

Report Number: 15107843-EP1V3

TABLE OF CONTENTS

1. SCOPE	2
2. WPT/NFC/BT/BLE/BLE CHANNEL SOUNDING/802.15.4 THREAD/2.4G WLAN/5G WLAN/6G WLAN TECHNOLOGIES	3
2.1. DESCRIPTION OF TEST SETUP	3
2.1.1. WPT TEST SETUP BLOCK DIAGRAM	4
2.1.2. NFC/BT/BLE/BLE CHANNEL SOUNDING/802.15.4 THREAD/2.4G WLAN/5G WLAN/6G WLAN TEST SETUP BLOCK DIAGRAM	5
2.2. ANTENNA PORT SETUP	7
2.2.1. RF Antenna Port test	7
2.2.2. 6G WLAN 987594 D02 U-NII 6 GHz EMC Measurement (Section K and L)	7
2.2.3. WWAN 2G/3G/4G/5G	8
2.3. AC LINE CONDUCTED SETUP	9
2.3.1. WPT	9
2.3.2. NFC/BT/BLE/BLE CHANNEL SOUNDING/802.15.4 THREAD/2.4G WLAN/5G WLAN/6G WLAN	9
2.4. TEMPERATURE CHAMBER SETUP (NFC)	10
2.5. RADIATED RF MEASUREMENT SETUP	11
2.5.1. WPT	11
2.5.2. NFC/BT/BLE/BLE CHANNEL SOUNDING/802.15.4 THREAD/2.4G WLAN/5G WLAN/6G WLAN	12
2.5.3. WWAN 2G/3G/4G/5G/NTN	15
3. CBRS	18
4. DYNAMIC FREQUENCY SELECTION MEASUREMENT SETUP	19
5. CONTENTION PROTOCOL MEASUREMENT SETUP	22

1. SCOPE

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

Reports
15107843-E1V1 FCC Report WWAN (2G3G)
15107843-E2V1 FCC Report WWAN (4G5G)
15107843-E3V1 FCC Report Carrier Aggregation
15107843-E4V1 FCC Report NTN Bands
15107843-E5V1 FCC B48 CBRS Report
15107843-E6V1 FCC Report BT_BLE Channel Sounding Mode2_DSS
15107843-E7V1 FCC Report BT_BLE Channel Sounding_Mode0_DTS
15107843-E8V1 FCC Report 802.15.4 Thread_DTS
15107843-E9V1 FCC Report 2.4G_DTS WLAN
15107843-E10V1 FCC Report UNII 5G WLAN
15107843-E11V1 FCC Report UNII WLAN DFS
15107843-E12V1 FCC Report UNII WLAN 6GHz
15107843-E13V1 FCC Report UNII WLAN CBP
15107843-E14V1 FCC Report NFC
15107843-E15V1 FCC Report WPT

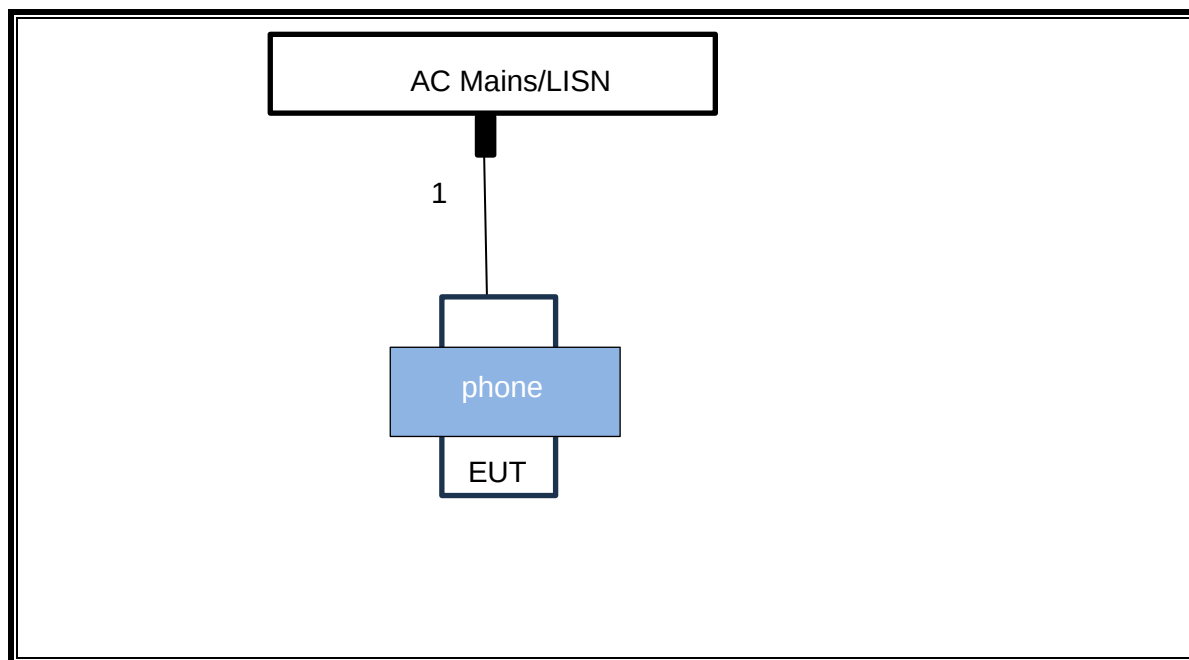
2. WPT/NFC/BT/BLE/BLE CHANNEL SOUNDING/802.15.4 THREAD/2.4G WLAN/5G WLAN/6G WLAN TECHNOLOGIES

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	G2YBB	41061FDAQ0003E		A4RG2YBB
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	

