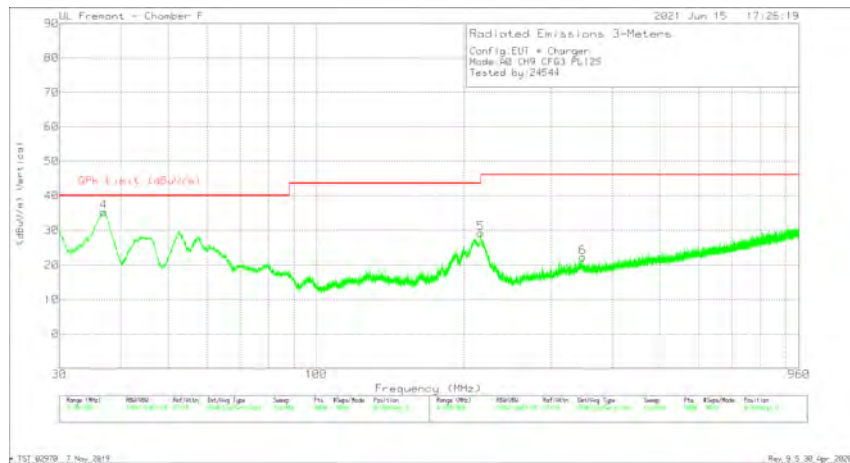
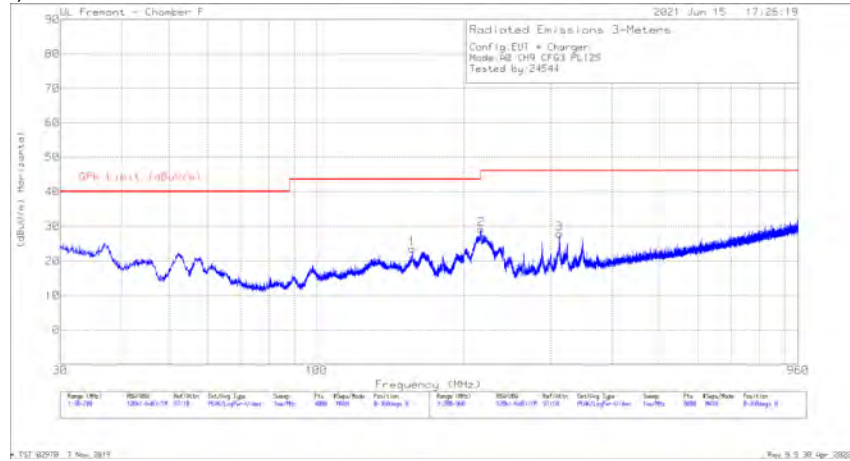
File: 3_1_20_2021_04_26_42



Marker	Frequency (MHz)	Meter Reading (dBμV)	Det	Loop Antenna Reading (dBm)	Cables (dB)	Dist Corr 300m	Corrected Reading (dBμV/m)	Peak Limit (dBμV/m)	Margin (dB)	Avg Limit (dBμV/m)	Margin (dB)	Peak Limit (dBμV/m)	Margin (dB)	Avg Limit (dBμV/m)	Margin (dB)	Azimuth (Degs)	Antenna Face
1	03101	41.31	Pk	-14	0	-80	-24.69	57.76	-82.45	37.76	-62.45	-	-	-	-	-0.360	On
2	01537	42.54	Pk	16.8	0	-80	-20.66	63.85	-84.51	43.85	-64.51	-	-	-	-	-0.360	Off
5	34708	42.62	Pk	10.9	1	-80	-26.38	-	-	-	-	36.8	-63.18	16.8	-43.18	-0.360	Off

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dBm)	Cables (dB)	Dist Corr (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Antenna Face
2	.82144	34.06	Pk	10.8	.1	-40	4.96	29.33	-24.37	0-360	On
3	4.42875	18.51	Pk	10.9	.2	-40	-10.39	29.5	-39.89	0-360	On
6	.51941	38.6	Pk	13.8	.1	-40	9.5	33.3	-23.8	0-360	Off

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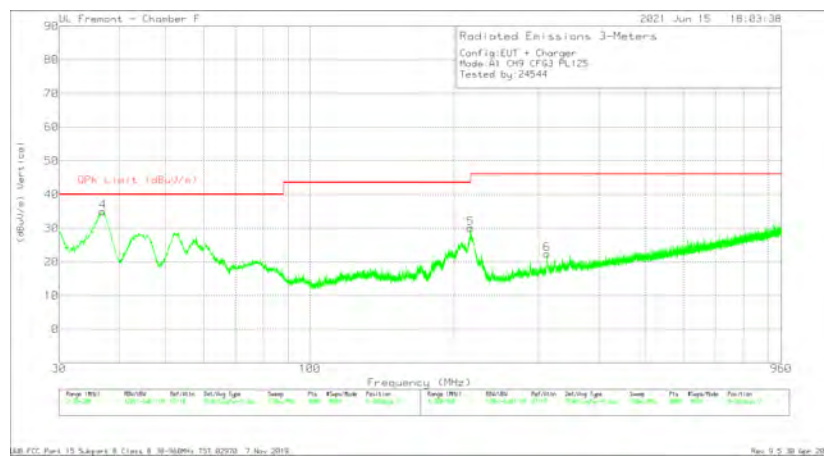
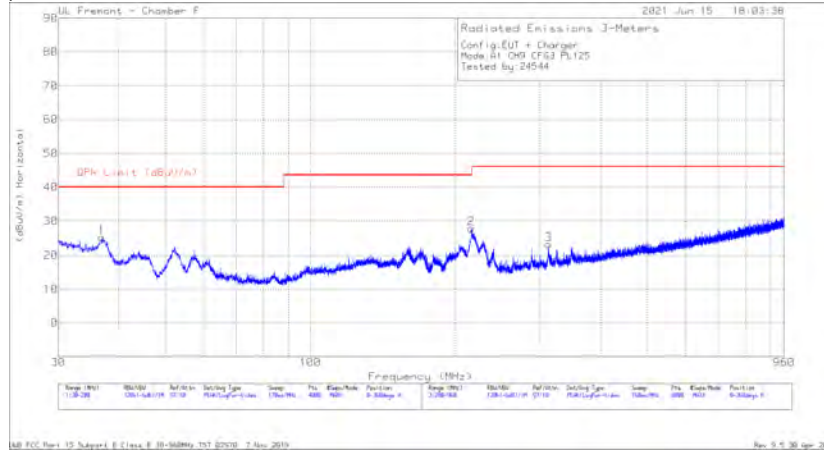
9.5.2. EMISSIONS, 30 - 960 MHz**ANT. 0, CH9, CONFIG 3****Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	156.8528	36.26	Pk	18	-30.8	23.46	43.52	-20.06	0-360	201	H
4	36.9293	43.89	Pk	23.2	-31.8	35.29	40	-4.71	0-360	100	V
	37.0848	40.25	Qp	23	-31.8	31.45	40	-8.55	212	109	V
2	216.4371	42.66	Pk	16.8	-30.3	29.16	46.02	-16.86	0-360	99	H
3	312.8743	37.79	Pk	19.8	-29.8	27.79	46.02	-18.23	0-360	99	H
5	216.057	42.75	Pk	16.8	-30.4	29.15	46.02	-16.87	0-360	99	V
6	348.2187	31.51	Pk	20.5	-29.7	22.31	46.02	-23.71	0-360	99	V

Pk - Peak detector

Qp - Quasi-Peak detector

ANT. 1, CH9, CONFIG 3



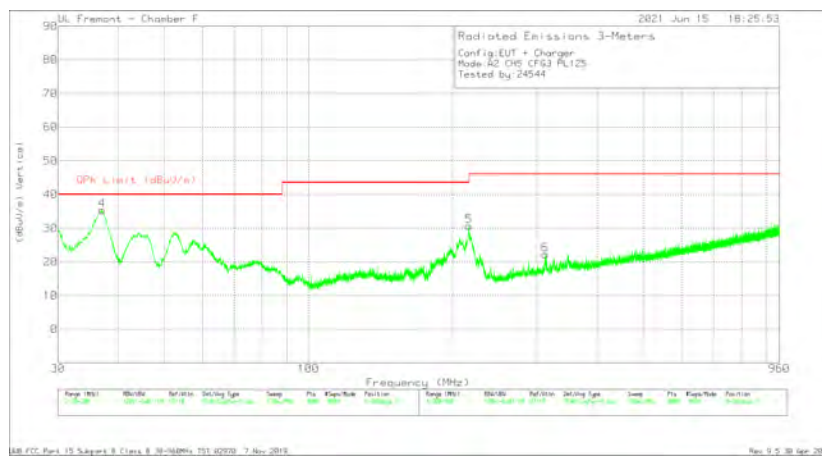
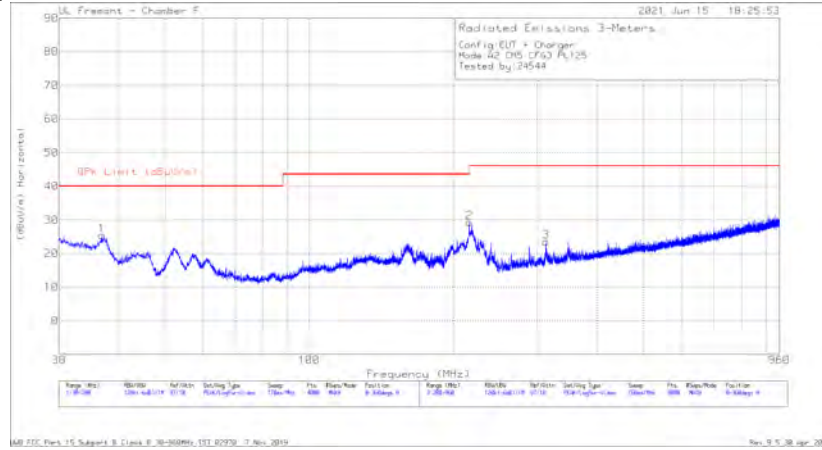
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	36.9293	33.9	Pk	23.2	-31.8	25.3	40	-14.7	0-360	399	H
4	37.0143	43.65	Pk	23.1	-31.8	34.95	40	-5.05	0-360	100	V
	36.6766	39.91	Qp	23.4	-31.8	31.51	40	-8.49	234	108	V
2	215.772	41.44	Pk	16.8	-30.4	27.84	43.52	-15.68	0-360	99	H
3	311.9241	33.29	Pk	19.8	-29.8	23.29	46.02	-22.73	0-360	99	H
5	216.057	43.66	Pk	16.8	-30.4	30.06	46.02	-15.96	0-360	99	V
6	312.1142	32.4	Pk	19.8	-29.8	22.4	46.02	-23.62	0-360	99	V

Pk - Peak detector

Qp - Quasi-Peak detector

ANT.2, CH5, CONFIG 3



Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	36.8443	34.02	Pk	23.2	-31.8	25.42	40	-14.58	0-360	399	H
4	37.0568	44.12	Pk	23.1	-31.8	35.42	40	-4.58	0-360	100	V
	36.8417	39.11	Qp	23.2	-31.8	30.51	40	-9.49	281	103	V
2	216.057	42.84	Pk	16.8	-30.4	29.24	46.02	-16.78	0-360	99	H
3	312.2092	33.54	Pk	19.8	-29.8	23.54	46.02	-22.48	0-360	99	H
5	215.962	44.2	Pk	16.8	-30.4	30.6	43.52	-12.92	0-360	99	V
6	311.8291	32.26	Pk	19.8	-29.8	22.26	46.02	-23.76	0-360	99	V

Pk - Peak detector

Qp - Quasi-Peak detector

UL Fremont - Chamber F

2021 Jun 15 19:18:31

Radiated Emissions 3-Meters

Config: EUT + Charger

Mode: A2 CH9 CF63 PL125

Tested by: 24544

Y-axis: (dBuV/m) (Ant range)

X-axis: Frequency (MHz)

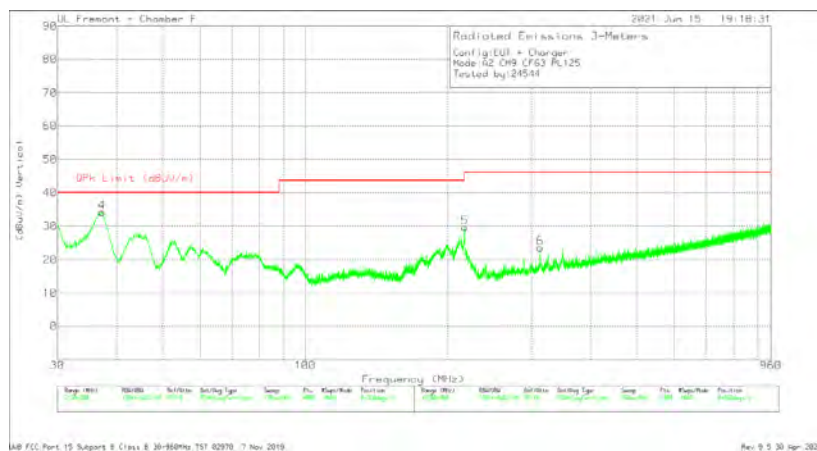
Limit: 40 dBuV/m

1, 2, 3

Range (MHz)	Min/Max	Ref/Offs	Ant/Ref Type	Swaps	Pre	Post/Ref	Pre/Offs
1.00-300	2001-2401.07	0.0170	25W/25W (1-10m)	150W/150W	0.000	0.000	0.00000
300-960	2401-2401.07	0.0170	25W/25W (1-10m)	150W/150W	0.000	0.000	0.00000

LAB FCC Part 15 Subpart E Class B 30-960MHz 551.02010 7 Nov 2019

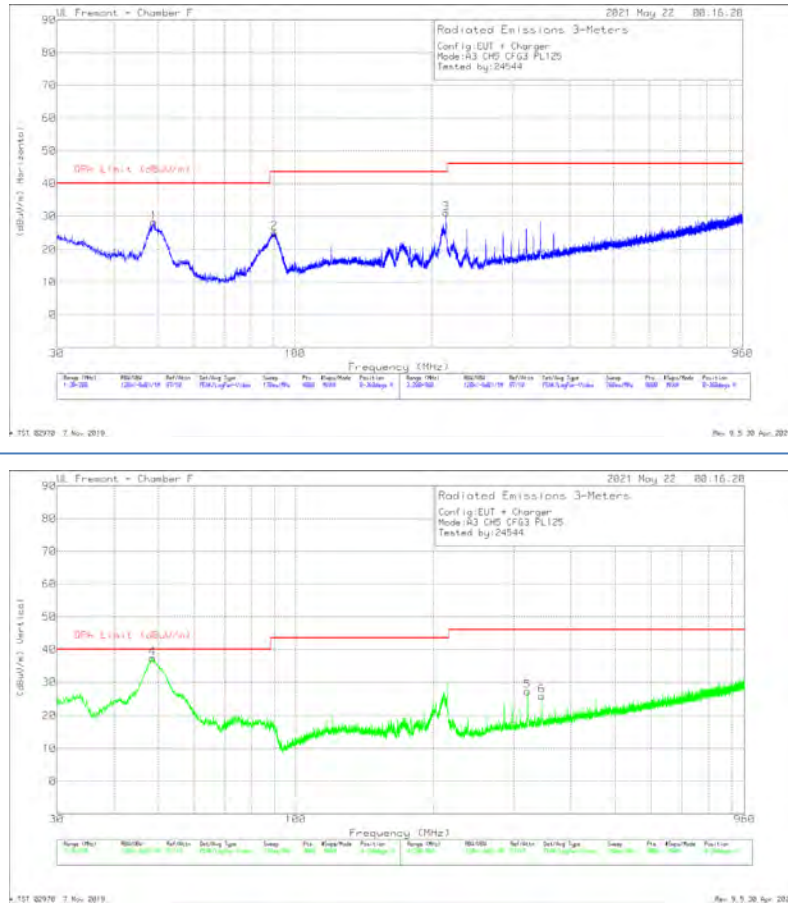
Rev: 9.5 30 Apr 2020



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	36.9293	33.2	Pk	23.2	-31.8	24.6	40	-15.4	0-360	399	H
4	37.2269	42.95	Pk	22.9	-31.8	34.05	40	-5.95	0-360	100	V
	36.9364	38.65	Qp	23.2	-31.8	30.05	40	-9.95	245	106	V
2	216.7221	41.47	Pk	16.8	-30.3	27.97	46.02	-18.05	0-360	99	H
3	348.9788	32.97	Pk	20.5	-29.7	23.77	46.02	-22.25	0-360	99	H
5	216.9121	43.08	Pk	16.8	-30.3	29.58	46.02	-16.44	0-360	99	V
6	313.1593	33.68	Pk	19.8	-29.8	23.68	46.02	-22.34	0-360	99	V

Qp - Quasi-Peak detector

ANT. 3, CH5, CONFIG 3



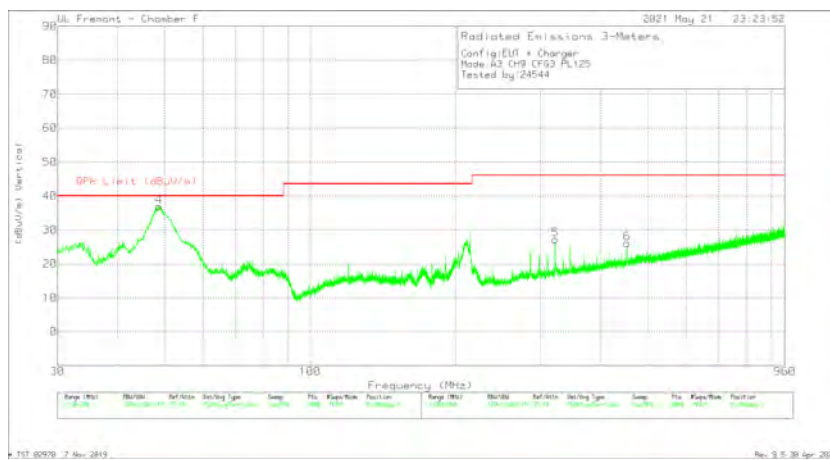
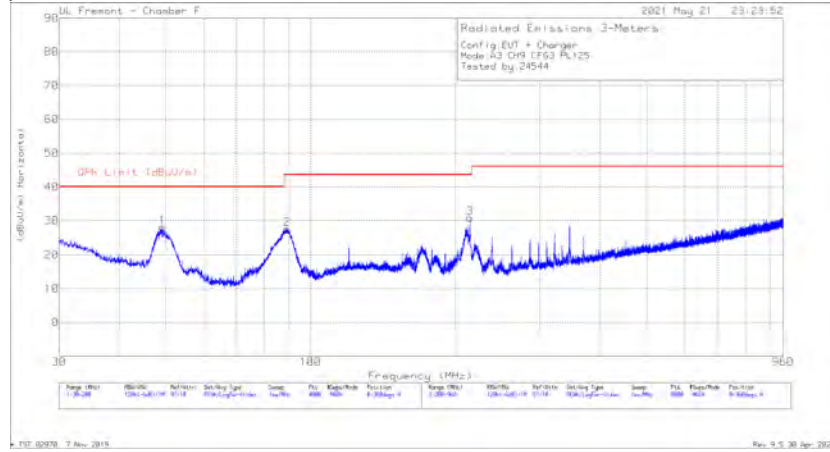
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	49.0449	45.44	Pk	14.5	-31.7	28.24	40	-11.76	0-360	400	H
2	90.068	42.87	Pk	13.5	-31.3	25.07	43.52	-18.45	0-360	300	H
4	48.6198	54.38	Pk	14.7	-31.7	37.38	40	-2.62	0-360	100	V
	48.7248	50.19	Qp	14.6	-31.7	33.09	40	-6.91	90	102	V
3	214.4418	44.7	Pk	16.7	-30.4	31	43.52	-12.52	0-360	99	H
5	321.4253	37.12	Pk	20	-29.8	27.32	46.02	-18.7	0-360	99	V
6	345.4634	35.17	Pk	20.4	-29.6	25.97	46.02	-20.05	0-360	99	V

Pk - Peak detector

Qp - Quasi-Peak detector

ANT. 3, CH9, CONFIG 3



Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Ampl/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	49.1725	45.22	Pk	14.4	-31.7	27.92	40	-12.08	0-360	400	H
2	89.3879	45.41	Pk	13.4	-31.3	27.51	43.52	-16.01	0-360	301	H
4	48.6198	53.91	Pk	14.7	-31.7	36.91	40	-3.09	0-360	101	V
	48.4248	50.11	Qp	14.8	-31.7	33.21	40	-6.79	78	100	V
3	214.2518	44.45	Pk	16.7	-30.4	30.75	43.52	-12.77	0-360	99	H
5	321.4253	37.05	Pk	20	-29.8	27.25	46.02	-18.77	0-360	99	V
6	452.2569	32.77	Pk	22.5	-29.2	26.07	46.02	-19.95	0-360	99	V

Pk - Peak detector

Qp - Quasi-Peak detector

9.6. AVERAGE EMISSIONS ABOVE 960 MHz**LIMITS****FCC**

15.519 (c)

Frequency in MHz	EIRP in dBm
960-1610	-75.3
1610-1990	-63.3
1990-3100	-61.3
3100-10600	-41.3
Above 10600	-61.3

§15.519 (d) In addition to the radiated emission limits specified in the table in paragraph (c) of this section, UWB transmitters operating under the provisions of this section shall not exceed the following average limits when measured using a resolution bandwidth of no less than 1 kHz:

Frequency in MHz	EIRP in dBm
1164-1240	-85.3
1559-1610	-85.3

RSS-220

Section 5.3.1 (d) Radiated emissions above 960 MHz from a device shall not exceed the following average limits when measured using a resolution bandwidth of 1 MHz.

