



# TEST REPORT

**Report Number. :** 13708019-E5V1

**Applicant :** Samsung Electronics Co., Ltd.  
129 Samsung-Ro, Yeongtong-Gu  
Suwon-Si, Gyeonggi-Do, 16677, Korea

**Model :** SM-M127G/DS

**FCC ID :** A3LSMM127G

**EUT Description :** GSM/WCDMA/LTE Phablet with BT/BLE and DTS b/g/n

**Test Standard(s) :** FCC 47 CFR PART 15 SUBPART B

**Date Of Issue:**

March 05, 2021

**Prepared by:**

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NVLAP Lab code: 200065-0

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Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
V1	3/5/2021	Initial Issue	

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# 1. ATTESTATION OF TEST RESULTS

Applicant Name and Address	SAMSUNG ELECTRONICS CO., LTD. 129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI, GYEONGGI-DO, 16677, KOREA	
Model	SM-M127G	
FCC ID	A3LSMM127G	
EUT Description	GSM/WCDMA/LTE PHABLET WITH BT/BLE AND DTS B/G/N	
Serial Number	R38NB0188LV	
Date Tested	FEBRUARY 22, 2021 to FEBRUARY 25, 2021	
Applicable Standards	PART 15 SUBPART B	
Test Results	COMPLIES	
<p>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.</p> <p>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.</p> <p>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 NVLAP, NIST, any agency of the Federal Government, or any agency of the U.S. government.</p>		
Approved & Released By:	Reviewed By:	Prepared By:
		
Dan Corona Operations Leader UL Verification Services Inc.	Kiya Kedida Senior Project Engineer UL Verification Services Inc.	Brian Shen Laboratory Engineer UL Verification Services Inc.

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with the following:

- FCC CFR 47 Part 2
- FCC CFR 47 Part 15B
- ANSI C63.4:2014

## 3. FACILITIES AND ACCREDITATION

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0, 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
<input type="checkbox"/>	Building 1: 47173 Benicia Street Fremont, CA 94538, U.S.A	US0104	2324A	208313
<input type="checkbox"/>	Building 2: 47266 Benicia Street Fremont, CA 94538, U.S.A	US0104	22541	208313
<input checked="" type="checkbox"/>	Building 4: 47658 Kato Rd Fremont, CA 94538, U.S.A	US0104	2324B	208313

## 4. DECISION RULES AND MEASUREMENT UNCERTAINTY

### 4.1. METROLOGICAL TRACEABILITY

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

### 4.2. DECISION RULES

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

### 4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	U <sub>Lab</sub>
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	4.84 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%.

### 4.4. SAMPLE CALCULATION

#### **RADIATED EMISSIONS**

Where relevant, the following sample calculation is provided:  
 Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)  
 $36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} = 28.9 \text{ dBuV/m}$

#### **MAINS CONDUCTED EMISSIONS**

Where relevant, the following sample calculation is provided:  
 Final Voltage (dBuV) = Measured Voltage (dBuV) + Cable Loss (dB) + Limiter Factor (dB) + LISN Insertion Loss.  
 $36.5 \text{ dBuV} + 0 \text{ dB} + 10.1 \text{ dB} + 0 \text{ dB} = 46.6 \text{ dBuV}$

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## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE Phablet with BT/BLE and DTS b/g/n.

### 5.2. TEST MODE

Mode	Description
GSM 850	Communication with Callbox Simulator (CMW500)
WCDMA BAND 5	Communication with Callbox Simulator (CMW500)
LTE BAND 5	Communication with Callbox Simulator (CMW500)

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### **5.3. WORST-CASE CONFIGURATION AND MODE**

For GSM 850, WCDMA Band 5, and LTE Band 5, the spurious emissions were investigated in three orthogonal orientations X, Y, and Z. It was determined that X orientation was the worst-case orientation.

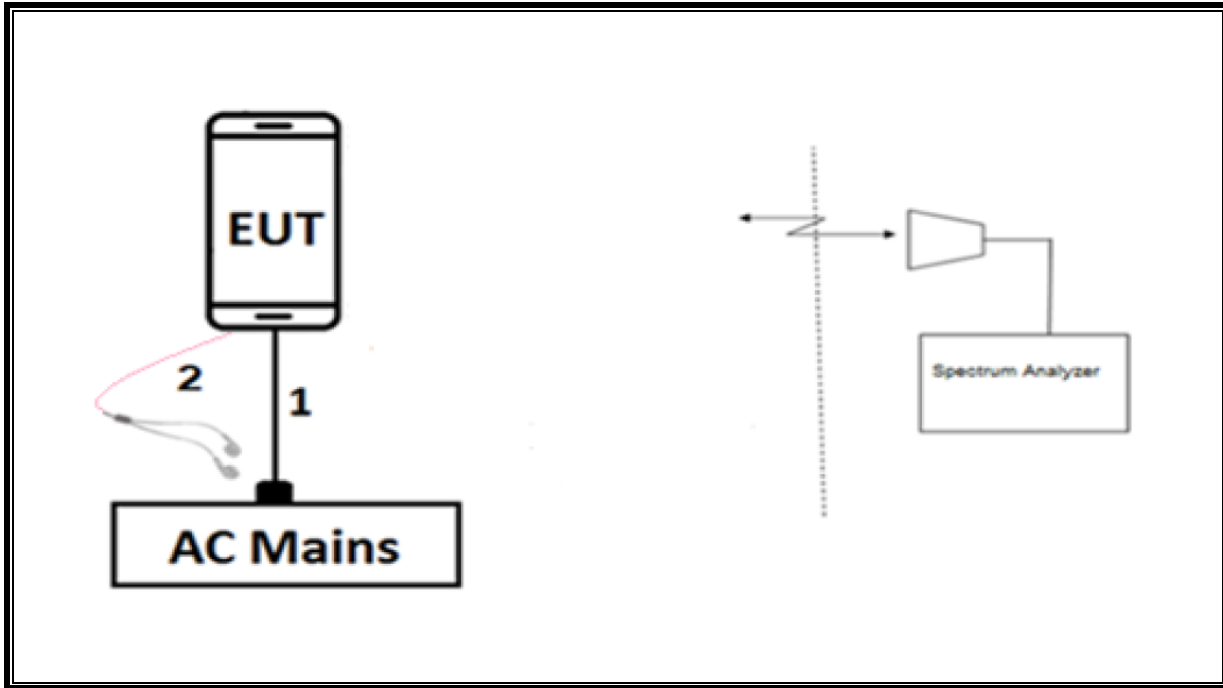
Note: The EUT is continuously communicated with the call box during the test. Also attached with travel adapter for the worst case condition.



**5.4. DESCRIPTION OF TEST SETUP**

SUPPORT TEST EQUIPMENT						
Description		Manufacturer	Model	Serial Number	FCC ID/ DoC	
AC Adapter		Samsung	EP-TA200	R37M3FL1XN1DK3	N/A	
Earphone		Samsung	N/A	N/A	N/A	
I/O CABLES (RF RADIATED TEST)						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB	1	AC Adapter	Shielded	1	N/A
2	Earphone	1	3.5mm	Un-Shielded	1	N/A

**RADIATED SETUP**



## 6. 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	ID Num	Cal Due	Last Cal
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	PRE0179522	2/19/2022	2/19/2021
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	PRE0100034	9/15/2021	9/15/2020
Amplifier, 1 to 18GHz, 35dB	AMPLICAL	AMP1G18-35	T1571	8/20/2021	8/20/2020
Antenna, BroadBand Hybrid, 30MHz to 3GHz	Sunol Sciences Corp.	JB3	PRE0184052	11/19/2021	11/19/2020
Amplifier, 10KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310	170647	12/29/2021	12/29/2020
Test Software List					
Description	Manufacturer	Model	Version		
Radiated Software	UL	UL EMC	Rev 9.5, April 30, 2020		

## 7. RADIATED TEST RESULTS

### 7.1. APPLICABLE LIMITS AND TEST RESULTS

#### TEST PROCEDURE

ANSI C63.4: 2014

#### LIMIT

§ 15.109 (a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Limit for radiated disturbance of Class B ITE at measuring distance of 3 meter	
Frequency Range (MHz)	Quasi-Peak limit (dBuV/m)
30 to 88	40
88 to 216	43.5
216 to 960	46
Above 960 MHz	54

Note: The lower limit shall apply at the transition frequency.

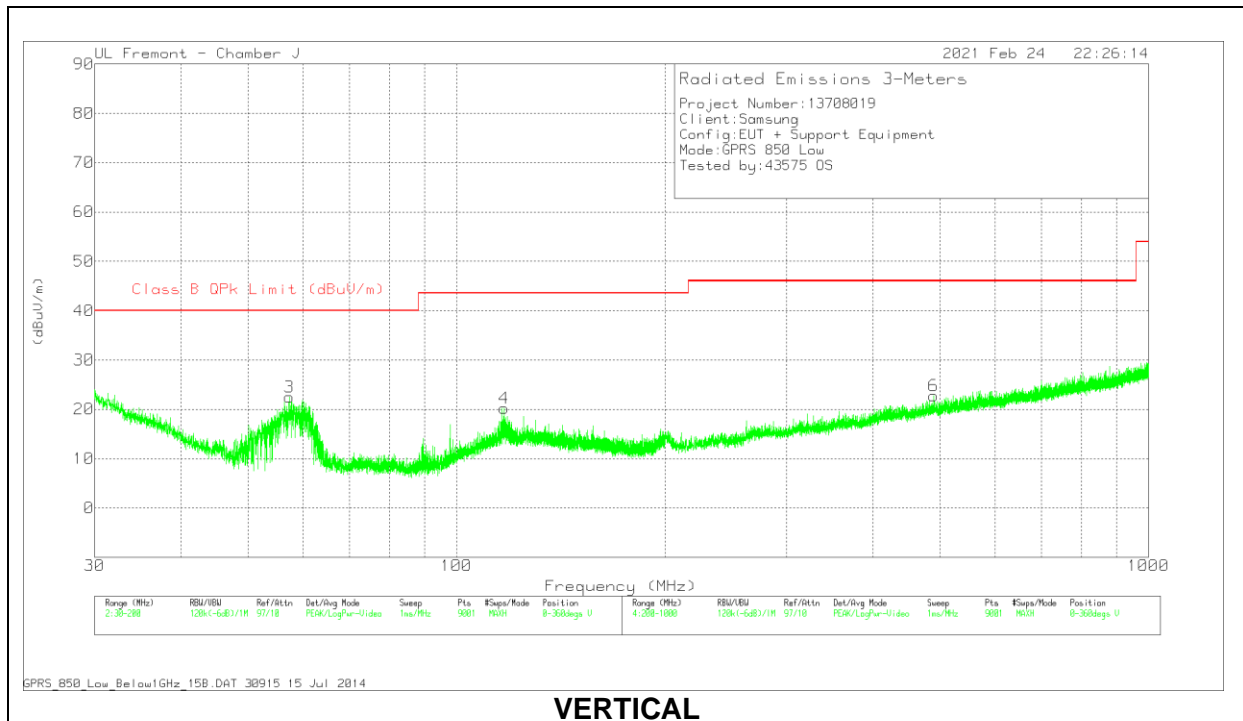
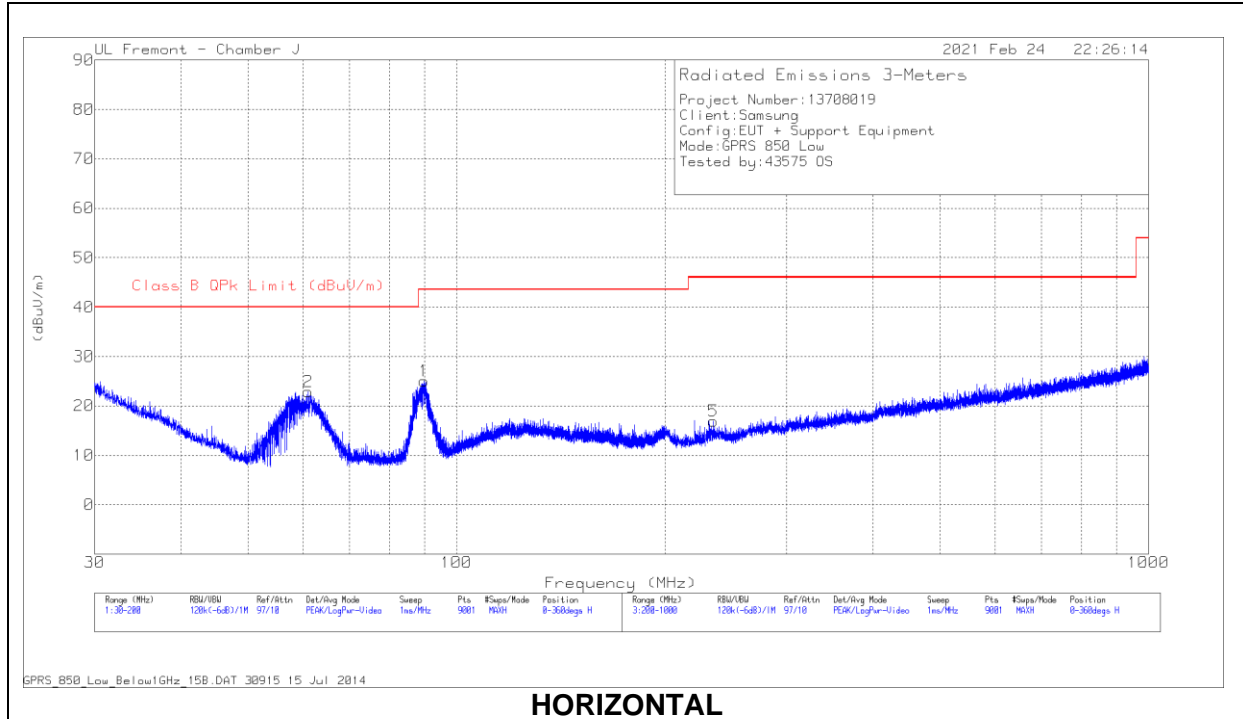
#### RESULTS

