

# Report Number: 15107858-EP1V2

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## 1. SCOPE

The purpose of this document is to show test setup diagrams and photos for the following reports

Reports
15107858-E1 FCC Report WWAN (2G3G)
15107858-E2 FCC Report WWAN (4G5G)
15107858-E3 FCC Report Carrier Aggregation
15107858-E4 FCC Report NTN Bands
15107858-E5 FCC B48 CBRS
15107858-E6 FCC Report BT_BLE Channel Sounding Mode2_DSS
15107858-E7 FCC Report BT_BLE_Channel Sounding_Mode0_DTS
15107858-E8 FCC Report 802.15.4_Thread_DTS
15107858-E9 FCC Report 2.4G_DTS WLAN
15107858-E10 FCC Report 5G_UNII WLAN
15107858-E11 FCC Report UNII WLAN DFS
15107858-E12 FCC Report UNII WLAN 6GHz
15107858-E13 FCC Report UNII WLAN CBP
15107858-E14 FCC Report NFC
15107858-E15 FCC Report WPT
15107858-E16 FCC Report UWB

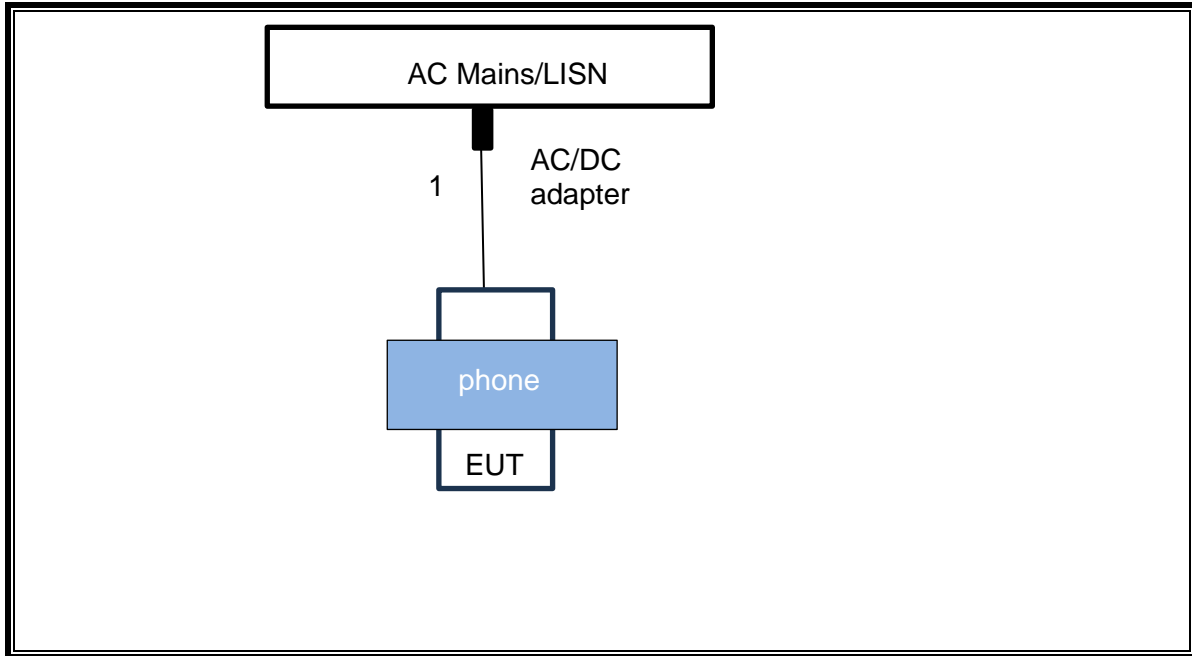
## 2. WPT/NFC/BT/BLE/BLE CHANNEL SOUNDING/802.15.4 THREAD/2.4G WLAN/5G WLAN/6G WLAN TECHNOLOGIES

### 2.1. DESCRIPTION OF TEST SETUP

SUPPORT TEST EQUIPMENT						
Description	Manufacturer	Model	Serial Number	FCC ID/ DoC		
Laptop	Dell	Latitude 5310	00330-80000-00000-AA366	DoC		
AC/DC Adapter	Dell	LA65NM191	1A5-0653-A02	DoC		
AC/DC Adapter	Google	45 W	1HV003B90100315DE	DoC		
Phone (WPT supporting client)	Google	GGX8B	41031FDAS0007H	A4RGGX8B		
USB-A Cable With Repeater (UWB)	Ugreen	10321	X000TT2OLL	DoC		
I/O CABLES (CONDUCTED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	AC	1	2-Prong	Un-shielded	1	
2	DC	1	DC	Un-shielded	1.5	
3	USB	1	USB C to USB C	Un-shielded	1	
4	SMA	1	SMA	Un-shielded	0.1	
5	AC	1	3-Prong	Un-shielded	1.5	
6	USB-C	1	USB-C	Shielded	1	
I/O CABLES (RADIATED TEST/AC POWER LINE EMISSIONS)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB-C	1	USB-C	Shielded	1	
2	AC	1	3-Prong	Un-shielded	1.5	