Hand-held (Outdoor) Communication, Measurement, Location Sensing, and Tracking Devices	
Frequency	E.i.r.p. in a Resolution Bandwidth of 1 MHz
960-1 610 MHz	-75.3 dBm
1.61-4.75 GHz	-70.0 dBm
4.75-10.6 GHz	-41.3 dBm
Above 10.6 GHz	-61.3 dBm

Section 5.3.1 (e) In addition to the limits specified in paragraph (d) of this section, radiated emissions shall not exceed the following average limits when measured using a resolution bandwidth greater than or equal to 1 kHz. The measurements shall demonstrate compliance with the stated limits at whatever resolution bandwidth is used.

Frequency	E.i.r.p. in a Resolution Bandwidth of no less than 1 kHz
1 164-1 240 MHz	-85.3 dBm
1 559-1 610 MHz	-85.3 dBm

TEST PROCEDURE

ANSI C63.10 Clause 10.3

RSS-220 Annex

Exploratory measurements for all frequency ranges are performed with the measurement antenna at close distances to the EUT as described in ANSI C63.10 6.6.4.2. Where emissions are observed the measurement antenna is then positioned at a height of 1.5m and a distance of 0.5m from the EUT and final measurements are made at the frequencies observed in the exploratory scans using the alternative measurement procedures detailed in ANSI C63.10 section 6.6.5. If no emissions are observed, a plot is made at a test distance of 0.5m from the EUT to show the measurement system noise floor.

PROCEDURE FOR 0.96 TO 6 GHz

Measurements are made with the antenna feeding a spectrum analyzer via a preamplifier and cables, at a maximum distance of 0.5m from the EUT.

A low pass filter with a cut off frequency of 6 GHz is used to suppress the fundamental and perform measurement for 0.96 - 6 GHz.

RESULTS FOR 6 GHz TO 9 GHz

The 6 - 9 GHz frequency band is covered in Section 9.3.

PROCEDURE FOR 9 GHz TO 18 GHz

Measurements are made with the antenna feeding a spectrum analyzer via a preamplifier and cables, at a maximum distance of 0.5m from the EUT.

A high pass filter with pass band frequency beyond 9 GHz is used to suppress the fundamental and perform measurement for 9 - 18 GHz.

PROCEDURE FOR 1.164 TO 1.240 GHz

Measurements are made with the antenna feeding a spectrum analyzer via a preamplifier and cables, at a maximum distance of 0.5m from the EUT.

RBW = 120 kHz & VBW = 360 kHz were used at pre-scan.

A low pass filter with a cut off frequency of 6 GHz is used to suppress the fundamental and perform measurement for 1.164 – 1.240 GHz.

PROCEDURE FOR 1.559 TO 1.610 GHz

Measurements are made with the antenna feeding a spectrum analyzer via a preamplifier and cables, at a maximum distance of 0.5m from the EUT.

RBW = 120 kHz & VBW = 360 kHz were used at pre-scan.

A low pass filter with a cut off frequency of 6 GHz is used to suppress the fundamental and perform measurement for 1.559 – 1.610 GHz.

PROCEDURE FOR 18 GHz TO 40 GHz

Measurements are made with the antenna feeding a spectrum analyzer via a preamplifier and cables, at a maximum distance of 0.5m from the EUT.

A final test is made at any frequencies at which emissions are found. During this final scan, the antenna is kept no further from the EUT than the maximum distance calculated for each band that yields a minimum system noise floor.

Distance Correction Factor from 3m to 0.5m = $20 \cdot \log(0.5\text{m}/3\text{m}) = -15.56 \text{ dB}$

RESULTS

Employee IDs: 24544, 24839, 25207

Location: Chamber F

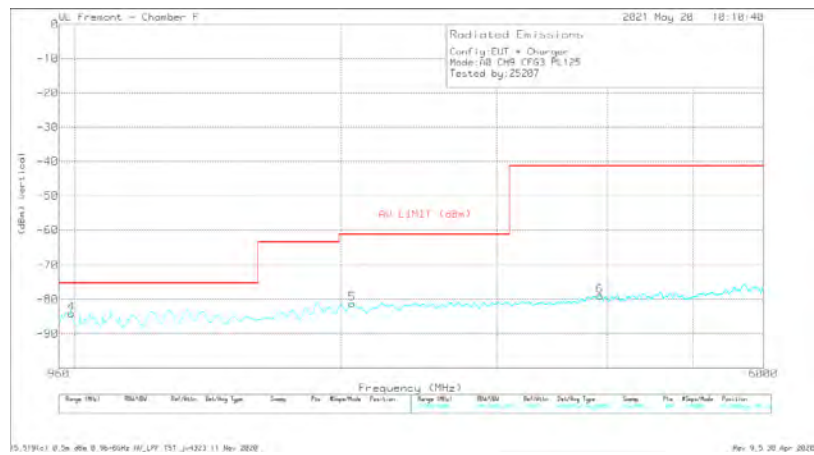
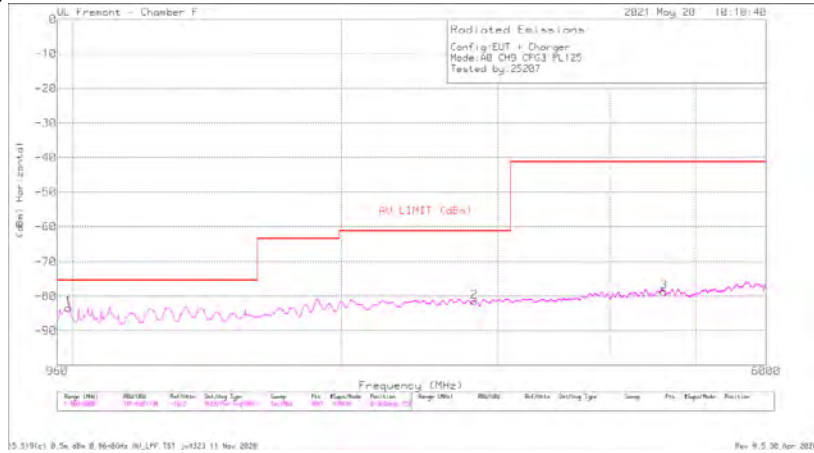
Test Date: 05/14/2021 – 06/17/2021

Average Emissions Summary

Ant	CH	Config	Payload	Power Setting	1164 - 1240 MHz	1559 - 1610 MHz	0.96 - 18 GHz	18 - 26 GHz	26 - 40 GHz
0	9	3	125	Max	PASS	PASS	PASS	PASS	PASS
1	9	3	125	Max	PASS	PASS	PASS	PASS	PASS
2	5	3	125	Max	PASS	PASS	PASS	PASS	PASS
2	9	3	125	Max	PASS	PASS	PASS	PASS	PASS
3	5	3	125	Max	PASS	PASS	PASS	PASS	PASS
3	9	3	125	Max	PASS	PASS	PASS	PASS	PASS

9.6.1. AVERAGE EMISSIONS, 0.96 – 6 GHz**9.6.1.1. FCC15.519 (C)**

ANT. 0, CH9, CONFIG 3

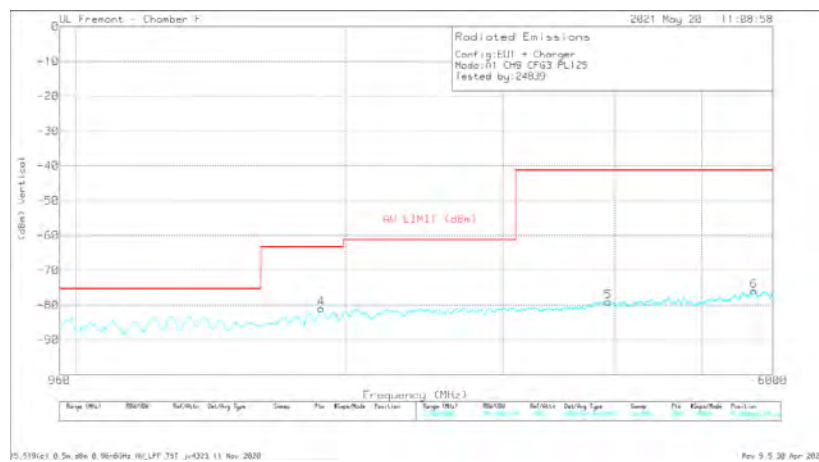
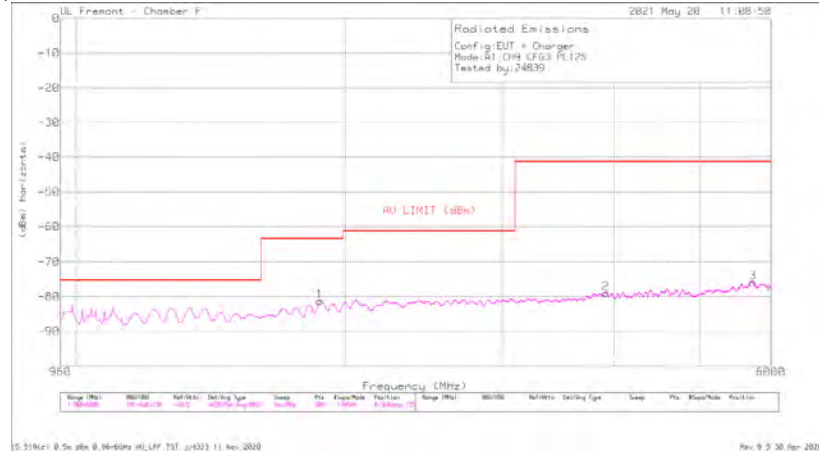
**Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	AF (dBm)	Ampl/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LFP (dB)	EIRP (dBm)	FCC15.519(c) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	989	-62.45	RMS	27.8	-45.1	-15.6	11.8	2	-83.35	-75.3	-8.05	75	155	H
2	2822	-65.72	RMS	32.3	-44.6	-15.6	11.8	3	-81.52	-61.3	-20.22	207	155	H
3	4607	-65.58	RMS	34.1	-43.9	-15.6	11.8	5	-78.68	-41.3	-37.38	317	155	H
4	992	-63.25	RMS	27.9	-45.1	-15.6	11.8	2	-84.05	-75.3	-8.75	110	155	V
5	2058	-63.58	RMS	31.3	-45.4	-15.6	11.8	3	-81.18	-61.3	-19.88	176	155	V
6	3919	-66.33	RMS	33.7	-43	-15.6	11.8	5	-78.93	-41.3	-37.63	66	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

ANT. 1, CH9, CONFIG 3



Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	EIRP (dBm)	FCC15.519(c) ERP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1874	-63.47	RMS	30.8	-45.1	-15.6	11.8	.3	-81.27	-63.3	-17.97	295	155	H
2	3919	-66.41	RMS	33.7	-43	-15.6	11.8	.5	-79.01	-41.3	-37.71	184	155	H
3	5724	-67.3	RMS	34.9	-41.7	-15.6	11.8	2	-75.9	-41.3	-34.6	295	155	H
4	1880	-63.03	RMS	30.6	-45	-15.6	11.8	.3	-80.93	-63.3	-17.63	175	155	V
5	3932	-67.14	RMS	33.7	-42.2	-15.6	11.8	.5	-78.94	-41.3	-37.64	22	155	V
6	5718	-67.48	RMS	35	-41.6	-15.6	11.8	2	-75.88	-41.3	-34.58	1	155	V

RMS - RMS detection

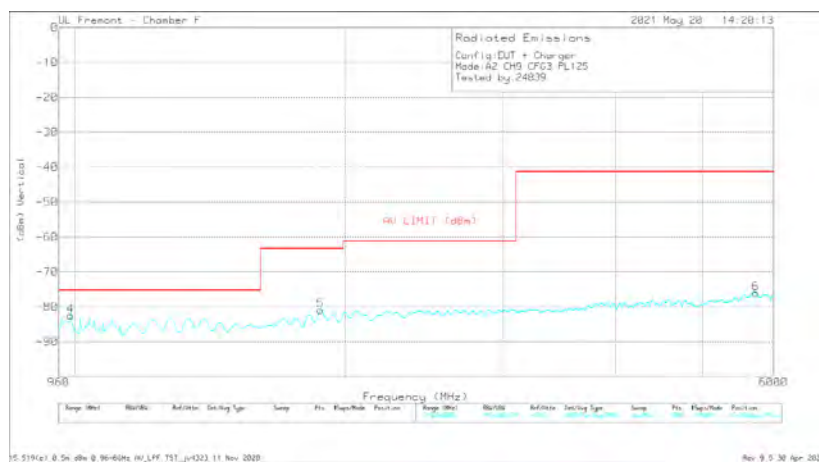
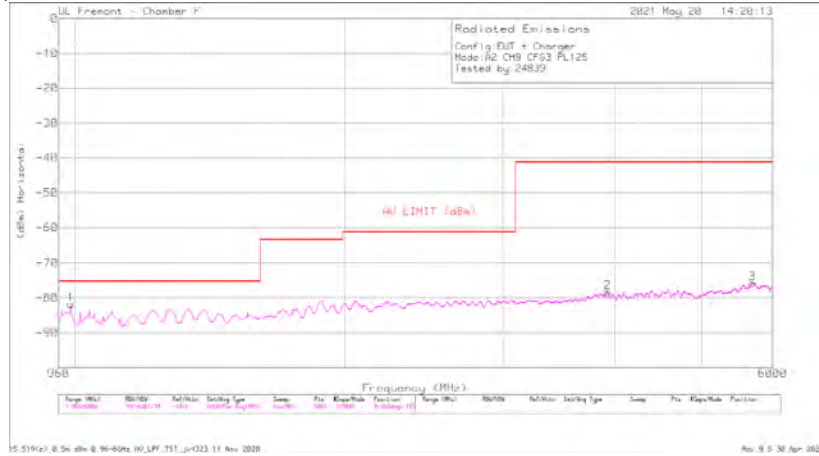
*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

[illegible]

Marker	Frequency (MHz)	Measuring (MHz)	Det	A/F (dB/m)	Amp/Ctrl (dB)	Dist Correction (dB)	Conversion Factor (dB)	1821.96 LRF (dB)	ERP (dBm)	FC115.519(C) ERP (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	990	-52.97	RMS	27.8	-45.1	-15.6	11.8	2	-83.87	-75.3	-8.57	141	155	H
2	1880	-52.98	RMS	30.6	-45	-15.6	11.8	3	-80.88	-63.3	-17.58	31	155	H
3	5699	-67.1	RMS	27.9	-41.7	-15.6	11.8	2	-75.6	-41.3	-34.4	119	155	H
4	992	-61.42	RMS	34.9	-45.1	-15.6	11.8	2	-82.22	-75.3	-6.92	176	155	V
5	1874	-63.53	RMS	30.8	-45.1	-15.6	11.8	3	-81.33	-63.3	-18.03	88	155	V
6	5705	-67.16	RMS	34.9	-41.6	-15.6	11.8	2	-75.66	-41.3	-34.36	198	155	V

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH5 fundamental signal.

ANT. 2, CH9, CONFIG 3



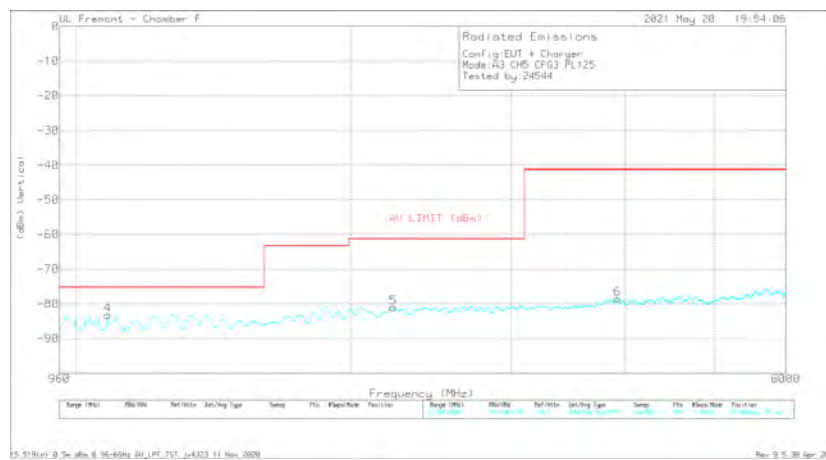
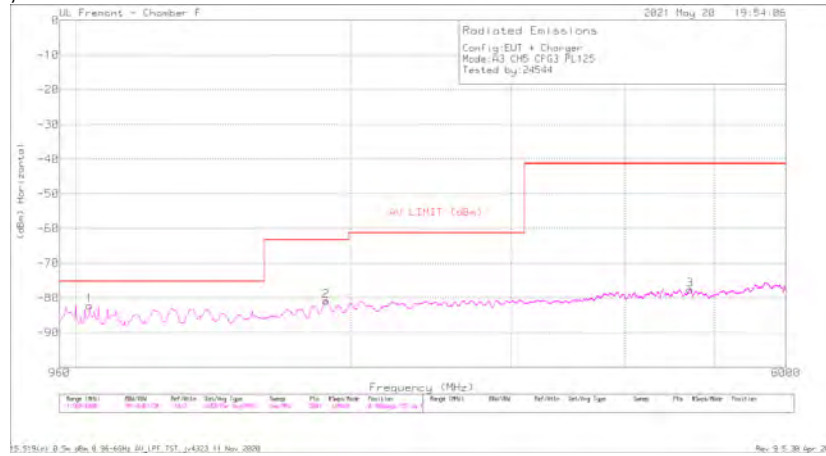
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	EIRP (dBm)	FCC15.519(c) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	991	-61.01	RMS	27.9	-45.1	-15.6	11.8	2	-81.81	-75.3	-6.51	141	155	H
2	3928	-66.45	RMS	33.7	-42.3	-15.6	11.8	5	-78.35	-41.3	-37.05	295	155	H
3	5693	-67.34	RMS	34.9	-41.6	-15.6	11.8	2	-75.84	-41.3	-34.54	273	155	H
4	990	-61.64	RMS	27.8	-45.1	-15.6	11.8	2	-82.54	-75.3	-7.24	175	155	V
5	1878	-63.17	RMS	30.7	-45	-15.6	11.8	3	-80.97	-63.3	-17.67	197	155	V
6	5730	-67.47	RMS	34.9	-41.7	-15.6	11.8	2	-76.07	-41.3	-34.77	264	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