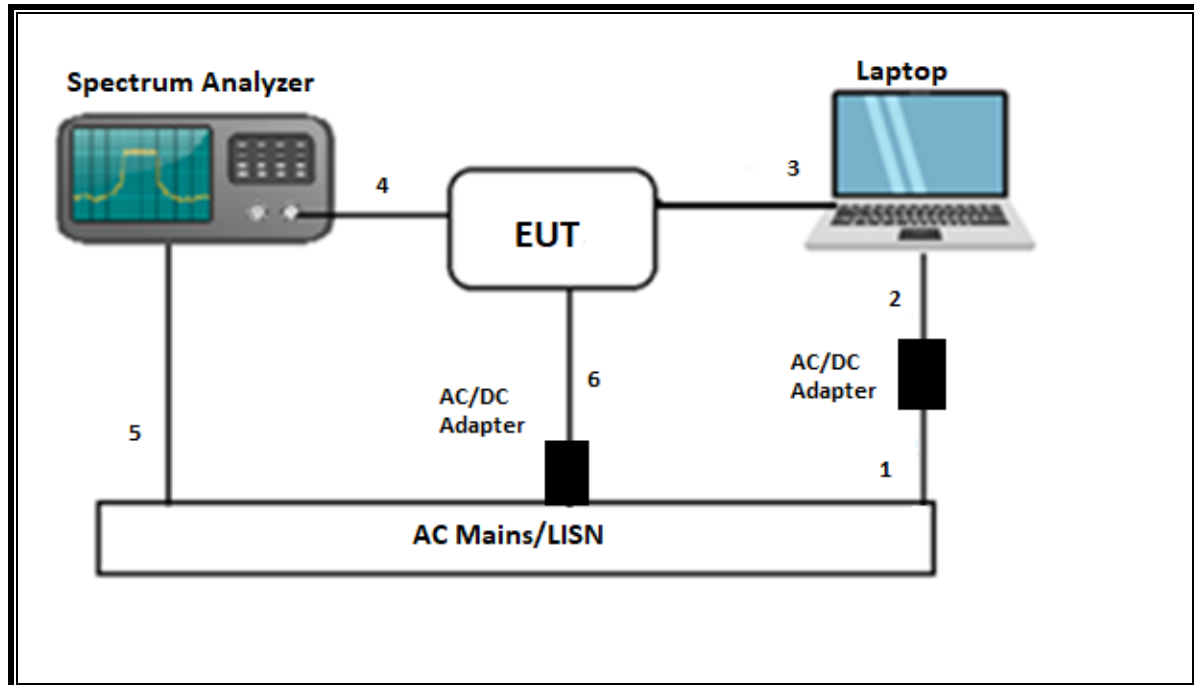
2.1.1. WPT TEST SETUP BLOCK DIAGRAM

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

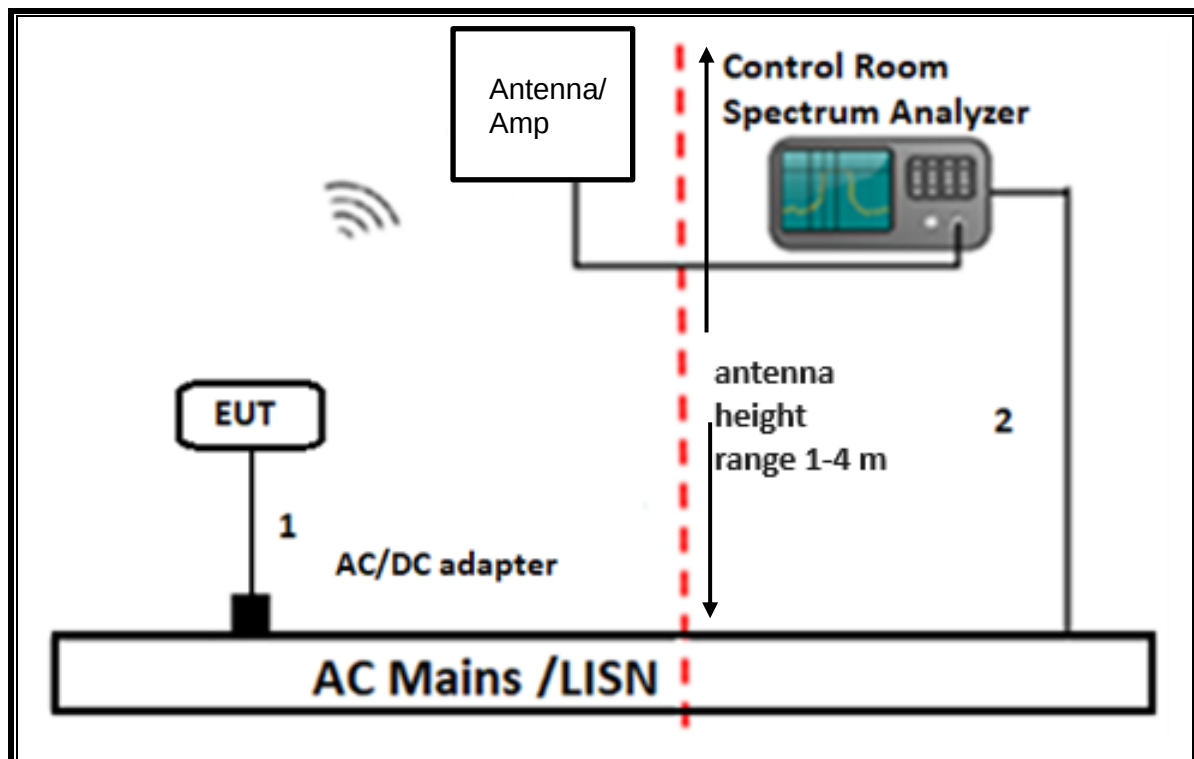


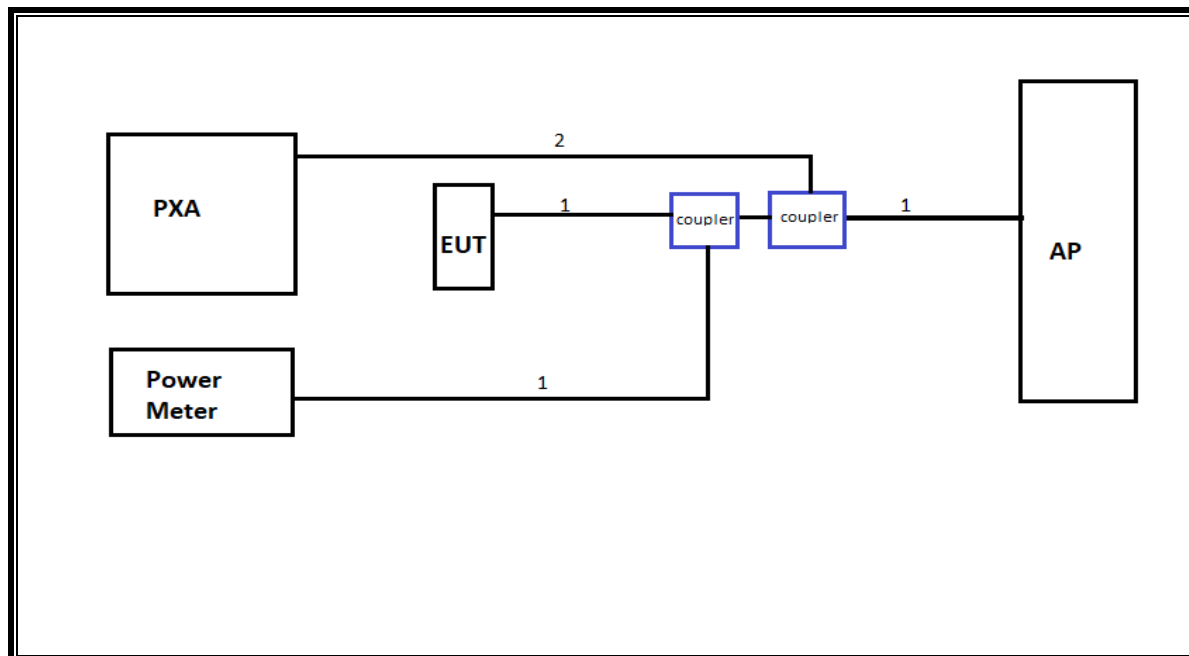
2.1.2. NFC/BT/BLE/BLE CHANNEL SOUNDING/802.15.4 THREAD/2.4G WLAN/5G WLAN/6G WLAN TEST SETUP BLOCK DIAGRAM