## 8. DATA FOR 15B RECEIVER MODE

### 8.1. GSM 850

#### 8.1.1. BELOW 1GHz

#### LOW CHANNEL

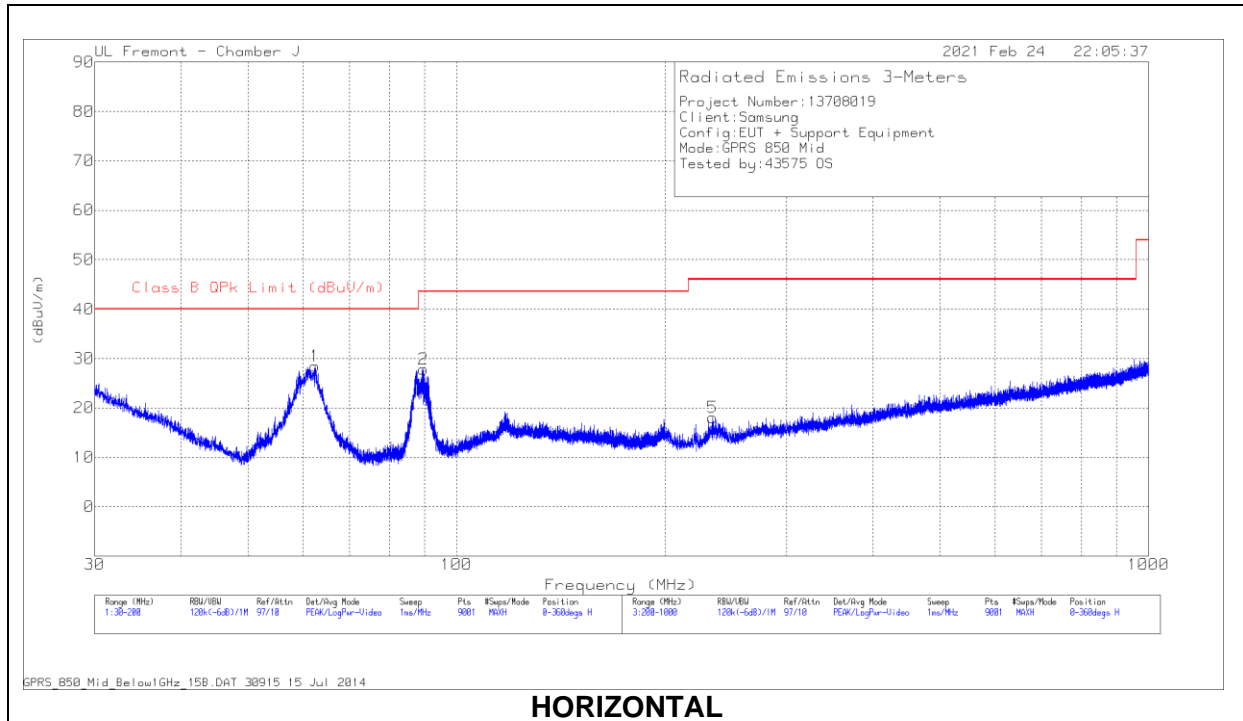


**RADIATED EMISSIONS**

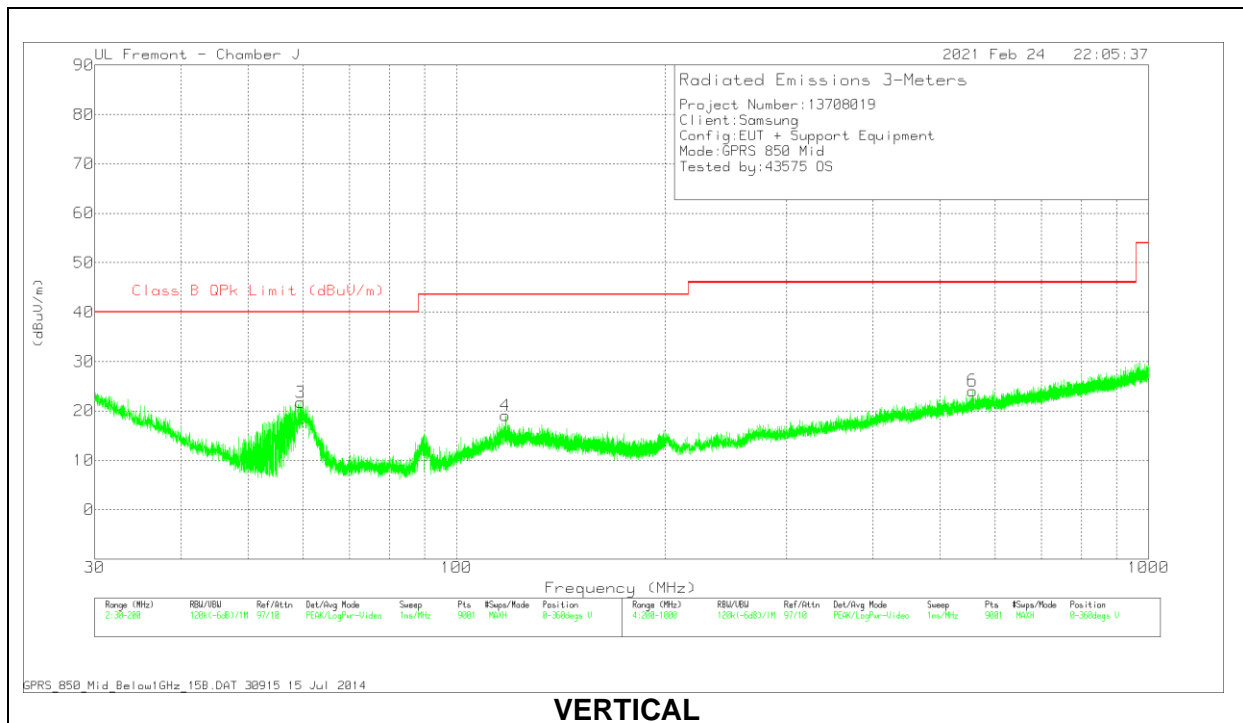
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF PRE0184052 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	89.6125	44.12	Pk	13.6	-31.1	26.62	43.52	-16.9	127	214	H
	89.6125	36.47	Qp	13.6	-31.1	18.97	43.52	-24.55	127	214	H
2	61.0913	40.57	Pk	13.6	-31.3	22.87	40	-17.13	0-360	195	H
3	57.3702	40.35	Pk	13.4	-31.3	22.45	40	-17.55	0-360	100	V
4	117.2294	31.51	Pk	19.5	-30.8	20.21	43.52	-23.31	0-360	100	V
5	235.1112	29.23	Pk	17.9	-30.2	16.93	46.02	-29.09	0-360	99	H
6	489.3337	28.28	Pk	23.8	-29.3	22.78	46.02	-23.24	0-360	98	V

Pk - Peak detector  
 Qp - Quasi-Peak detector

**MID CHANNEL**



**HORIZONTAL**



**VERTICAL**

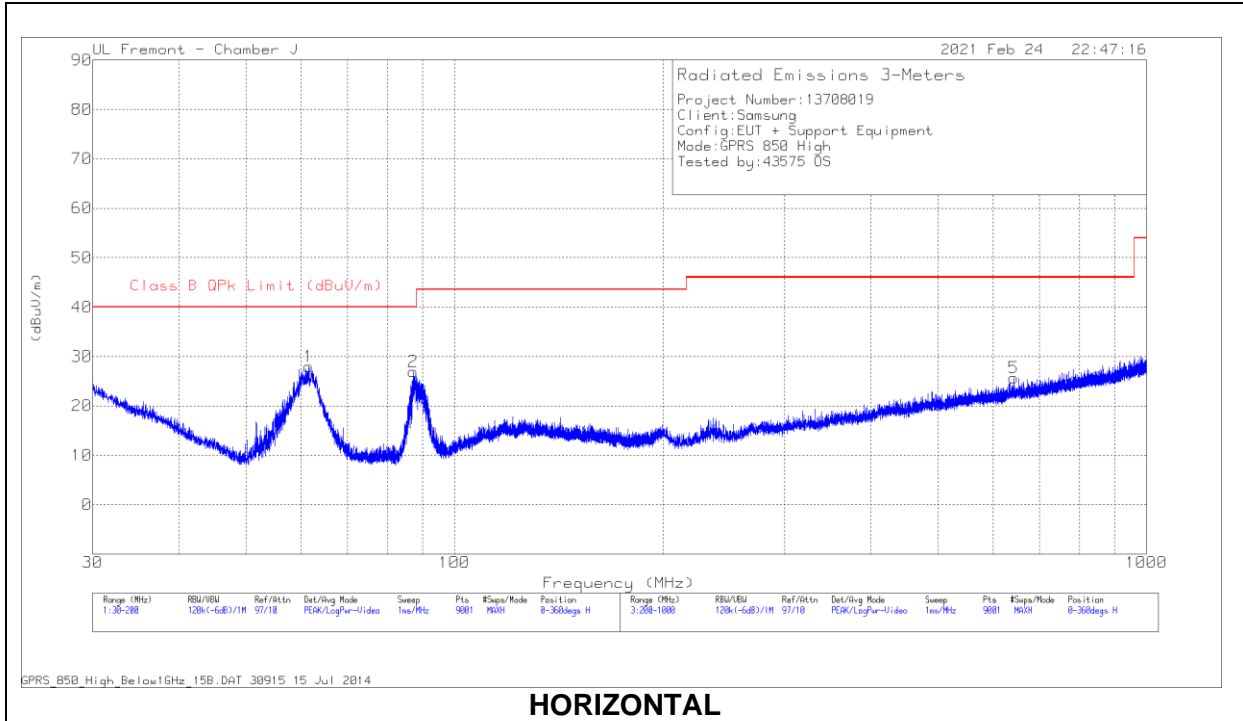
**RADIATED EMISSIONS**

Marker	Frequency (MHz)	Meter Reading (dBUV)	Det	AF PRE0184052 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBUV/m)	Class B QPk Limit (dBUV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	62.4513	46.06	Pk	13.7	-31.3	28.46	40	-11.54	0-360	293	H
	62.3516	38.35	Qp	13.7	-31.3	20.75	40	-19.25	82	181	H
2	89.4815	45.43	Pk	13.5	-31.1	27.83	43.52	-15.69	0-360	195	H
3	59.5046	39.46	Pk	13.6	-31.3	21.76	40	-18.24	0-360	100	V
4	117.5883	30.22	Pk	19.6	-30.8	19.02	43.52	-24.5	0-360	100	V
5	234.4	30.44	Pk	17.8	-30.2	18.04	46.02	-27.98	0-360	292	H
6	556.5338	28.49	Pk	24.7	-29.1	24.09	46.02	-21.93	0-360	198	V

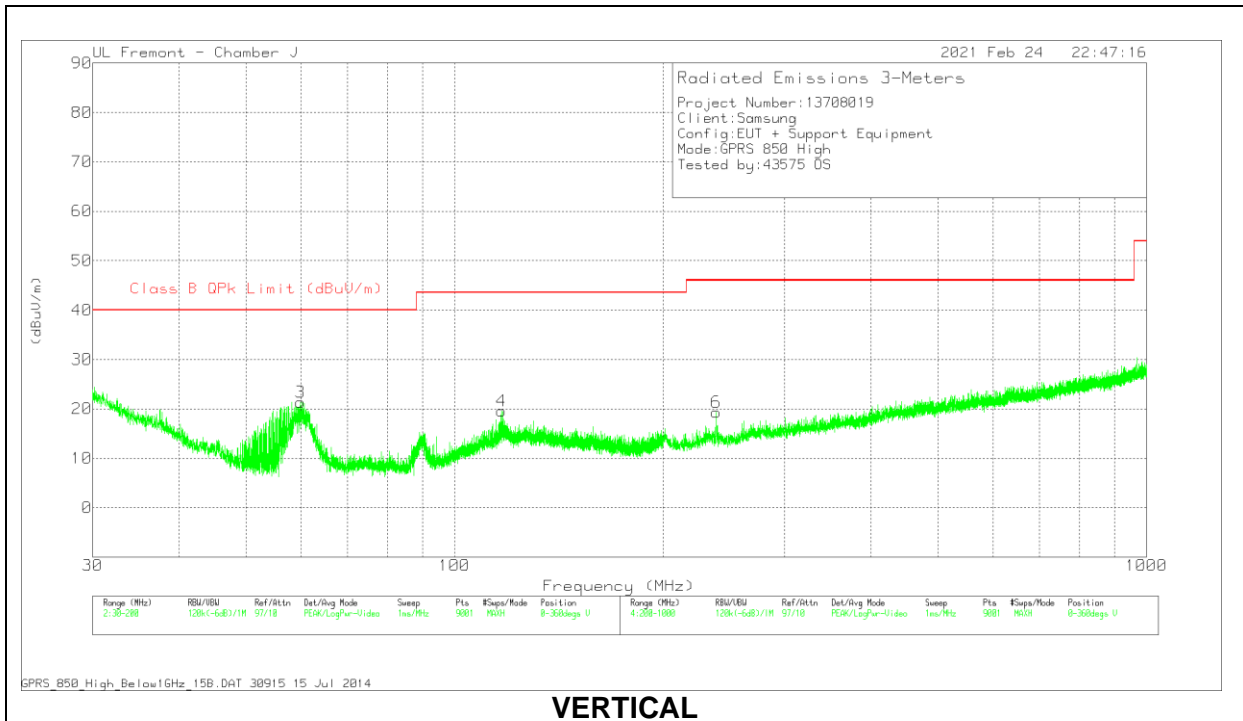
Pk - Peak detector  
 Qp - Quasi-Peak detector



**HIGH CHANNEL**



**HORIZONTAL**



**VERTICAL**

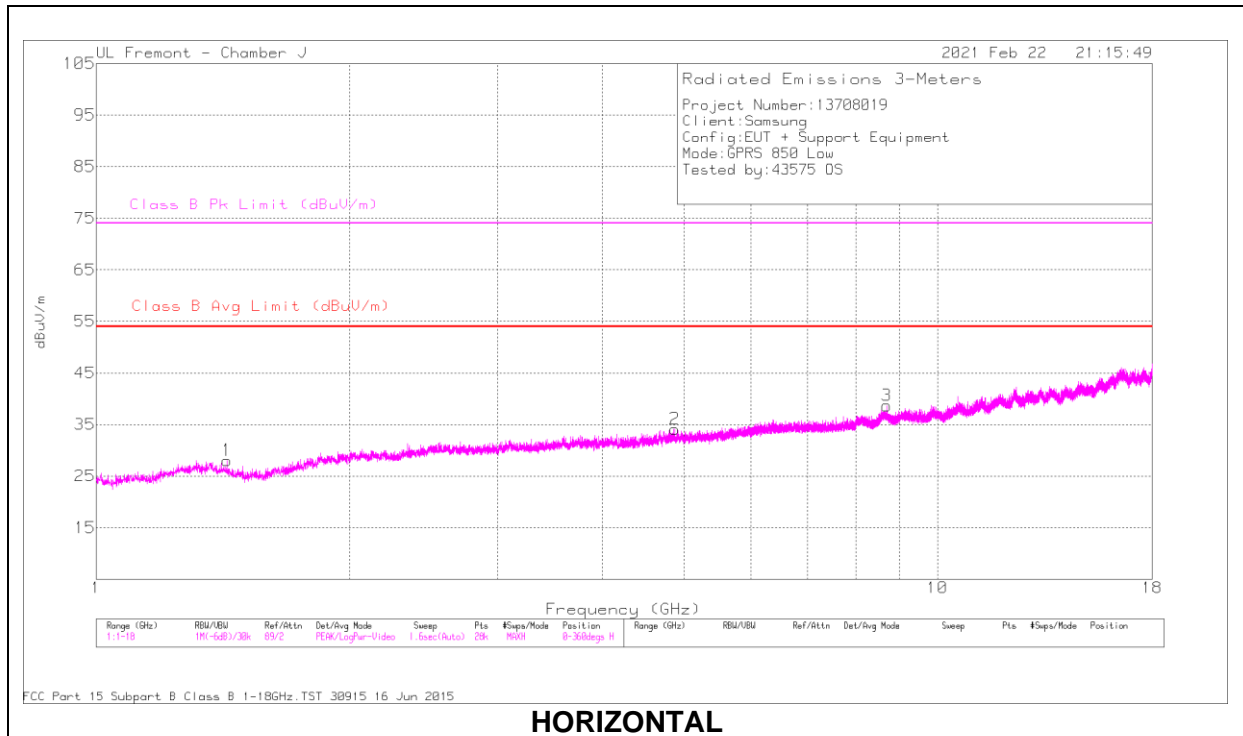
**RADIATED EMISSIONS**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF PRE0184052 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	61.3197	43.47	Pk	13.6	-31.3	25.77	40	-14.23	50	231	H
	61.3197	32.06	Qp	13.6	-31.3	14.36	40	-25.64	50	231	H
2	87.1581	44.54	Pk	13.5	-31.1	26.94	40	-13.06	0-360	195	H
3	59.8824	39.06	Pk	13.6	-31.3	21.36	40	-18.64	0-360	100	V
4	116.8516	30.85	Pk	19.5	-30.8	19.55	43.52	-23.97	0-360	100	V
5	642.9339	28.73	Pk	26	-29	25.73	46.02	-20.29	0-360	293	H
6	238.8445	31.56	Pk	18	-30.2	19.36	46.02	-26.66	0-360	299	V

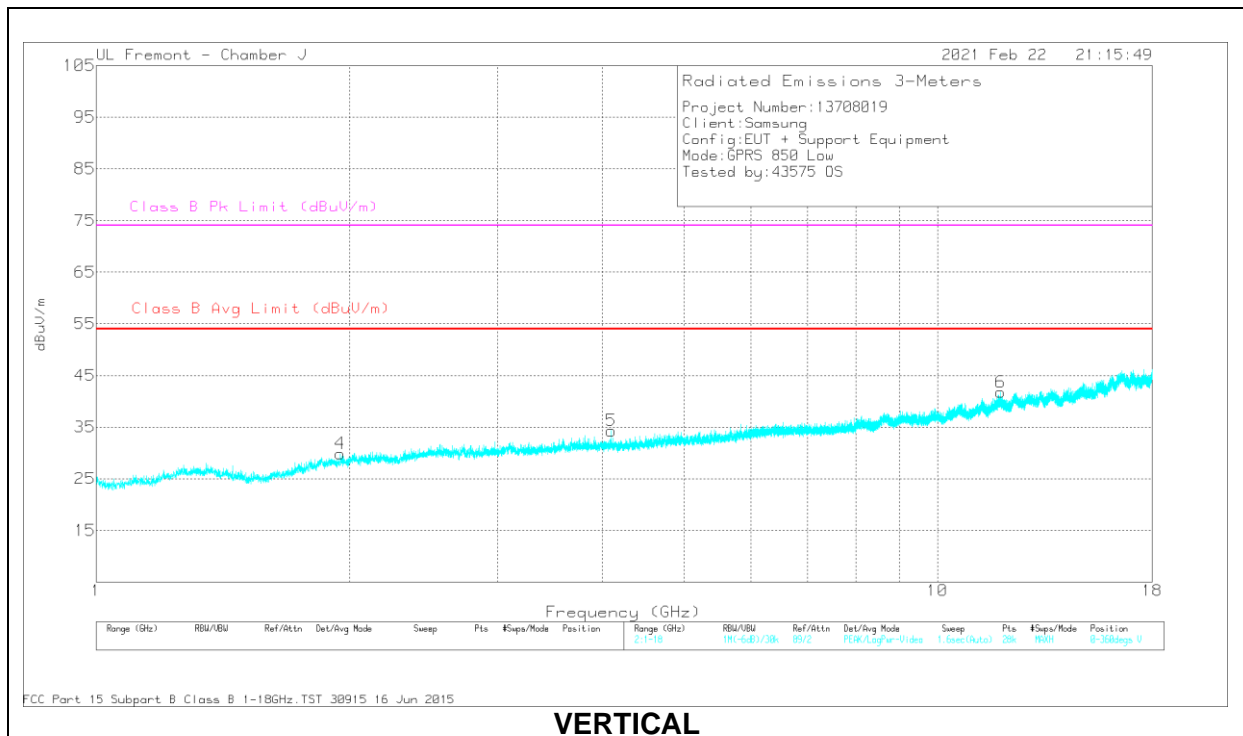
Pk - Peak detector  
 Qp - Quasi-Peak detector