ANT. 3, CH5, CONFIG 3



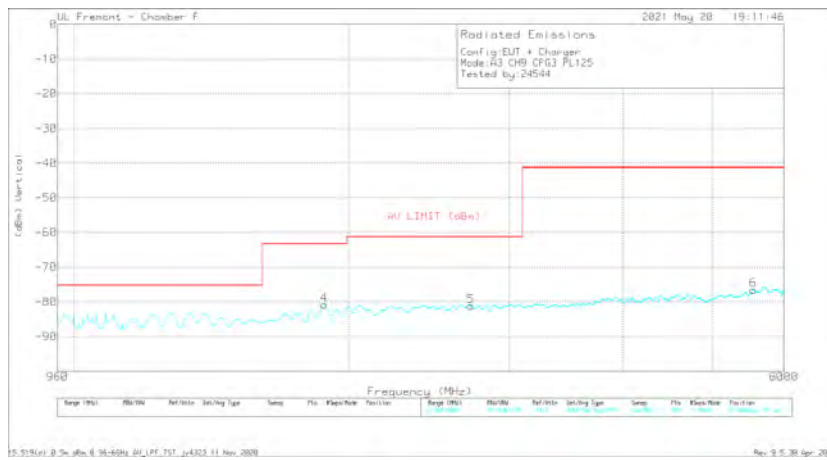
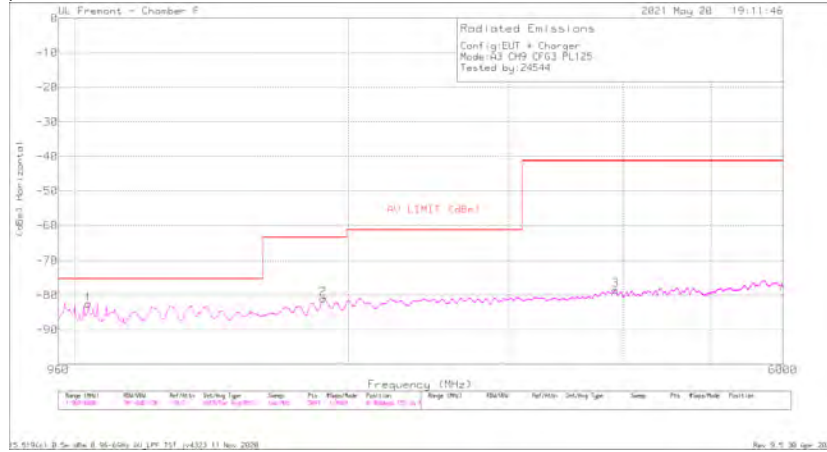
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	EIRP (dBm)	FCC15.519(c) ERP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1036	-60.27	RMS	26.9	-45.2	-15.6	11.8	.2	-82.17	-75.3	-6.87	198	155	H
2	1881	-62.97	RMS	30.6	-45	-15.6	11.8	.3	-80.87	-63.3	-17.57	1	155	H
3	4712	-64.86	RMS	34.1	-43.6	-15.6	11.8	.5	-77.66	-41.3	-36.36	264	155	H
4	1084	-61.64	RMS	27.4	-45.4	-15.6	11.8	.2	-83.24	-75.3	-7.94	185	155	V
5	2227	-63.93	RMS	31.7	-45.3	-15.6	11.8	.3	-81.03	-61.3	-19.73	339	155	V
6	3925	-66.4	RMS	33.7	-42.5	-15.6	11.8	.5	-78.5	-41.3	-37.2	359	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH5 fundamental signal.

ANT. 3, CH9, CONFIG 3

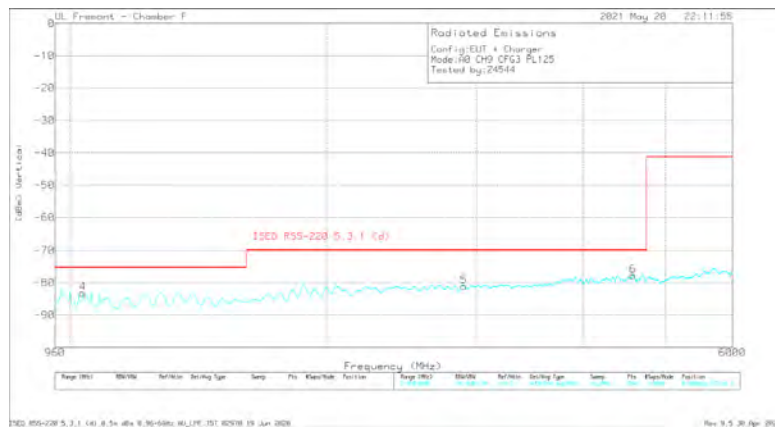
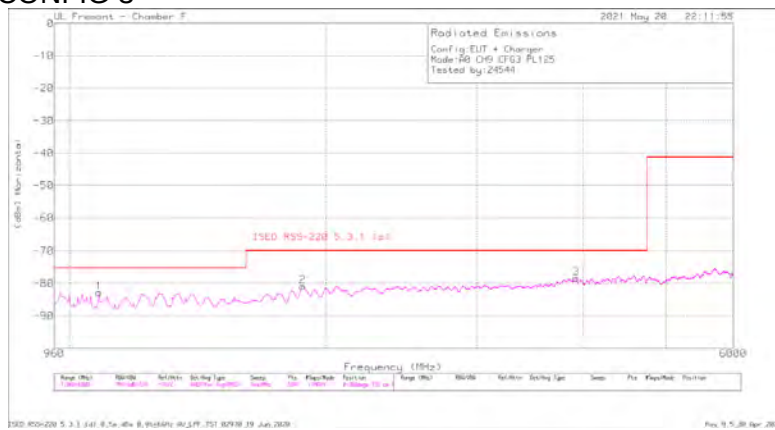


Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	EIRP (dBm)	FCC15.519(c) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1036	-60.56	RMS	26.9	-45.2	-15.6	11.8	.2	-82.46	-75.3	-7.16	198	155	H
2	1876	-63.29	RMS	30.8	-45	-15.6	11.8	.3	-80.99	-63.3	-17.69	110	155	H
3	3928	-66.56	RMS	33.7	-42.3	-15.6	11.8	.5	-78.46	-41.3	-37.16	154	155	H
4	1881	-62.94	RMS	30.6	-45	-15.6	11.8	.3	-80.84	-63.3	-17.54	295	155	V
5	2724	-65.1	RMS	32.4	-44.9	-15.6	11.8	.2	-81.2	-61.3	-19.9	207	155	V
6	5552	-67.45	RMS	34.8	-42.1	-15.6	11.8	2	-76.55	-41.3	-35.25	53	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

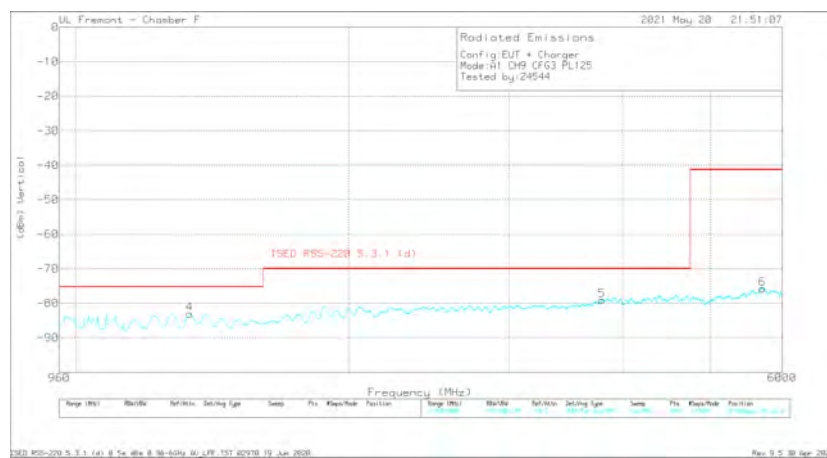
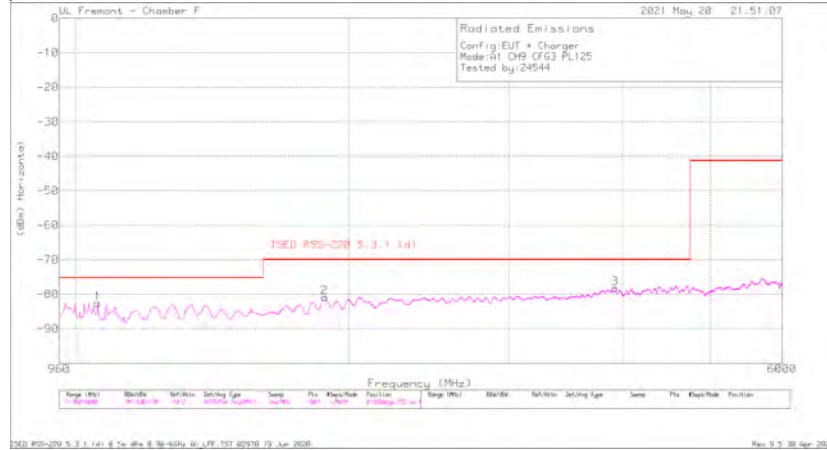
9.6.1.2. RSS-220 5.3.1 (d)**ANT. 0, CH9, CONFIG 3****Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LFP (dB)	Corrected Reading (dBm)	ISSED RSS-220 5.3.1 (d)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1083	-61.24	RMS	27.4	-45.4	-15.6	11.8	.2	-82.84	-75.3	-7.54	119	155	H
2	1877	-63.16	RMS	30.8	-45	-15.6	11.8	.3	-80.86	-70	-10.86	360	155	H
3	3924	-66.2	RMS	33.7	-42.6	-15.6	11.8	.5	-78.4	-70	-8.4	206	155	H
4	1035	-61.36	RMS	27	-45.2	-15.6	11.8	.2	-83.16	-75.3	-7.86	154	155	V
5	2902	-65.59	RMS	32.5	-44.5	-15.6	11.8	.3	-81.09	-70	-11.09	220	155	V
6	4585	-64.87	RMS	34.1	-43.7	-15.6	11.8	.5	-77.77	-70	-7.77	1	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

ANT. 1, CH9, CONFIG 3



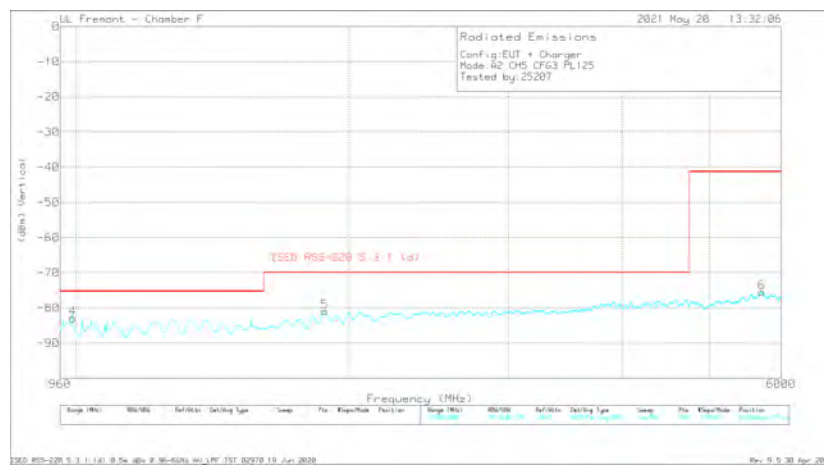
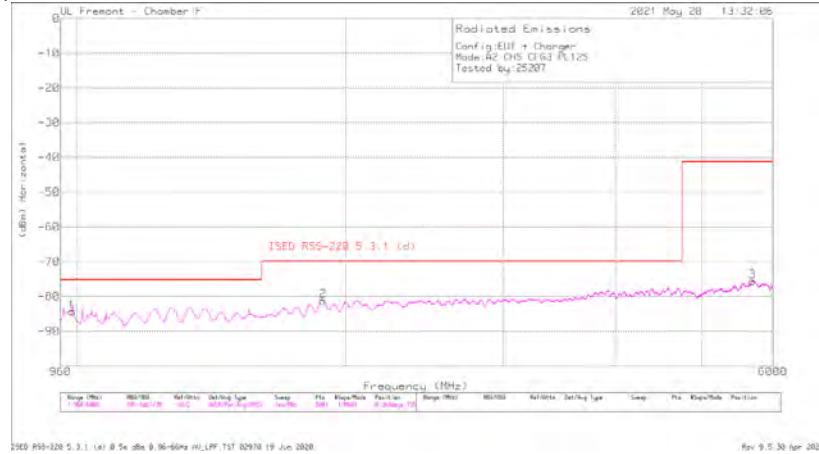
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	AF (dBm)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188156 LPF (dB)	Corrected Reading (dBm)	ISED RSS-220 5.3.1 (d)	Margin (dB)	Altitude (Deps)	Height (cm)	Polarity
1	1059	-60.34	RMS	26.8	-45.4	-15.6	11.8	.2	-82.54	-75.3	-7.24	198	155	H
2	1881	-62.94	RMS	30.6	-45	-15.6	11.8	.3	-80.84	-70	-10.84	88	155	H
3	3928	-66.39	RMS	33.7	-42.3	-15.6	11.8	.5	-78.29	-70	-8.29	1	155	H
4	1337	-63.08	RMS	29	-45.3	-15.6	11.8	.1	-83.08	-75.3	-7.78	97	155	V
5	3798	-66.02	RMS	33.7	-43.4	-15.6	11.8	.4	-79.12	-70	-9.12	97	155	V
6	5707	-67.23	RMS	34.9	-41.6	-15.6	11.8	.2	-75.73	-41.3	-34.43	207	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

ANT. 2, CH5, CONFIG 3



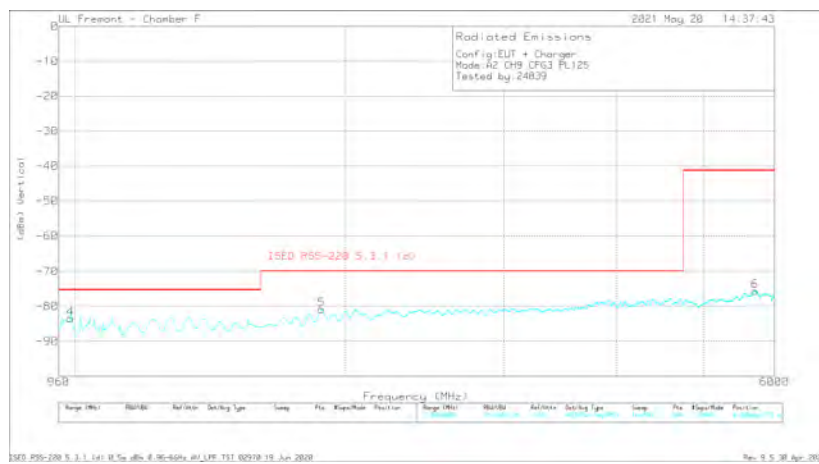
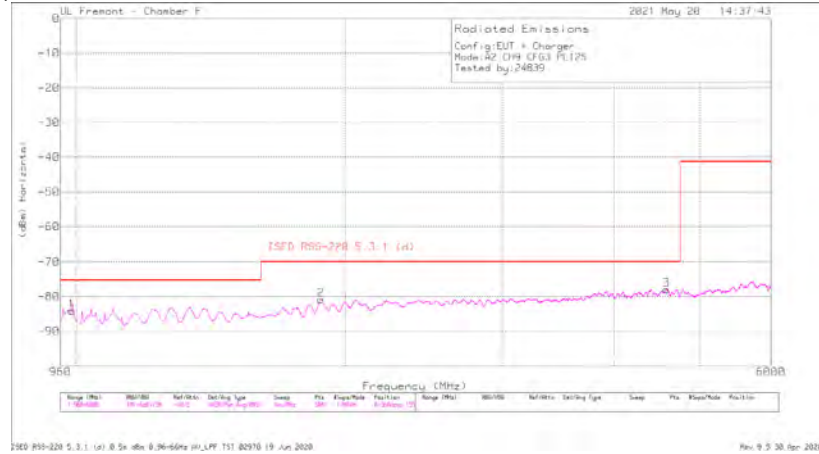
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	AF (dBm)	Ampl/Chl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LFP (dB)	Corrected Reading (dBm)	ISED RSS-220 5.3.1 (d)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	969	-63.49	RMS	27.8	-45.1	-15.6	11.8	.2	-84.39	-75.3	-9.09	141	155	H
2	1886	-63.43	RMS	30.8	-45.1	-15.6	11.8	.3	-81.23	-70	-11.23	272	155	H
3	5693	-67.15	RMS	34.9	-41.6	-15.6	11.8	2	-75.65	-41.3	-34.35	359	155	H
4	992	-62.16	RMS	27.9	-45.1	-15.6	11.8	2	-82.96	-75.3	-7.66	175	155	V
5	1880	-63.07	RMS	30.6	-45	-15.6	11.8	.3	-80.97	-70	-10.97	110	155	V
6	5712	-67.08	RMS	34.9	-41.5	-15.6	11.8	2	-75.48	-41.3	-34.18	1	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH5 fundamental signal.

ANT. 2, CH9, CONFIG 3



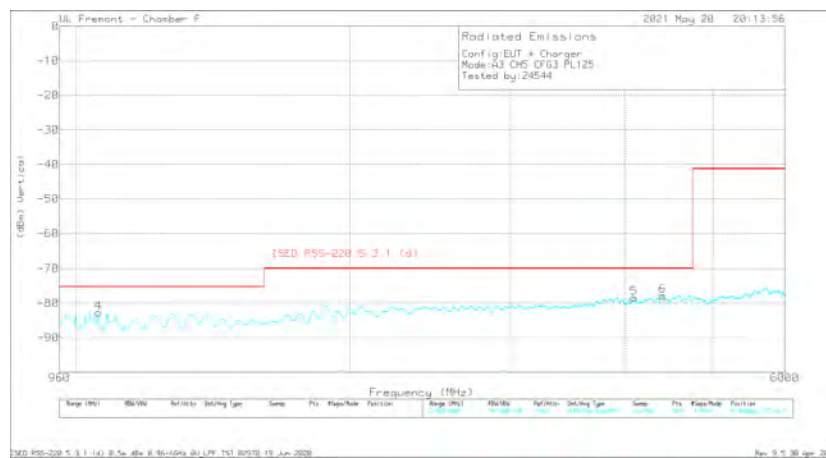
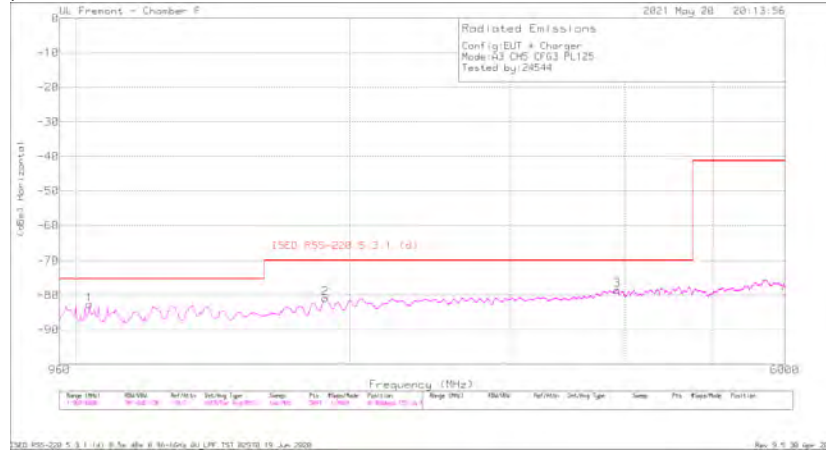
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	Corrected Reading (dBm)	ISSED RSS-220 5.3.1 (d)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	989	-63.2	RMS	27.8	-45.1	-15.6	11.8	.2	-84.1	-75.3	-8.8	141	155	H
2	1880	-62.96	RMS	30.6	-45	-15.6	11.8	.3	-80.86	-70	-10.86	273	155	H
3	4581	-64.98	RMS	34.1	-43.8	-15.6	11.8	.5	-77.98	-70	-7.98	141	155	H
4	989	-62.63	RMS	27.8	-45.1	-15.6	11.8	.2	-83.53	-75.3	-8.23	175	155	V
5	1880	-62.98	RMS	30.6	-45	-15.6	11.8	.3	-80.88	-70	-10.88	154	155	V
6	5705	-67.14	RMS	34.9	-41.6	-15.6	11.8	2	-75.64	-41.3	-34.34	22	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