CONDUCTED TEST



RADIATED EMISSIONS/AC POWERLINE EMISSIONS



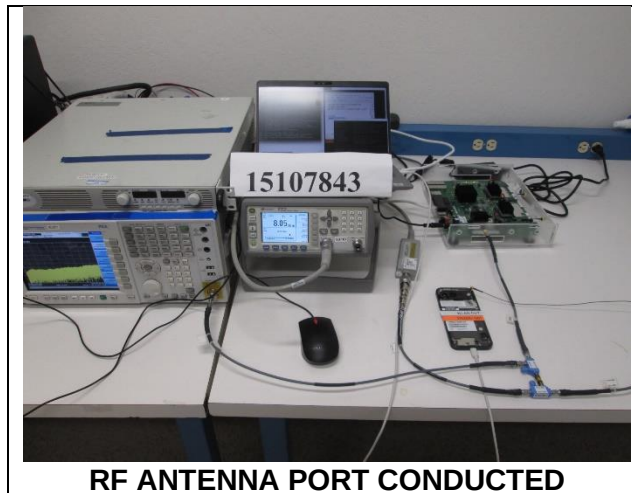
6G WLAN 987594 D02 U-NII 6 GHz EMC Measurement (Section K and L)

2.2. ANTENNA PORT SETUP

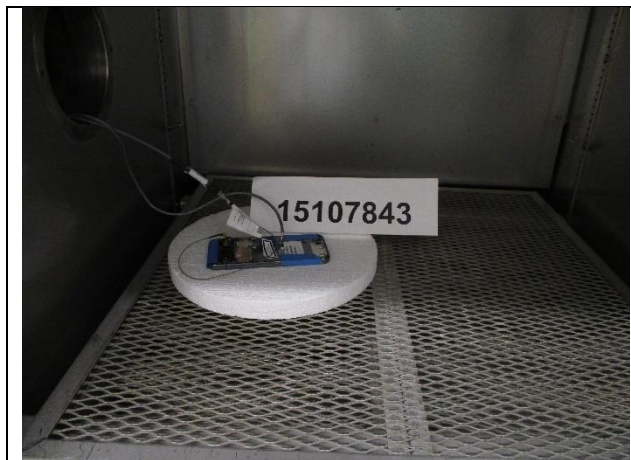
2.2.1. RF Antenna Port test



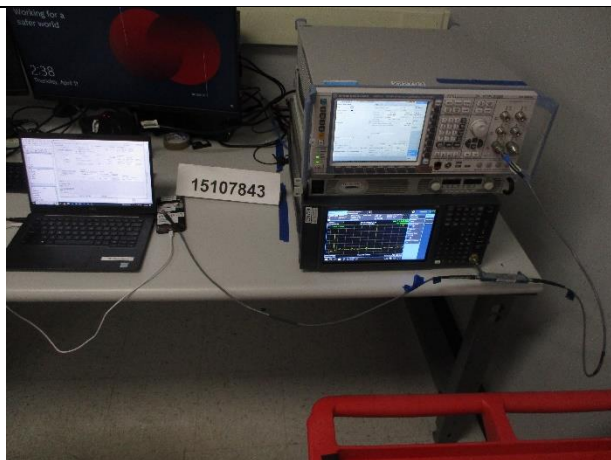
2.2.2. 6G WLAN 987594 D02 U-NII 6 GHz EMC Measurement (Section K and L)



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



AC LINE CONDUCTED (FRONT)



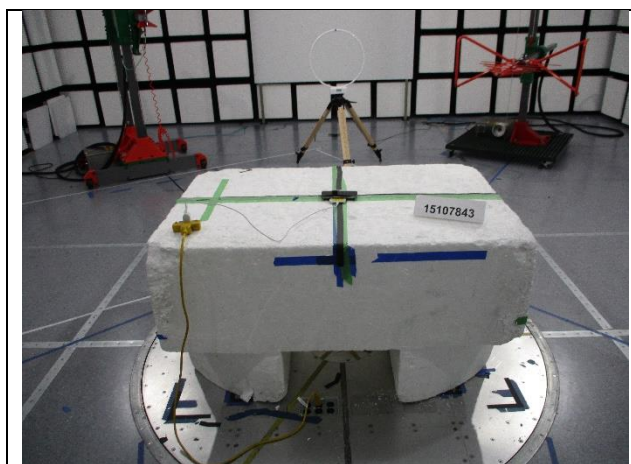
AC LINE CONDUCTED (BACK)