**8.1.2. ABOVE 1GHz**

**LOW CHANNEL**



**HORIZONTAL**



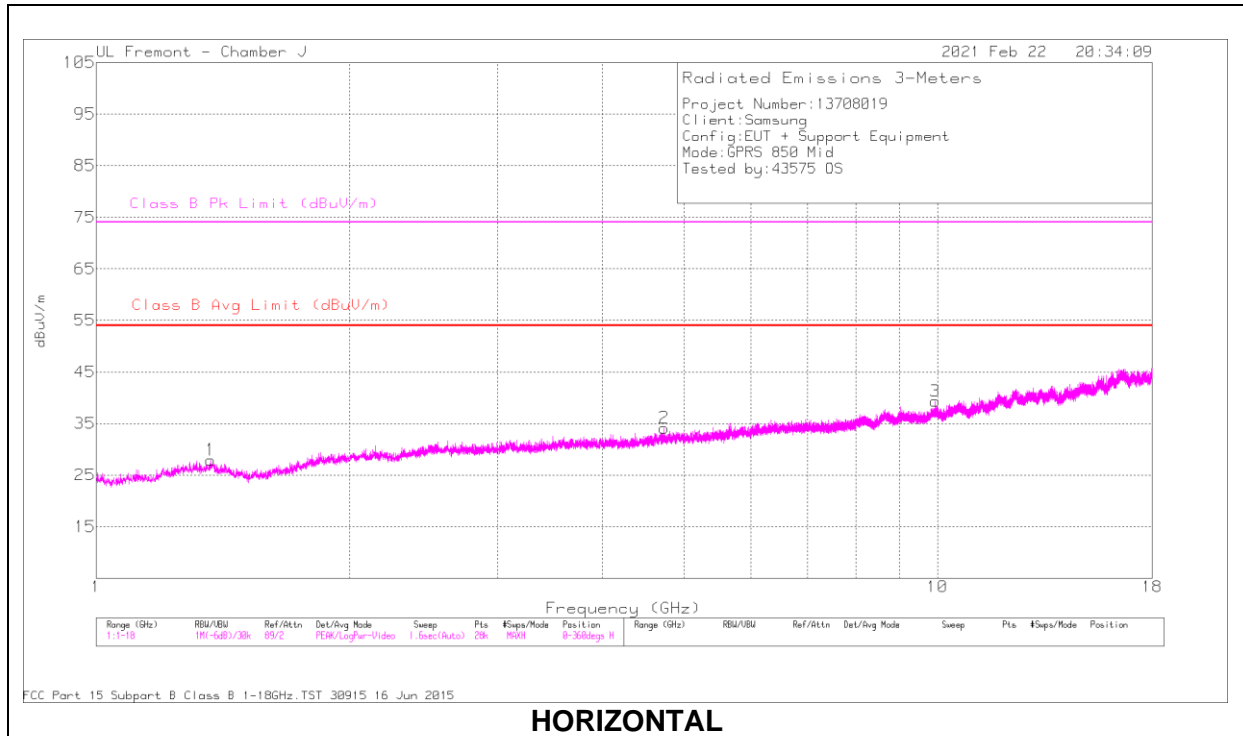
**VERTICAL**

**RADIATED EMISSIONS**

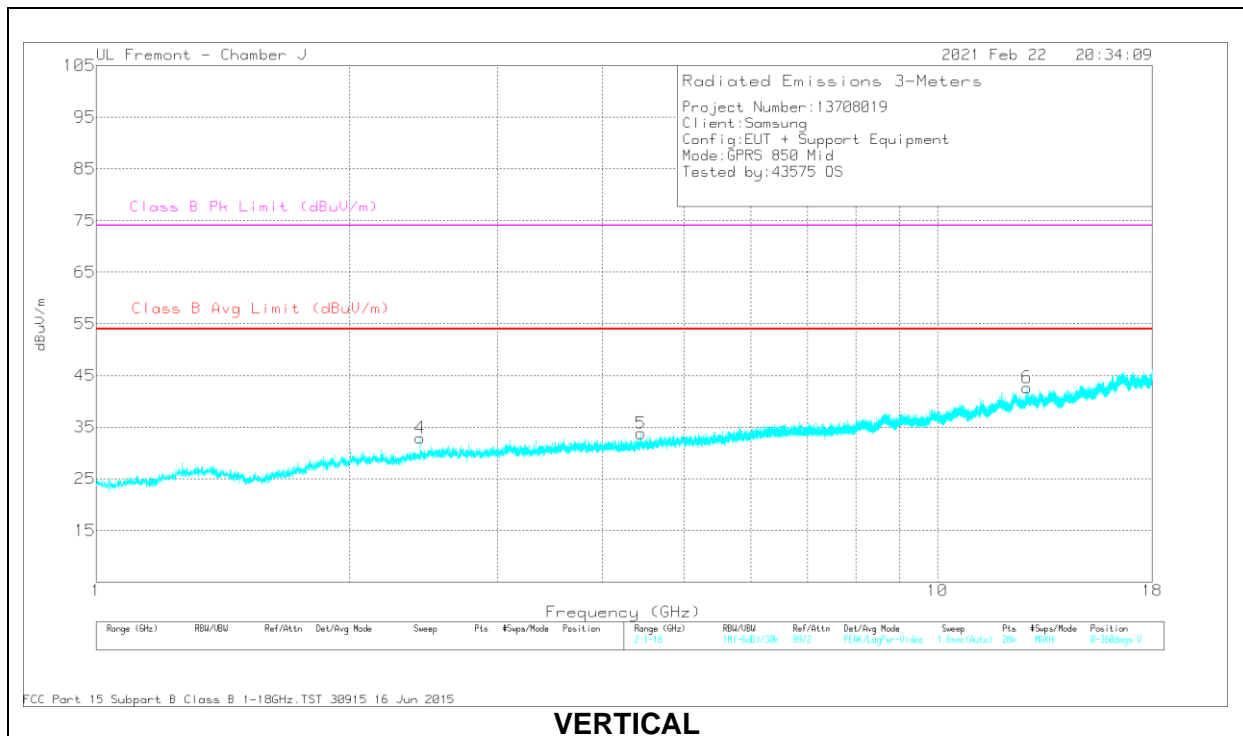
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0100034 (dB/m)	Amp/Cbl (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.42965	33.47	Pk	28.9	-35.7	26.67	54	-27.33	74	-47.33	345	263	H
	1.42965	20.91	Av	28.9	-35.7	14.11	54	-39.89	-	-	345	263	H
2	4.87097	29.74	Pk	34.4	-30.9	33.24	54	-20.76	74	-40.76	279	338	H
	4.87097	16.81	Av	34.4	-30.9	20.31	54	-33.69	-	-	279	338	H
3	8.70485	26.37	Pk	36.2	-25.4	37.17	54	-16.83	74	-36.83	133	163	H
	8.70485	13.4	Av	36.2	-25.4	24.2	54	-29.8	-	-	133	163	H
4	1.94836	44.33	Pk	31.1	-35.4	40.03	54	-13.97	74	-33.97	202	107	V
	1.94836	29.84	Av	31.1	-35.4	25.54	54	-28.46	-	-	202	107	V
5	4.09416	40.59	Pk	33.5	-32	42.09	54	-11.91	74	-31.91	89	255	V
	4.09416	27.19	Av	33.5	-32	28.69	54	-25.31	-	-	89	255	V
6	11.88147	33.64	Pk	38.9	-22.5	50.04	54	-3.96	74	-23.96	129	162	V
	11.88147	20.87	Av	38.9	-22.5	37.27	54	-16.73	-	-	129	162	V

Pk - Peak detector  
 Av - Average detection

**MID CHANNEL**



**HORIZONTAL**



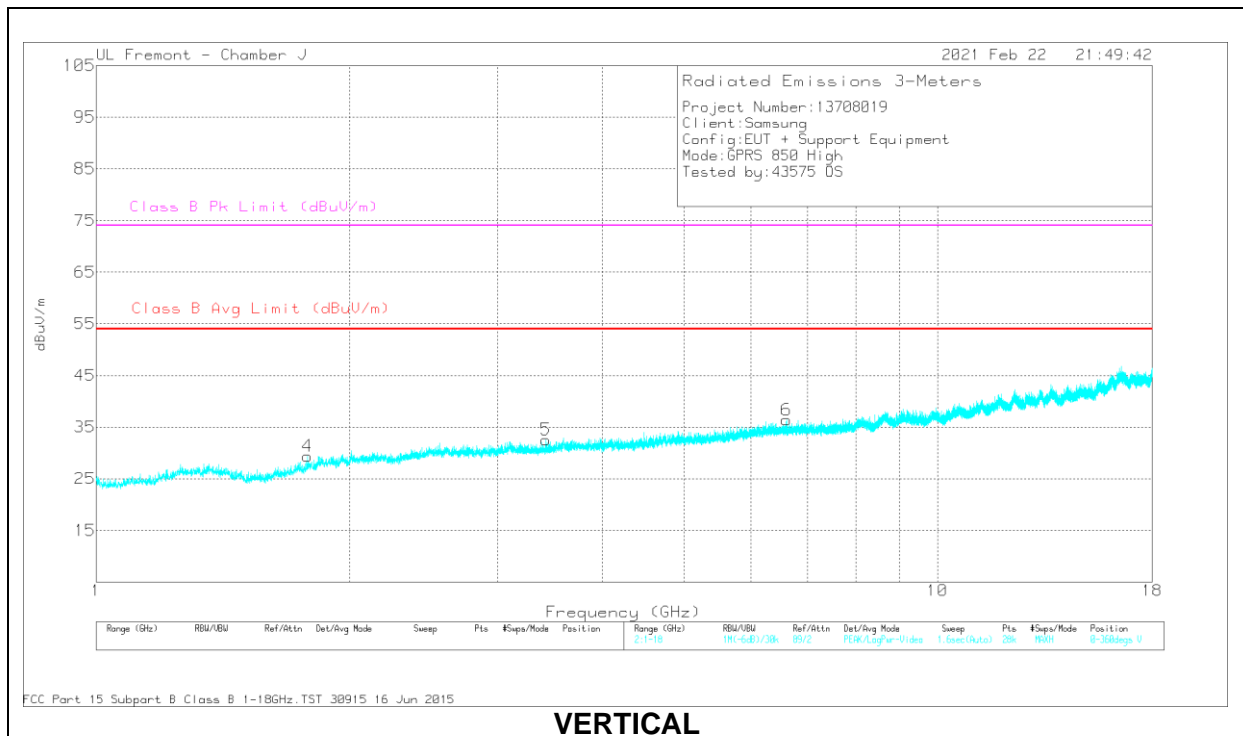
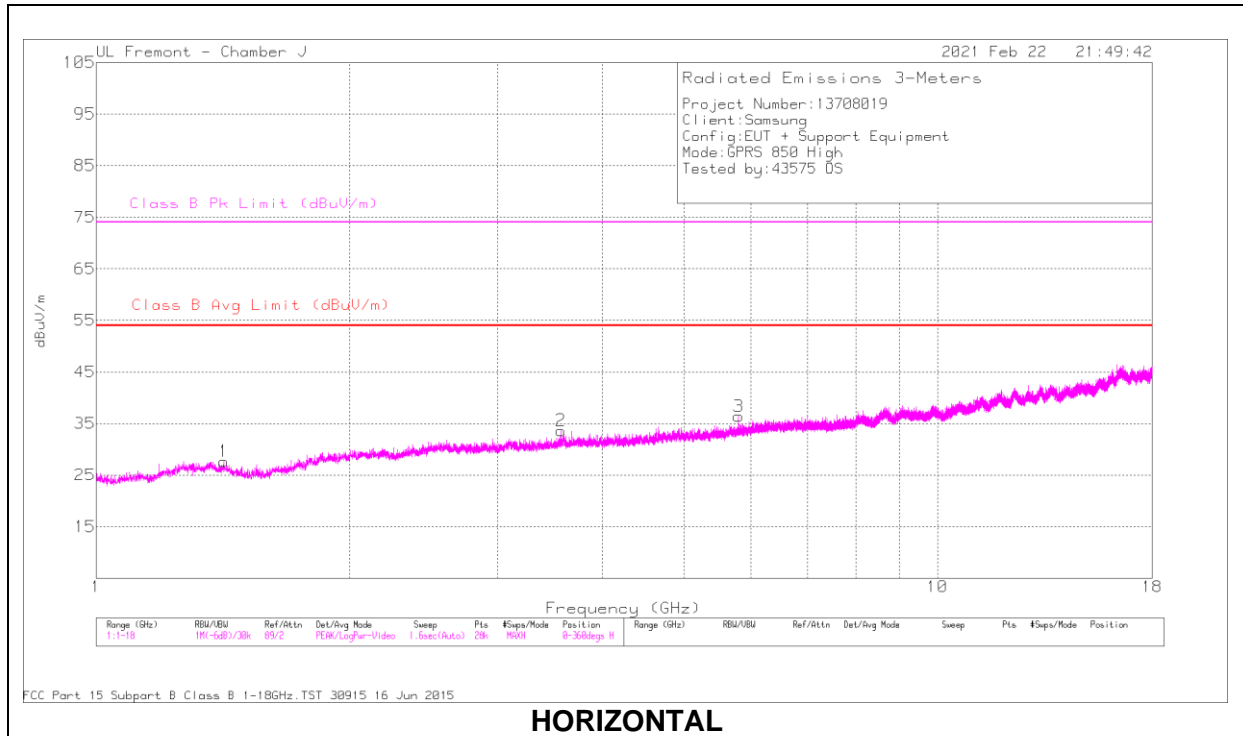
**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0100034 (dB/m)	Amp/Cbl (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.36671	33.47	Pk	29.8	-35.6	27.67	54	-26.33	74	-46.33	82	349	H
	1.36671	20.62	Av	29.8	-35.6	14.82	54	-39.18	-	-	82	349	H
2	4.73108	31.47	Pk	34.2	-31.2	34.47	54	-19.53	74	-39.53	198	389	H
	4.73108	17.39	Av	34.2	-31.2	20.39	54	-33.61	-	-	198	389	H
3	9.93088	26.33	Pk	37.3	-24.9	38.73	54	-15.27	74	-35.27	294	267	H
	9.93064	13.05	Av	37.3	-24.9	25.45	54	-28.55	-	-	294	267	H
4	2.4247	43.1	Pk	32.1	-35.3	39.9	54	-14.1	74	-34.1	342	146	V
	2.4247	29.78	Av	32.1	-35.3	26.58	54	-27.42	-	-	342	146	V
5	4.43874	39.7	Pk	33.8	-31.3	42.2	54	-11.8	74	-31.8	81	131	V
	4.43874	26.52	Av	33.8	-31.3	29.02	54	-24.98	-	-	81	131	V
6	12.77831	32.89	Pk	39.2	-22	50.09	54	-3.91	74	-23.91	323	153	V
	12.77831	20.02	Av	39.2	-22	37.22	54	-16.78	-	-	323	153	V

Pk - Peak detector  
 Av - Average detection

**HIGH CHANNEL**



**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0100034 (dB/m)	Amp/Cbl (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.41793	33.32	Pk	29	-35.7	26.62	54	-27.38	74	-47.38	188	306	H
	1.41793	20.83	Av	29	-35.7	14.13	54	-39.87	-	-	188	306	H
2	3.56662	32.67	Pk	33.5	-33.5	32.67	54	-21.33	74	-41.33	4	335	H
	3.56662	19.18	Av	33.5	-33.5	19.18	54	-34.82	-	-	4	335	H
3	5.80203	28.76	Pk	35.1	-29.7	34.16	54	-19.84	74	-39.84	77	175	H
	5.80203	16.05	Av	35.1	-29.7	21.45	54	-32.55	-	-	77	175	H
4	1.78296	43.94	Pk	30.3	-35.6	38.64	54	-15.36	74	-35.36	334	161	V
	1.78296	30.01	Av	30.3	-35.6	24.71	54	-29.29	-	-	334	161	V
5	3.42518	43.05	Pk	33	-34.1	41.95	54	-12.05	74	-32.05	294	109	V
	3.42518	29.03	Av	33	-34.1	27.93	54	-26.07	-	-	294	109	V
6	6.61668	37.27	Pk	35.9	-27.9	45.27	54	-8.73	74	-28.73	124	214	V
	6.61668	23.54	Av	35.9	-27.9	31.54	54	-22.46	-	-	124	214	V