ANT. 3, CH5, CONFIG 3



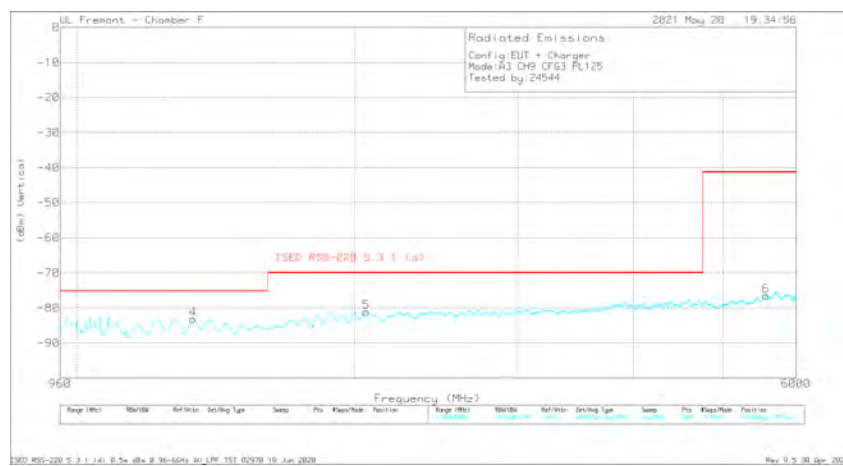
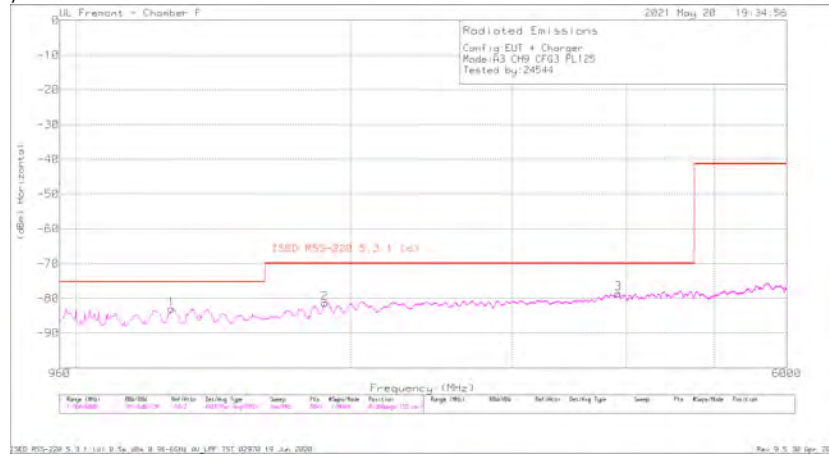
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LFP (dB)	Corrected Reading (dBm)	ISD RSS-220 S.3.1 (d)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1036	-60.86	RMS	26.9	-45.2	-15.6	11.8	.2	-82.76	-75.3	-7.46	207	155	H
2	1879	-63.08	RMS	30.7	-45	-15.6	11.8	.3	-80.88	-70	-10.88	360	155	H
3	3929	-66.66	RMS	33.7	-42.2	-15.6	11.8	.5	-78.46	-70	-8.46	339	155	H
4	1060	-60.48	RMS	26.8	-45.4	-15.6	11.8	.2	-82.68	-75.3	-7.38	175	155	V
5	4098	-66.14	RMS	33.8	-42.9	-15.6	11.8	.6	-78.44	-70	-8.44	330	155	V
6	4406	-64.79	RMS	33.8	-43.6	-15.6	11.8	.5	-77.89	-70	-7.89	131	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH5 fundamental signal.

ANT. 3, CH9, CONFIG 3

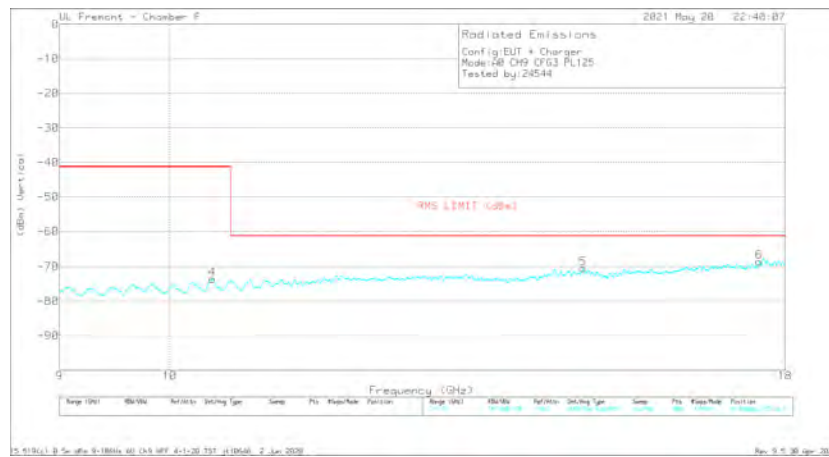
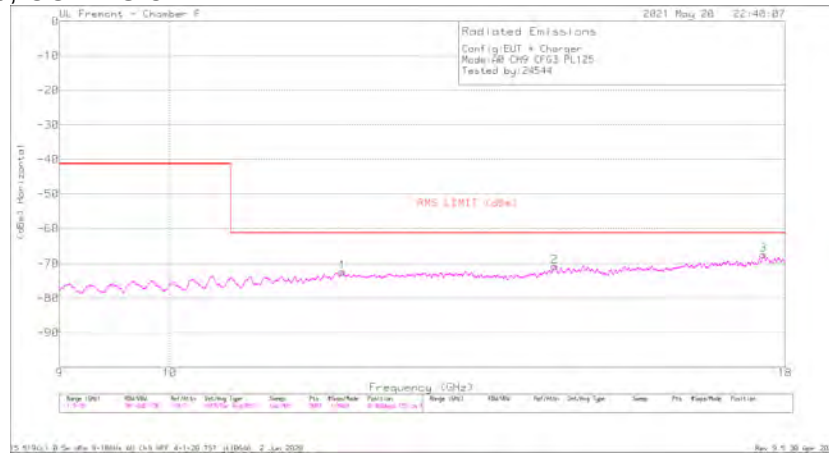


Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBm)	Det	AF (dBm)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	Corrected Reading (dBm)	ISSED RSS-220 5.3.1 (d)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1274	-63.12	RMS	29	-45.3	-15.6	11.8	2	-83.02	-75.3	-7.72	184	155	H
2	1873	-63.51	RMS	30.8	-45.1	-15.6	11.8	3	-81.31	-70	-11.31	317	155	H
3	3924	-66.35	RMS	33.7	-42.6	-15.6	11.8	5	-78.55	-70	-8.55	31	155	H
4	1337	-63.19	RMS	29	-45.3	-15.6	11.8	1	-83.19	-75.3	-7.89	307	155	V
5	2057	-63.47	RMS	31.3	-45.4	-15.6	11.8	3	-81.07	-70	-11.07	66	155	V
6	5564	-67.53	RMS	34.8	-42	-15.6	11.8	2	-76.53	-41.3	-35.23	198	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

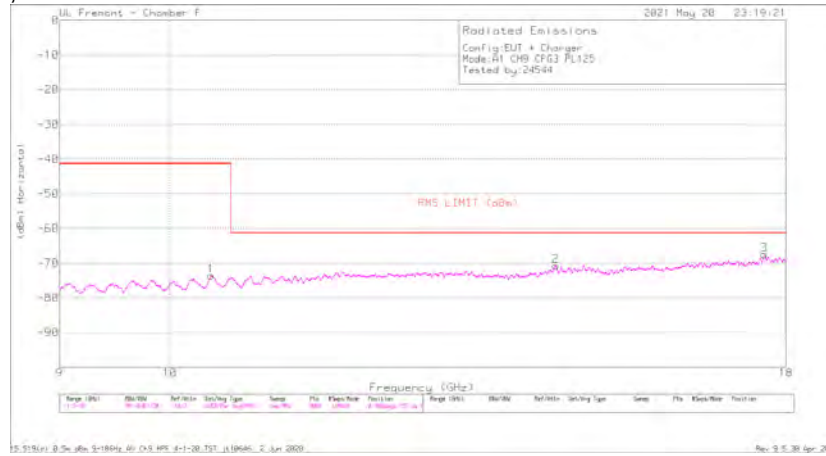
9.6.2. AVERAGE EMISSIONS, 9 – 18 GHz**ANT. 0, CH9, CONFIG 3****Trace Markers**

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	CH9_HPF (dB)	EIRP (dBm)	FCC15.519(c) ERP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	11.797	-70.52	RMS	38.9	-37.5	-15.6	11.8	.5	-72.42	-61.3	-11.12	308	155	H
2	14.444	-71.4	RMS	39.7	-35.5	-15.6	11.8	.3	-70.7	-61.3	-9.4	65	155	H
3	17.634	-70.99	RMS	41.5	-34.6	-15.6	11.8	.5	-67.39	-61.3	-6.09	65	155	H
4	10.415	-69.18	RMS	37.5	-38.1	-15.6	11.8	0	-73.58	-41.3	-32.28	31	155	V
5	14.844	-71.23	RMS	40.1	-36.4	-15.6	11.8	.8	-70.53	-61.3	-9.23	207	155	V
6	17.558	-71.15	RMS	41.5	-35.7	-15.6	11.8	.6	-68.55	-61.3	-7.25	207	155	V

RMS - RMS detection

*Note: Test was performed with a high-pass filter with pass-band frequency starting at 9 GHz to suppress CH9 fundamental signal.

ANT. 1, CH9, CONFIG 3



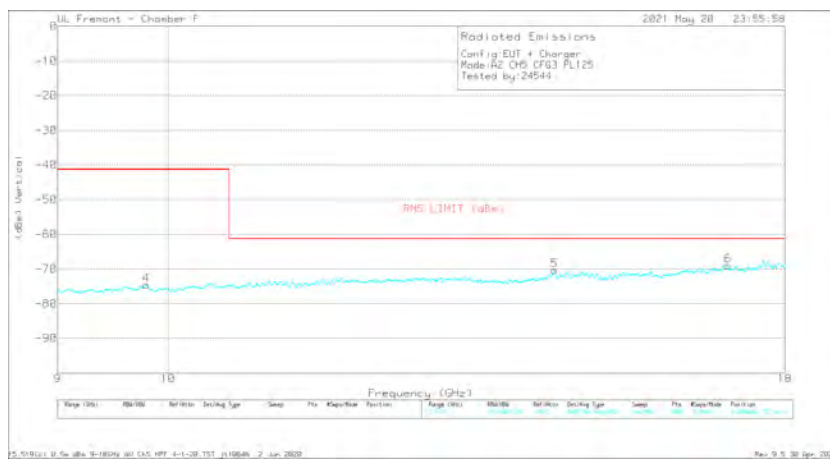
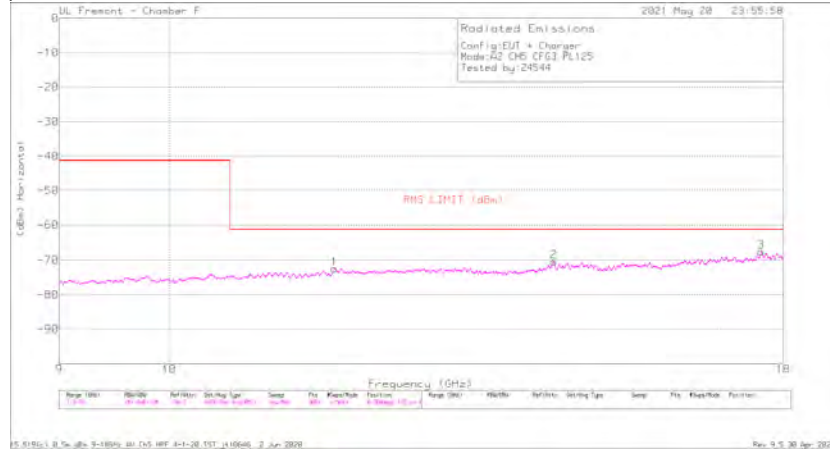
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	CH9 HPF (dB)	EIRP (dBm)	FCC15.519(c) ERP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	10.398	-69.05	RMS	37.4	-38.2	-15.6	11.8	0	-73.65	-41.3	-32.35	74	155	H
2	14.45	-71.7	RMS	39.8	-35.4	-15.6	11.8	.4	-70.7	-61.3	-9.4	119	155	H
3	17.631	-71.05	RMS	41.5	-34.6	-15.6	11.8	.4	-67.55	-61.3	-6.25	184	155	H
4	10.792	-70.44	RMS	37.8	-37.4	-15.6	11.8	0	-73.84	-61.3	-12.54	264	155	V
5	14.835	-71.05	RMS	40	-36.4	-15.6	11.8	.7	-70.55	-61.3	-9.25	286	155	V
6	17.702	-71.2	RMS	41.5	-35.2	-15.6	11.8	.4	-68.3	-61.3	-7	286	155	V

RMS - RMS detection

*Note: Test was performed with a high-pass filter with pass-band frequency starting at 9 GHz to suppress CH9 fundamental signal.

ANT. 2, CH5, CONFIG 3



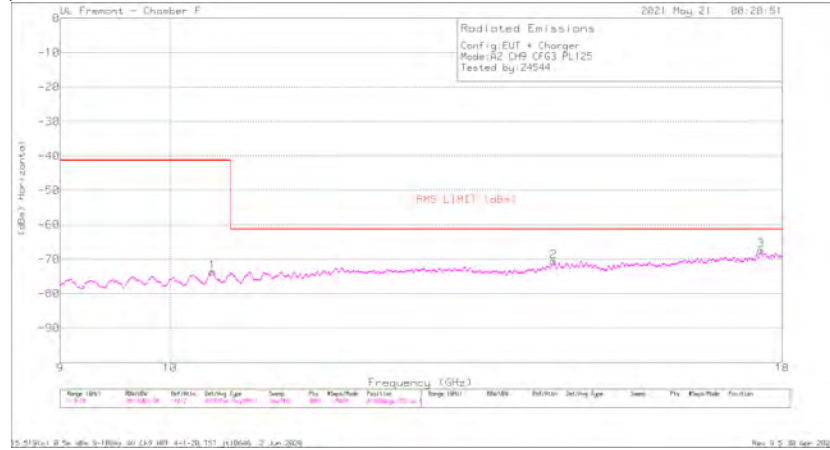
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	CH5 HPF (dB)	EIRP (dBm)	FCC15.519(c) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	11.7145	-70.69	RMS	38.8	-37.4	-15.6	11.8	.6	-72.49	-61.3	-11.19	22	155	H
2	14.452	-71.49	RMS	39.8	-35.4	-15.6	11.8	.5	-70.39	-61.3	-9.09	44	155	H
3	17.628	-71.15	RMS	41.4	-34.6	-15.6	11.8	.6	-67.55	-61.3	-6.25	264	155	H
4	9.791	-69.6	RMS	36.7	-39	-15.6	11.8	1.1	-74.6	-41.3	-33.3	360	155	V
5	14.45	-71.49	RMS	39.8	-35.4	-15.6	11.8	.5	-70.39	-61.3	-9.09	97	155	V
6	17.044	-70.71	RMS	41.3	-36.4	-15.6	11.8	.6	-69.01	-61.3	-7.71	185	155	V

RMS - RMS detection

*Note: Test was performed with a high-pass filter with pass-band frequency starting at 9 GHz to suppress CH5 fundamental signal.

ANT. 2, CH9, CONFIG 3



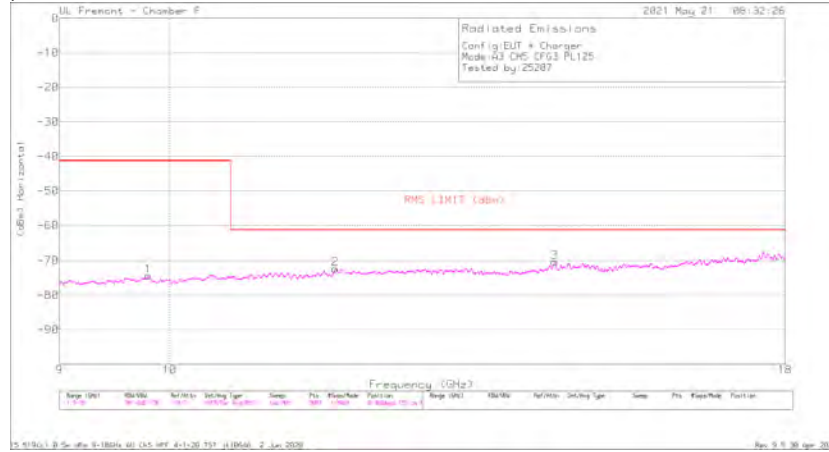
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dBm)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	CH9 HPF (dB)	EIRP (dBm)	FCC15.518(c) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	10.415	-69.19	RMS	37.5	-38.1	-15.6	11.8	0	-73.59	-41.3	-32.29	52	155	H
2	14.45	-71.62	RMS	39.8	-35.4	-15.6	11.8	.4	-70.62	-61.3	-9.32	338	155	H
3	17.634	-70.98	RMS	41.5	-34.6	-15.6	11.8	.5	-67.38	-61.3	-6.08	97	155	H
4	11.795	-70.74	RMS	38.9	-37.4	-15.6	11.8	.5	-72.54	-61.3	-11.24	110	155	V
5	14.839	-71.25	RMS	40.1	-36.4	-15.6	11.8	.8	-70.55	-61.3	-9.25	220	155	V
6	17.556	-70.99	RMS	41.5	-35.8	-15.6	11.8	.5	-68.59	-61.3	-7.29	285	155	V

RMS - RMS detection

*Note: Test was performed with a high-pass filter with pass-band frequency starting at 9 GHz to suppress CH9 fundamental signal.

ANT. 3, CH5, CONFIG 3



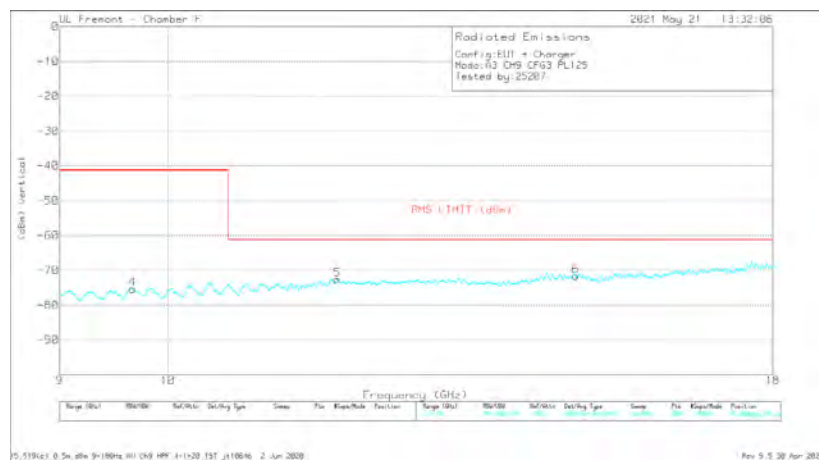
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	CH5_HPF (dB)	EIRP (dBm)	FCC15.519(c) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	9.797	-69.55	RMS	36.7	-38.8	-15.6	11.8	1.1	-74.35	-41.3	-33.05	317	155	H
2	11.713	-70.42	RMS	38.7	-37.5	-15.6	11.8	.6	-72.42	-61.3	-11.12	31	155	H
3	14.443	-71.47	RMS	39.8	-35.5	-15.6	11.8	.6	-70.37	-61.3	-9.07	141	155	H
4	9.798	-69.63	RMS	36.8	-38.8	-15.6	11.8	1.1	-74.33	-41.3	-33.03	176	155	V
5	13.265	-71.04	RMS	39.1	-37	-15.6	11.8	.5	-72.24	-61.3	-10.94	0	155	V
6	17.645	-71.38	RMS	41.5	-35.1	-15.6	11.8	.6	-68.18	-61.3	-6.88	220	155	V

RMS - RMS detection

*Note: Test was performed with a high-pass filter with pass-band frequency starting at 9 GHz to suppress CH5 fundamental signal.