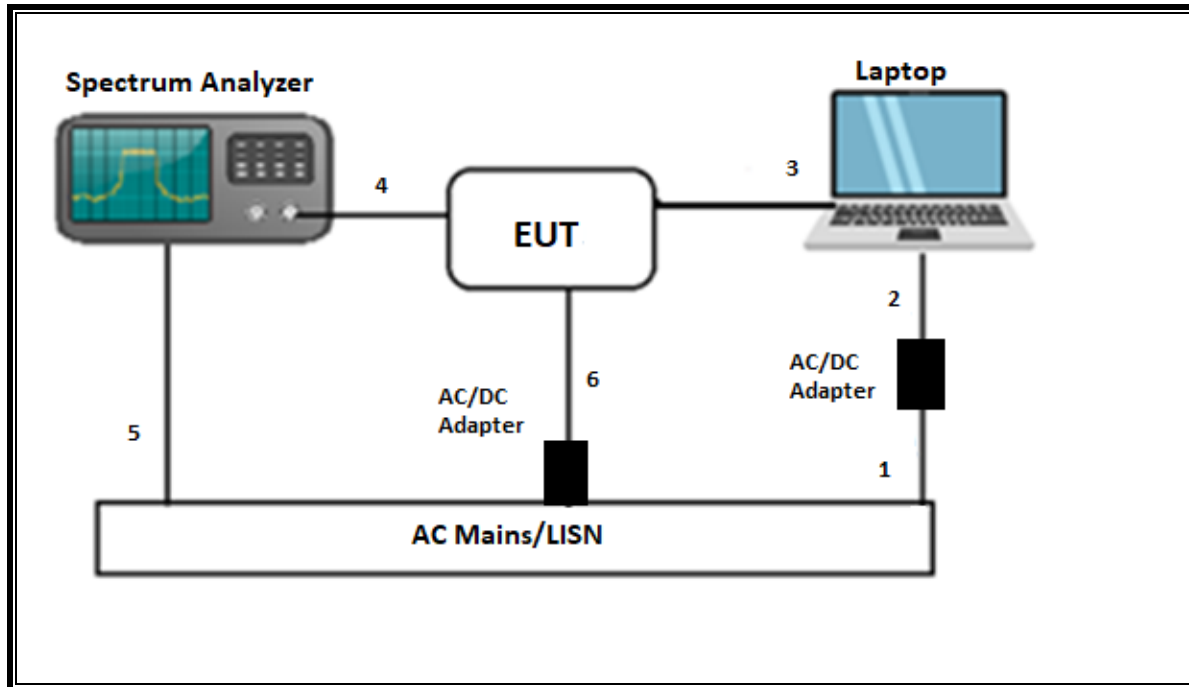
### 2.1.1. WPT TEST SETUP BLOCK DIAGRAM

#### CONFIGURATION 2: OPERATING MODE (RADIATED EMISSIONS/AC POWERLINE EMISSIONS)

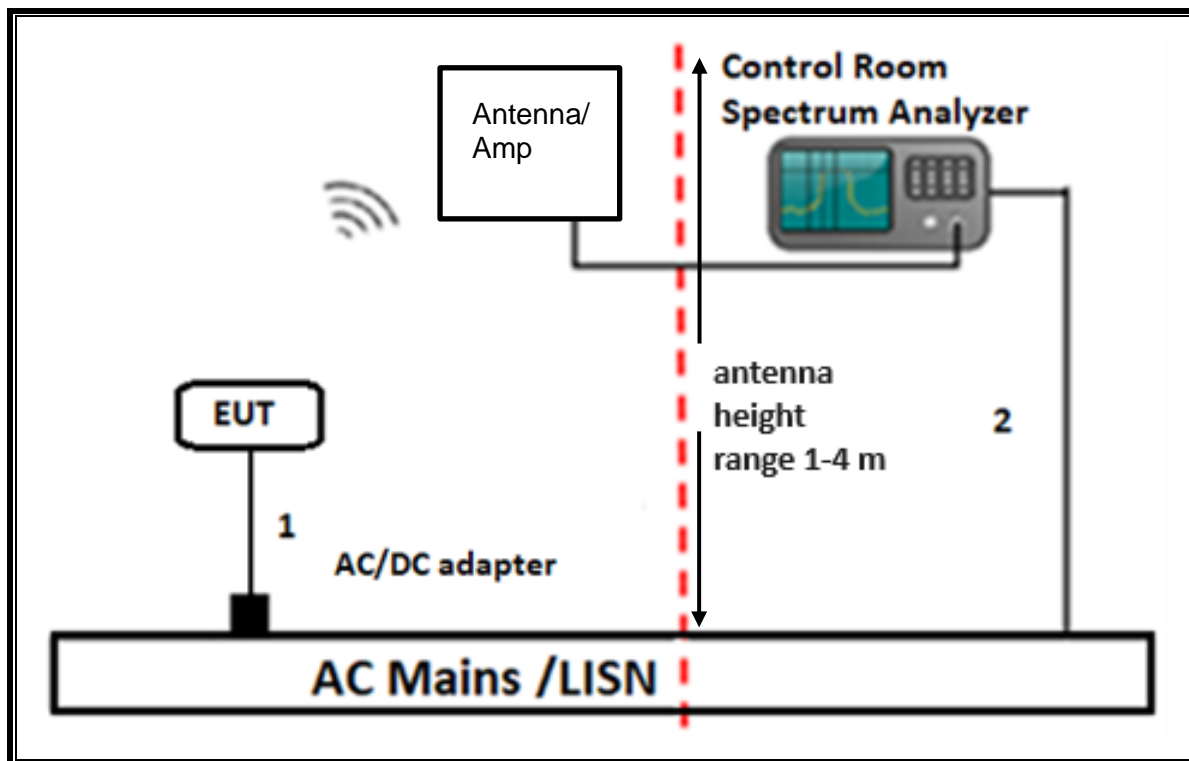


### 2.1.2. NFC/BT/BLE/BLE CHANNEL SOUNDING/802.15.4 THREAD/2.4G WLAN/5G WLAN/6G WLAN/UWB TEST SETUP BLOCK DIAGRAM

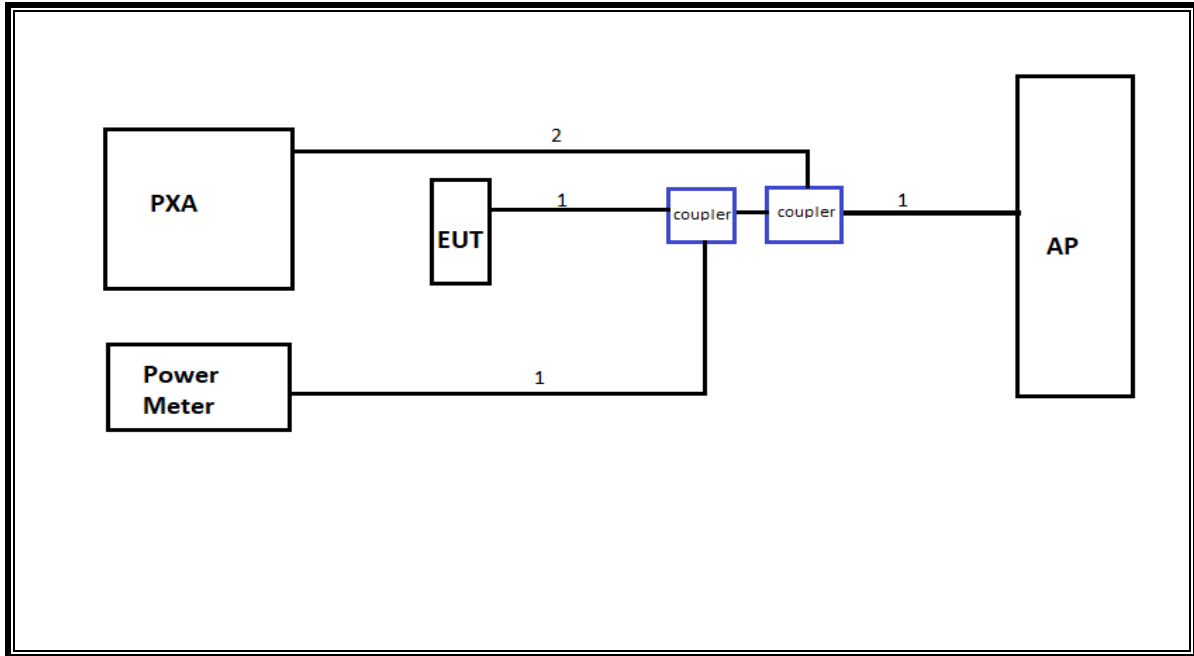
#### CONDUCTED TEST



#### RADIATED EMISSIONS/AC POWERLINE EMISSIONS

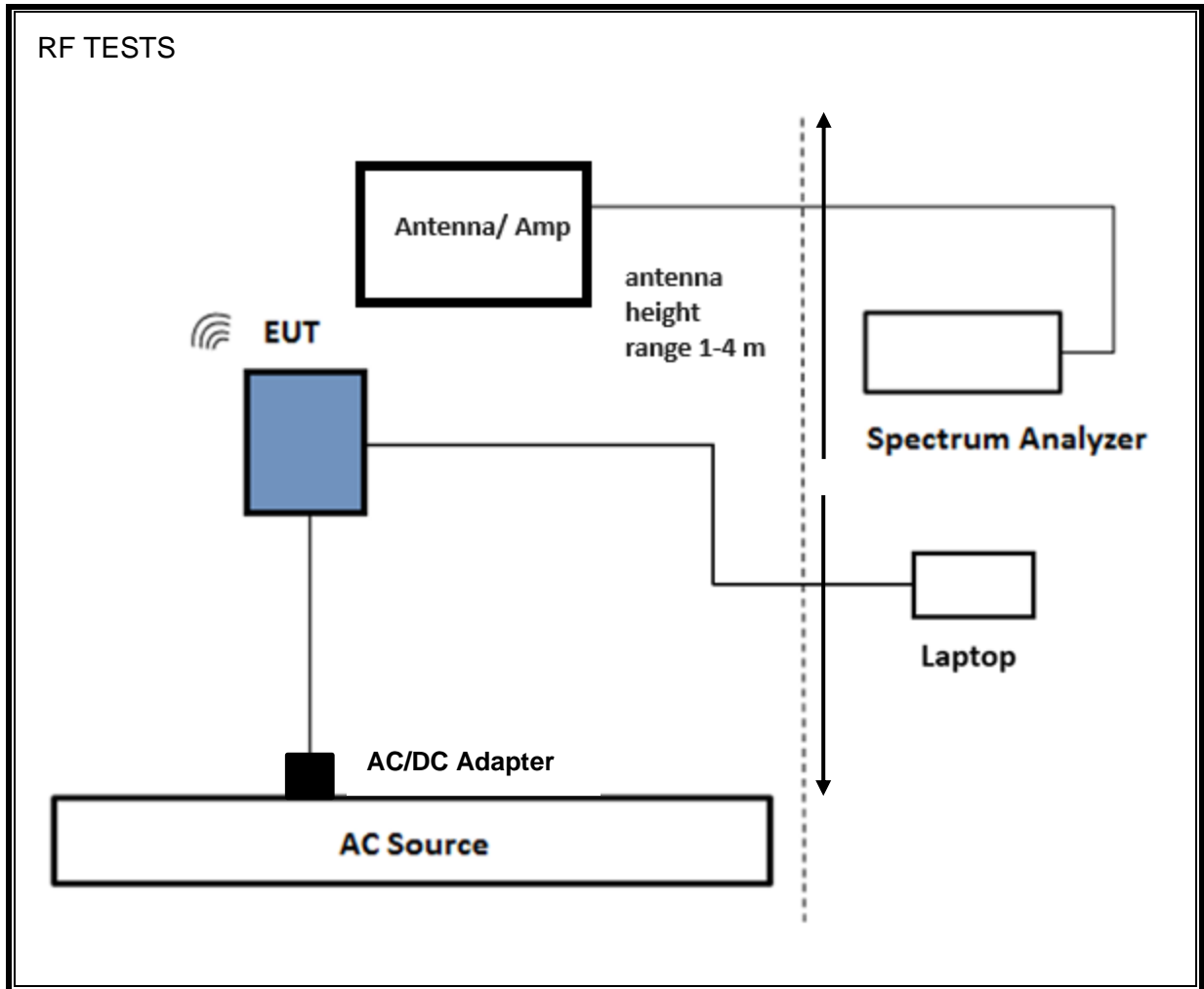


**6G WLAN 987594 D02 U-NII 6 GHz EMC Measurement (Section K and L)**



### 2.1.3. UWB TEST SETUP BLOCK DIAGRAM

#### SETUP DIAGRAM FOR Above 1GHz TESTS

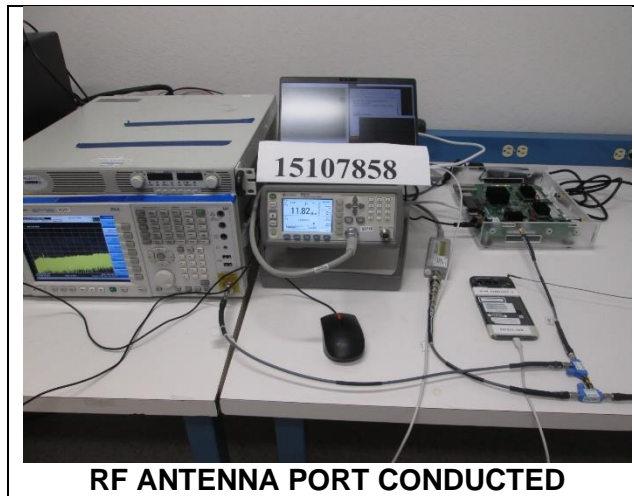