2.4. TEMPERATURE CHAMBER SETUP (NFC)

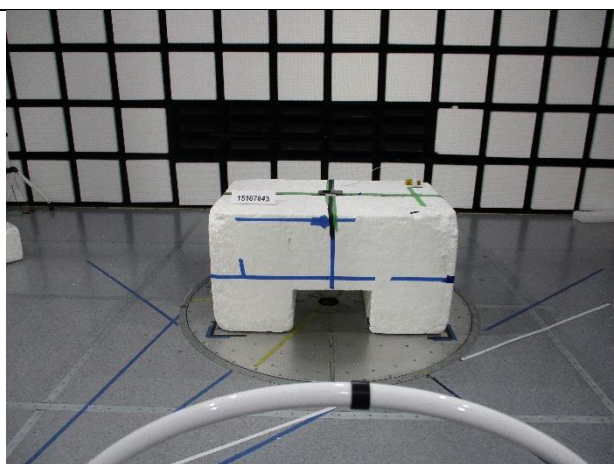


2.5. RADIATED RF MEASUREMENT SETUP

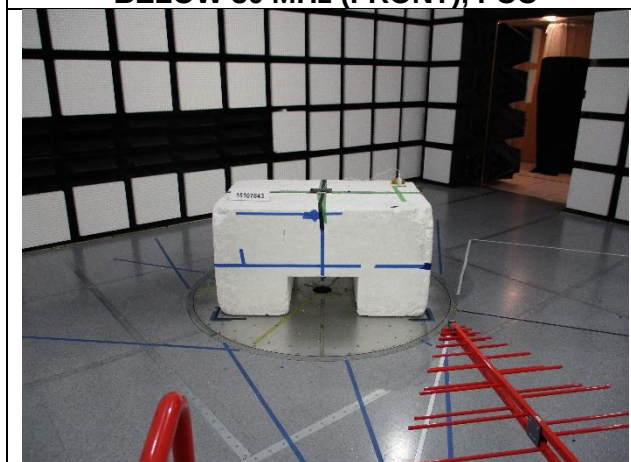
2.5.1. WPT



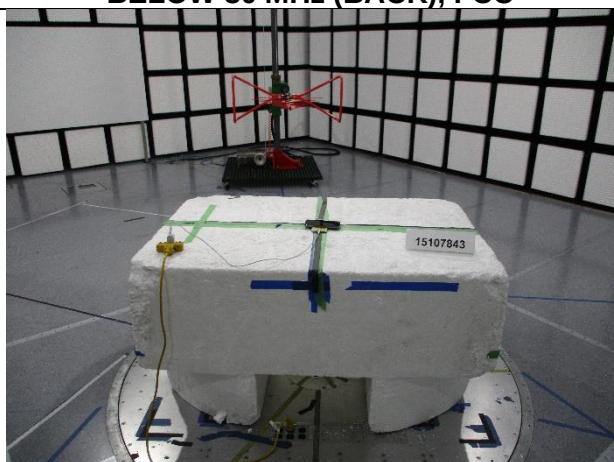
BELOW 30 MHz (FRONT), FCC



BELOW 30 MHz (BACK), FCC



BELOW 1GHz (FRONT)

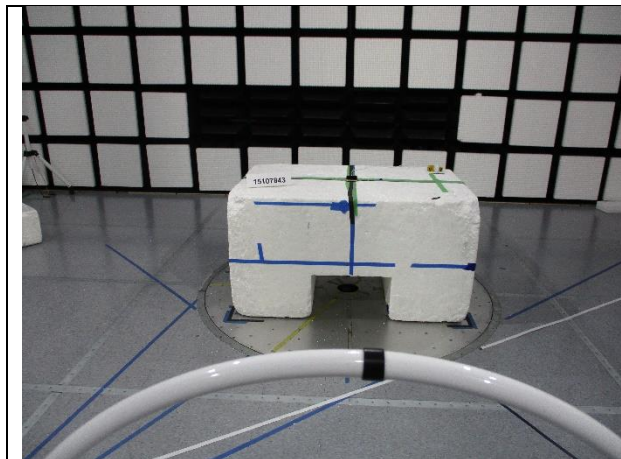


BELOW 1GHz (BACK)

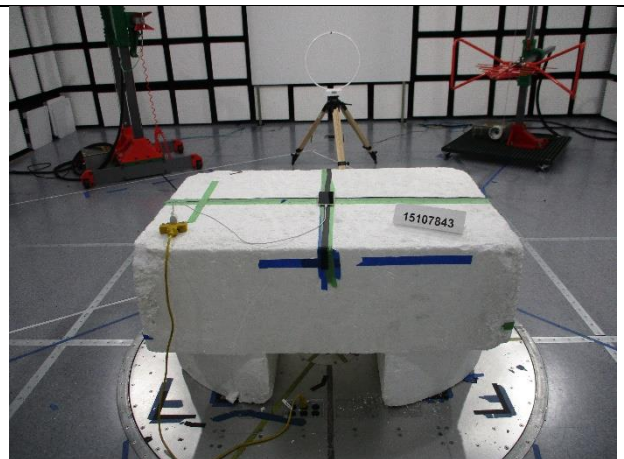
2.5.2. NFC/BT/BLE/BLE CHANNEL SOUNDING/802.15.4 THREAD/2.4G WLAN/5G WLAN/6G WLAN

Refer to each test report for worst case orientation.

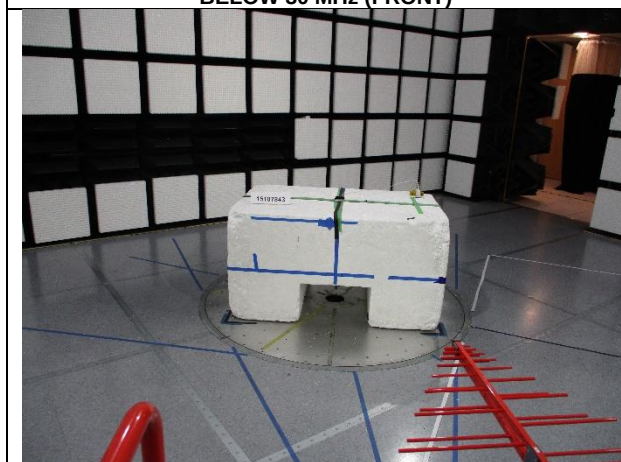
X (Flatbed Orientation)



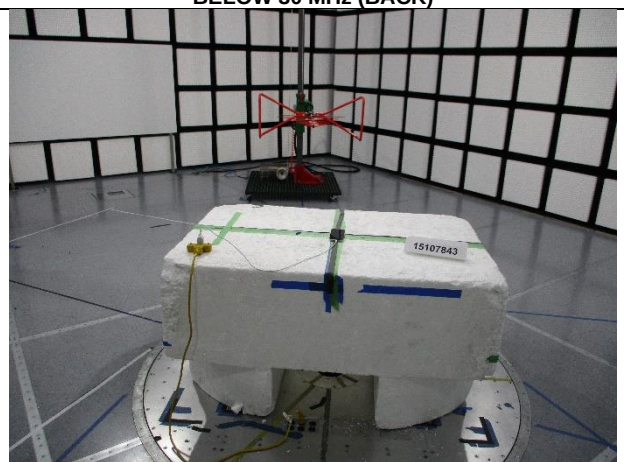
BELOW 30 MHz (FRONT)



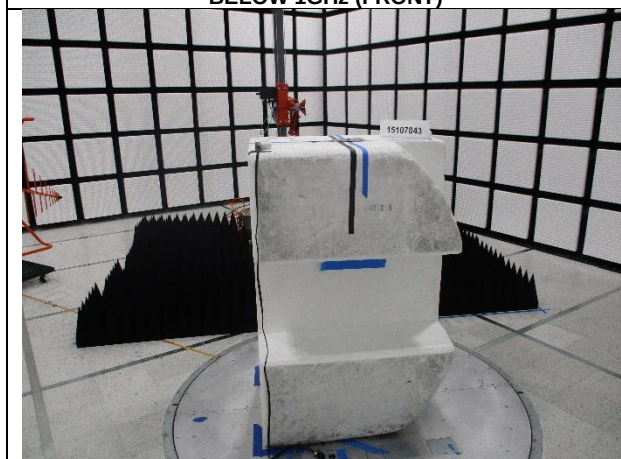
BELOW 30 MHz (BACK)