ANT. 3, CH9, CONFIG 3



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	CH9 HPF (dB)	Corrected Reading (dBm)	FCC15.519(c) ERP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	9.642	-69.05	RMS	36.7	-39.2	-15.6	11.8	0	-75.35	-41.3	-34.05	220	155	H
2	11.803	-70.85	RMS	38.9	-37.7	-15.6	11.8	.6	-72.85	-61.3	-11.55	198	155	H
3	14.849	-71.1	RMS	40	-36.6	-15.6	11.8	.7	-70.8	-61.3	-9.5	330	155	H
4	9.662	-68.97	RMS	36.7	-39.3	-15.6	11.8	0	-75.37	-41.3	-34.07	119	155	V
5	11.789	-70.84	RMS	38.9	-37.4	-15.6	11.8	.5	-72.64	-61.3	-11.34	317	155	V
6	14.861	-71.27	RMS	40	-37.1	-15.6	11.8	.5	-71.67	-61.3	-10.37	339	155	V

RMS - RMS detection

*Note: Test was performed with a high-pass filter with pass-band frequency starting at 9 GHz to suppress CH9 fundamental signal.

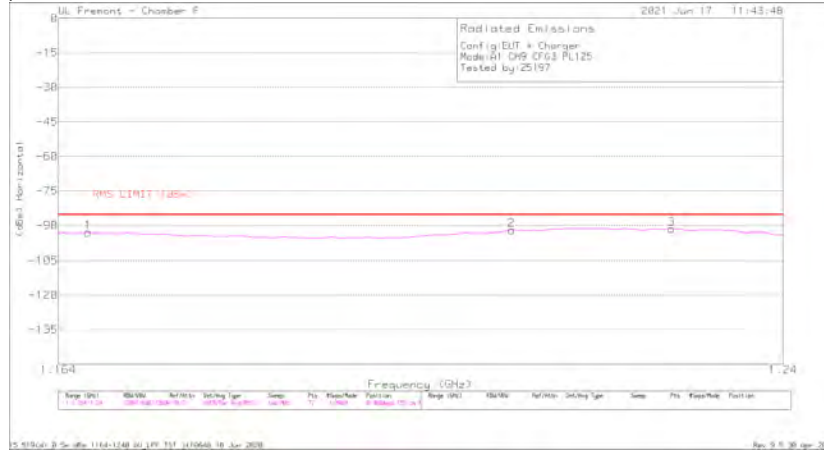
9.6.3. AVERAGE EMISSIONS, 1.164 – 1.240 GHz**ANT. 0, CH9, CONFIG 3****Trace Markers**

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dBm)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	180196 LPF (dB)	EIRP (dBm)	FCC15.519(d) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.166	-72.45	RMS	28.5	-45.4	-15.6	11.8	.2	-92.95	-85.3	-7.65	359	155	H
2	1.22	-71.75	RMS	29.9	-45.3	-15.6	11.8	.2	-90.75	-85.3	-5.45	141	155	H
3	1.223	-72.24	RMS	29.9	-45.3	-15.6	11.8	.2	-91.24	-85.3	-5.94	295	155	H
4	1.17	-72.55	RMS	28.6	-45.4	-15.6	11.8	.2	-92.95	-85.3	-7.65	220	155	V
5	1.213	-72.36	RMS	29.7	-45.2	-15.6	11.8	.2	-91.46	-85.3	-6.16	197	155	V
6	1.221	-72.24	RMS	29.9	-45.3	-15.6	11.8	.2	-91.24	-85.3	-5.94	220	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

ANT. 1, CH9, CONFIG 3



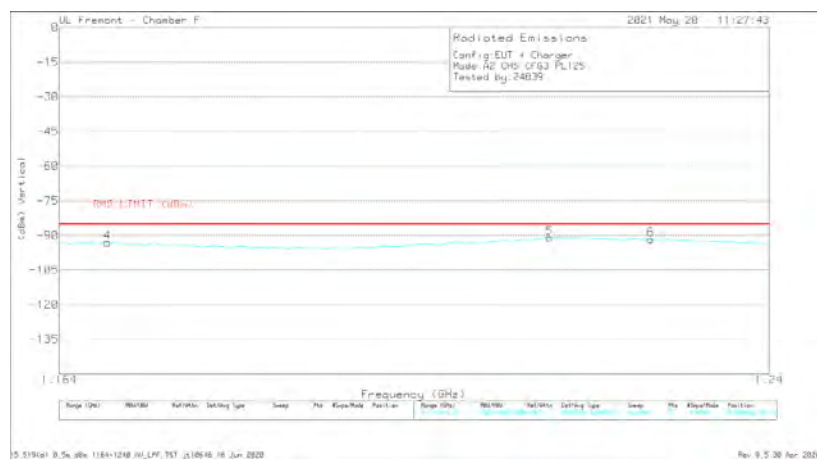
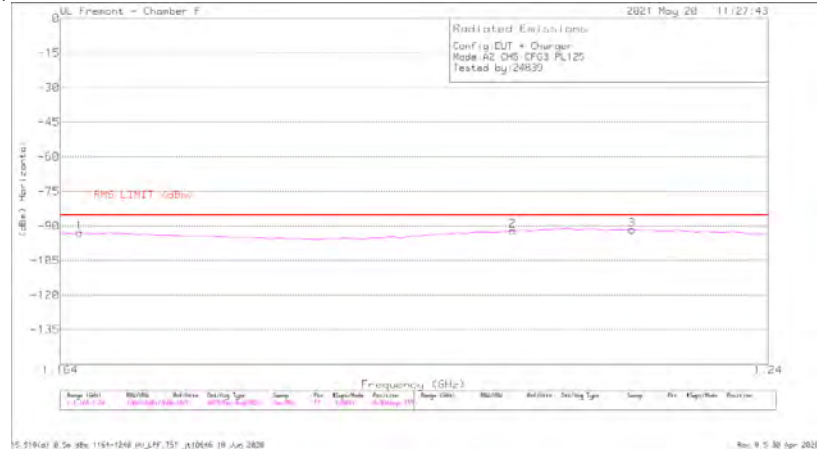
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LFP (dB)	EIRP (dBm)	FCC15.519(d) ERP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.167	-72.55	RMS	28.6	-45.4	-15.6	11.8	.2	-92.95	-85.3	-7.65	132	155	H
2	1.211	-72.73	RMS	29.6	-45.2	-15.6	11.8	.2	-91.93	-85.3	-6.63	220	155	H
3	1.228	-72.24	RMS	29.8	-45.4	-15.6	11.8	.2	-91.44	-85.3	-6.14	220	155	H
4	1.173	-72.48	RMS	28.6	-45.4	-15.6	11.8	.2	-92.88	-85.3	-7.58	229	155	V
5	1.215	-72.64	RMS	29.8	-45.2	-15.6	11.8	.2	-91.64	-85.3	-6.34	31	155	V
6	1.228	-72.51	RMS	29.8	-45.4	-15.6	11.8	.2	-91.71	-85.3	-6.41	273	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

ANT. 2, CH5, CONFIG 3



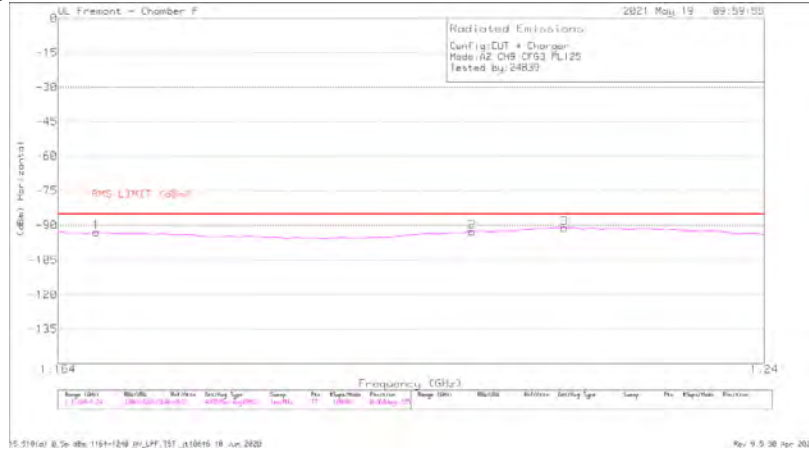
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dBm)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	EIRP (dBm)	FCC15.519(d) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.166	-72.37	RMS	28.5	-45.4	-15.6	11.8	.2	-92.87	-85.3	-7.57	207	155	H
2	1.212	-72.93	RMS	29.7	-45.2	-15.6	11.8	.2	-92.03	-85.3	-6.73	251	155	H
3	1.225	-72.39	RMS	29.8	-45.4	-15.6	11.8	.2	-91.59	-85.3	-6.29	141	155	H
4	1.169	-72.66	RMS	28.6	-45.4	-15.6	11.8	.2	-93.06	-85.3	-7.76	109	155	V
5	1.216	-72.08	RMS	29.9	-45.2	-15.6	11.8	.2	-90.98	-85.3	-5.68	242	155	V
6	1.227	-72.45	RMS	29.8	-45.4	-15.6	11.8	.2	-91.65	-85.3	-6.35	308	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH5 fundamental signal.

ANT. 2, CH9, CONFIG 3



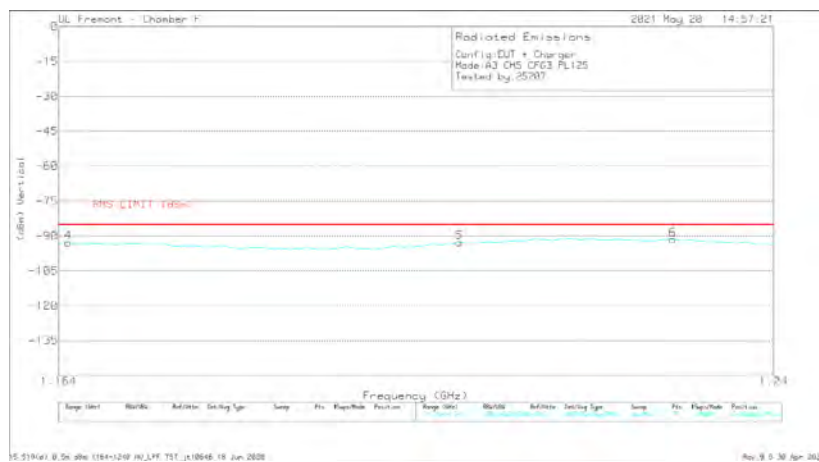
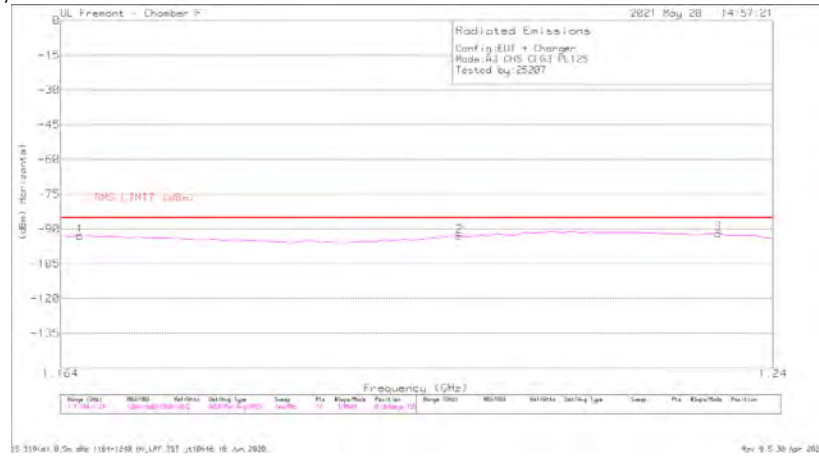
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dBm)	Amp/Chl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	EIRP (dBm)	FCC15.519(d) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.168	-72.57	RMS	28.6	-45.4	-15.6	11.8	-2	-92.97	-85.3	-7.67	317	155	H
2	1.208	-73.26	RMS	29.5	-45.3	-15.6	11.8	-2	-92.66	-85.3	-7.36	53	155	H
3	1.218	-72.29	RMS	29.9	-45.2	-15.6	11.8	-2	-91.19	-85.3	-5.89	207	155	H
4	1.165	-72.77	RMS	28.5	-45.4	-15.6	11.8	-2	-92.77	-85.3	-7.47	66	155	V
5	1.217	-71.91	RMS	29.9	-45.2	-15.6	11.8	-2	-90.81	-85.3	-5.51	109	155	V
6	1.221	-72.26	RMS	29.9	-45.3	-15.6	11.8	-2	-91.26	-85.3	-5.96	66	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

ANT. 3, CH5, CONFIG 3



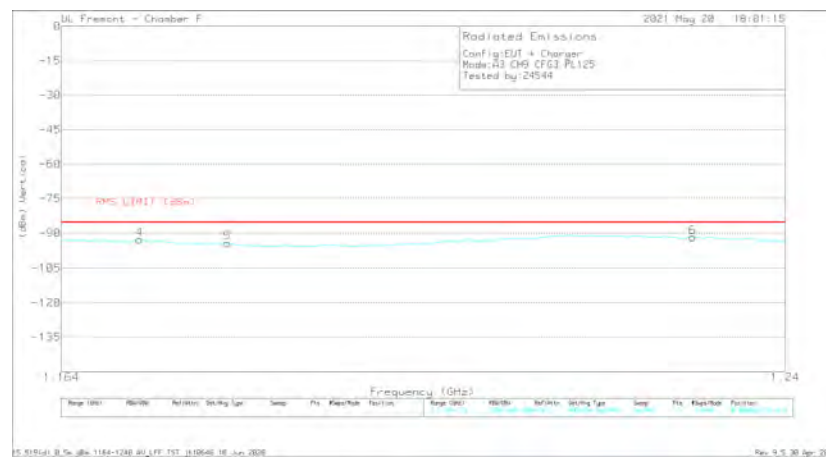
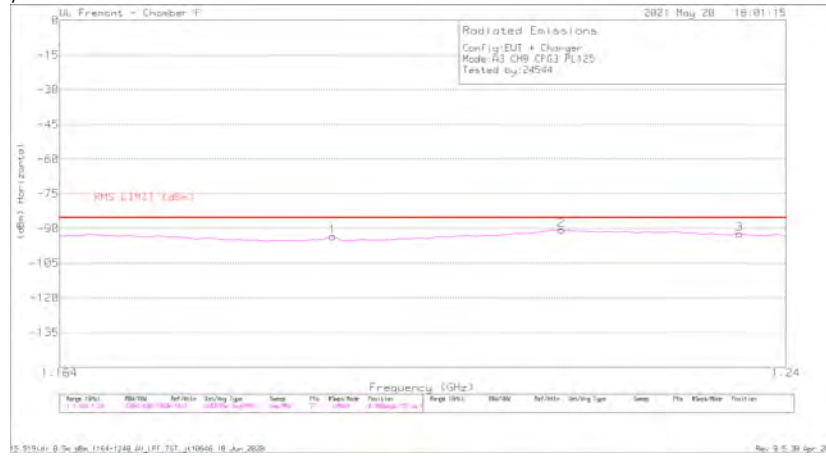
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dBm)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	EIRP (dBm)	FCC15.519(d) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.166	-72.53	RMS	28.5	-45.4	-15.6	11.8	2	-93.03	-85.3	-7.73	163	155	H
2	1.206	-73.91	RMS	29.6	-45.2	-15.6	11.8	2	-93.11	-85.3	-7.81	273	155	H
3	1.234	-72.67	RMS	29.8	-45.4	-15.6	11.8	2	-91.87	-85.3	-6.57	185	155	H
4	1.165	-72.25	RMS	28.5	-45.4	-15.6	11.8	2	-92.75	-85.3	-7.45	88	155	V
5	1.206	-73.53	RMS	29.6	-45.2	-15.6	11.8	2	-92.73	-85.3	-7.43	22	155	V
6	1.229	-72.32	RMS	29.8	-45.4	-15.6	11.8	2	-91.52	-85.3	-6.22	88	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH5 fundamental signal.

ANT. 3, CH9, CONFIG 3



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dBm)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	EIRP (dBm)	FCC15.519(d) ERP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.192	-73.87	RMS	29.2	-45.1	-15.6	11.8	.2	-93.37	-85.3	-8.07	140	155	H
2	1.216	-71.8	RMS	29.9	-45.2	-15.6	11.8	.2	-90.7	-85.3	-5.4	140	155	H
3	1.235	-73.1	RMS	29.8	-45.4	-15.6	11.8	.2	-92.3	-85.3	-7	163	155	H
4	1.172	-72.22	RMS	28.6	-45.4	-15.6	11.8	.2	-92.62	-85.3	-7.32	242	155	V
5	1.181	-74.04	RMS	28.9	-45.4	-15.6	11.8	.2	-94.14	-85.3	-8.84	242	155	V
6	1.23	-72.46	RMS	29.8	-45.4	-15.6	11.8	.2	-91.66	-85.3	-6.36	264	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

9.6.4. AVERAGE EMISSIONS, 1.559 – 1.610 GHz

ANT. 0, CH9, CONFIG 3

**Trace Markers**

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dBm)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	EIRP (dBm)	FCC15.519(d) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.561	-71.42	RMS	27.9	-45.2	-15.6	11.8	.2	-92.32	-85.3	-7.02	163	155	H
2	1.583	-73.14	RMS	27.9	-45.2	-15.6	11.8	.2	-94.04	-85.3	-8.74	229	155	H
3	1.6	-73.94	RMS	28	-45.3	-15.6	11.8	.2	-94.84	-85.3	-9.54	141	155	H
4	1.562	-73.12	RMS	27.9	-45.2	-15.6	11.8	.2	-94.02	-85.3	-8.72	220	155	V
5	1.584	-73.77	RMS	27.9	-45.2	-15.6	11.8	.2	-94.67	-85.3	-9.37	242	155	V
6	1.605	-73.96	RMS	28	-45.3	-15.6	11.8	.2	-94.86	-85.3	-9.56	330	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH5 fundamental signal.

ANT. 1, CH9, CONFIG 3



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dBm)	Amp/Chl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	EIRP (dBm)	FCC15.519(d) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.561	-72.35	RMS	27.9	-45.2	-15.6	11.8	.2	-93.25	-85.3	-7.95	229	155	H
2	1.601	-73.88	RMS	28	-45.3	-15.6	11.8	.2	-94.78	-85.3	-9.48	97	155	H
3	1.604	-73.78	RMS	28	-45.3	-15.6	11.8	.2	-94.68	-85.3	-9.38	207	155	H
4	1.56	-70.96	RMS	27.9	-45.2	-15.6	11.8	.2	-91.86	-85.3	-6.56	197	155	V
5	1.592	-73.78	RMS	28	-45.3	-15.6	11.8	.2	-94.68	-85.3	-9.38	220	155	V
6	1.605	-73.92	RMS	28	-45.3	-15.6	11.8	.2	-94.82	-85.3	-9.52	110	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

ANT. 2, CH5, CONFIG 3



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dBm)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	188196 LPF (dB)	EIRP (dBm)	FCC15.119(d) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.572	-73.13	RMS	28	-45.2	-15.6	11.8	.2	-93.93	-85.3	-8.63	317	155	H
2	1.589	-73.58	RMS	28	-45.3	-15.6	11.8	.2	-94.48	-85.3	-9.18	75	155	H
3	1.605	-73.99	RMS	28	-45.3	-15.6	11.8	.2	-94.89	-85.3	-9.59	338	155	H
4	1.56	-72.71	RMS	27.9	-45.2	-15.6	11.8	.2	-93.61	-85.3	-8.31	198	155	V
5	1.575	-73.28	RMS	28	-45.2	-15.6	11.8	.2	-94.08	-85.3	-8.78	22	155	V
6	1.607	-73.6	RMS	28	-45.3	-15.6	11.8	.2	-94.5	-85.3	-9.2	308	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH5 fundamental signal.