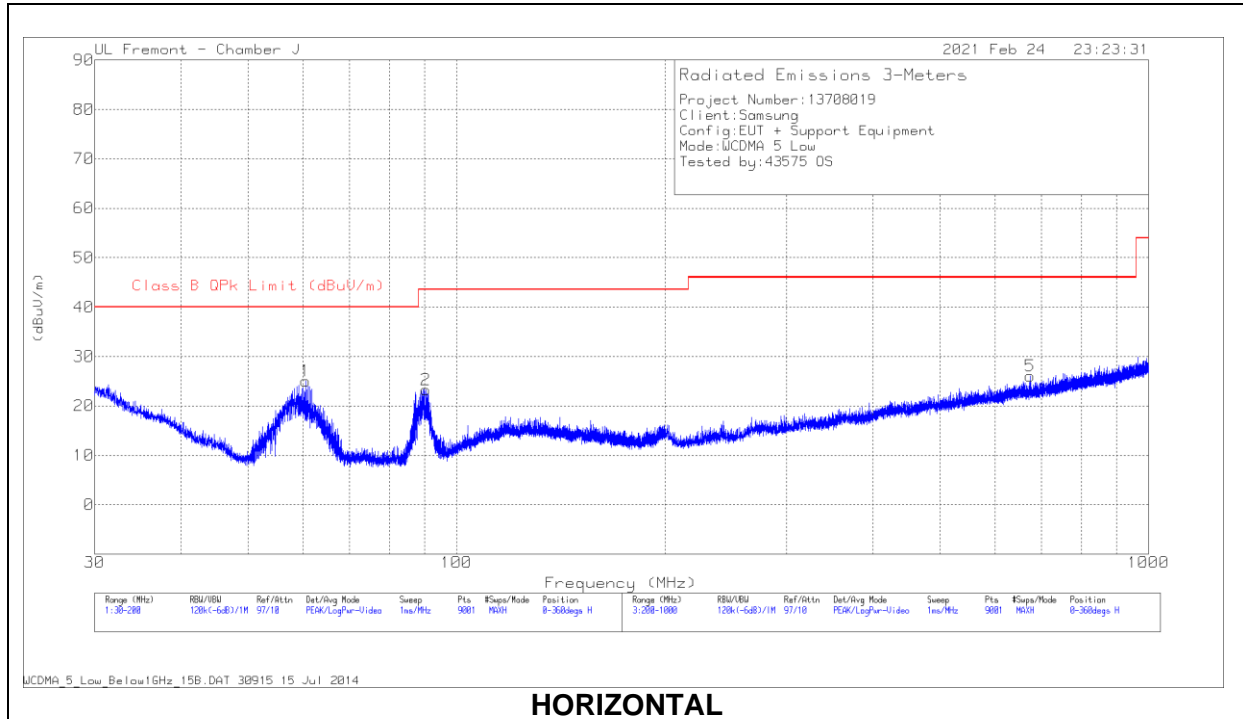
Pk - Peak detector  
 Av - Average detection



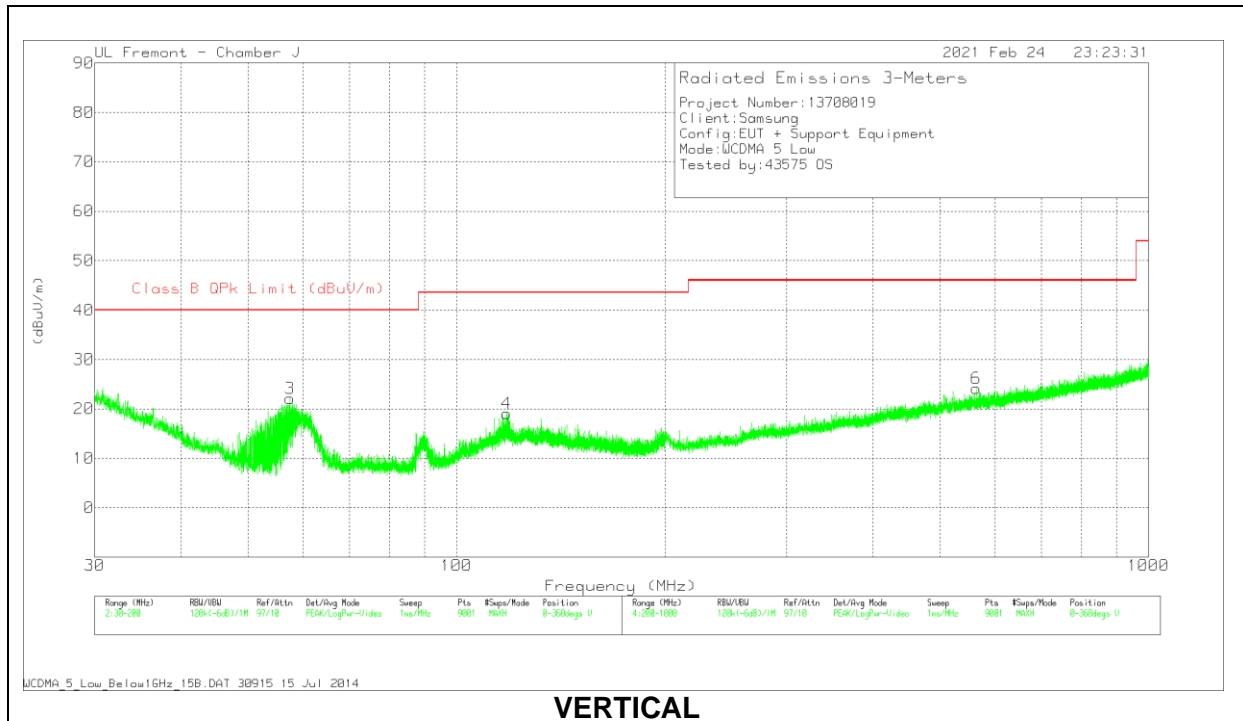
## 8.2. WCDMA BAND 5

### 8.2.1. BELOW 1GHz

#### LOW CHANNEL



**HORIZONTAL**



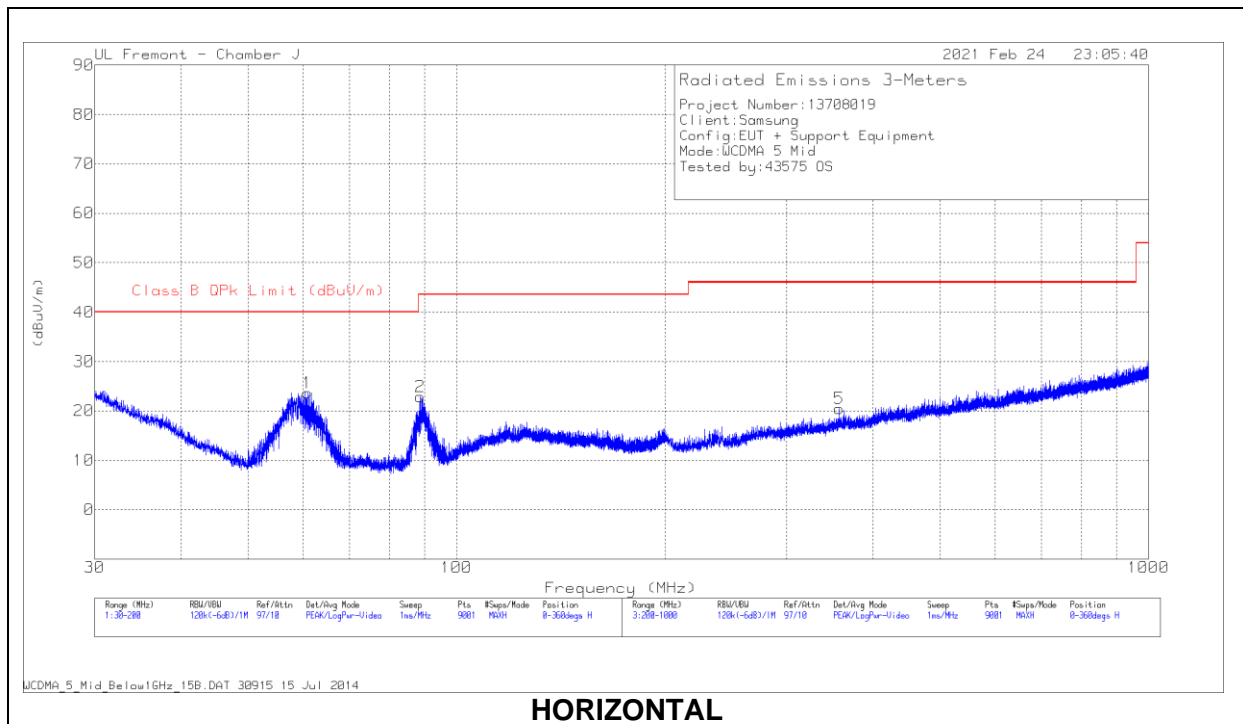
**VERTICAL**

**RADIATED EMISSIONS**

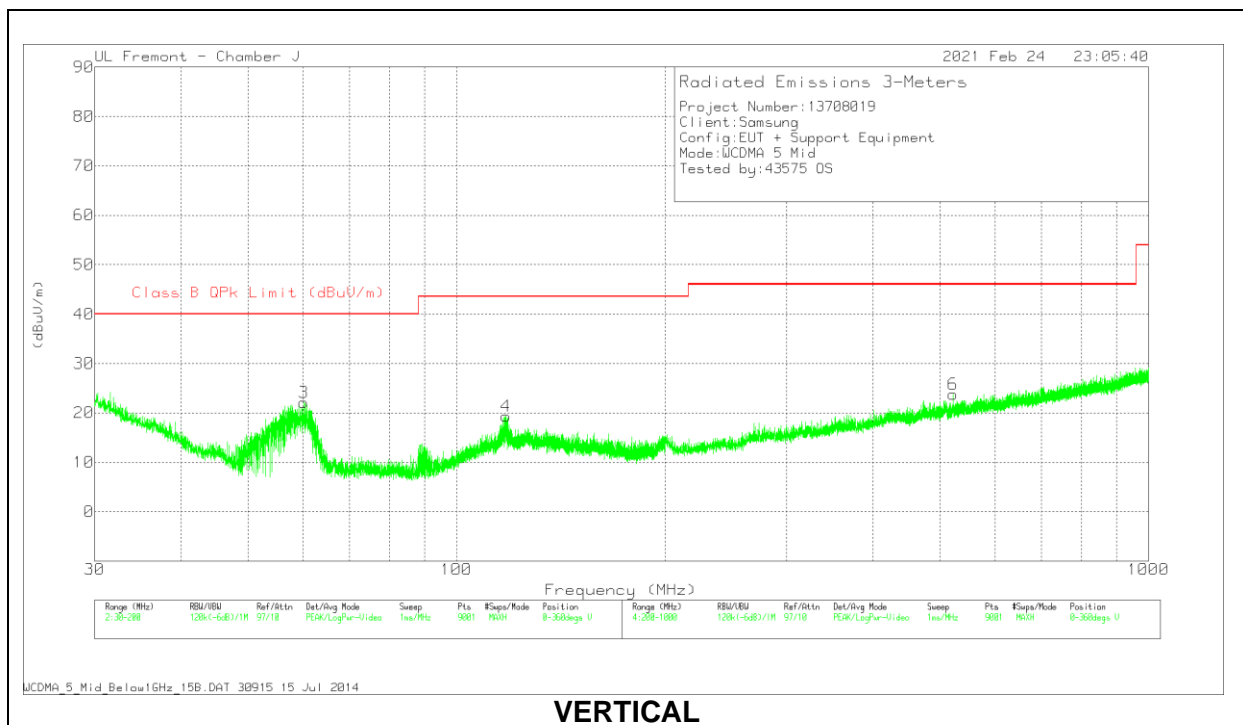
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF PRE0184052 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	60.4757	42.86	Pk	13.6	-31.3	25.16	40	-14.84	68	375	H
	60.4757	32.56	Qp	13.6	-31.3	14.86	40	-25.14	68	375	H
2	90.2559	40.66	Pk	13.6	-31	23.26	43.52	-20.26	0-360	195	H
3	57.4646	40.01	Pk	13.4	-31.3	22.11	40	-17.89	0-360	100	V
4	118.2116	30.33	Pk	19.6	-30.8	19.13	43.52	-24.39	0-360	100	V
5	674.6673	28.63	Pk	26	-28.6	26.03	46.02	-19.99	0-360	389	H
6	563.7338	28.48	Pk	24.8	-29.1	24.18	46.02	-21.84	0-360	299	V

Pk - Peak detector  
 Qp - Quasi-Peak detector

**MID CHANNEL**



**HORIZONTAL**



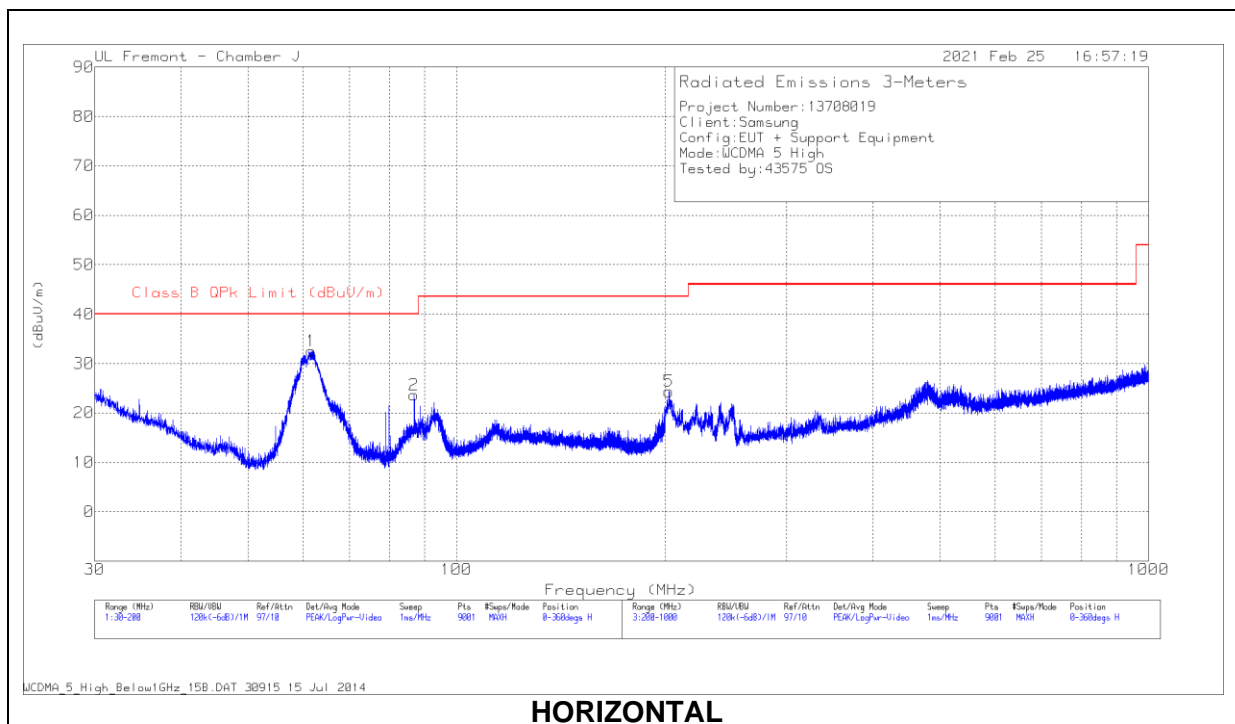
**VERTICAL**

**RADIATED EMISSIONS**

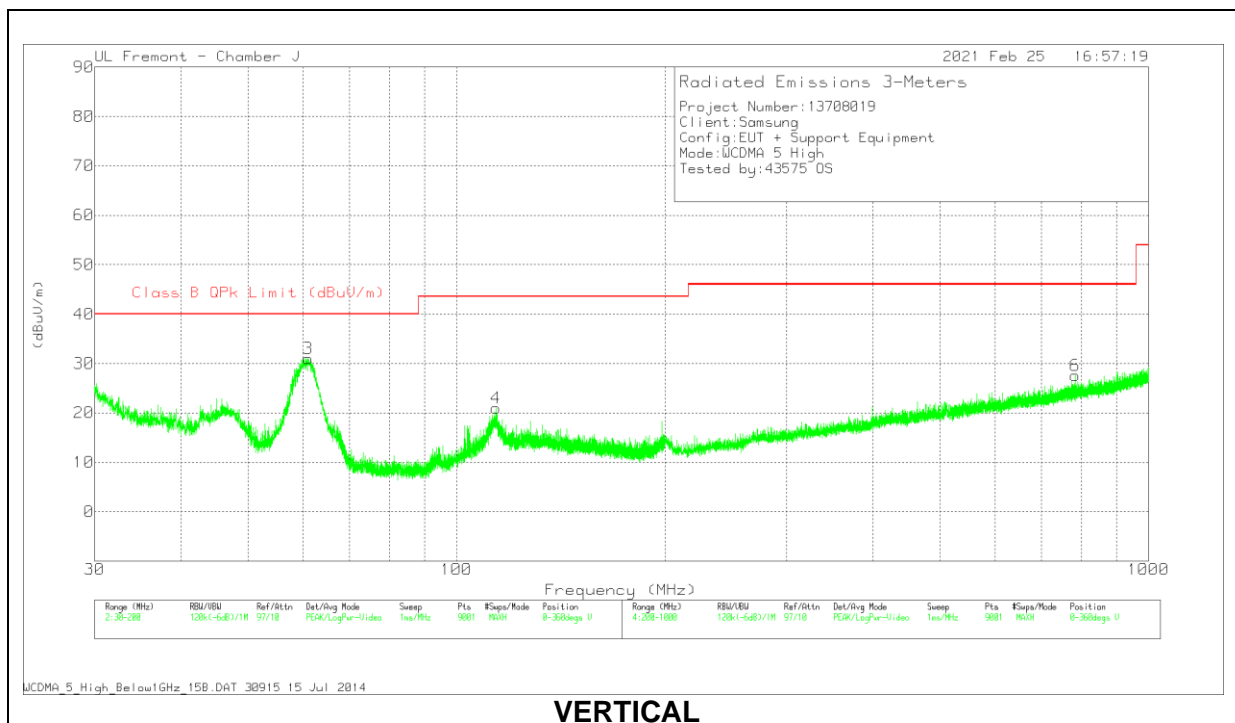
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF PRE0184052 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	60.8409	43.32	Pk	13.6	-31.3	25.62	40	-14.38	54	232	H
	60.8409	36.58	Qp	13.6	-31.3	18.88	40	-21.12	54	232	H
2	88.6881	40.49	Pk	13.5	-31.1	22.89	43.52	-20.63	0-360	195	H
3	60.1657	39.86	Pk	13.6	-31.3	22.16	40	-17.84	0-360	100	V
4	117.9094	30.53	Pk	19.6	-30.8	19.33	43.52	-24.19	0-360	100	V
5	357.3335	28.99	Pk	21.2	-29.7	20.49	46.02	-25.53	0-360	99	H
6	522.2226	29.06	Pk	24	-29.3	23.76	46.02	-22.26	0-360	199	V