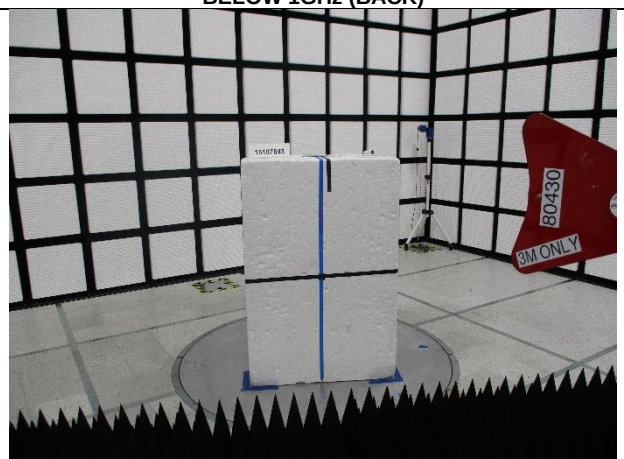
BELOW 1GHz (FRONT)



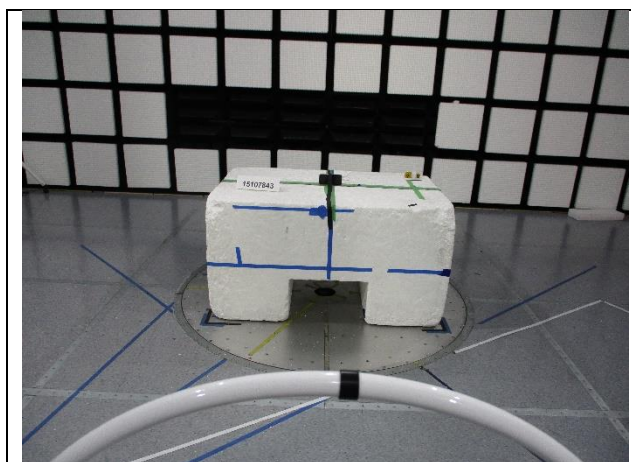
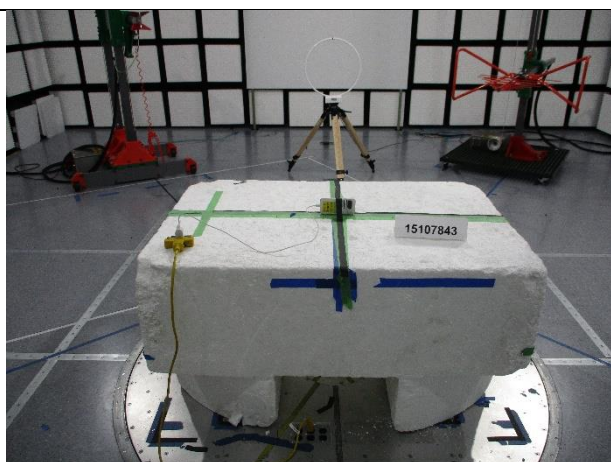
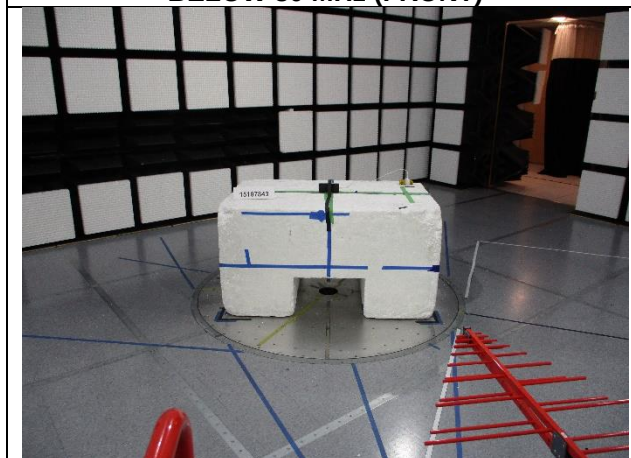
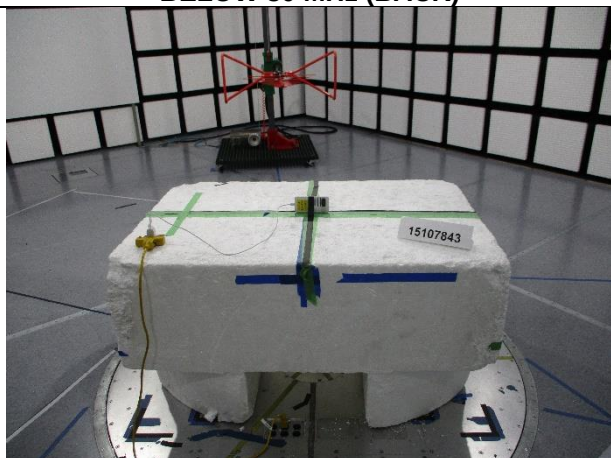
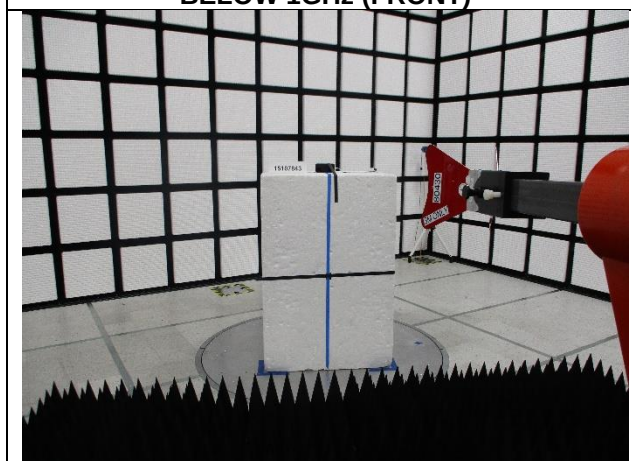
BELOW 1GHz (BACK)