## 2.2. ANTENNA PORT SETUP

### 2.2.1. RF Antenna Port test



### 2.2.2. 6G WLAN 987594 D02 U-NII 6 GHz EMC Measurement (Section K and L)

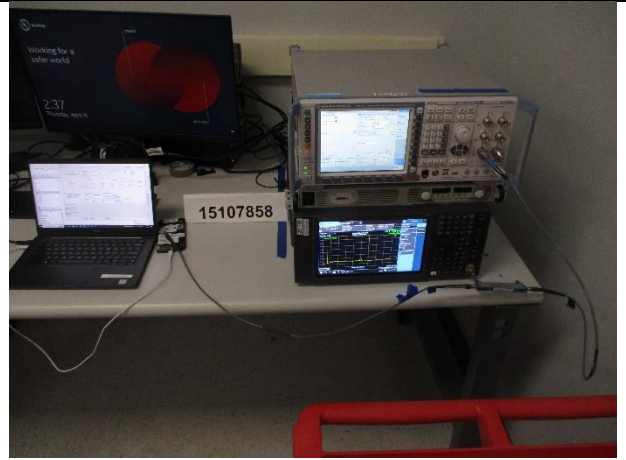




### 2.2.3. WWAN 2G/3G/4G/5G



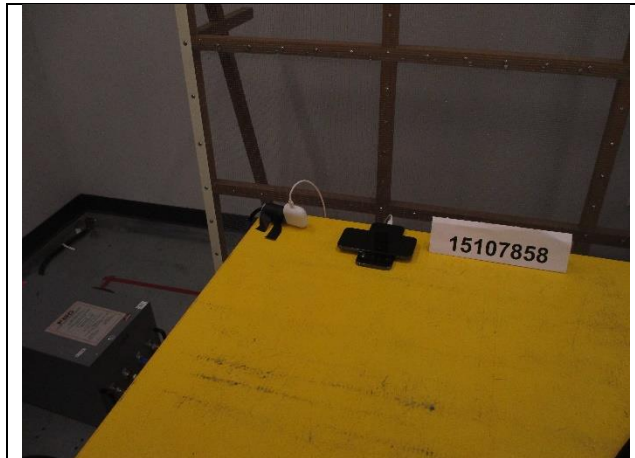
**FREQUENCY STABILITY**



**RF ANTENNA PORT CONDUCTED**

### 2.3. AC LINE CONDUCTED SETUP

#### 2.3.1. WPT



AC LINE CONDUCTED (FRONT)



AC LINE CONDUCTED (BACK)

#### 2.3.2. NFC/BT/BLE/BLE CHANNEL SOUNDING/802.15.4 THREAD/2.4G WLAN/5G WLAN/6G WLAN/UWB

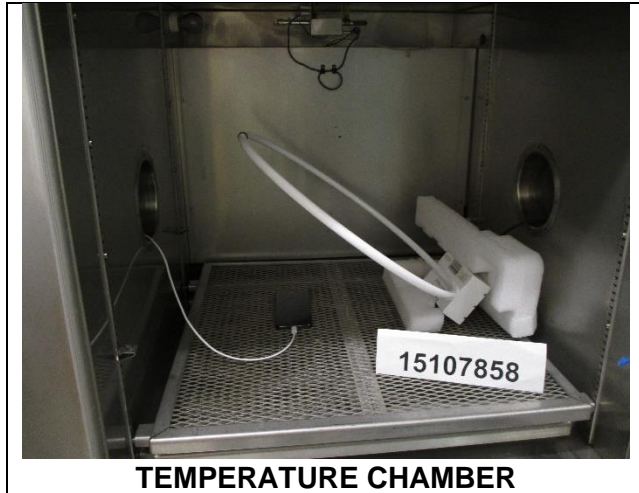


AC LINE CONDUCTED (FRONT)



AC LINE CONDUCTED (BACK)

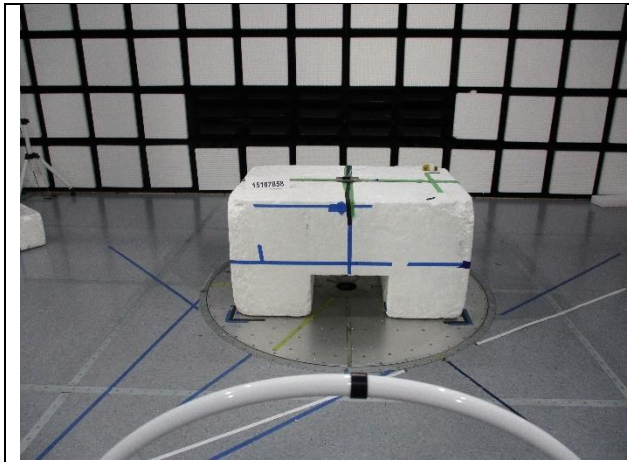
## 2.4. TEMPERATURE CHAMBER SETUP (NFC)