ANT. 2, CH9, CONFIG 3



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	180196 LPF (dB)	EIRP (dBm)	FCC15.519(d) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.56	-72.5	RMS	27.9	-45.2	-15.6	11.8	.2	-93.4	-85.3	-8.1	185	155	H
2	1.581	-73.41	RMS	27.9	-45.3	-15.6	11.8	.2	-94.41	-85.3	-9.11	273	155	H
3	1.607	-73.88	RMS	28	-45.3	-15.6	11.8	.2	-94.78	-85.3	-9.48	31	155	H
4	1.56	-71.63	RMS	27.9	-45.2	-15.6	11.8	.2	-92.53	-85.3	-7.23	176	155	V
5	1.592	-73.88	RMS	28	-45.3	-15.6	11.8	.2	-94.78	-85.3	-9.48	308	155	V
6	1.603	-74.16	RMS	28	-45.3	-15.6	11.8	.2	-95.06	-85.3	-9.76	132	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

0L Fremont - Chamber F

2021 May 20 18:29:28

Radiated Emissions
Config: EUT + Charger
Mode: 43 DMS (76.3) PL125
Tested by: 24544

EMI Horizontal (dBm)

RMS LIMIT (dBm)

0.05 1.51

Frequency (GHz)

Range (GHz)	Mode	Antenna	Setup Type	Swing	Pre	Range/Rule	Position
1.0-1.51 (1)	120MHz (200MHz)	202.0A	200MHz	40dBm	Pre	Range/Rule	Position
1.0-1.51 (1)	120MHz (200MHz)	202.0A	200MHz	40dBm	Pre	Range/Rule	Position

15.751646 V Sw 40W 1575-1618.461 VRF 157 1180446 10 Jun 2008

Rev: 9.5.30 Apr 2008



Marker	Frequency (GHz)	Meter Reading (GHz)	Det	AF (dBm)	Amp/Ctrl (dB)	Dist Correction (dB)	Conversion Factor (dB)	18dB LFP (dB)	EIRP (dBm)	FCCL5.559(dB EIRP RMS dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.561	-72.66	RMS	27.9	-45.2	-15.6	11.8	2	-93.56	-85.3	-8.26	198	155	H
2	1.601	-74.3	RMS	27.9	-45.3	-15.6	11.8	2	-95.2	-85.3	-9.9	1	155	H
3	1.583	-73.55	RMS	27.9	-45.2	-15.6	11.8	2	-94.45	-85.3	-9.15	154	155	H
4	1.56	-72.64	RMS	27.9	-45.2	-15.6	11.8	2	-93.54	-85.3	-8.24	185	155	V
5	1.585	-73.52	RMS	27.9	-45.2	-15.6	11.8	2	-94.42	-85.3	-9.12	295	155	V
6	1.6	-73.96	RMS	28	-45.3	-15.6	11.8	2	-94.86	-85.3	-9.56	295	155	V

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH5 fundamental signal.

ANT. 3, CH9, CONFIG 3



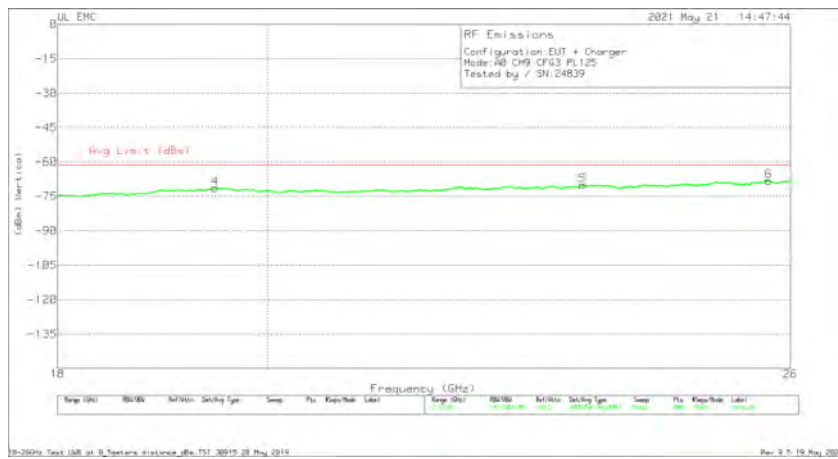
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dBm)	Amp/Cbl (dB)	Dist Correction (dB)	Conversion Factor (dB)	180196 LPF (dB)	EIRP (dBm)	FCC15.519(d) EIRP RMS (dBm)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.57	-72.8	RMS	28	-45.2	-15.6	11.8	.2	-93.6	-85.3	-8.3	162	155	H
2	1.589	-73.86	RMS	28	-45.3	-15.6	11.8	.2	-94.76	-85.3	-9.46	141	155	H
3	1.596	-73.86	RMS	28	-45.2	-15.6	11.8	.2	-94.66	-85.3	-9.36	97	155	H
4	1.561	-70.54	RMS	27.9	-45.2	-15.6	11.8	.2	-91.44	-85.3	-6.14	176	155	V
5	1.585	-73.46	RMS	27.9	-45.2	-15.6	11.8	.2	-94.36	-85.3	-9.06	1	155	V
6	1.599	-73.97	RMS	28	-45.2	-15.6	11.8	.2	-94.77	-85.3	-9.47	1	155	V

RMS - RMS detection

*Note: Test was performed with a low-pass filter with cutoff frequency at 5.4 GHz to suppress CH9 fundamental signal.

ANT. 0, CH9, CONFIG 3



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Conversion Factor (dB)	EIRP (dBm)	Avg Limit (dBm)	Margin (dB)
1	19.495	-81.96	RMS	32.6	-17.9	-15.6	11.8	-71.06	-61.3	-9.76
2	22.607	-81.45	RMS	34.1	-18.8	-15.6	11.8	-70.75	-61.3	-9.45
3	25.708	-80.56	RMS	33.4	-19	-15.6	11.8	-68.16	-61.3	-6.86
4	19.498	-82.35	RMS	32.6	-17.8	-15.6	11.8	-71.35	-61.3	-10.05
5	23.421	-81.54	RMS	33.8	-18.5	-15.6	11.8	-70.04	-61.3	-8.74
6	25.717	-80.54	RMS	34.1	-18	-15.6	11.8	-68.24	-61.3	-6.94

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UL EMC 2021 May 21 17:24:21

RF Emissions:
Configuration: EUT + Charger
Model: A1 CH9 CF63 PL125
Tested by: / SN: 24839

Avg Limit LdBm/Hz

1 2 3

LdBm/Hz

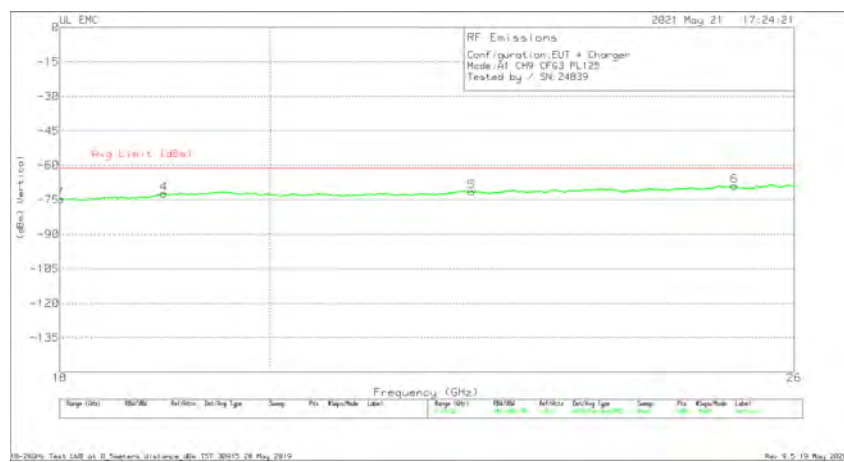
Frequency (GHz)

Range (GHz)	BW (dB)	RefLevel	Scaling Type	Sweep	Pwr	Repetitions	Label	VerComp
18-26	40-48	100	dBm/Hz	Step	100	100		

18 26

00-26264 Test IAR at 0 Southern distance_00_011 30015 20 May 2019

Rev: 5.5-19 May 2019



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Conversion Factor (dB)	EIRP (dBm)	Avg Limit (dBm)	Margin (dB)
1	19.131	-82.14	RMS	32.7	-18.7	-15.6	11.8	-71.94	-61.3	-10.64
2	19.572	-81.87	RMS	32.7	-18.6	-15.6	11.8	-71.57	-61.3	-10.27
3	20.189	-81.85	RMS	32.6	-19.6	-15.6	11.8	-72.65	-61.3	-11.35
4	19.964	-82.01	RMS	32.5	-19	-15.6	11.8	-72.31	-61.3	-11.01
5	22.121	-82.11	RMS	33.3	-18.8	-15.6	11.8	-71.41	-61.3	-10.11
6	25.231	-81.69	RMS	34.2	-17.6	-15.6	11.8	-68.89	-61.3	-7.59

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UL EMC 2021 May 21 17:44:52

RF Emissions
Configuration EUT 4 Charger
Made R2 CH5 CF63 PL125
Tested by / SN:24544

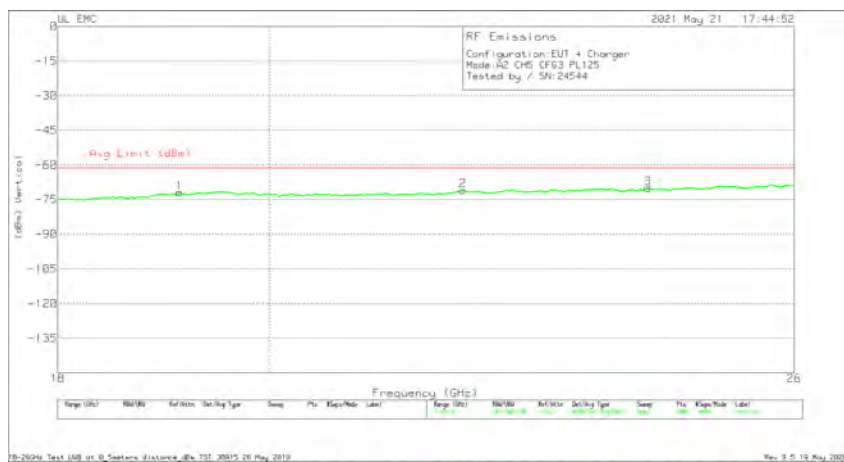
Avg Limit (dotted)

4 5 6

Frequency (GHz)

Range (GHz)	ResBW	RefSens	DetType	SwType	Pre	PostProc	Label	Range (GHz)	ResBW	RefSens	DetType	SwType	Pre	PostProc	Label
18-26	90kHz	-150dBm	EN61010-1	EN61010-1	None	None	None	18-26	90kHz	-150dBm	EN61010-1	EN61010-1	None	None	None

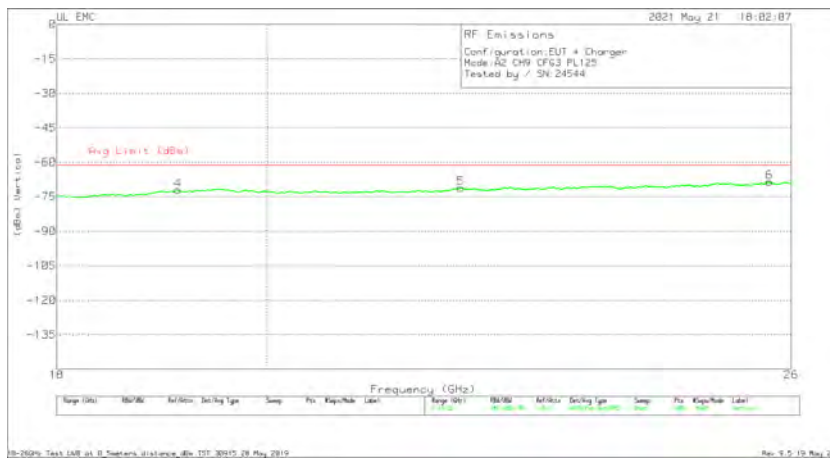
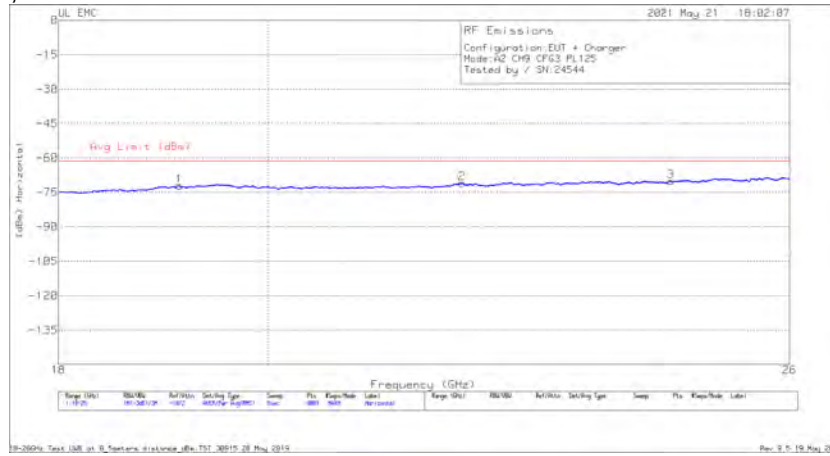
78-26294 Test Lab at R_Software distance_0m TSI 30015 08 May 2019 Rev. 3.5 F2 May 2019



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Conversion Factor (dB)	EIRP (dBm)	Avg Limit (dBm)	Margin (dB)
4	19.13	-82.44	RMS	32.7	-18.7	-15.6	11.8	-72.24	-61.3	-10.94
5	23.057	-81.67	RMS	33.4	-18.1	-15.6	11.8	-70.67	-61.3	-9.37
6	25.737	-80.77	RMS	34.1	-18.6	-15.6	11.8	-68.57	-61.3	-7.27
1	19.29	-82.14	RMS	32.7	-18.7	-15.6	11.8	-71.94	-61.3	-10.64
2	22.036	-81.72	RMS	33.3	-18.8	-15.6	11.8	-71.02	-61.3	-9.72
3	24.169	-82.4	RMS	33.7	-17.5	-15.6	11.8	-70.1	-61.3	-8.7

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ANT. 2, CH9, CONFIG 3

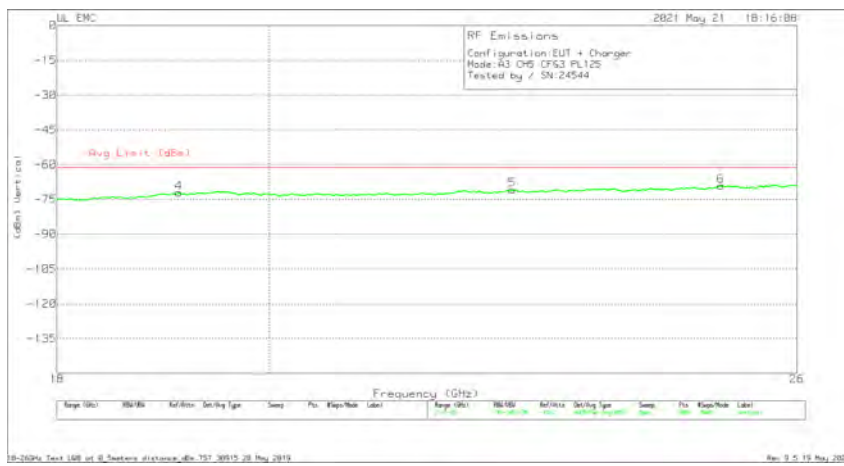
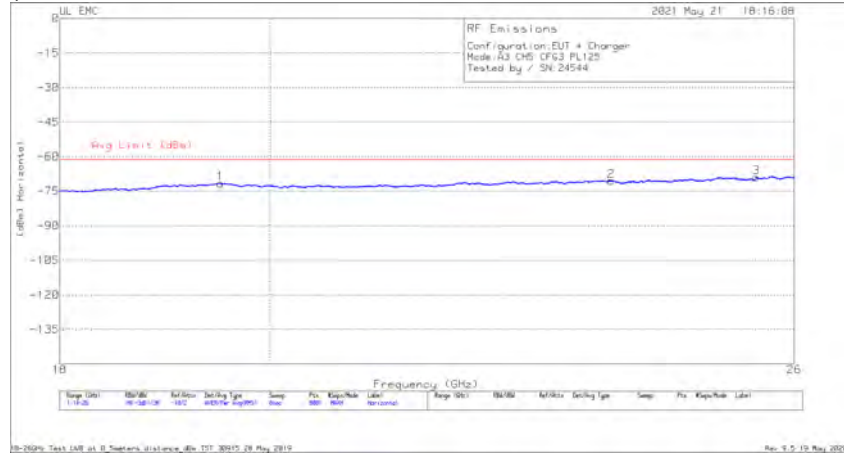


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Conversion Factor (dB)	EIRP (dBm)	Avg Limit (dBm)	Margin (dB)
1	19.128	-82.24	RMS	32.7	-18.7	-15.6	11.8	-72.04	-61.3	-10.74
2	22.05	-81.63	RMS	33.3	-18.8	-15.6	11.8	-70.93	-61.3	-9.63
3	24.491	-82.61	RMS	33.8	-17.5	-15.6	11.8	-70.11	-61.3	-8.81
4	19.127	-82.24	RMS	32.7	-18.7	-15.6	11.8	-72.04	-61.3	-10.74
5	22.034	-81.78	RMS	33.3	-18.9	-15.6	11.8	-71.18	-61.3	-9.88
6	25.714	-80.84	RMS	34.1	-18	-15.6	11.8	-68.54	-61.3	-7.24

RMS - RMS detection

ANT. 3, CH5, CONFIG 3

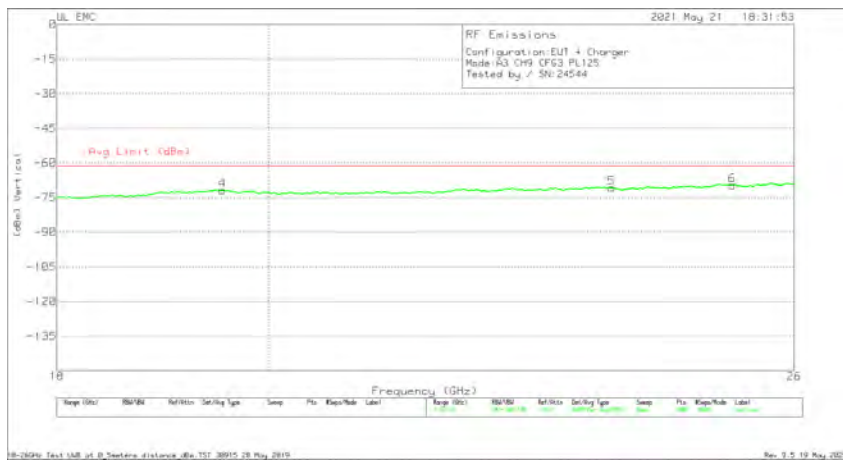
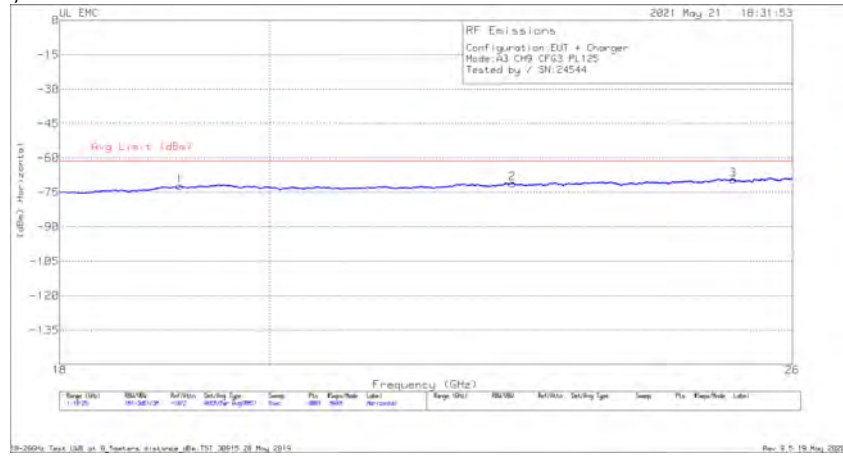