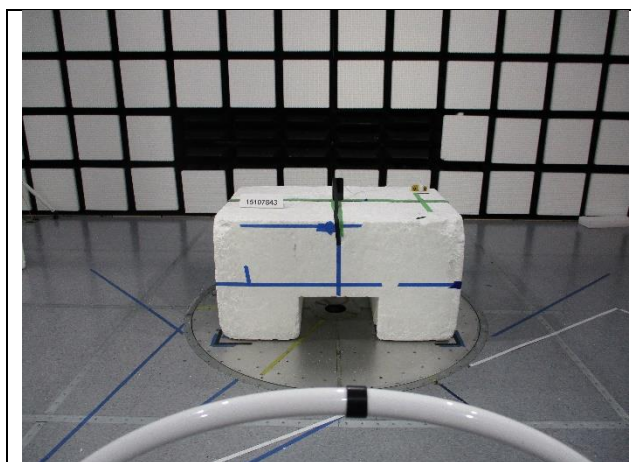
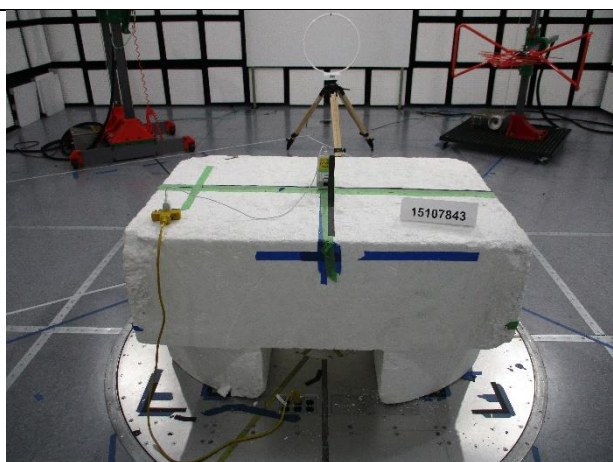
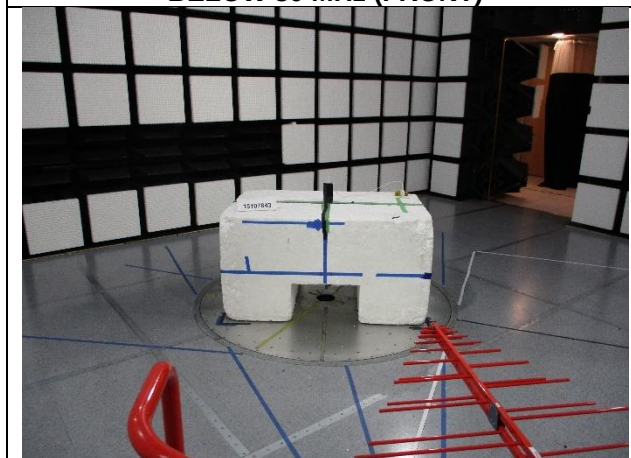
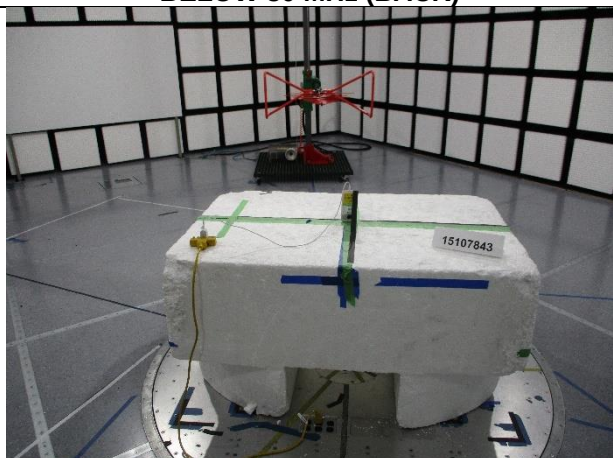
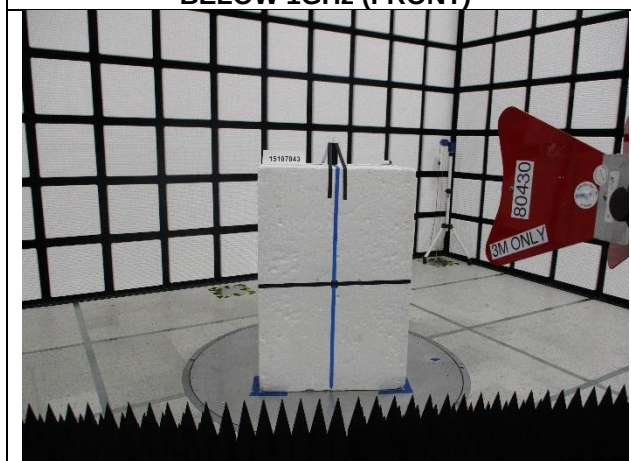
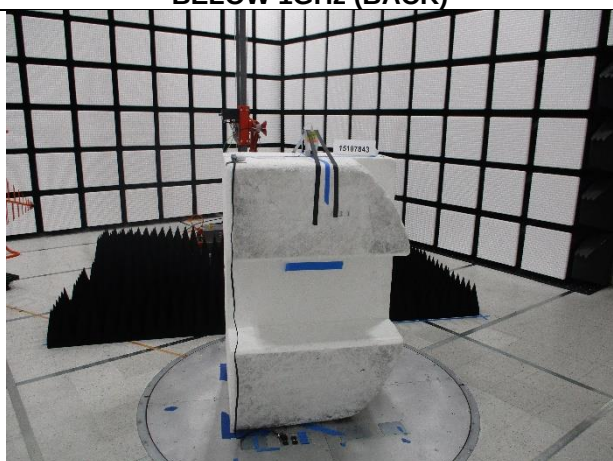


ABOVE 1GHz (FRONT)



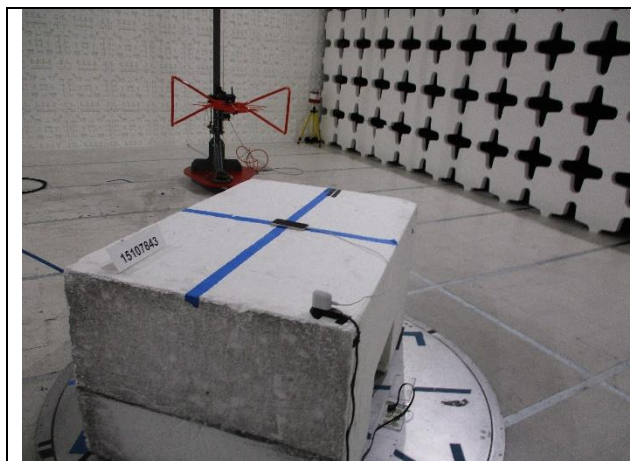
ABOVE 1GHz (BACK)

Y (Landscape Orientation)**BELOW 30 MHz (FRONT)****BELOW 30 MHz (BACK)****BELOW 1GHz (FRONT)****BELOW 1GHz (BACK)****ABOVE 1GHz (FRONT)****ABOVE 1GHz (BACK)**

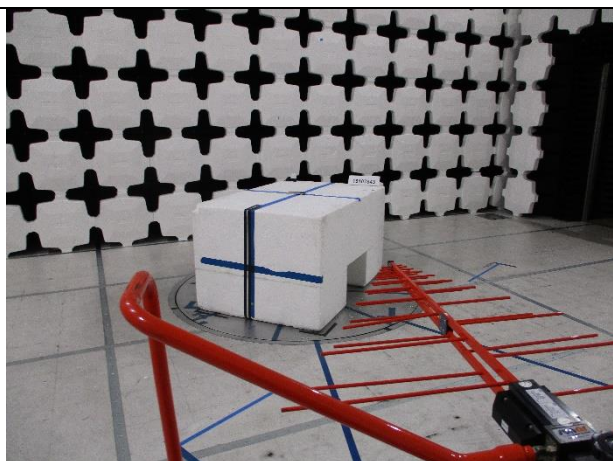
Z (Portrait Orientation)**BELOW 30 MHz (FRONT)****BELOW 30 MHz (BACK)****BELOW 1GHz (FRONT)****BELOW 1GHz (BACK)****ABOVE 1GHz (FRONT)****ABOVE 1GHz (BACK)**