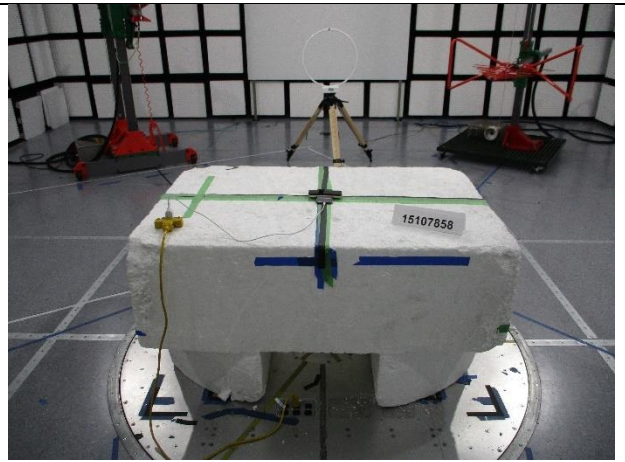
TEMPERATURE CHAMBER

## 2.5. RADIATED RF MEASUREMENT SETUP

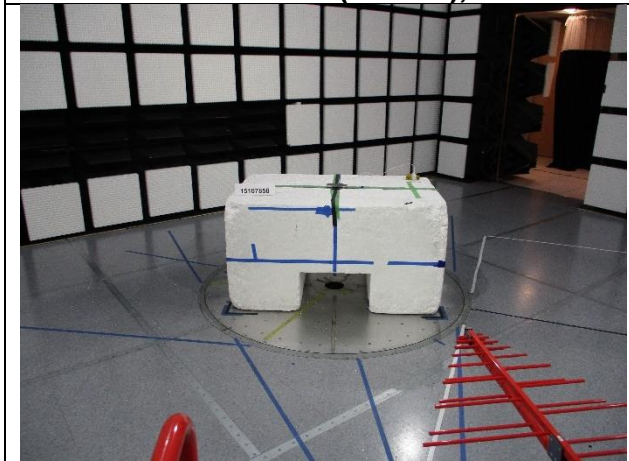
### 2.5.1. WPT



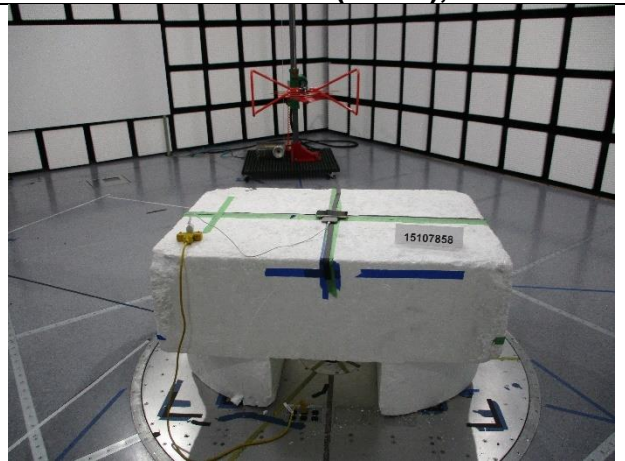
BELOW 30 MHz (FRONT), FCC



BELOW 30 MHz (BACK), FCC



BELOW 1GHz (FRONT)

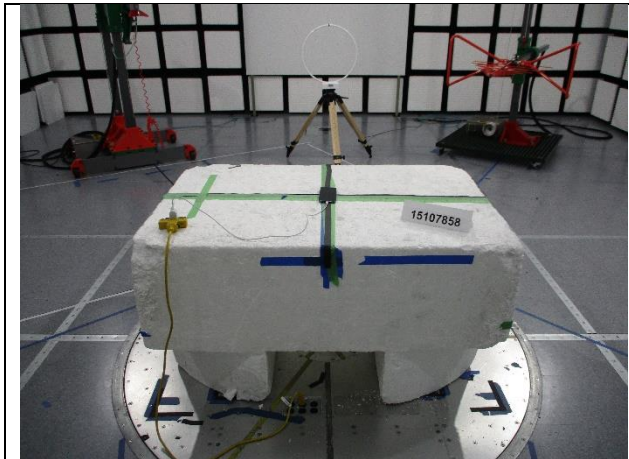


BELOW 1GHz (BACK)

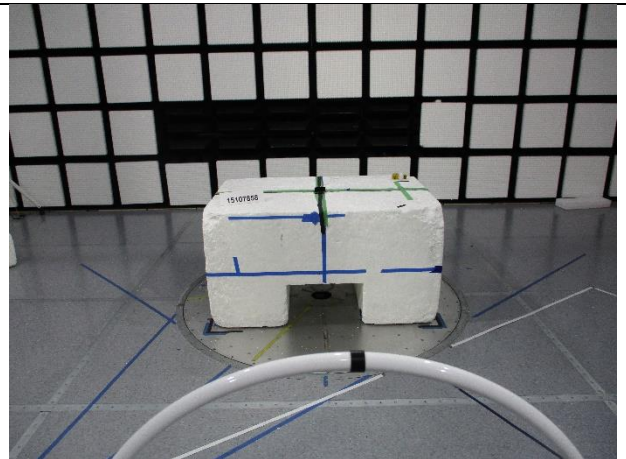
### 2.5.2. NFC/BT/BLE/BLE CHANNEL SOUNDING/802.15.4 THREAD/2.4G WLAN/5G WLAN/6G WLAN/UWB

Refer to each test report for worst case orientation.

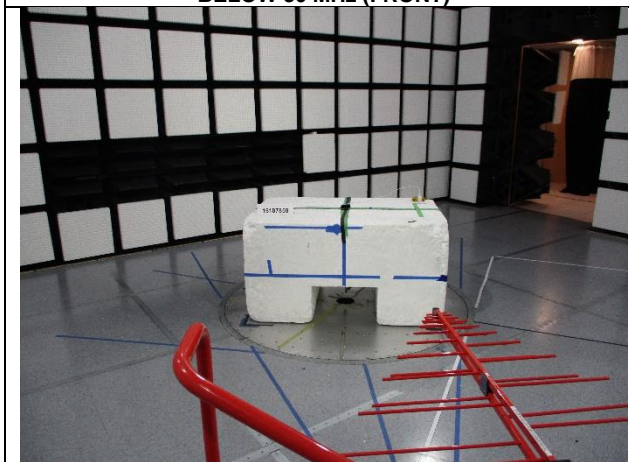
#### X (Flatbed Orientation)



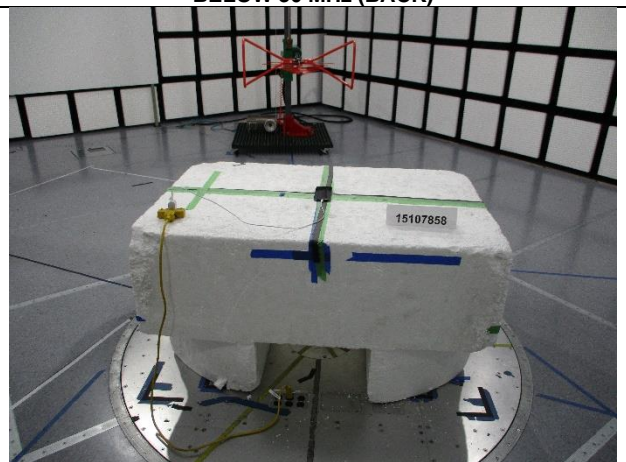
BELOW 30 MHz (FRONT)



BELOW 30 MHz (BACK)



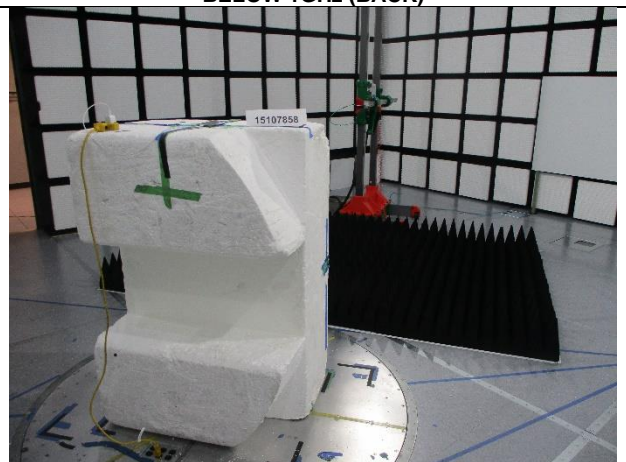
BELOW 1GHz (FRONT)