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Conversion Factor (dB)	EIRP (dBm)	Avg Limit (dBm)	Margin (dB)
1	19.509	-82.36	RMS	32.6	-18	-15.6	11.8	-71.56	-61.3	-10.26
2	23.722	-82.11	RMS	33.7	-18.3	-15.6	11.8	-70.51	-61.3	-9.21
3	25.509	-81.84	RMS	34.1	-17.4	-15.6	11.8	-68.94	-61.3	-7.64
4	19.123	-82.41	RMS	32.7	-18.6	-15.6	11.8	-72.11	-61.3	-10.81
5	22.571	-81.71	RMS	33.4	-18.7	-15.6	11.8	-70.81	-61.3	-9.51
6	25.034	-81.86	RMS	34.1	-17.6	-15.6	11.8	-69.16	-61.3	-7.86

RMS - RMS detection

ANT. 3, CH9, CONFIG 3



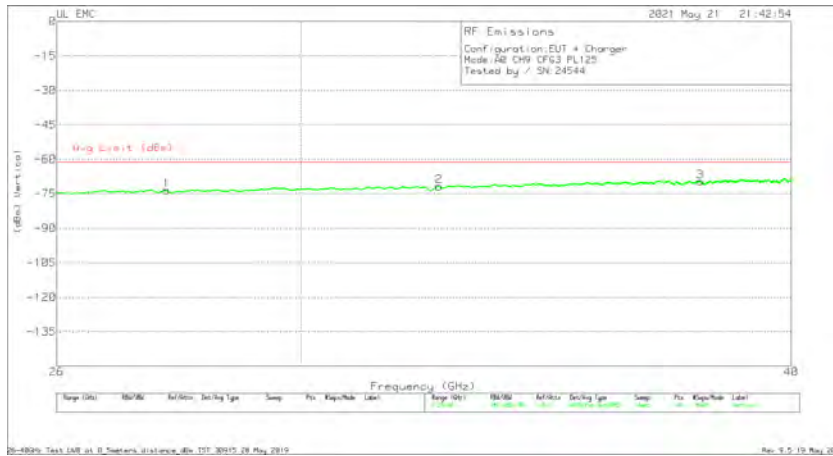
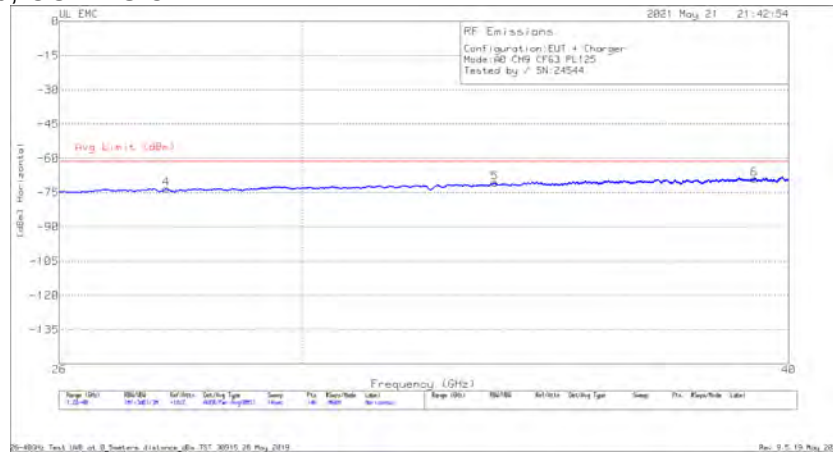
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Conversion Factor (dB)	EIRP (dBm)	Avg Limit (dBm)	Margin (dB)
1	19.119	-82.36	RMS	32.7	-18.7	-15.6	11.8	-72.16	-61.3	-10.86
2	22.592	-82.2	RMS	33.4	-18.5	-15.6	11.8	-71.1	-61.3	-9.8
3	25.238	-82.24	RMS	34.2	-17.6	-15.6	11.8	-69.44	-61.3	-8.14
4	19.55	-82.43	RMS	32.7	-18.3	-15.6	11.8	-71.83	-61.3	-10.53
5	23.735	-82.73	RMS	33.7	-18	-15.6	11.8	-70.83	-61.3	-9.53
6	25.211	-82.33	RMS	34.2	-17.8	-15.6	11.8	-69.73	-61.3	-8.43

RMS - RMS detection

9.6.6. AVERAGE EMISSIONS, 26 – 40 GHz

ANT. 0, CH9, CONFIG 3

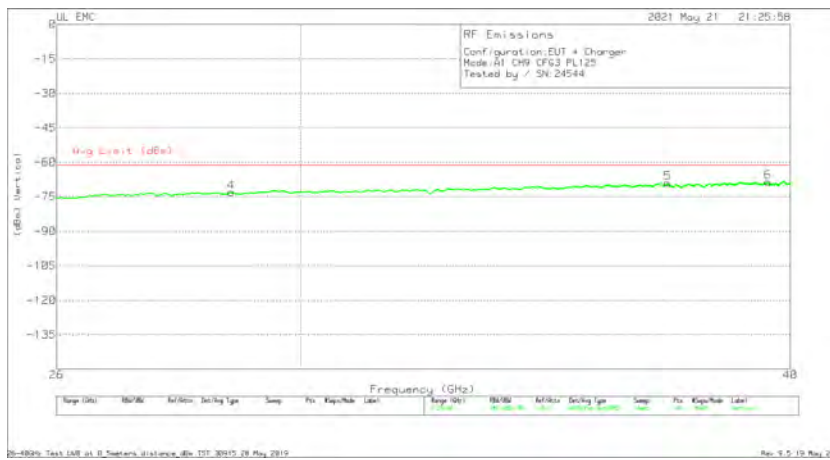
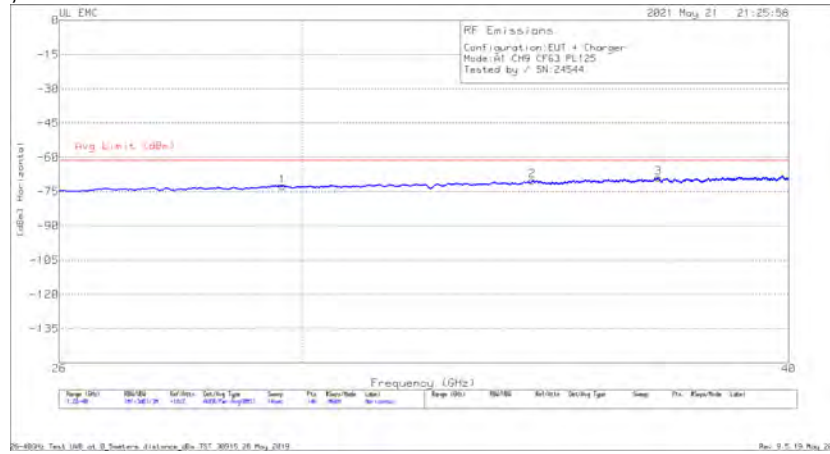


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Conversion Factor (dB)	EIRP (dBm)	Avg Limit (dBm)	Margin (dB)
4	27.693	-78.67	RMS	36	-26.8	-15.6	11.8	-73.27	-61.3	-11.97
5	33.628	-79.76	RMS	37.2	-24.3	-15.6	11.8	-70.66	-61.3	-9.36
6	39.197	-81.52	RMS	38.5	-22.2	-15.6	11.8	-69.02	-61.3	-7.72
1	27.731	-78.76	RMS	35.9	-26.8	-15.6	11.8	-73.46	-61.3	-12.16
2	32.532	-79.89	RMS	37.2	-25.3	-15.6	11.8	-71.79	-61.3	-10.49
3	37.917	-80.86	RMS	38.1	-23.1	-15.6	11.8	-69.66	-61.3	-8.36

RMS - RMS detection

ANT. 1, CH9, CONFIG 3



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Conversion Factor (dB)	EIRP (dBm)	Avg Limit (dBm)	Margin (dB)
1	29.664	-80.72	RMS	36.9	-24.9	-15.6	11.8	-72.52	-61.3	-11.22
2	34.377	-79.67	RMS	37.5	-24.2	-15.6	11.8	-70.17	-61.3	-8.87
3	37.032	-80.33	RMS	38.1	-22.9	-15.6	11.8	-68.93	-61.3	-7.63
4	29.805	-80.23	RMS	36.2	-25.2	-15.6	11.8	-73.03	-61.3	-11.73
5	37.215	-80.06	RMS	38.2	-23.3	-15.6	11.8	-68.96	-61.3	-7.66
6	39.477	-81.21	RMS	38.2	-21.7	-15.6	11.8	-68.51	-61.3	-7.21
1	29.664	-80.72	RMS	36.9	-24.9	-15.6	11.8	-72.52	-61.3	-11.22

RMS - RMS detection

UL EMC 2021 May 21 19:58:11

RF Emissions
Configuration: EUT + Charger
Model: A2 C45 CF63 PL125
Tested by / SN: 24544

-60 dBm/Hz (dBr)

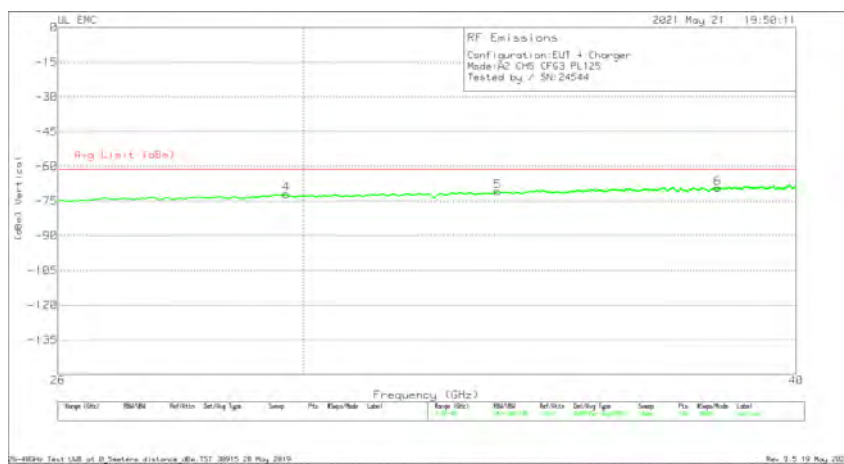
1 2 3

Frequency (GHz)

Range (GHz)	RBW (Hz)	Ref. Level	Det. Type	Sweep	Pre	Post	Label	Range (GHz)	RBW (Hz)	Ref. Level	Det. Type	Sweep	Pre	Post	Label
0.0 to 4.0	90 kHz	-100	ANALOG	100	10	10	Normal	0.0 to 4.0	90 kHz	-100	ANALOG	100	10	10	Normal

20-40000 Test LAB at 0 Southern distance_001 015 30015 20 May 2019

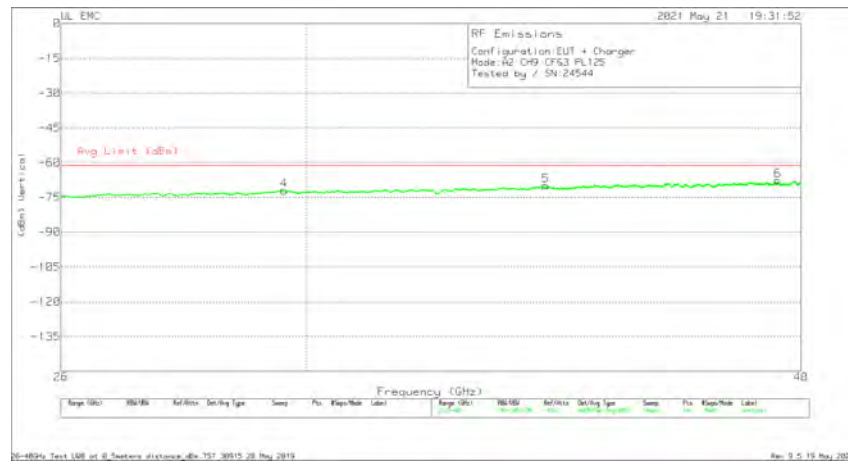
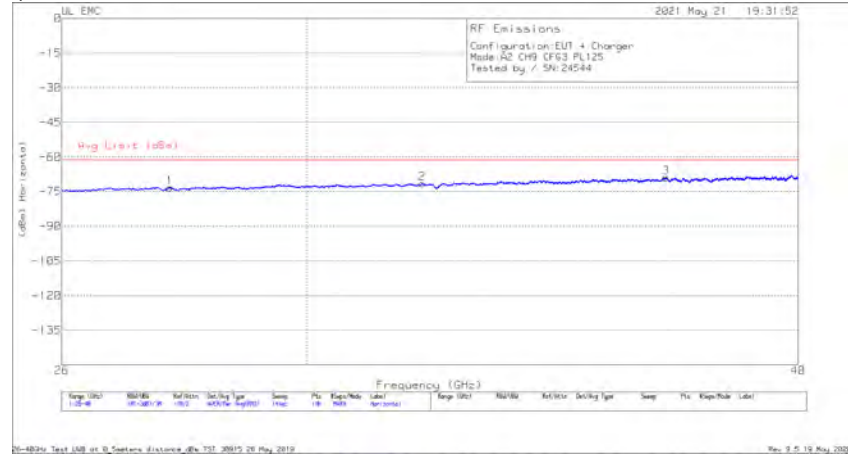
Rev: 5.5-19 May 2019



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Conversion Factor (dB)	EIRP (dBm)	Avg Limit (dBm)	Margin (dB)
1	27.485	-77.78	RMS	36	-27.5	-15.6	11.8	-73.08	-61.3	-11.78
2	32.519	-79.67	RMS	37.3	-25.2	-15.6	11.8	-71.37	-61.3	-10.07
3	37.873	-80.71	RMS	38.1	-22.7	-15.6	11.8	-69.11	-61.3	-7.81
4	245.705	-80.02	RMS	36.8	-25	-15.6	11.8	-70.72	-61.3	-9.42
5	33.608	-79.87	RMS	37.3	-24.4	-15.6	11.8	-70.77	-61.3	-9.47
6	38.208	-80.59	RMS	39.1	-23.1	-15.6	11.8	-69.39	-61.3	-8.09

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ANT. 2, CH9, CONFIG 3

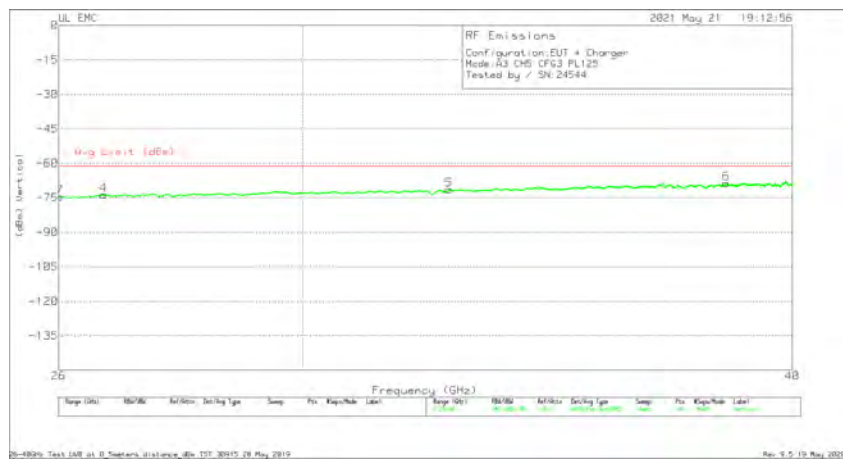
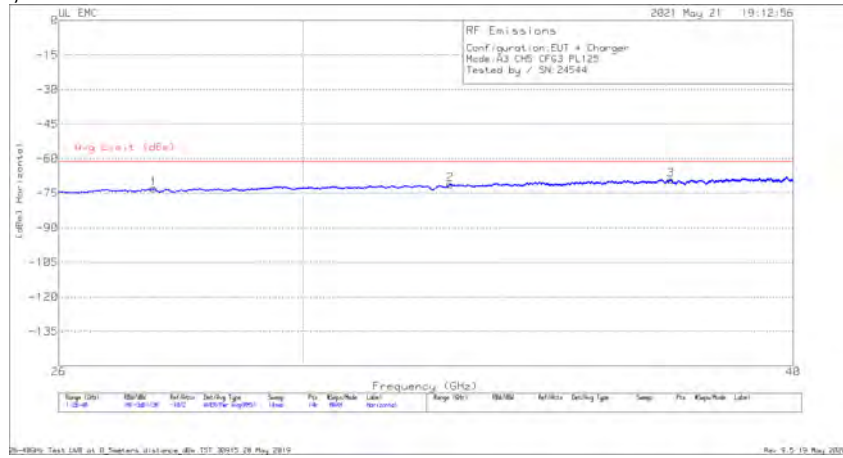


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Conversion Factor (dB)	EIRP (dBm)	Avg Limit (dBm)	Margin (dB)
1	27.697	-78.75	RMS	36	-26.8	-15.6	11.8	-73.35	-61.3	-12.05
2	32.1	-79.55	RMS	36.9	-25	-15.6	11.8	-71.45	-61.3	-10.15
3	37.02	-80.28	RMS	38.1	-22.9	-15.6	11.8	-68.88	-61.3	-7.58
4	29.603	-80.61	RMS	37.2	-24.8	-15.6	11.8	-72.01	-61.3	-10.71
5	34.469	-79.88	RMS	37.5	-23.7	-15.6	11.8	-69.88	-61.3	-8.58
6	39.461	-80.66	RMS	38.3	-21.5	-15.6	11.8	-67.66	-61.3	-6.36

RMS - RMS detection

ANT. 3, CH5, CONFIG 3

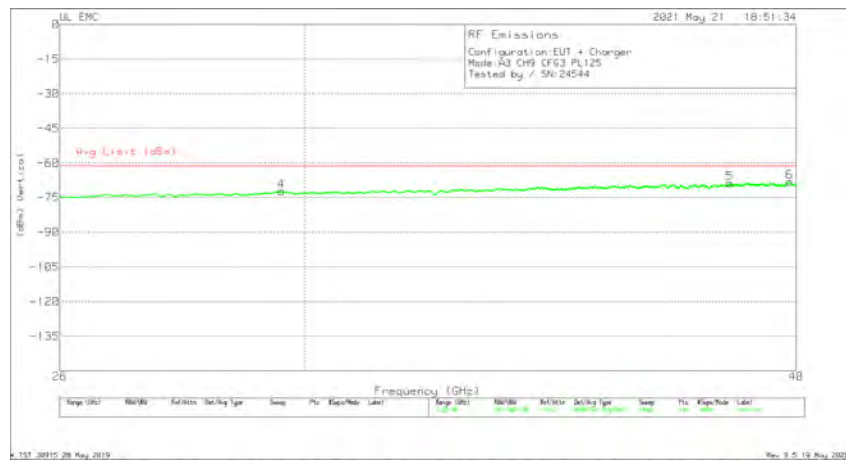
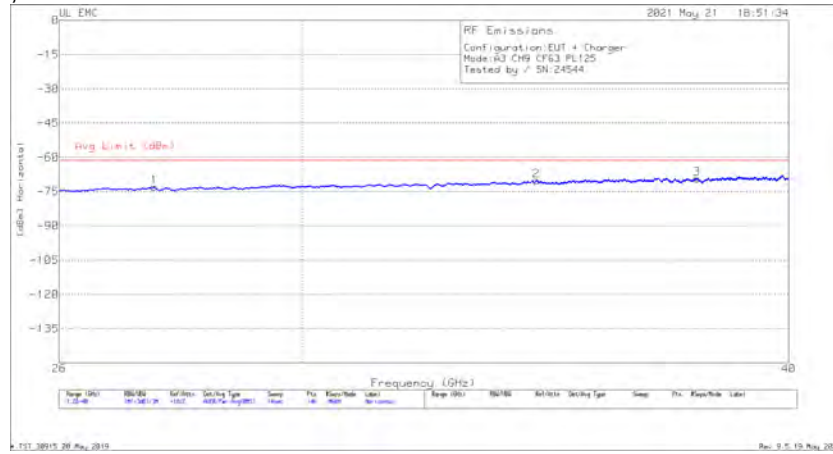


