



CERTIFICATION TEST REPORT

Report Number. : 4790406782-E1V3

Applicant : SAMSUNG ELECTRONICS CO., LTD.
129 SAMSUNG-RO, YEONGTONG-GU, SUWON-SI,
GYEONGGI-DO, 16677, KOREA

Model : SM-A236M/DSN, SM-A236M/N

FCC ID : A3LSMA236MN

EUT Description : GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac
and NFC.

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

Date Of Issue:

2022-07-13

Prepared by:

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ACCREDITED

Testing Laboratory

TL-637

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2022-07-01	Initial issue	Yeonhee Lim
V2	2022-07-11	Updated to address TCB's question	Yeonhee Lim
V3	2022-07-13	Updated to address TCB's question	Yeonhee Lim

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.

EUT DESCRIPTION: GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac and NFC.

MODEL NUMBER: SM-A236M/DSN, SM-A236M/N

SERIAL NUMBER: R3CT506TWAN (RADIATED)

DATE TESTED: 2022-06-13 ~ 2022-06-28;

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15B	Complies

UL Korea, Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Korea, Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Korea, Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Korea, Ltd. 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 IAS, any agency of the Federal Government, or any agency of any government.

Approved & Released For
UL Korea, Ltd. By:



Seokhwan Hong
Suwon Lab Engineer
UL Korea, Ltd.

Tested By:



Yeonhee Lim
Suwon Lab Engineer
UL Korea, Ltd.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with following methods.

1. FCC CFR 47 Part 2.
2. FCC CFR 47 Part 15.
3. ANSI C63.4-2014

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 218 Maeyeong-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16675, Korea. Line conducted emissions are measured only at the 218 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

218 Maeyeong-ro	
☒	Chamber 1(3m semi-anechoic chamber)
☒	Chamber 2(3m semi-anechoic chamber)
☐	Chamber 3(3m semi-anechoic chamber)
☐	Chamber 4(3m Full-anechoic chamber)
☐	Chamber 5(3m Full-anechoic chamber)

UL Korea, Ltd. is accredited by IAS, Laboratory Code TL-637. The full scope of accreditation can be viewed at <https://www.iasonline.org/wp-content/uploads/2017/05/TL-637-cert-New.pdf>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

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)

28.9 dBuV/m = 36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.02 dB
Radiated Disturbance, 30 MHz to 1 GHz	4.05 dB
Radiated Disturbance, 1 GHz to 18 GHz	5.78 dB

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

4.4. DECISION RULE

Decision rule for statement(s) of conformity is based on Procedure 2, Clause 4.4.3 in IEC Guide 115:2007.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE/5G NR Phone + BT/BLE, DTS/UNII a/b/g/n/ac and NFC.
This test report addresses the WWAN operational mode.

This report covers the Samsung models SM-A236M/DSN, SM-A236M/N.
These models are identical in hardware except SM-A236M/DSN is supported dual SIM tray and SM-A236M/N has single SIM tray.

All series model was same hardware thus, SM-A236M/DSN was set for final test.

5.2. TEST MODE

Mode	RX Frequency range (MHz)	Description
GSM850	869.2 – 893.8	Communicating with Call simulator(CMW500)
WCDMA BAND 5	869 – 894	Communicating with Call simulator(CMW500)
LTE BAND 12	729 – 746	Communicating with Call simulator(CMW500)
LTE BAND 13	746 – 756	Communicating with Call simulator(CMW500)
LTE BAND 26	859 – 894	Communicating with Call simulator(CMW500)

5.3. WORST-CASE ORIENTATION AND MODE

The fundamental and radiated spurious emission were investigated in three orthogonal orientations X and Y, it was determined that below orientation was worst-case orientation for each band.

i. Worst Axis Condition

Band	Worst Case		
	X	Y	Z
GSM 850	-	-	O
WCDMA B5	-	-	O
LTE B12	-	-	O
LTE B13	-	-	O
LTE B26	-	-	O

WCDMA Band5

WCDMA Band 5(Rx Frequency range: 869-894 MHz) is covered by GSM 850(Rx Frequency range: 869-894 MHz) due to same frequency range and maximum tune-up limit is higher than WCDMA Band5. Therefore, only Mid channel was checked.

LTE Band 5

LTE Band 5(Rx Frequency range: 869-894 MHz) is covered by LTE Band 26(Rx Frequency range: 859-894 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth.

LTE Band 17

LTE Band 17(Rx Frequency range: 734-746 MHz) is covered by LTE Band 12(Rx Frequency range: 729-746 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth.