BELOW 1GHz (BACK)

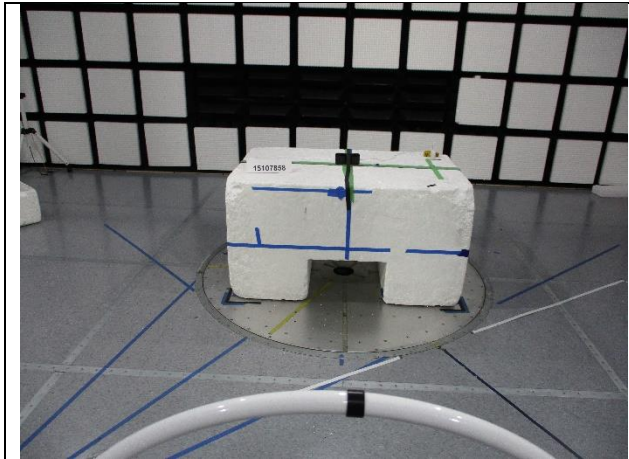


ABOVE 1GHz (FRONT)

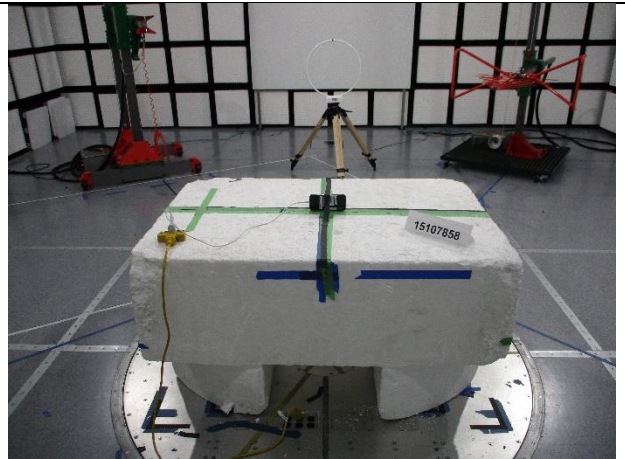


ABOVE 1GHz (BACK)