Pk - Peak detector  
 Qp - Quasi-Peak detector

**HIGH CHANNEL**



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

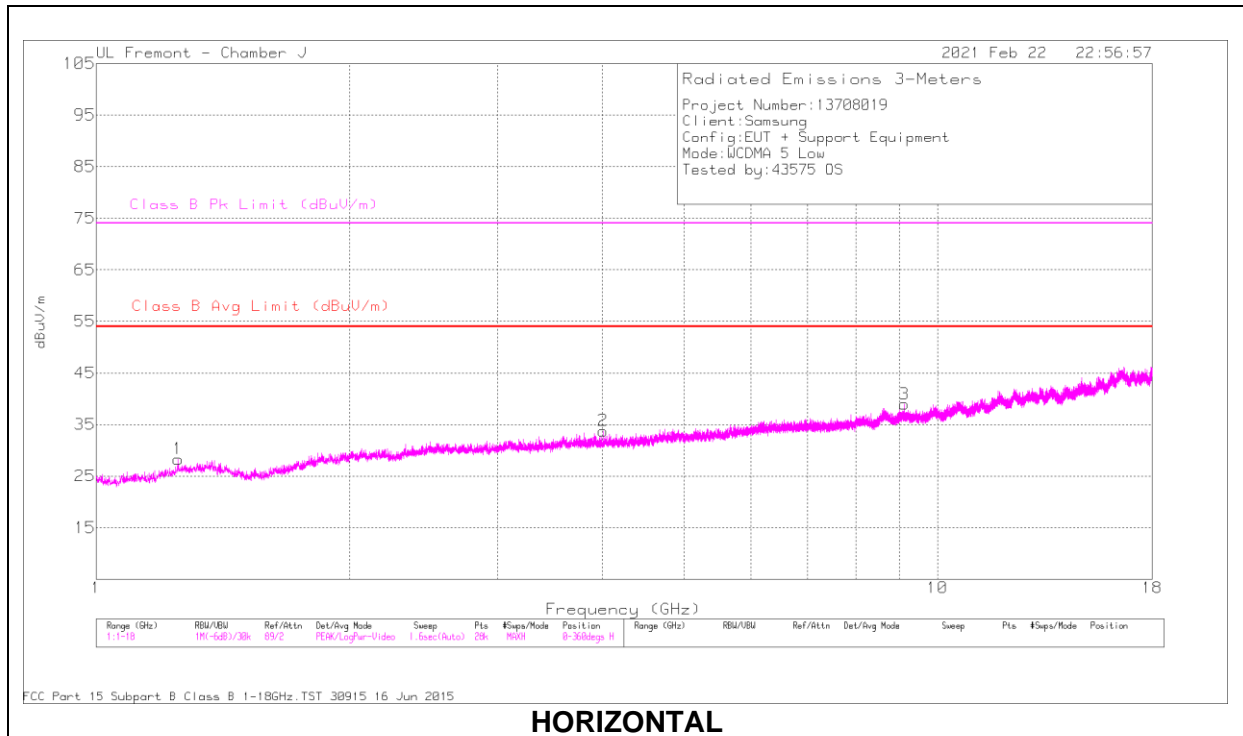
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF PRE0184052 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	61.6769	50.16	Pk	13.7	-31.3	32.56	40	-7.44	0-360	293	H
	61.6745	40.72	Qp	13.7	-31.3	23.12	40	-16.88	84	296	H
2	86.7426	41.29	Pk	13.5	-31.1	23.69	40	-16.31	0-360	293	H
3	61.0724	48.72	Pk	13.6	-31.3	31.02	40	-8.98	0-360	100	V
4	114.0372	32.73	Pk	19.2	-30.9	21.03	43.52	-22.49	0-360	100	V
5	202.8444	36.25	Pk	18.5	-30.4	24.35	43.52	-19.17	0-360	100	H
6	784.3563	28.42	Pk	27.4	-28.2	27.62	46.02	-18.4	0-360	99	V

Pk - Peak detector

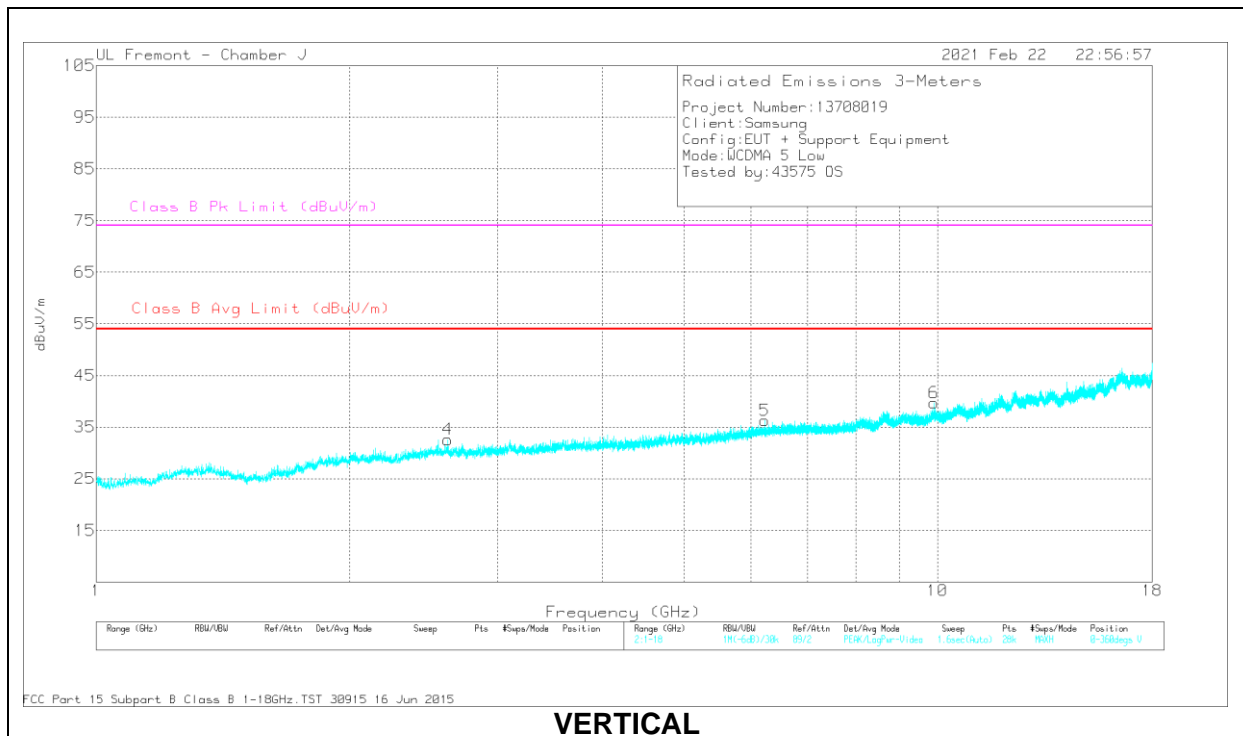
Qp - Quasi-Peak detector

**8.2.2. ABOVE 1GHz**

**LOW CHANNEL**



**HORIZONTAL**



**VERTICAL**

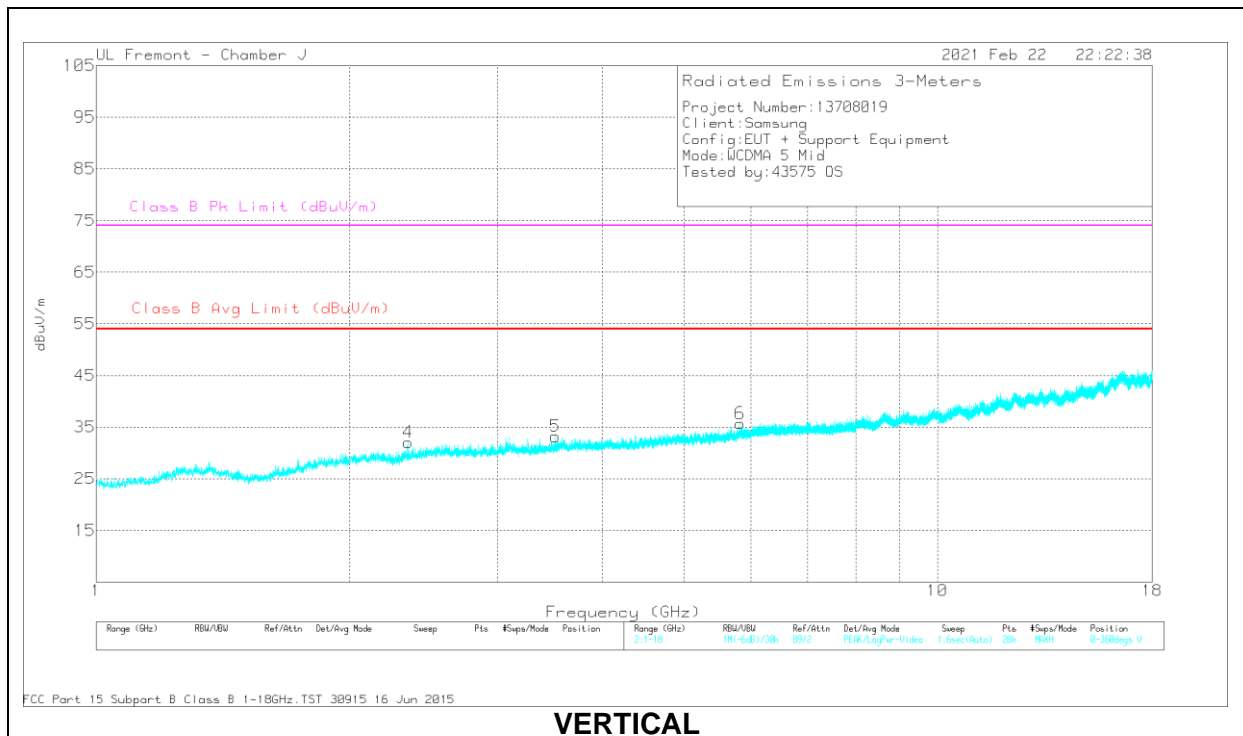
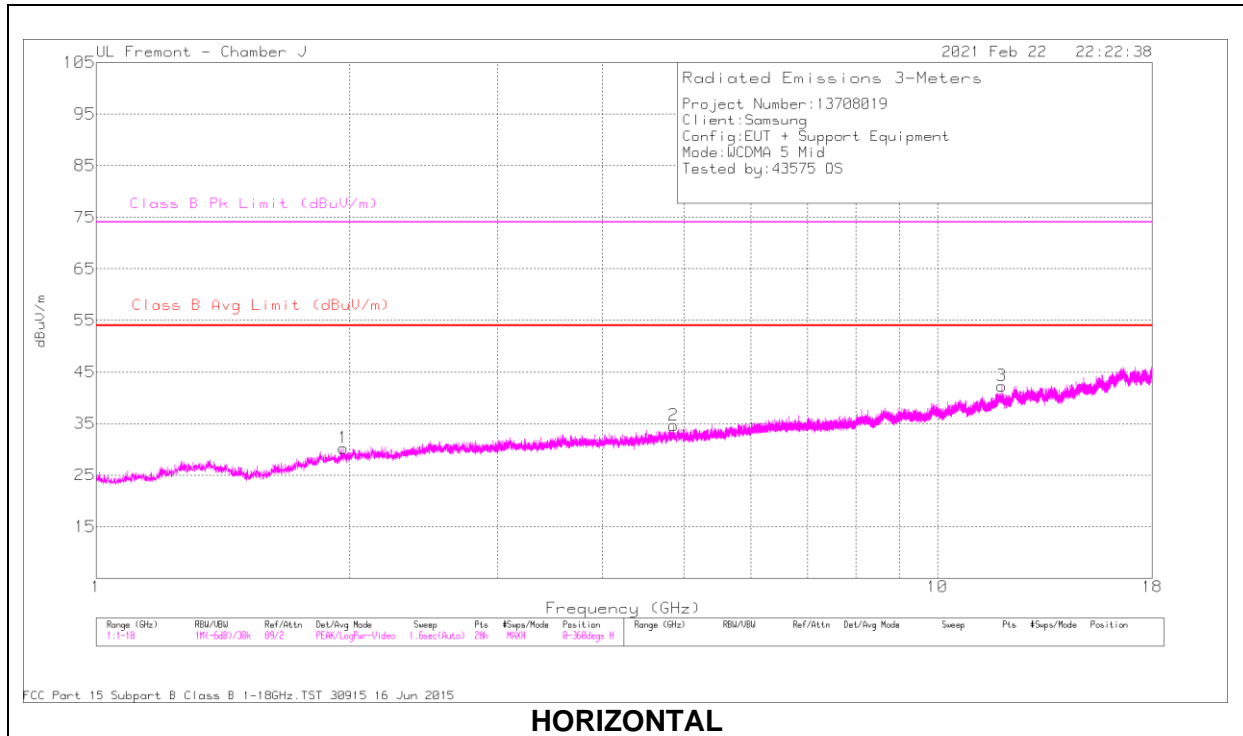
**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0100034 (dB/m)	Amp/Cbl (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.25159	33.38	Pk	29.2	-35.6	26.98	54	-27.02	74	-47.02	69	102	H
	1.25159	20.74	Av	29.2	-35.6	14.34	54	-39.66	-	-	69	102	H
2	4.00496	31.69	Pk	33.5	-32.4	32.79	54	-21.21	74	-41.21	181	139	H
	4.00496	18.25	Av	33.5	-32.4	19.35	54	-34.65	-	-	181	139	H
3	9.13099	24.6	Pk	36.6	-24.8	36.4	54	-17.6	74	-37.6	304	321	H
	9.13099	12.21	Av	36.6	-24.8	24.01	54	-29.99	-	-	304	321	H
4	2.6176	42.78	Pk	32.7	-35	40.48	54	-13.52	74	-33.52	116	107	V
	2.6176	29.89	Av	32.7	-35	27.59	54	-26.41	-	-	116	107	V
5	6.23121	38.19	Pk	35.8	-28.8	45.19	54	-8.81	74	-28.81	189	131	V
	6.23121	24.41	Av	35.8	-28.8	31.41	54	-22.59	-	-	189	131	V
6	9.90054	35.82	Pk	37.2	-24.8	48.22	54	-5.78	74	-25.78	109	286	V
	9.90054	22.57	Av	37.2	-24.8	34.97	54	-19.03	-	-	109	286	V