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

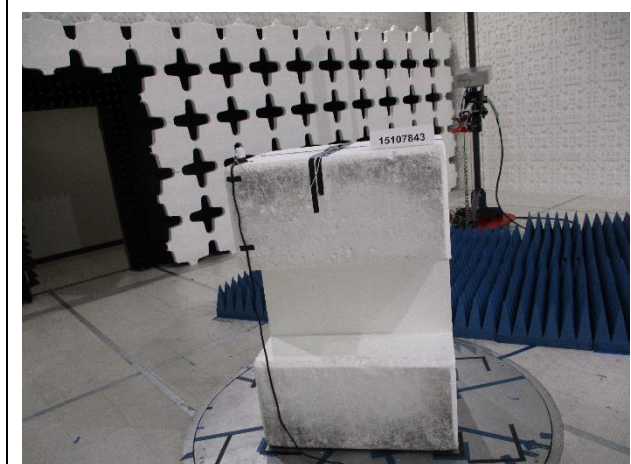
X (Flatbed Orientation)



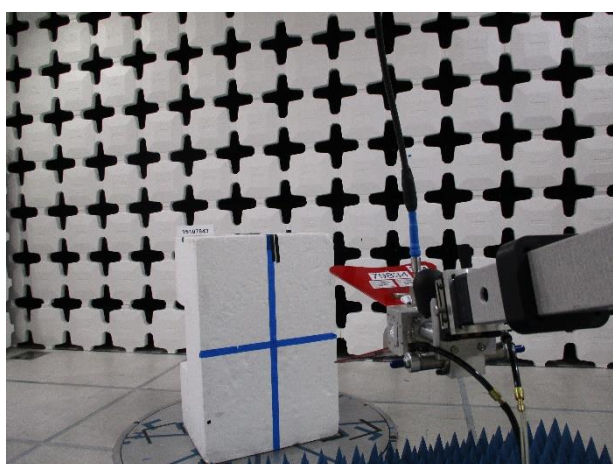
BELOW 1GHz (FRONT)



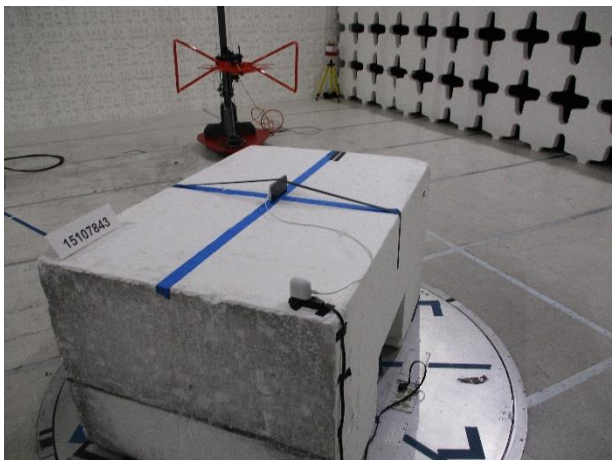
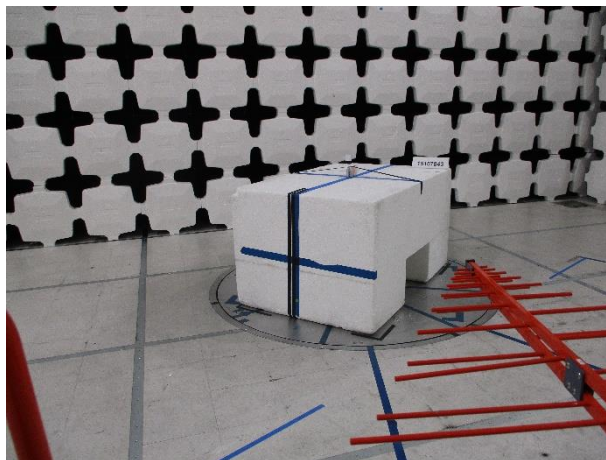
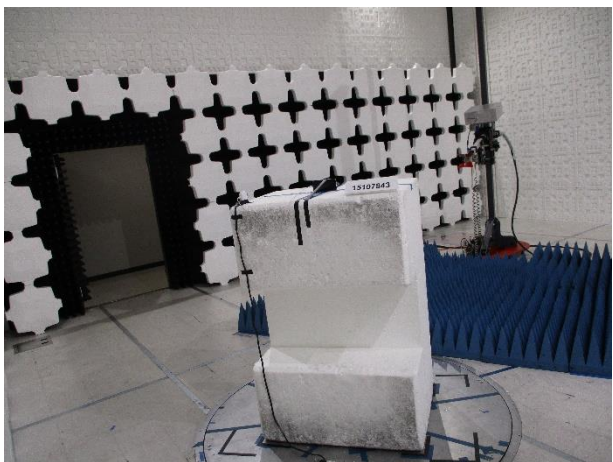
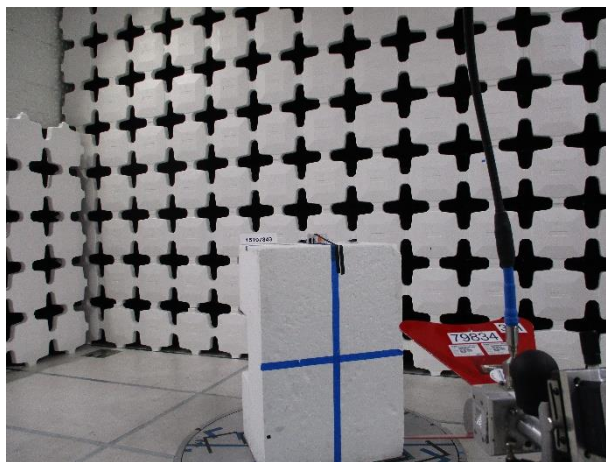
BELOW 1GHz (BACK)