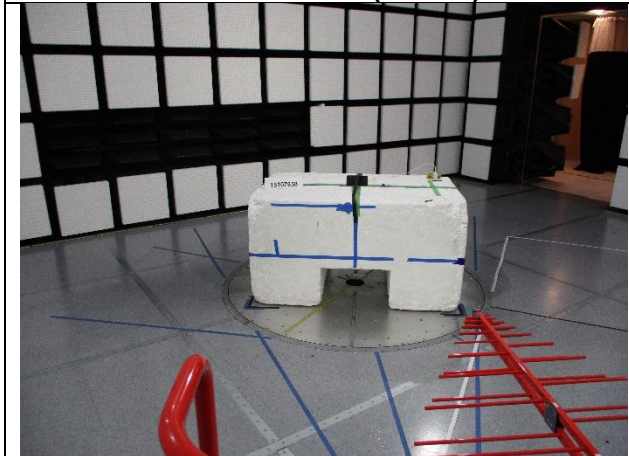
**Y (Landscape Orientation)**



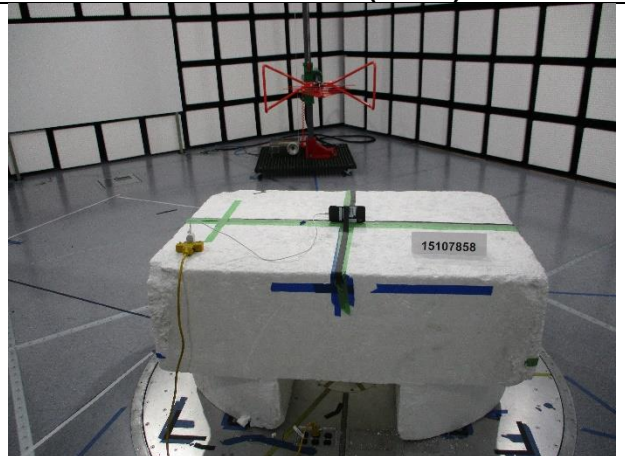
**BELOW 30 MHz (FRONT)**



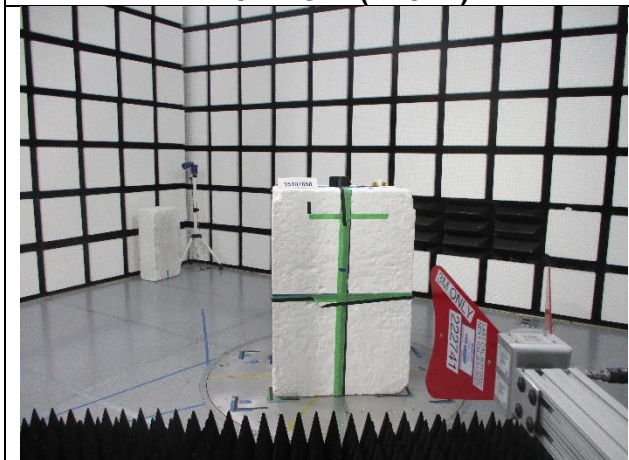
**BELOW 30 MHz (BACK)**



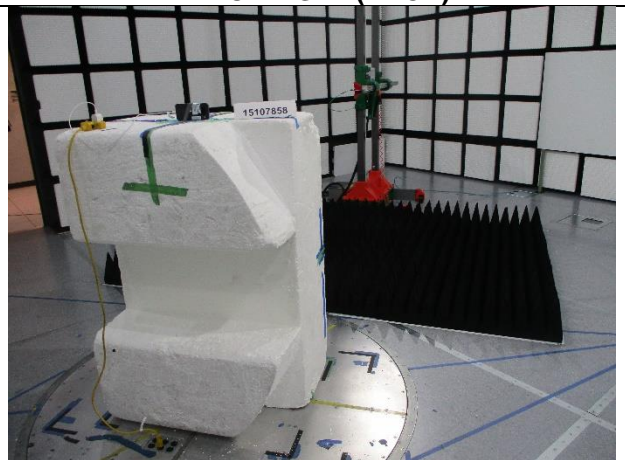
**BELOW 1GHz (FRONT)**



**BELOW 1GHz (BACK)**

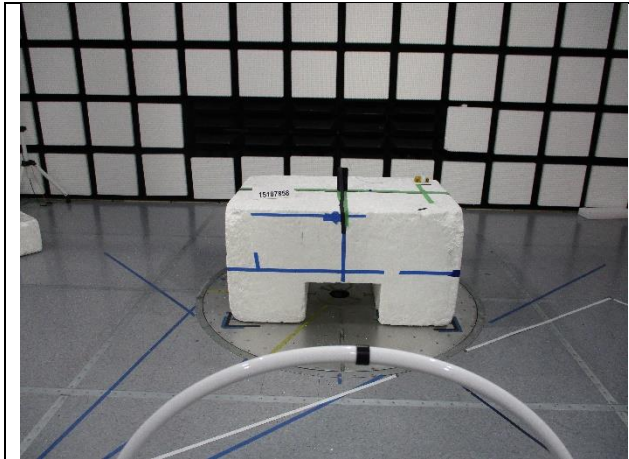


**ABOVE 1GHz (FRONT)**

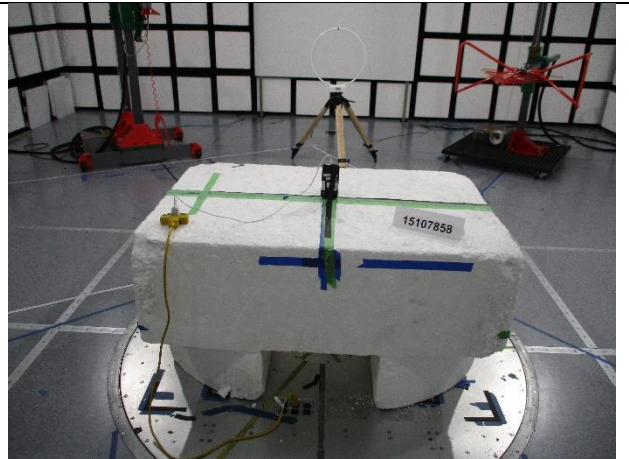


**ABOVE 1GHz (BACK)**

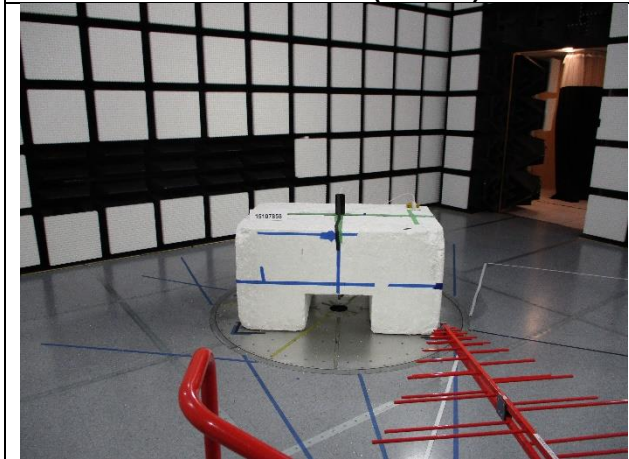
**Z (Portrait Orientation)**



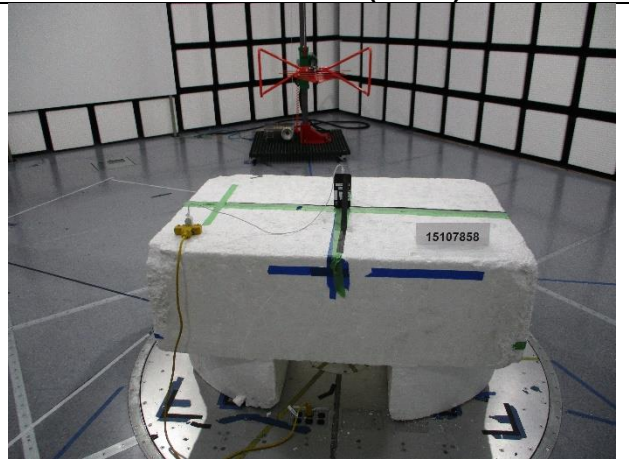
**BELOW 30 MHz (FRONT)**



**BELOW 30 MHz (BACK)**



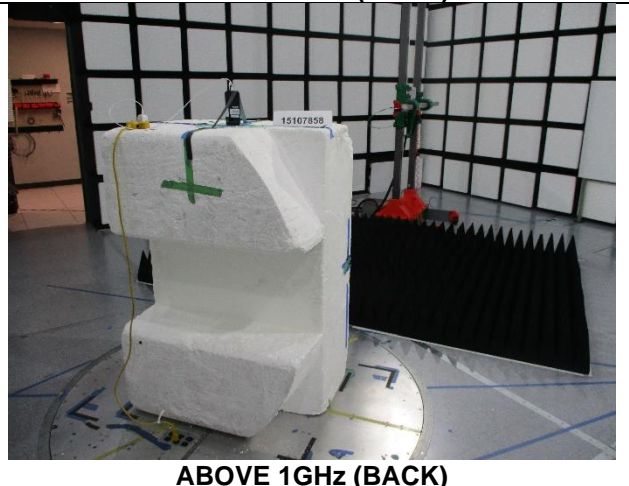
**BELOW 1GHz (FRONT)**



**BELOW 1GHz (BACK)**



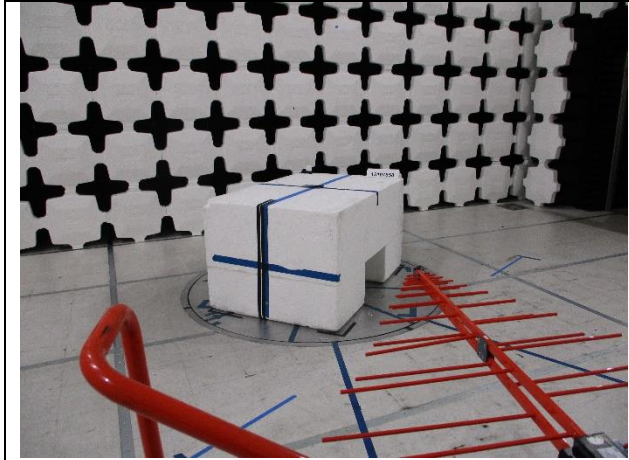
**ABOVE 1GHz (FRONT)**



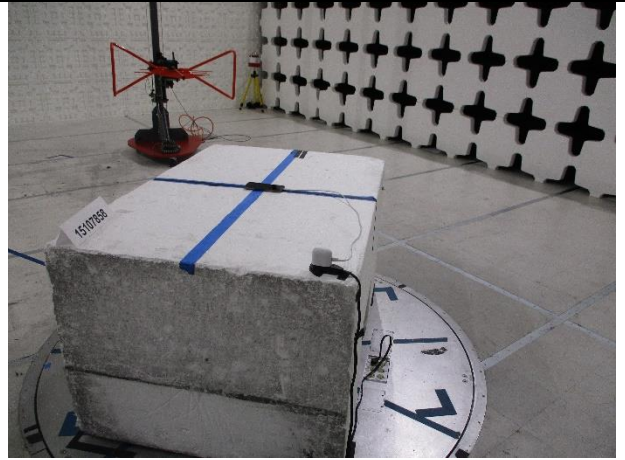
**ABOVE 1GHz (BACK)**

### 2.5.3. WWAN 2G/3G/4G/5G/NTN

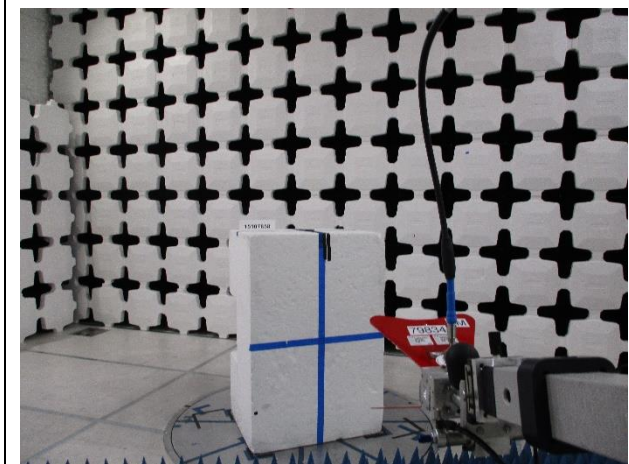
#### X (Flatbed Orientation)