Pk - Peak detector  
 Av - Average detection



**MID CHANNEL**

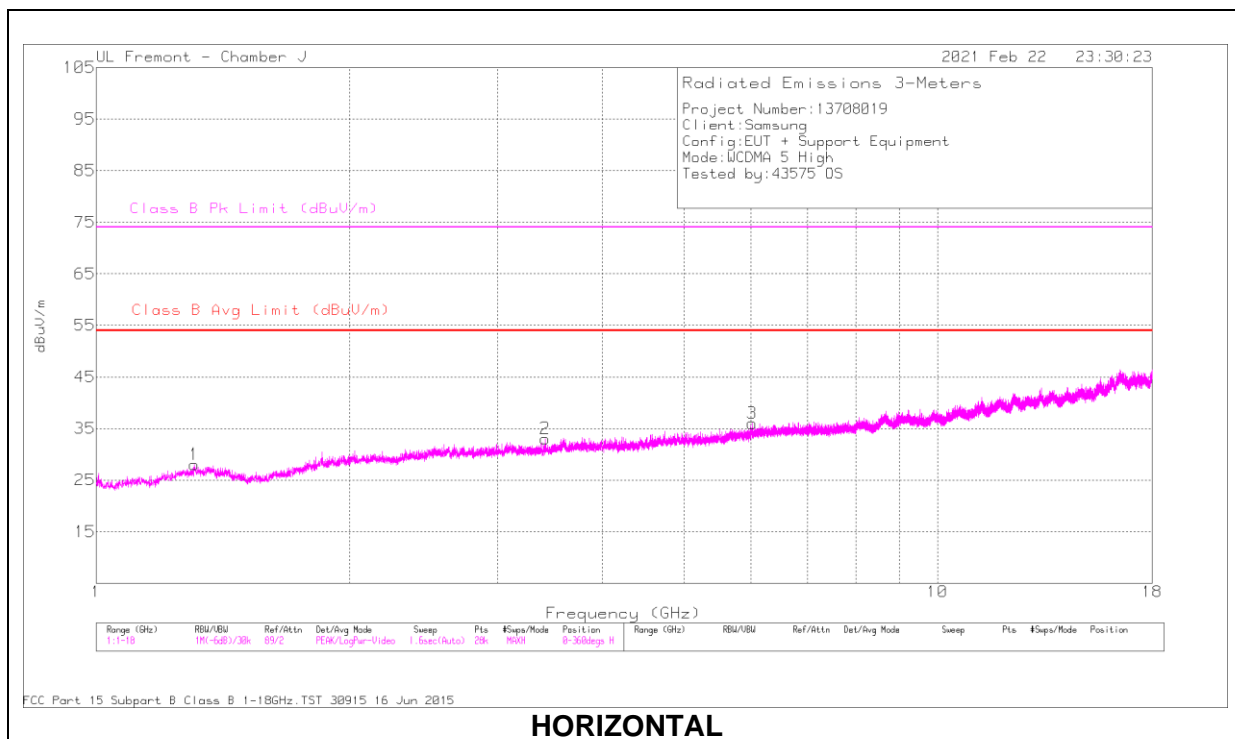


**RADIATED EMISSIONS**

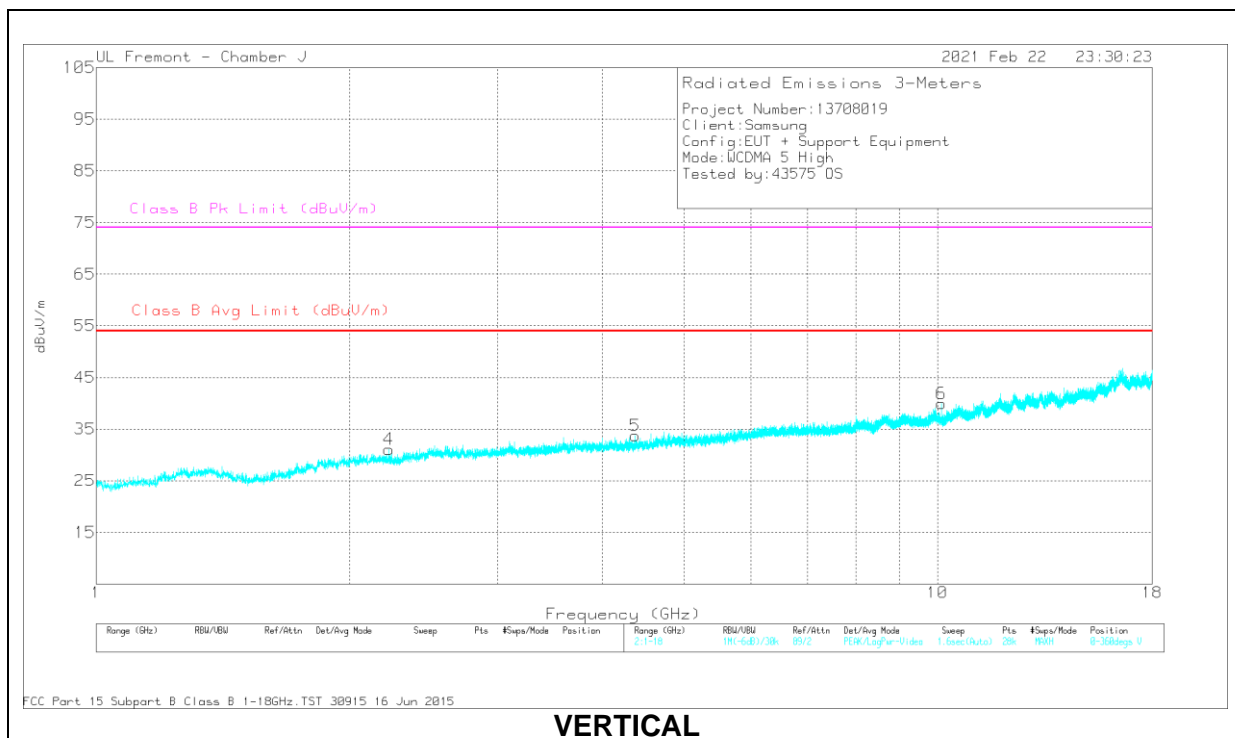
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0100034 (dB/m)	Amp/Cbl (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.96701	33.53	Pk	31.2	-35.5	29.23	54	-24.77	74	-44.77	94	329	H
	1.96701	20.82	Av	31.2	-35.5	16.52	54	-37.48	-	-	94	329	H
2	4.85796	30.91	Pk	34.4	-30.9	34.41	54	-19.59	74	-39.59	231	319	H
	4.85796	17.27	Av	34.4	-30.9	20.77	54	-33.23	-	-	231	319	H
3	11.92314	24.93	Pk	39	-22.4	41.53	54	-12.47	74	-32.47	283	306	H
	11.92314	11.44	Av	39	-22.4	28.04	54	-25.96	-	-	283	306	H
4	2.34554	43.49	Pk	32	-35.3	40.19	54	-13.81	74	-33.81	15	151	V
	2.34554	29.85	Av	32	-35.3	26.55	54	-27.45	-	-	15	151	V
5	3.51305	42.08	Pk	33.2	-33.6	41.68	54	-12.32	74	-32.32	209	183	V
	3.51305	28.49	Av	33.2	-33.6	28.09	54	-25.91	-	-	209	183	V
6	5.82786	39.77	Pk	35.3	-29.6	45.47	54	-8.53	74	-28.53	21	387	V
	5.82786	25.23	Av	35.3	-29.6	30.93	54	-23.07	-	-	21	387	V

Pk - Peak detector  
 Av - Average detection

**HIGH CHANNEL**



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

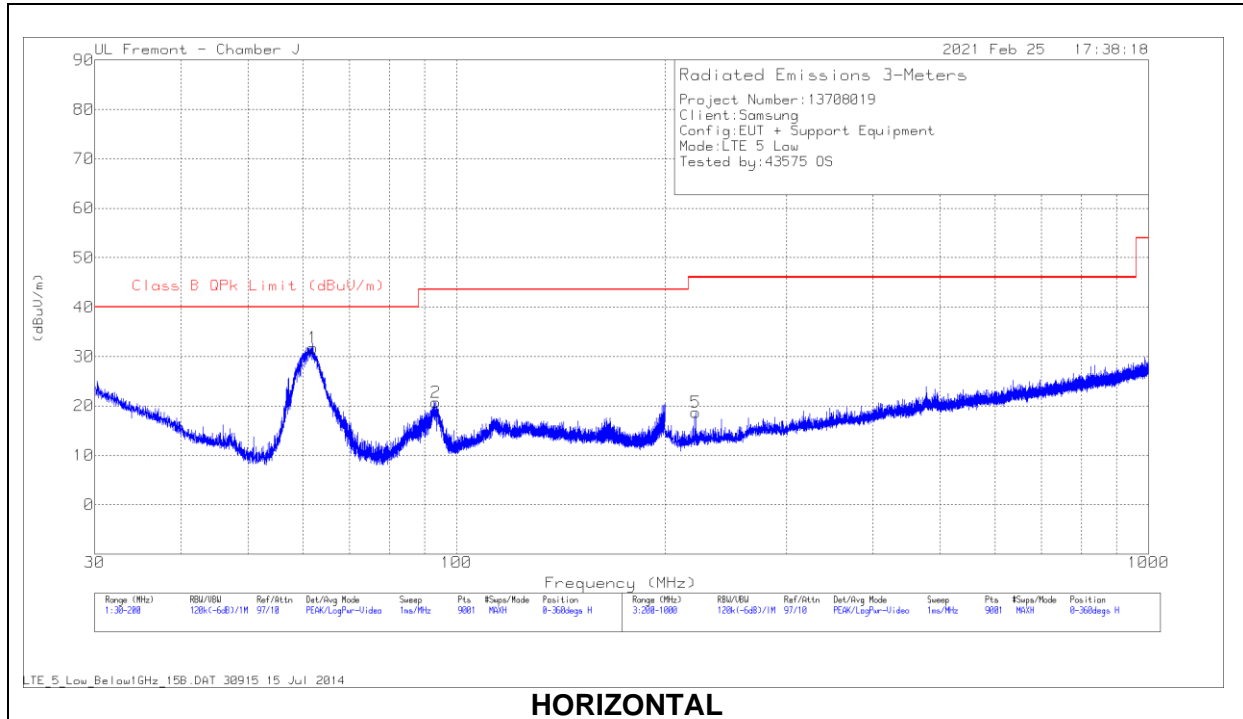
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0100034 (dB/m)	Amp/Cbl (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.30759	33.32	Pk	29.5	-35.6	27.22	54	-26.78	74	-46.78	292	332	H
	1.30759	20.83	Av	29.5	-35.6	14.73	54	-39.27	-	-	292	332	H
2	3.41765	33.39	Pk	33	-34.1	32.29	54	-21.71	74	-41.71	79	118	H
	3.41765	19.9	Av	33	-34.1	18.8	54	-35.2	-	-	79	118	H
3	6.01973	27.65	Pk	35.4	-29.2	33.85	54	-20.15	74	-40.15	103	273	H
	6.01973	15.79	Av	35.4	-29.2	21.99	54	-32.01	-	-	103	273	H
4	2.22839	42.75	Pk	31.4	-35.3	38.85	54	-15.15	74	-35.15	191	330	V
	2.22839	29.93	Av	31.4	-35.3	26.03	54	-27.97	-	-	191	330	V
5	4.3715	39.82	Pk	33.6	-31.5	41.92	54	-12.08	74	-32.08	215	307	V
	4.3715	26.68	Av	33.6	-31.5	28.78	54	-25.22	-	-	215	307	V
6	10.10503	34.4	Pk	37.3	-24.8	46.9	54	-7.1	74	-27.1	85	107	V
	10.10503	21.54	Av	37.3	-24.8	34.04	54	-19.96	-	-	85	107	V