5G NR Band n5

5G NR BAND n5 (Rx Frequency range: 869-894 MHz) is covered by GSM 850(Rx Frequency range: 869-894 MHz) due to same frequency range and maximum tune-up limit is higher than 5G NR BAND n5.

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

5.4. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacture	Model	Serial Number	FCC ID
Charger	SAMSUNG	EP-TA800	R37MANQ1E72SE3	N/A
Data Cable	SAMSUNG	EP-DN980	GH39-02115A BWE	N/A
Earphone	SAMSUNG	GH59-15055A	EHS64AVFWE	N/A

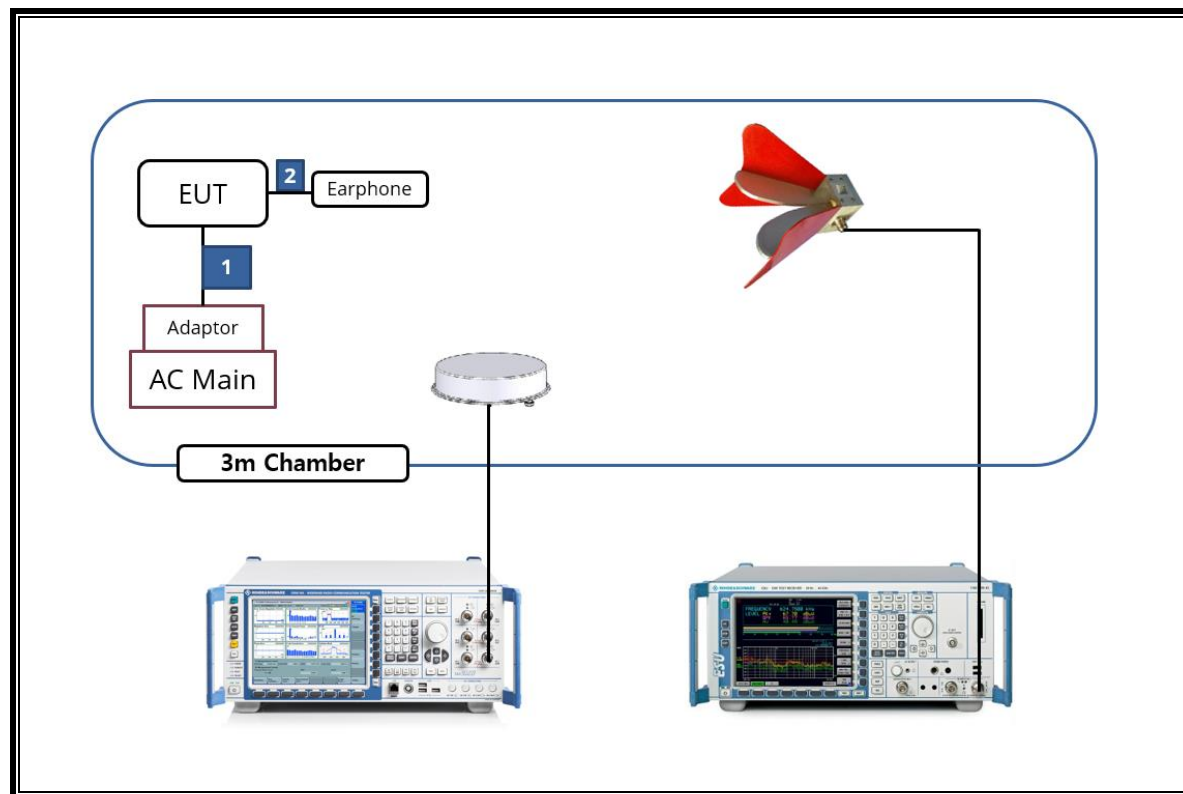
I/O CABLE

I/O Cable List						
Cable No.	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DC Power	1	C Type	Shielded	1.0 m	N/A
2	Audio	2	Mini-Jack	Unshielded	0.7 m	N/A

TEST SETUP

The EUT is continuously communicated with the call box during the tests.