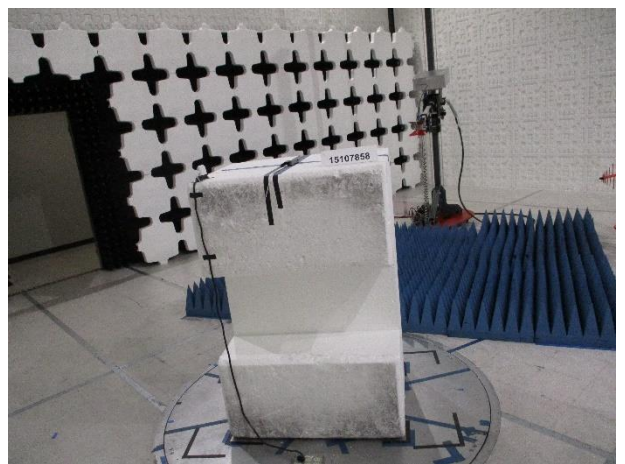
**BELOW 1GHz (FRONT)**



**BELOW 1GHz (BACK)**



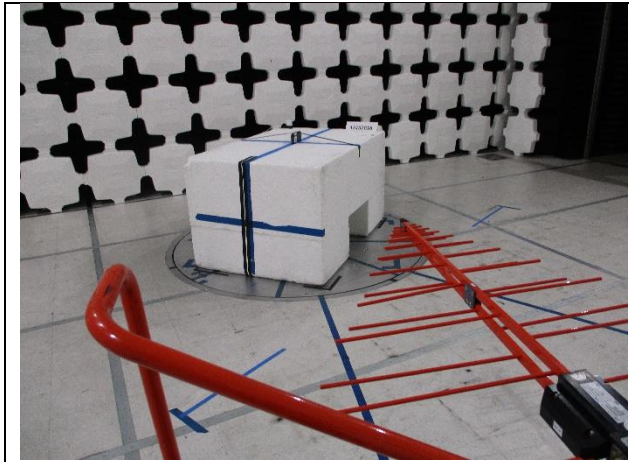
**ABOVE 1GHz (FRONT)**



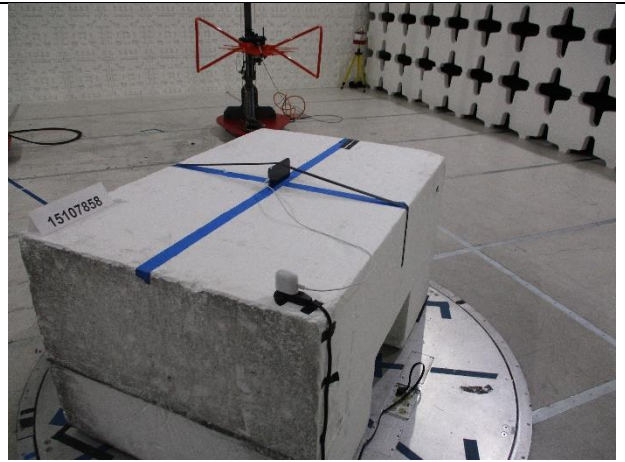
**ABOVE 1GHz (BACK)**



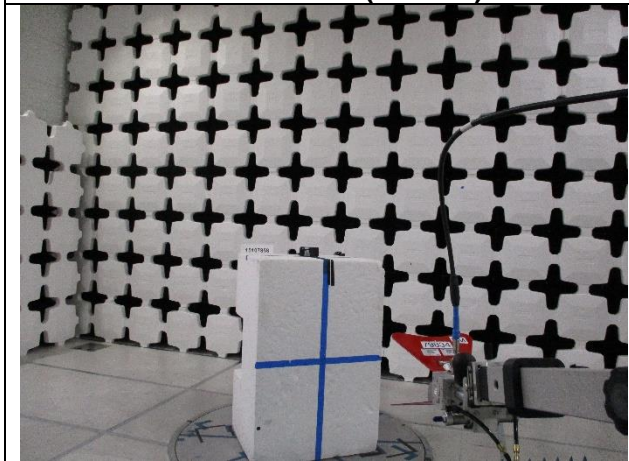
**Y (Landscape Orientation)**



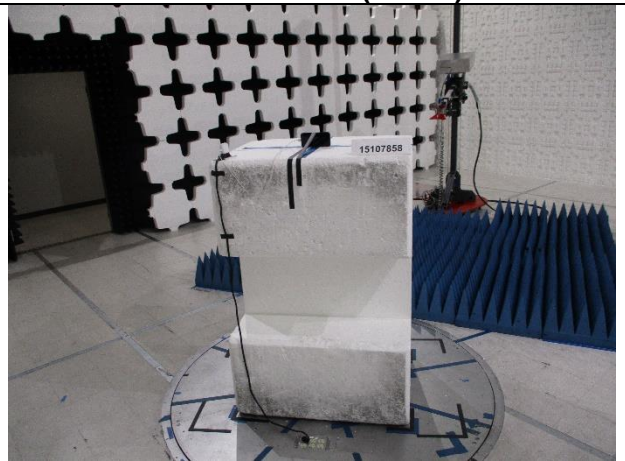
**BELOW 1GHz (FRONT)**



**BELOW 1GHz (BACK)**

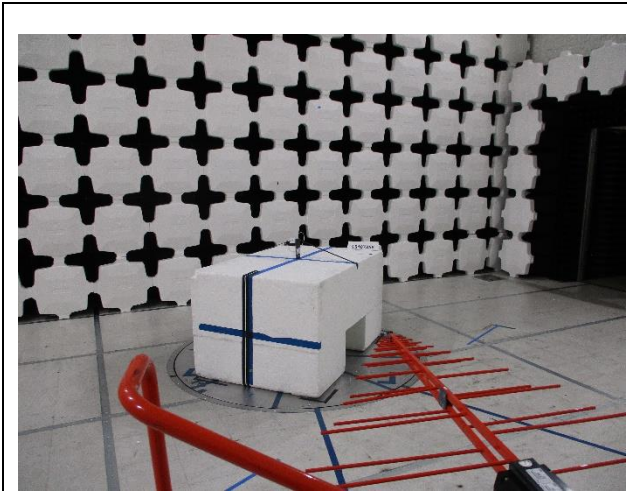


**ABOVE 1GHz (FRONT)**

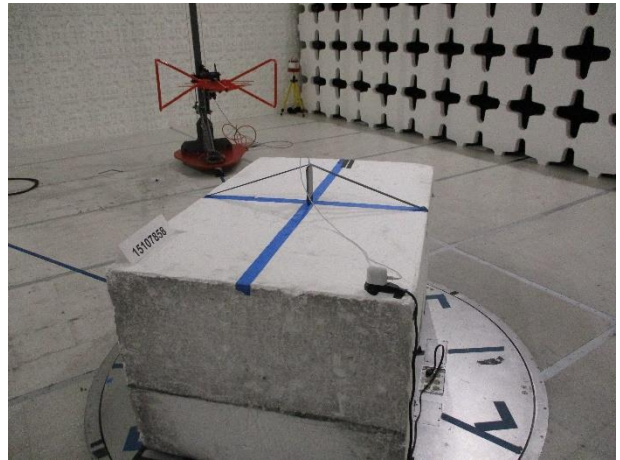


**ABOVE 1GHz (BACK)**

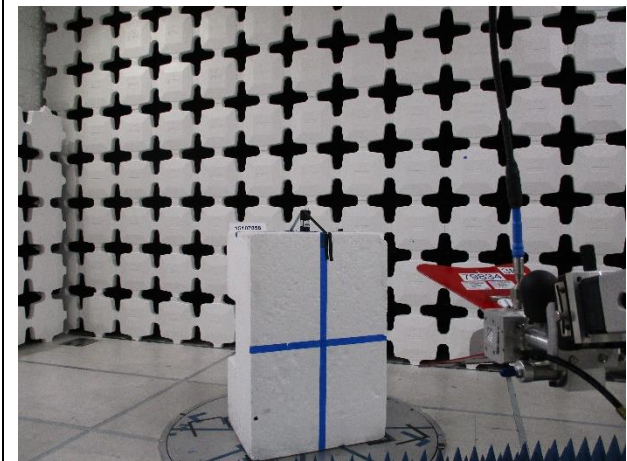
**Z (Portrait Orientation)**



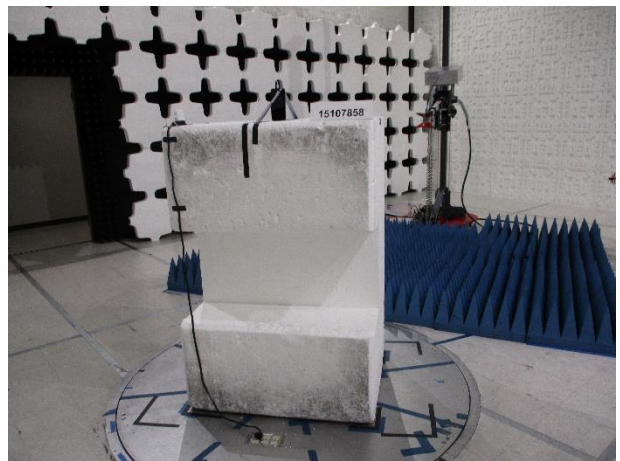
**BELOW 1GHz (FRONT)**



**BELOW 1GHz (BACK)**



**ABOVE 1GHz (FRONT)**



**ABOVE 1GHz (BACK)**

### 2.5.4. UWB

#### X (Flatbed Orientation)

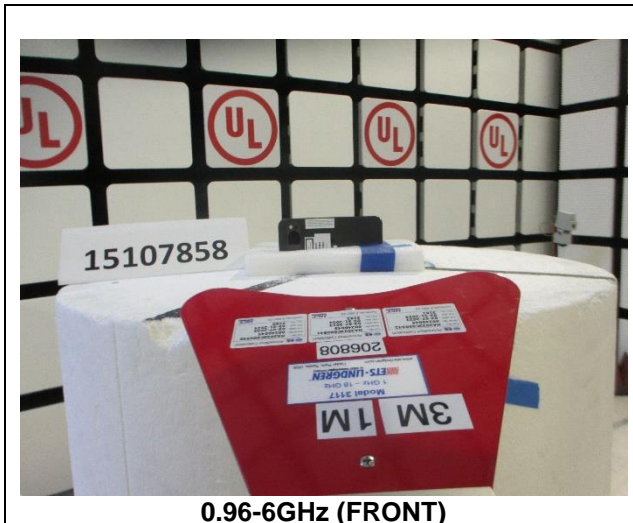


0.96-6GHz (FRONT)