Pk - Peak detector  
 Av - Average detection

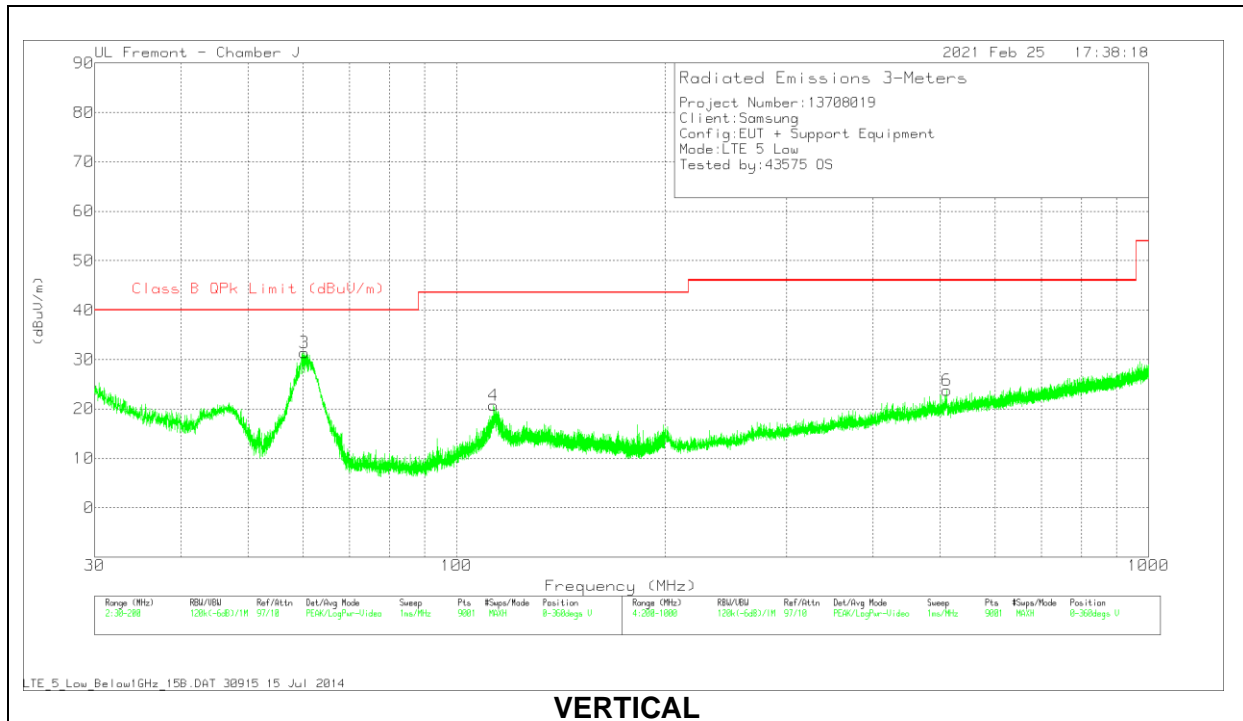
### 8.3. LTE BAND 5

#### 8.3.1. BELOW 1GHz

#### LOW CHANNEL



**HORIZONTAL**



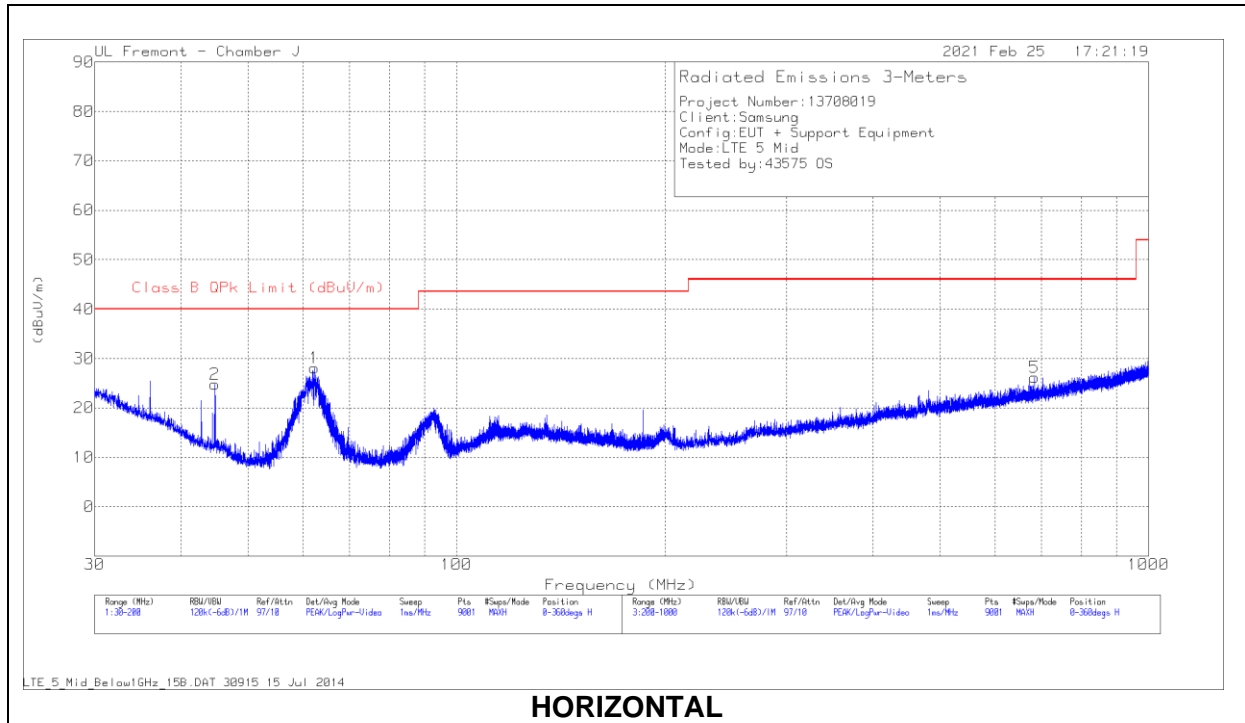
**VERTICAL**

**RADIATED EMISSIONS**

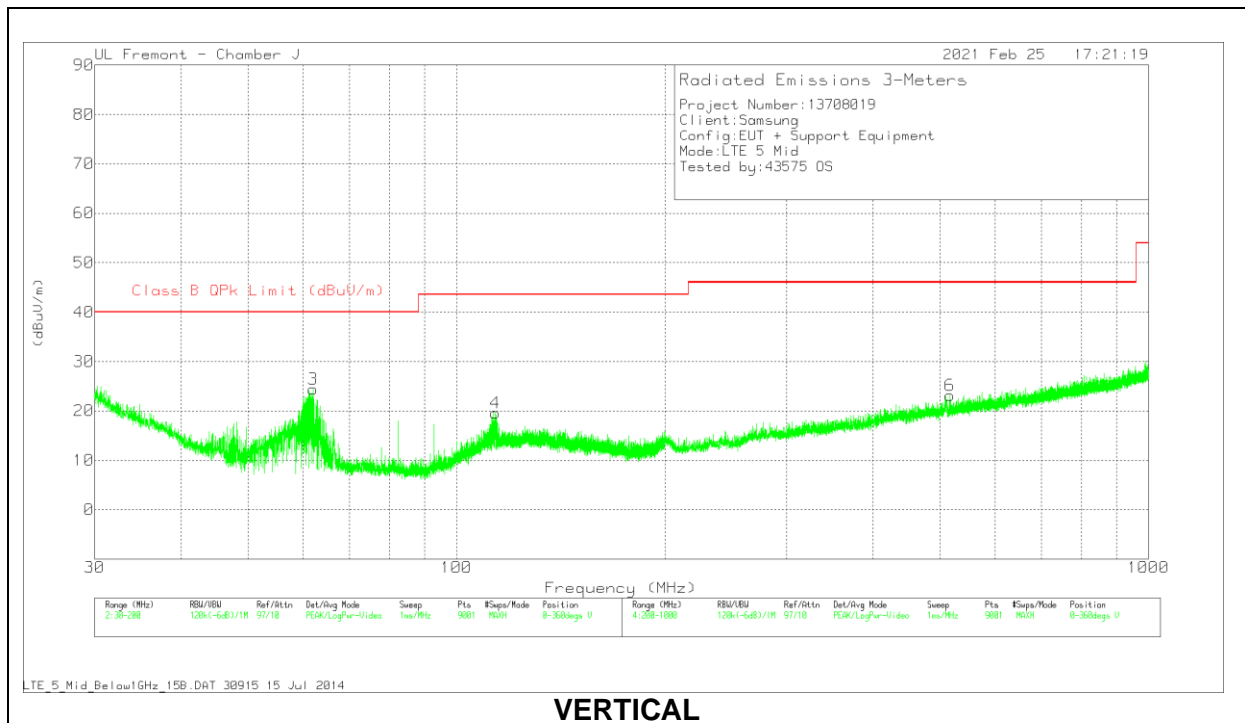
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF PRE0184052 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	61.998	49.39	Pk	13.7	-31.3	31.79	40	-8.21	0-360	389	H
	61.9563	46.02	Qp	13.7	-31.3	28.42	40	-11.58	73	327	H
2	93.3915	37.53	Pk	14.2	-31	20.73	43.52	-22.79	0-360	196	H
3	60.3357	49.11	Pk	13.6	-31.3	31.41	40	-8.59	0-360	100	V
4	113.206	32.53	Pk	19.1	-30.9	20.73	43.52	-22.79	0-360	100	V
5	221.6	31.74	Pk	17.3	-30.3	18.74	46.02	-27.28	0-360	100	H
6	511.4671	29.33	Pk	23.8	-29.3	23.83	46.02	-22.19	0-360	298	V

Pk - Peak detector  
 Qp - Quasi-Peak detector

**MID CHANNEL**



**HORIZONTAL**



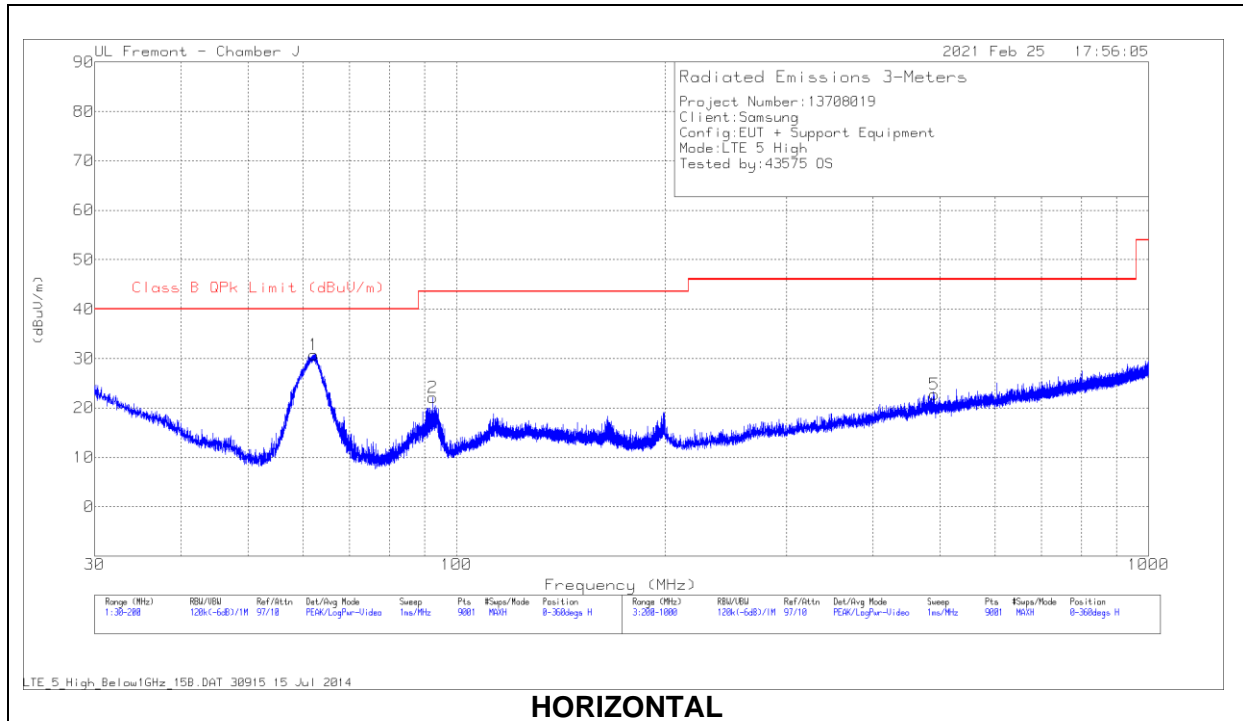
**VERTICAL**

**RADIATED EMISSIONS**

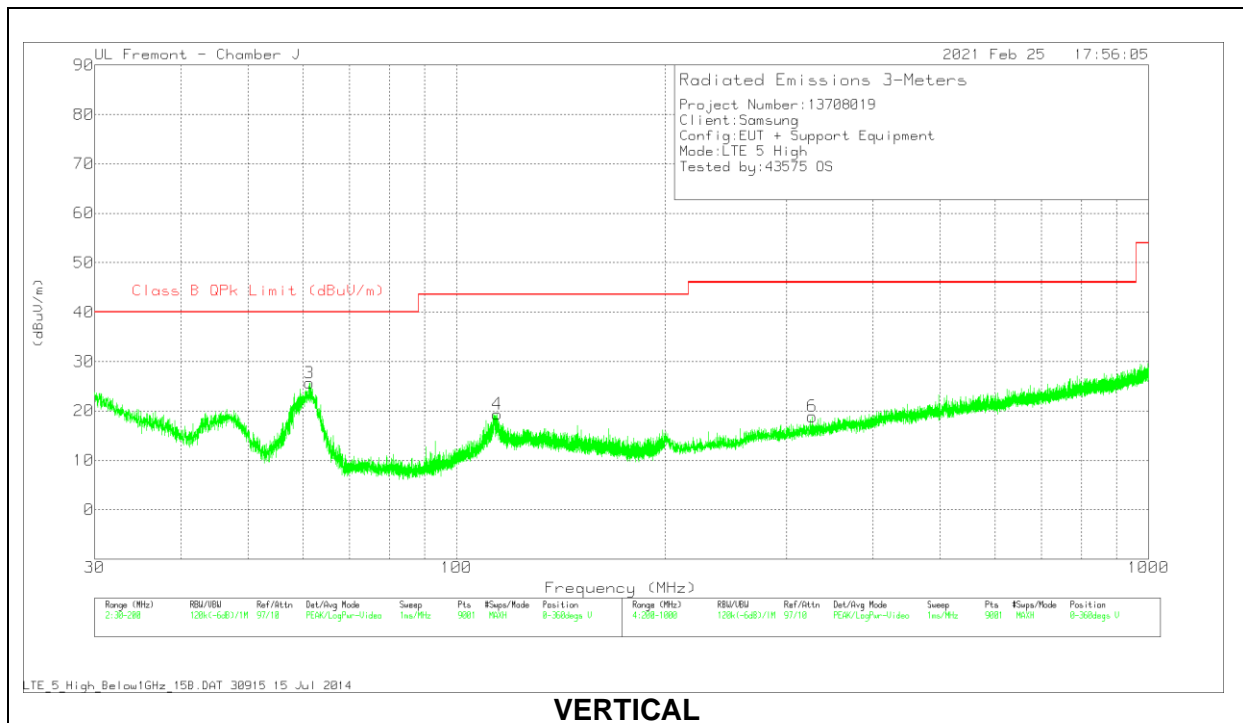
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF PRE0184052 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	62.2236	51.33	Pk	13.7	-31.3	33.73	40	-6.27	50	270	H
	62.2236	45.55	Qp	13.7	-31.3	27.95	40	-12.05	50	270	H
2	44.7145	39.24	Pk	17	-31.4	24.84	40	-15.16	0-360	389	H
3	62.0735	41.97	Pk	13.7	-31.3	24.37	40	-15.63	0-360	100	V
4	113.7538	31.24	Pk	19.2	-30.9	19.54	43.52	-23.98	0-360	100	V
5	684.1784	28.65	Pk	26.2	-28.7	26.15	46.02	-19.87	0-360	389	H
6	516.5337	28.61	Pk	23.9	-29.4	23.11	46.02	-22.91	0-360	199	V



**HIGH CHANNEL**



**HORIZONTAL**



**VERTICAL**

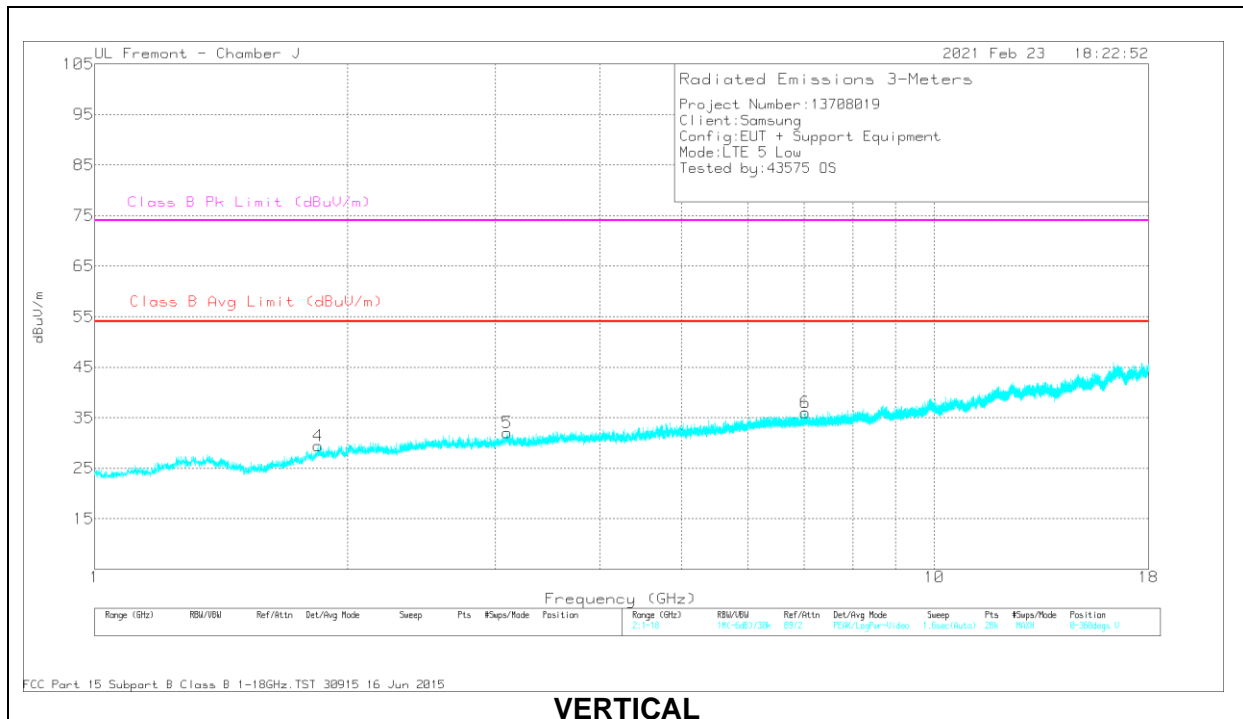
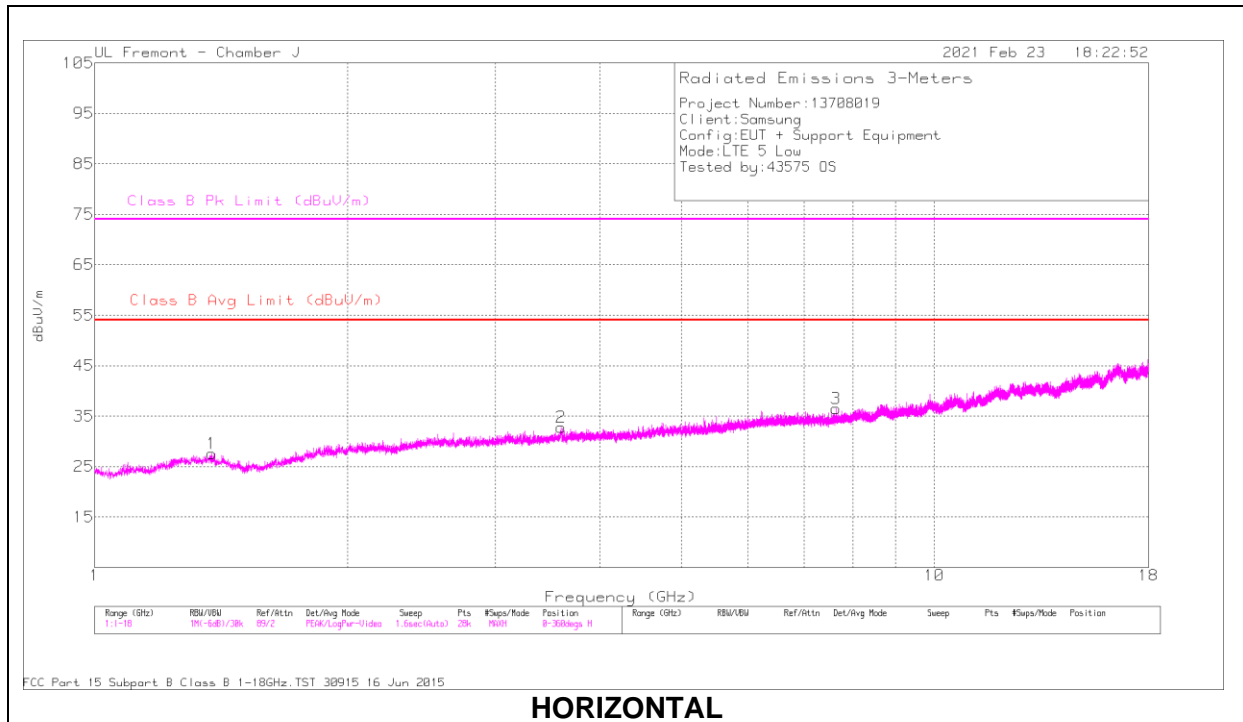
**RADIATED EMISSIONS**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF PRE0184052 (dB/m)	Amp Cbl (dB)	Corrected Reading (dBuV/m)	Class B QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	62.1869	48.32	Pk	13.7	-31.3	30.72	40	-9.28	0-360	293	H
	62.0186	34.92	Qp	13.7	-31.3	17.32	40	-22.68	247	235	H
2	92.3904	39.12	Pk	14	-31	22.12	43.52	-21.4	0-360	196	H
3	61.3369	43.41	Pk	13.6	-31.3	25.71	40	-14.29	0-360	100	V
4	114.5472	30.99	Pk	19.3	-30.9	19.39	43.52	-24.13	0-360	100	V
5	490.667	28.25	Pk	23.8	-29.3	22.75	46.02	-23.27	0-360	389	H
6	326.489	28.29	Pk	20.5	-29.9	18.89	46.02	-27.13	0-360	299	V