SETUP DIAGRAM FOR TESTS (RADIATED TEST 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	S/N	Cal Due
Antenna, Tuned Dipole 400~1000 MHz	ETS	3121D DB4	00164753	2023-02-08
Directional Antenna	Cobham	FPA3-0.8-6.0R/1329	110367-0003	N/A
Directional Antenna	Cobham	FPA3-0.8-6.0R/1329	80108-0004	N/A
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	750	2022-08-19
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	845	2022-08-13
Antenna, Bilog, 30MHz-1GHz	SCHWARZBECK	VULB9163	749	2022-08-13
Antenna, Horn, 18 GHz	ETS	3115	00167211	2022-07-27
Antenna, Horn, 18 GHz	ETS	3115	00161451	2022-08-15
Antenna, Horn, 18 GHz	ETS	3117	00168724	2022-07-27
Antenna, Horn, 18 GHz	ETS	3117	00168717	2022-08-15
Communications Test Set	R&S	CMW500	169796	2023-01-07
DC Power Supply	Agilent / HP	E3640A	MY54226395	2022-08-02
Preamplifier, 1000 MHz	Sonoma	310N	341282	2022-08-02
Preamplifier, 1000 MHz	Sonoma	310N	370599	2022-08-02
Preamplifier, 1000 MHz	Sonoma	310N	351741	2022-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1876511	2022-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	2029168	2022-08-02
Preamplifier, 18 GHz	Miteq	AFS42-00101800-25-S-42	1896138	2022-08-02
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54170614	2022-08-04
Spectrum Analyzer, 44 GHz	Agilent / HP	N9030A	MY54490312	2022-08-04
EMI Test Receive, 40 GHz	R&S	ESU40	100439	2022-08-02
EMI Test Receive, 40 GHz	R&S	ESU40	100457	2022-08-02
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G005	2022-08-03
High Pass Filter 1.2GHz	Micro-Tronics	HPM50108-02	G006	2022-08-02
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	010	2022-08-03
High Pass Filter 2.8GHz	Micro-Tronics	HPM50111-02	011	2022-08-02
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G001	2022-08-03
High Pass Filter 4GHz	Micro-Tronics	HPM50118-02	G002	2022-08-02
Attenuator	PASTERNAK	PE7087-10	A009	2022-08-03
Attenuator	PASTERNAK	PE7087-10	A001	2022-08-03
Attenuator	PASTERNAK	PE7087-10	A008	2022-08-03
Attenuator	PASTERNAK	PE7004-10	2	2022-08-02
Attenuator	PASTERNAK	PE7395-10	A011	2022-08-03
Temperature Chamber	ESPEC	SH-642	93001109	2022-08-02
Power Splitter	MINI-CIRCUITS	WA1534	UL003	2023-01-11
Power Splitter	MINI-CIRCUITS	WA1534	UL004	2023-01-11
UL Software				
Description	Manufacturer	Model	Version	
Antenna port test software	UL	CLT	Ver 3.4	
Radiated software	UL	UL EMC	Ver 9.5	

7. APPLICABLE LIMITS AND TEST RESULTS

7.1. RADIATED EMISSIONS

TEST PROCEDURE

ANSI C63.4-2014

LIMIT

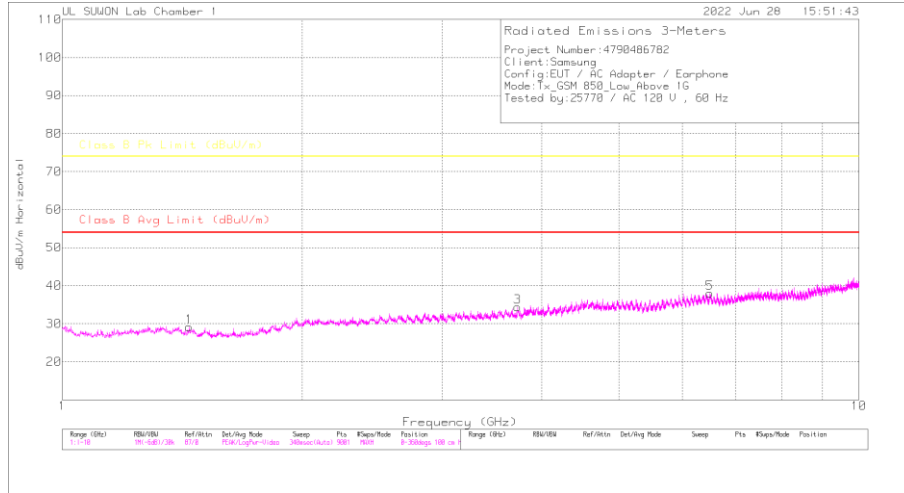
§15.109 (a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Limits for radiated disturbance of Class B ITE at measuring distance of 3 m	
Frequency range (MHz)	Quasi-peak limits (dB μ V/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.	