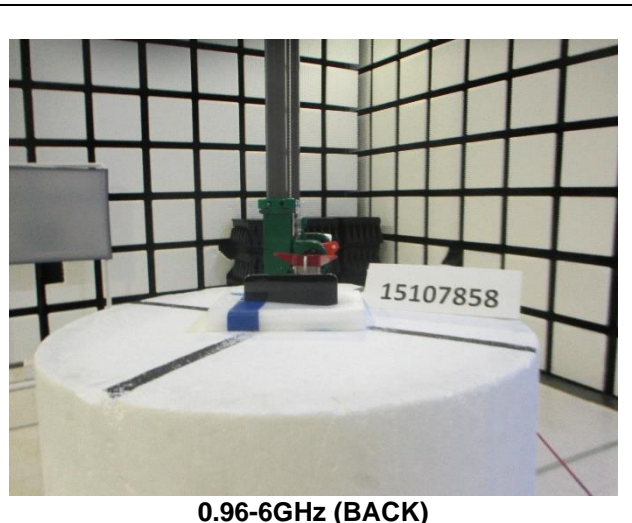


0.96-6GHz (BACK)

#### Y (Landscape Orientation)



0.96-6GHz (FRONT)

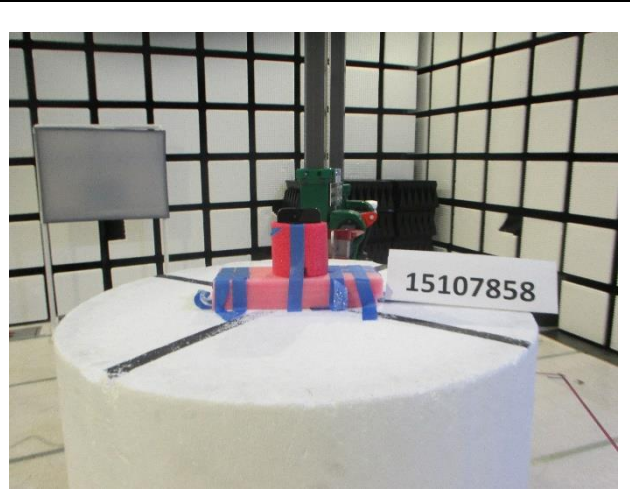


0.96-6GHz (BACK)

**Z (Portrait Orientation)**



**0.96-6GHz (FRONT)**



**0.96-6GHz (BACK)**

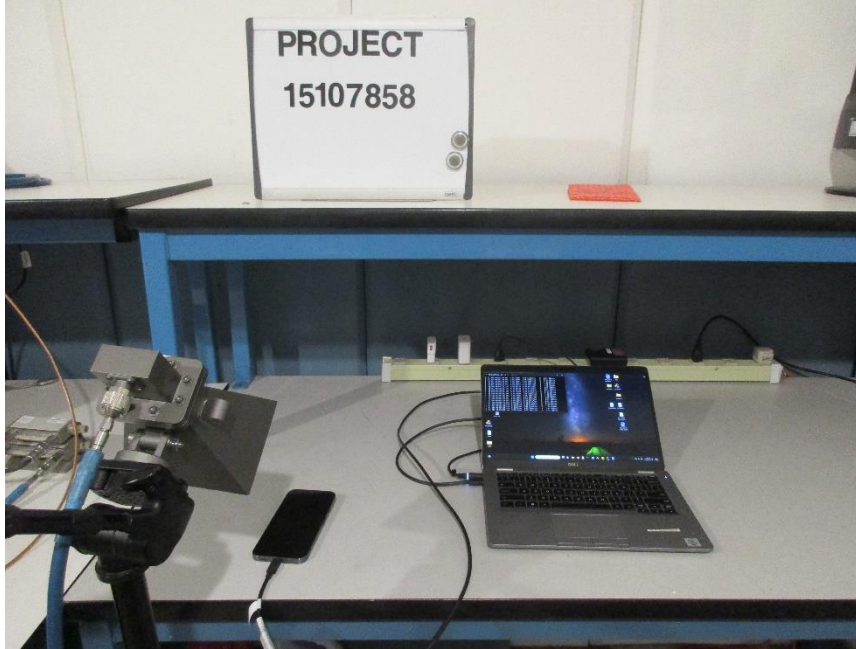
### 3. CBRS



## 4. DFS MEASUREMENT SETUP

### DYNAMIC FREQUENCY SELECTION MEASUREMENT SETUP

CLIENT MODE FRONT PHOTO



CLIENT MODE SIDE PHOTO



P2P MODE(OWNER) FRONT PHOTO



P2P MODE(OWNER) SIDE PHOTO



P2P MODE(CLIENT) FRONT PHOTO

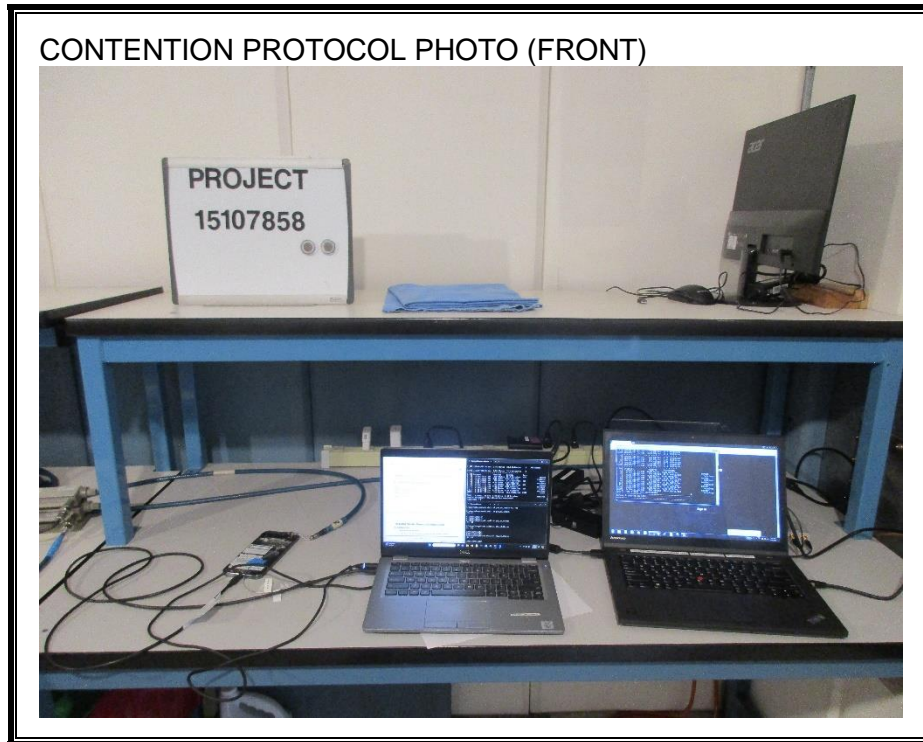


P2P MODE(CLIENT) SIDE PHOTO





## 5. CONTENTION PROTOCOL MEASUREMENT SETUP



**END OF REPORT**