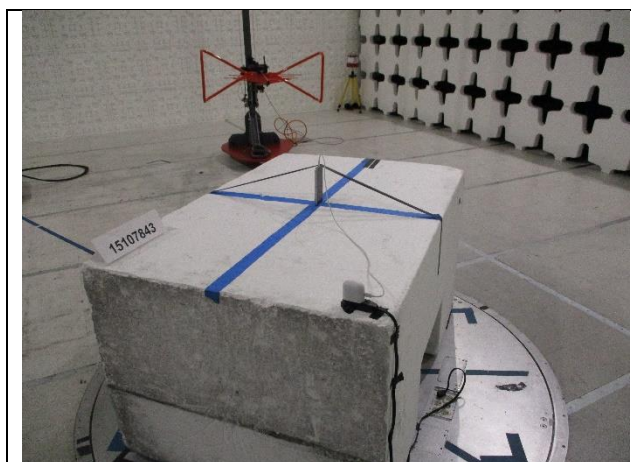
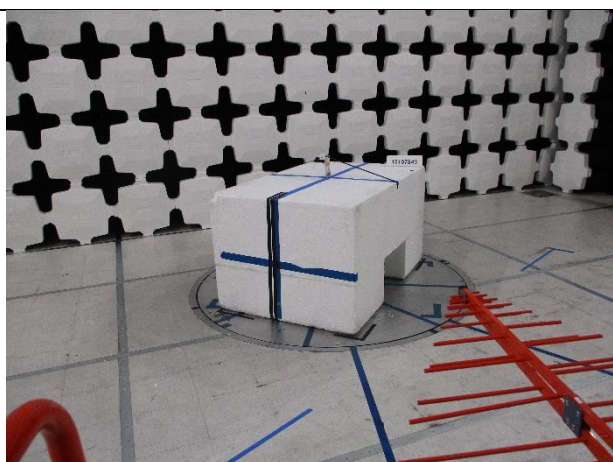
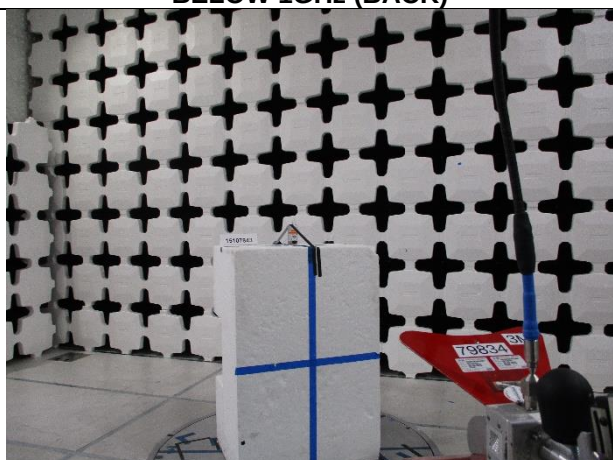


ABOVE 1GHz (FRONT)



ABOVE 1GHz (BACK)

Y (Landscape Orientation)**BELOW 1GHz (FRONT)****BELOW 1GHz (BACK)****ABOVE 1GHz (FRONT)****ABOVE 1GHz (BACK)**

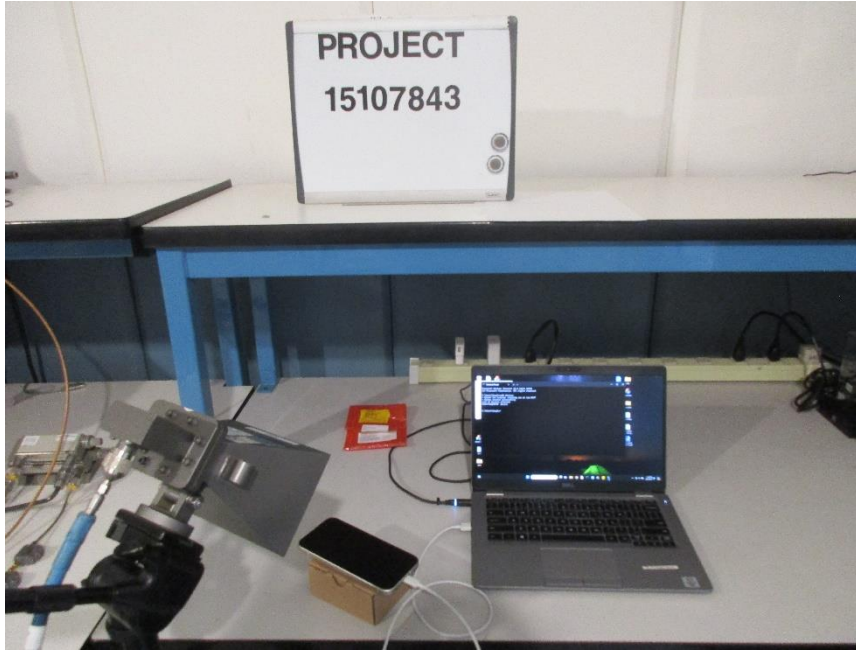
Z (Portrait Orientation)**BELOW 1GHz (FRONT)****BELOW 1GHz (BACK)****ABOVE 1GHz (FRONT)****ABOVE 1GHz (BACK)**

3. CBRS



4. DYNAMIC FREQUENCY SELECTION MEASUREMENT SETUP

DFS CLIENT MODE FRONT PHOTO



DFS CLIENT MODE SIDE PHOTO



DFS P2P MODE (OWNER DEVICE) FRONT PHOTO



DFS P2P MODE (OWNER DEVICE) SIDE PHOTO



DFS P2P MODE (CLIENT DEVICE) FRONT PHOTO

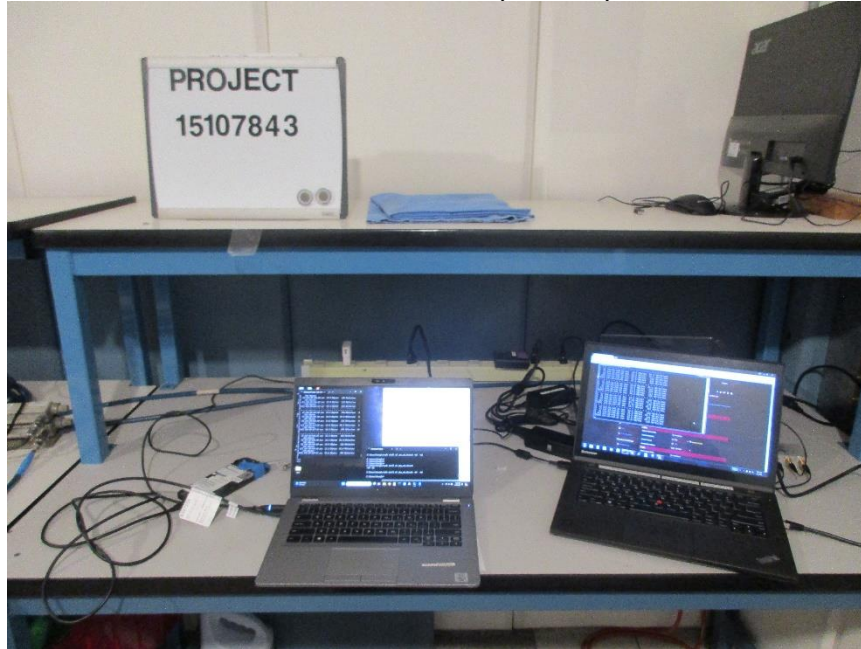


DFS P2P MODE (CLIENT DEVICE) SIDE PHOTO



5. CONTENTION PROTOCOL MEASUREMENT SETUP

CONTENTION PROTOCOL PHOTO (FRONT)



CONTENTION PROTOCOL PHOTO (BACK)



END OF REPORT