Pk - Peak detector  
 Qp - Quasi-Peak detector

**8.3.2. ABOVE 1GHz**

**LOW CHANNEL**

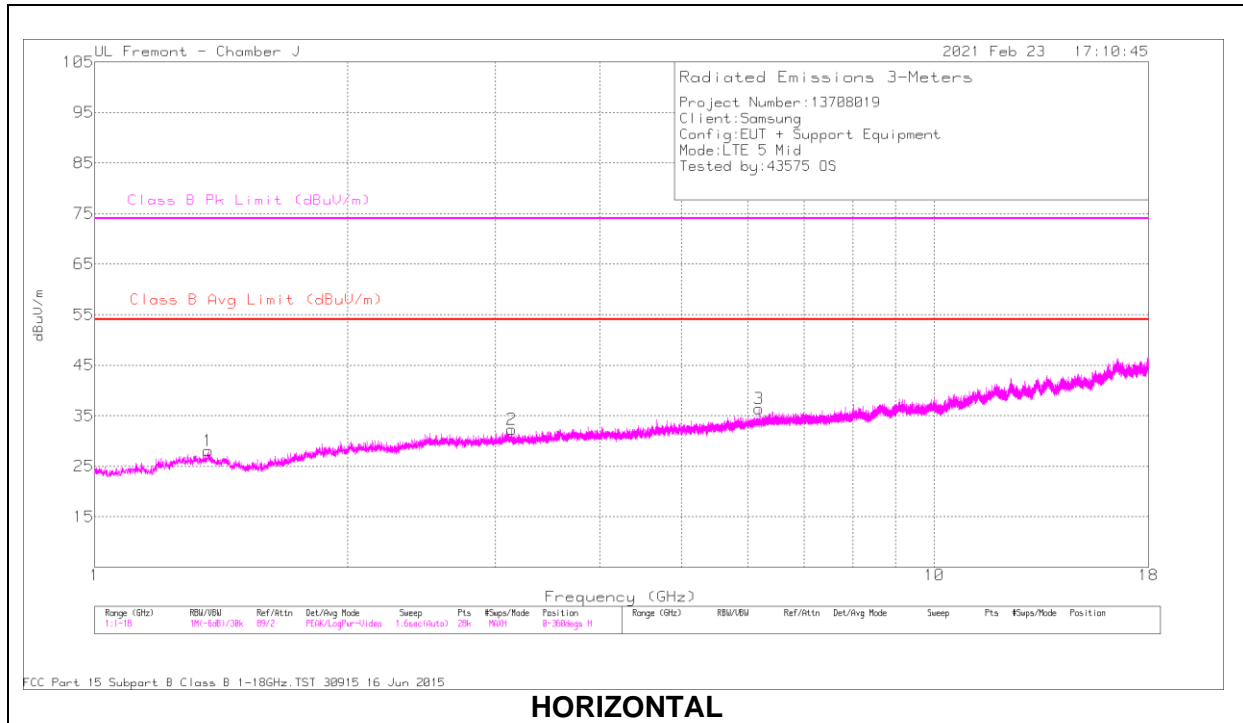


**RADIATED EMISSIONS**

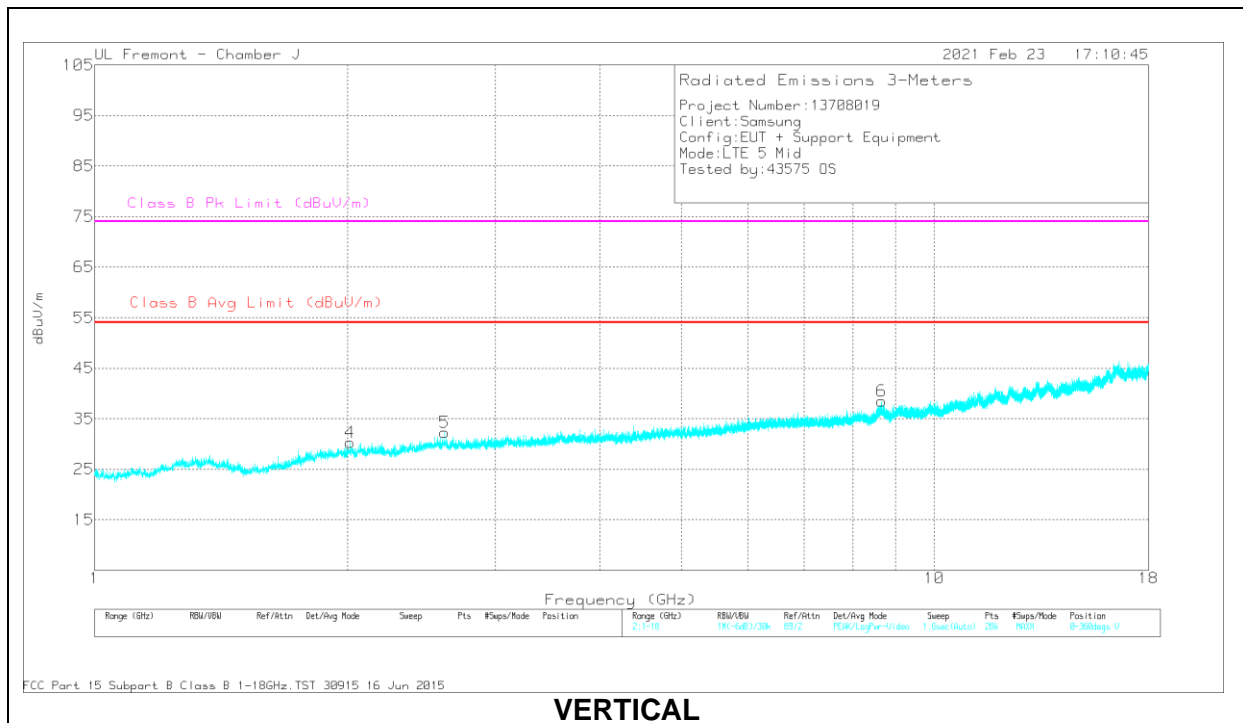
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0100034 (dB/m)	Amp/Cbl (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.37748	33.33	Pk	29.5	-35.7	27.13	54	-26.87	74	-46.87	1	320	H
	1.37748	20.39	Av	29.5	-35.7	14.19	54	-39.81	-	-	1	320	H
2	3.59412	31.74	Pk	34.4	-33.5	32.64	54	-21.36	74	-41.36	235	108	H
	3.59412	18.54	Av	34.4	-33.5	19.44	54	-34.56	-	-	235	108	H
3	7.63486	26.29	Pk	36	-27	35.29	54	-18.71	74	-38.71	331	255	H
	7.63486	13.36	Av	36	-27	22.36	54	-31.64	-	-	331	255	H
4	1.84504	43.75	Pk	30.8	-35.6	38.95	54	-15.05	74	-35.05	281	316	V
	1.84504	29.87	Av	30.8	-35.6	25.07	54	-28.93	-	-	281	316	V
5	3.1001	41.9	Pk	33.7	-34.5	41.1	54	-12.9	74	-32.9	242	317	V
	3.1001	28.87	Av	33.7	-34.5	28.07	54	-25.93	-	-	242	317	V
6	7.02856	36.25	Pk	35.9	-27.4	44.75	54	-9.25	74	-29.25	223	302	V
	7.02856	22.78	Av	35.9	-27.4	31.28	54	-22.72	-	-	223	302	V

Pk - Peak detector  
 Av - Average detection

**MID CHANNEL**



**HORIZONTAL**



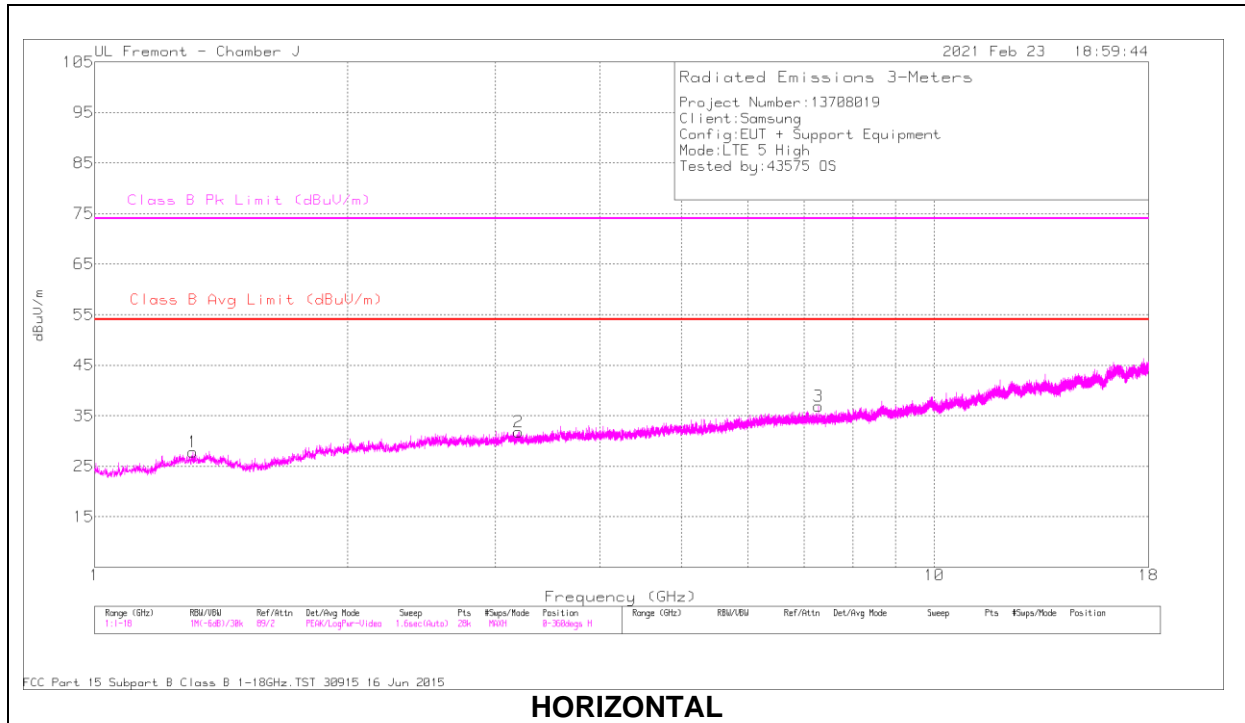
**VERTICAL**

**RADIATED EMISSIONS**

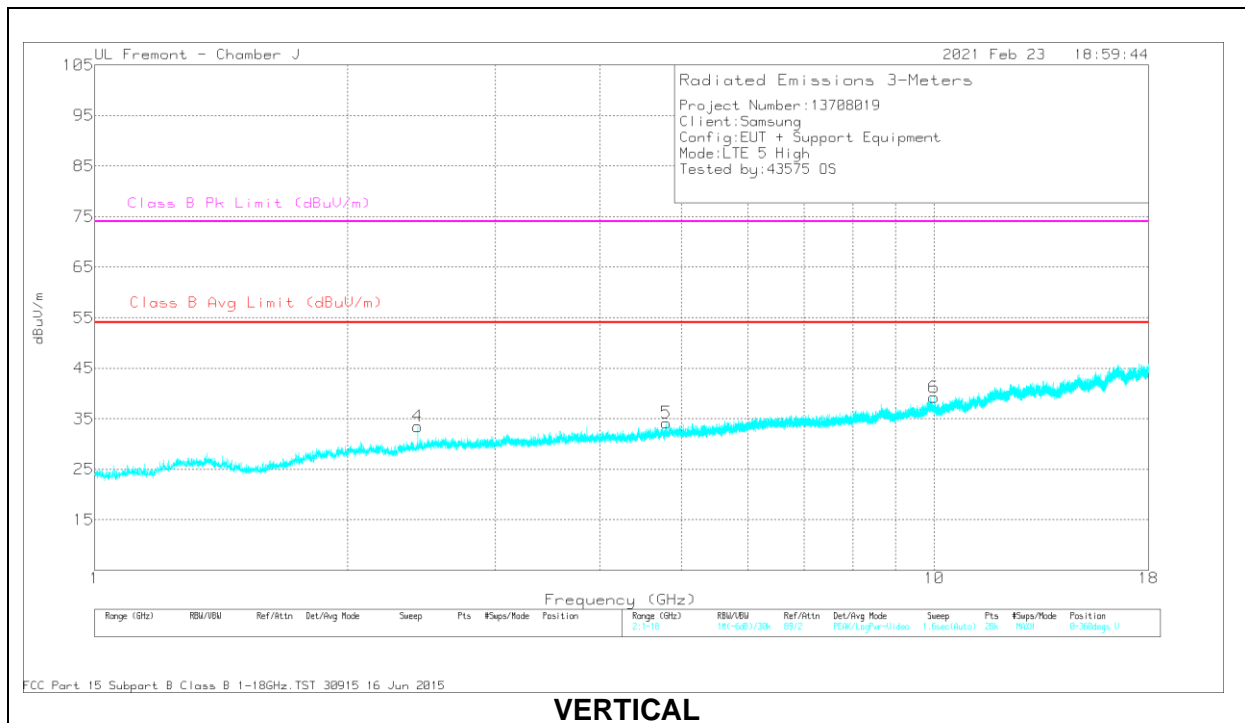
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0100034 (dB/m)	Amp/Cbl (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.36553	34.05	Pk	29.8	-35.6	28.25	54	-25.75	74	-45.75	141	381	H
	1.36553	20.31	Av	29.8	-35.6	14.51	54	-39.49	-	-	141	381	H
2	3.13661	32.19	Pk	33	-34.5	30.69	54	-23.31	74	-43.31	347	279	H
	3.13661	19.65	Av	33	-34.5	18.15	54	-35.85	-	-	347	279	H
3	6.18274	26.57	Pk	35.7	-29	33.27	54	-20.73	74	-40.73	141	139	H
	6.18274	14.43	Av	35.7	-29	21.13	54	-32.87	-	-	141	139	H
4	2.01517	42.63	Pk	31.5	-35.4	38.73	54	-15.27	74	-35.27	189	246	V
	2.01517	29.54	Av	31.5	-35.4	25.64	54	-28.36	-	-	189	246	V
5	2.6101	42.45	Pk	32.7	-34.9	40.25	54	-13.75	74	-33.75	354	276	V
	2.6101	29.39	Av	32.7	-34.9	27.19	54	-26.81	-	-	354	276	V
6	8.66246	35.04	Pk	36.2	-25.5	45.74	54	-8.26	74	-28.26	153	269	V
	8.66246	21.92	Av	36.2	-25.5	32.62	54	-21.38	-	-	153	269	V

Pk - Peak detector  
 Av - Average detection

**HIGH CHANNEL**



**HORIZONTAL**



**VERTICAL**

**RADIATED EMISSIONS**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF PRE0100034 (dB/m)	Amp/Cbl (dB)	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.30967	32.72	Pk	29.4	-35.6	26.52	54	-27.48	74	-47.48	321	157	H
	1.30967	20.42	Av	29.4	-35.6	14.22	54	-39.78	-	-	321	157	H
2	3.19703	31.98	Pk	33	-34.4	30.58	54	-23.42	74	-43.42	211	196	H
	3.19703	19.77	Av	33	-34.4	18.37	54	-35.63	-	-	211	196	H
3	7.28381	25.62	Pk	35.8	-27.1	34.32	54	-19.68	74	-39.68	244	161	H
	7.28381	13.54	Av	35.8	-27.1	22.24	54	-31.76	-	-	244	161	H
4	2.42588	45.59	Pk	32.1	-35.3	42.39	54	-11.61	74	-31.61	50	101	V
	2.42588	29.8	Av	32.1	-35.3	26.6	54	-27.4	-	-	50	101	V
5	4.79597	39.42	Pk	34.3	-31	42.72	54	-11.28	74	-31.28	295	270	V
	4.79597	26.18	Av	34.3	-31	29.48	54	-24.52	-	-	295	270	V
6	9.99296	34.77	Pk	37.2	-24.7	47.27	54	-6.73	74	-26.73	130	186	V
	9.99296	21.69	Av	37.2	-24.7	34.19	54	-19.81	-	-	130	186	V

Pk - Peak detector  
 Av - Average detection