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Conversion Factor (dB)	EIRP (dBm)	Avg Limit (dBm)	Margin (dB)
1	27.493	-77.89	RMS	36.1	-27.3	-15.6	11.8	-72.89	-61.3	-11.59
2	32.705	-79.75	RMS	37.4	-25	-15.6	11.8	-71.15	-61.3	-9.85
3	37.224	-80.13	RMS	38.2	-23.4	-15.6	11.8	-69.13	-61.3	-7.83
4	26.695	-76.85	RMS	35.9	-28.9	-15.6	11.8	-73.65	-61.3	-12.35
5	32.693	-80.14	RMS	37.4	-24.9	-15.6	11.8	-71.44	-61.3	-10.14
6	38.473	-80.94	RMS	38.4	-22.3	-15.6	11.8	-68.64	-61.3	-7.34

RMS - RMS detection

ANT. 3, CH9, CONFIG 3



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Conversion Factor (dB)	EIRP (dBm)	Avg Limit (dBm)	Margin (dB)
1	27.498	-77.99	RMS	36.1	-27.3	-15.6	11.8	-72.99	-61.3	-11.69
2	34.462	-80.07	RMS	37.5	-23.8	-15.6	11.8	-70.17	-61.3	-8.87
3	37.889	-80.82	RMS	38.1	-22.8	-15.6	11.8	-69.32	-61.3	-8.02
4	29.596	-80.73	RMS	37.2	-24.9	-15.6	11.8	-72.23	-61.3	-10.93
5	38.469	-81.16	RMS	38.4	-22.1	-15.6	11.8	-68.66	-61.3	-7.36
6	39.846	-81.24	RMS	38.6	-21.7	-15.6	11.8	-68.14	-61.3	-6.84

RMS - RMS detection

9.7. AC POWER LINE CONDUCTED EMISSIONS**LIMITS**

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 [*]	56 to 46 [*]
0.5-5	56	46
5-30	60	50

^{*} Decreases with the logarithm of the frequency.**TEST PROCEDURE**

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

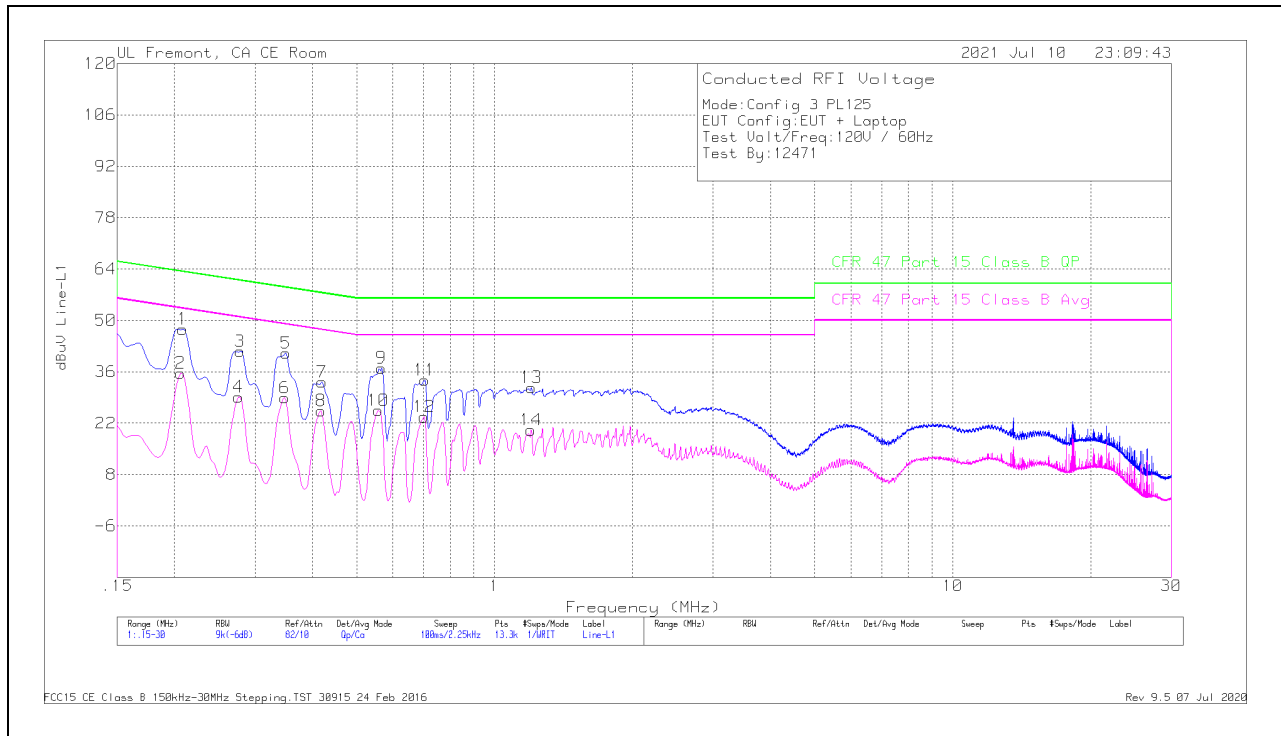
Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

Employee IDs: 12471

Location: Immunity Test Room

Test Date: 07/10/2021

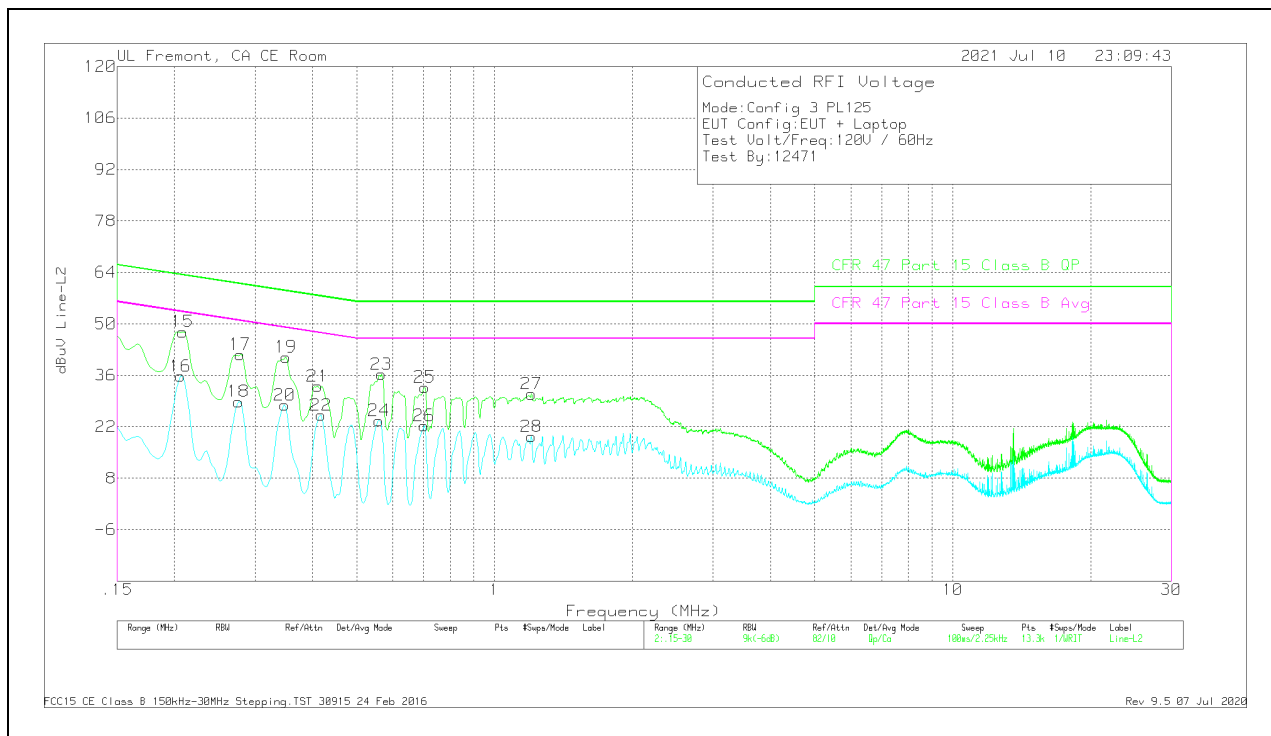
9.7.1. AC Power Line With Laptop**LINE 1 RESULTS****Range 1: Line-L1 .15 - 30MHz**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	PRE018644 6 L1	LC Cables C1&C3 dB	TekBox Limiter TBFL1 Model 207	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)M argin (dB)
1	.2085	38.34	Qp	0	0	9.3	47.64	63.26	-15.62	-	-
2	.20625	26.31	Ca	0	0	9.3	35.61	-	-	53.35	-17.74
3	.27825	32.29	Qp	0	0	9.3	41.59	60.87	-19.28	-	-
4	.276	19.83	Ca	0	0	9.3	29.13	-	-	50.94	-21.81
5	.35025	31.73	Qp	0	0	9.3	41.03	58.96	-17.93	-	-
6	.348	19.61	Ca	0	0	9.3	28.91	-	-	49.01	-20.1
7	.42	23.88	Qp	0	0	9.3	33.18	57.45	-24.27	-	-
8	.41775	16.04	Ca	0	0	9.3	25.34	-	-	47.49	-22.15
9	.56625	27.73	Qp	0	0	9.3	37.03	56	-18.97	-	-
10	.55725	16.16	Ca	0	0	9.3	25.46	-	-	46	-20.54
11	.7035	24.42	Qp	0	0	9.3	33.72	56	-22.28	-	-
12	.70125	14.44	Ca	0	0	9.3	23.74	-	-	46	-22.26
13	1.203	22.28	Qp	0	.1	9.3	31.68	56	-24.32	-	-
14	1.20075	10.72	Ca	0	.1	9.3	20.12	-	-	46	-25.88

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS

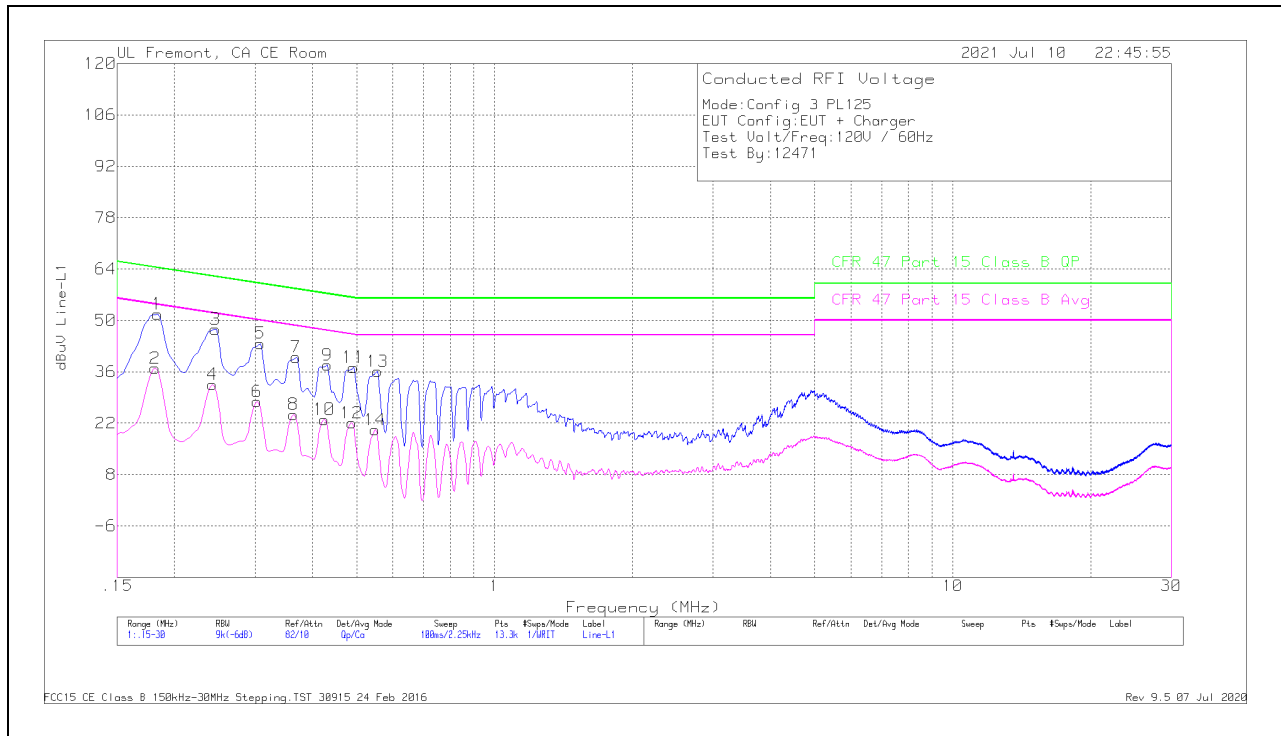


Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	PRE018644 6 L2	LC Cables C2&C3 dB	TekBox Limiter TBFL1 Model 207	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)M argin (dB)
15	.2085	38.53	Qp	0	0	9.3	47.83	63.26	-15.43	-	-
16	.20625	26.46	Ca	0	0	9.3	35.76	-	-	53.35	-17.59
17	.27825	32.33	Qp	0	0	9.3	41.63	60.87	-19.24	-	-
18	.276	19.52	Ca	0	0	9.3	28.82	-	-	50.94	-22.12
19	.35025	31.67	Qp	0	0	9.3	40.97	58.96	-17.99	-	-
20	.348	18.55	Ca	0	0	9.3	27.85	-	-	49.01	-21.16
21	.411	23.7	Qp	0	0	9.3	33	57.63	-24.63	-	-
22	.41775	15.84	Ca	0	0	9.3	25.14	-	-	47.49	-22.35
23	.56625	26.97	Qp	0	0	9.3	36.27	56	-19.73	-	-
24	.5595	14.34	Ca	0	0	9.3	23.64	-	-	46	-22.36
25	.7035	23.43	Qp	0	0	9.3	32.73	56	-23.27	-	-
26	.70125	12.95	Ca	0	0	9.3	22.25	-	-	46	-23.75
27	1.203	21.51	Qp	0	.1	9.3	30.91	56	-25.09	-	-
28	1.203	9.93	Ca	0	.1	9.3	19.33	-	-	46	-26.67

Qp - Quasi-Peak detector

Ca - CISPR average detection

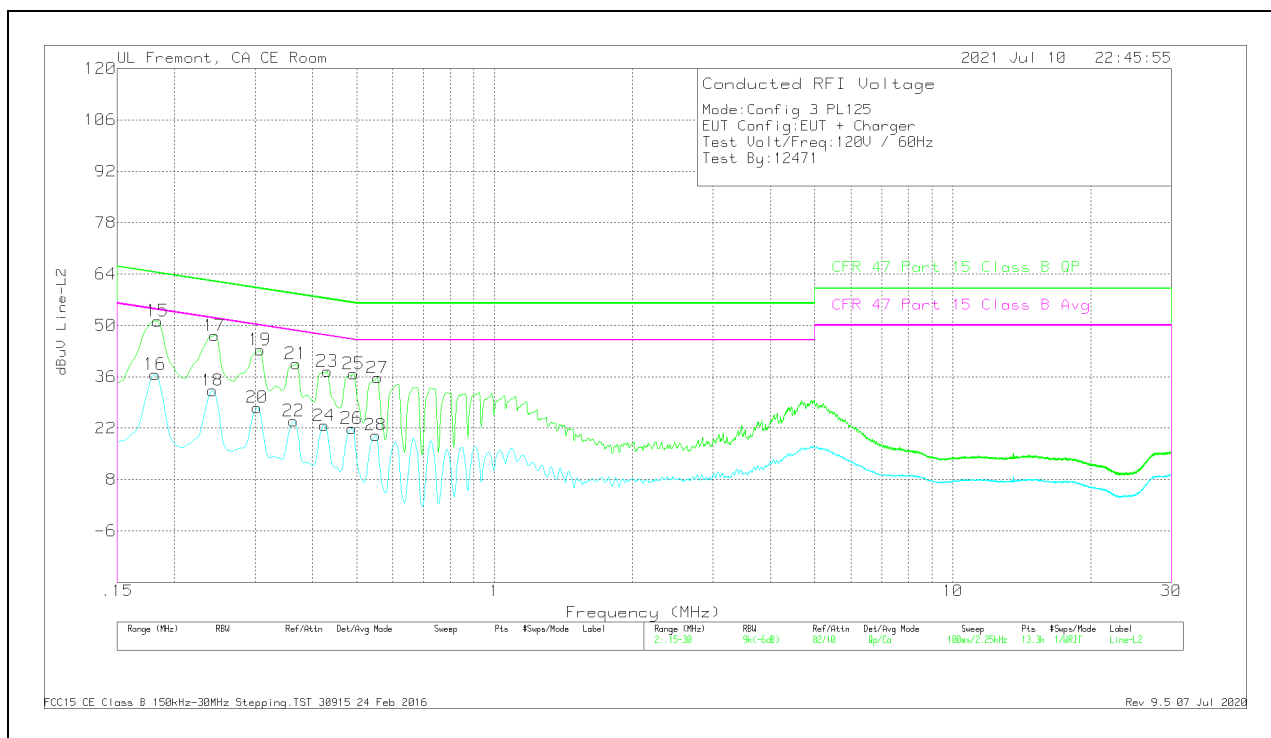
9.7.2. AC Power Line With AC/DC Adapter**LINE 1 RESULTS****Range 1: Line-L1 .15 - 30MHz**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	PRE018644 6 L1	LC Cables C1&C3 dB	TekBox Limiter TBFL1 Model 207	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)Margin (dB)
1	.18375	42.32	Qp	0	0	9.4	51.72	64.31	-12.59	-	-
2	.1815	27.55	Ca	0	0	9.4	36.95	-	-	54.42	-17.47
3	.24563	38.3	Qp	0	0	9.3	47.6	61.9	-14.3	-	-
4	.24225	23.24	Ca	0	0	9.3	32.54	-	-	52.02	-19.48
5	.3075	34.43	Qp	0	0	9.3	43.73	60.04	-16.31	-	-
6	.303	18.56	Ca	0	0	9.3	27.86	-	-	50.16	-22.3
7	.36825	30.67	Qp	0	0	9.3	39.97	58.54	-18.57	-	-
8	.36375	15.04	Ca	0	0	9.3	24.34	-	-	48.64	-24.3
9	.43125	28.52	Qp	0	0	9.3	37.82	57.23	-19.41	-	-
10	.4245	13.66	Ca	0	0	9.3	22.96	-	-	47.36	-24.4
11	.492	27.87	Qp	0	0	9.3	37.17	56.13	-18.96	-	-
12	.4875	12.75	Ca	0	0	9.3	22.05	-	-	46.21	-24.16
13	.555	26.78	Qp	0	0	9.3	36.08	56	-19.92	-	-
14	.54825	10.88	Ca	0	0	9.3	20.18	-	-	46	-25.82

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	PRE018644 6 L2	LC Cables C2&C3 dB	TekBox Limiter TBFL1 Model 207	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR)M argin (dB)
15	.18375	41.82	Qp	0	0	9.4	51.22	64.31	-13.09	-	-
16	.1815	27.26	Ca	0	0	9.4	36.66	-	-	54.42	-17.76
17	.2445	37.92	Qp	0	0	9.3	47.22	61.94	-14.72	-	-
18	.24225	22.98	Ca	0	0	9.3	32.28	-	-	52.02	-19.74
19	.3075	34.06	Qp	0	0	9.3	43.36	60.04	-16.68	-	-
20	.303	18.33	Ca	0	0	9.3	27.63	-	-	50.16	-22.53
21	.36825	30.3	Qp	0	0	9.3	39.6	58.54	-18.94	-	-
22	.36375	14.67	Ca	0	0	9.3	23.97	-	-	48.64	-24.67
23	.43125	28.2	Qp	0	0	9.3	37.5	57.23	-19.73	-	-
24	.4245	13.43	Ca	0	0	9.3	22.73	-	-	47.36	-24.63
25	.492	27.52	Qp	0	0	9.3	36.82	56.13	-19.31	-	-
26	.4875	12.62	Ca	0	0	9.3	21.92	-	-	46.21	-24.29
27	.555	26.47	Qp	0	0	9.3	35.77	56	-20.23	-	-
28	.5505	10.8	Ca	0	0	9.3	20.1	-	-	46	-25.9

Qp - Quasi-Peak detector

Ca - CISPR average detection

END OF REPORT

10. SETUP PHOTOS

Please refer to 13587908-EP21V1 for setup photos.