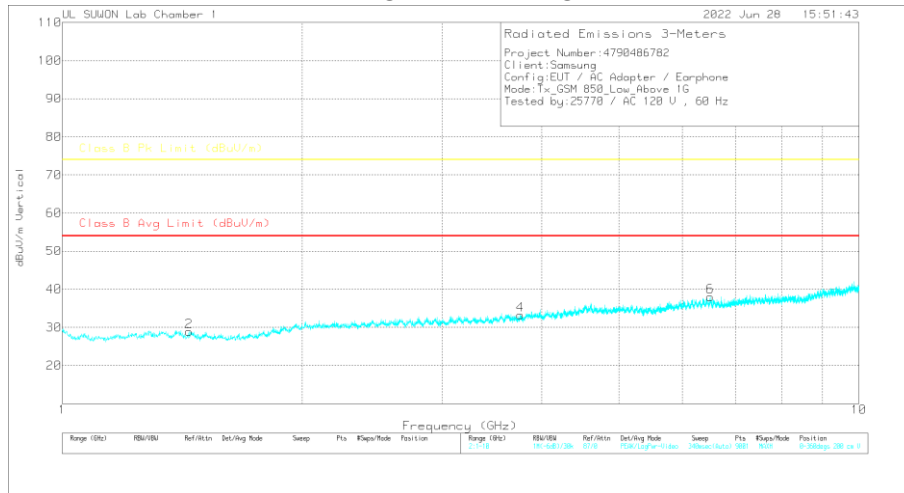
7.1.1. Above 1 GHz in the GSM850

LOW CHANNEL(869.2 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

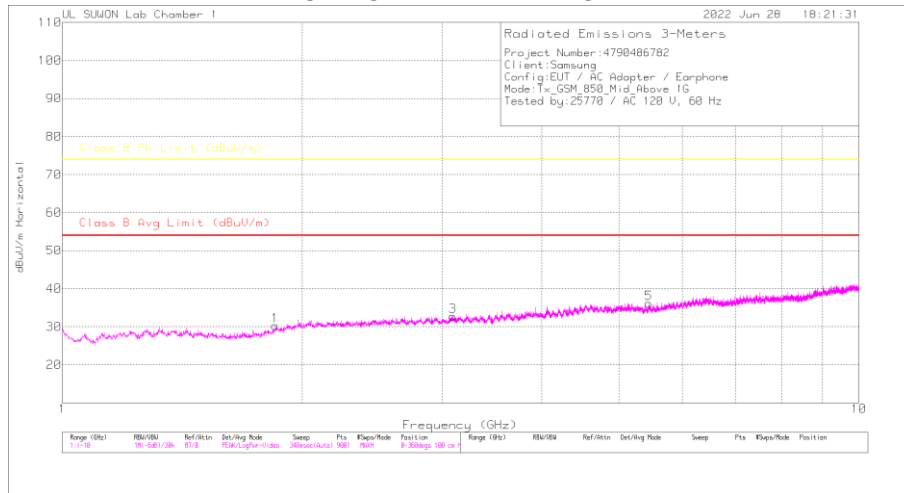
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871	1-18GHz[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Marg in (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.443	42.98	Pk	29.2	-36.8	.8	36.18	-	-	74	-37.82	0	100	H
1.443	30.67	Ca	29.2	-36.8	.8	23.87	54	-30.13	-	-	0	100	H
1.442	42.68	Pk	29.2	-36.8	.8	35.88	-	-	74	-38.12	0	100	V
1.442	30.66	Ca	29.2	-36.8	.8	23.86	54	-30.14	-	-	0	100	V
3.728	41.4	Pk	33	-33.2	.3	41.5	-	-	74	-32.5	0	100	H
3.728	28.8	Ca	33	-33.2	.3	28.9	54	-25.1	-	-	0	100	H
3.757	38.78	Pk	33.1	-33.1	.4	39.18	-	-	74	-34.82	0	100	V
3.757	26.71	Ca	33.1	-33.1	.4	27.11	54	-26.89	-	-	0	100	V
6.495	39.35	Pk	35.4	-29.4	.6	45.95	-	-	74	-28.05	0	100	H
6.495	26.63	Ca	35.4	-29.4	.6	33.23	54	-20.77	-	-	0	100	H
6.503	39.08	Pk	35.4	-29.3	.6	45.78	-	-	74	-28.22	0	100	V
6.503	26.92	Ca	35.4	-29.3	.6	33.62	54	-20.38	-	-	0	100	V

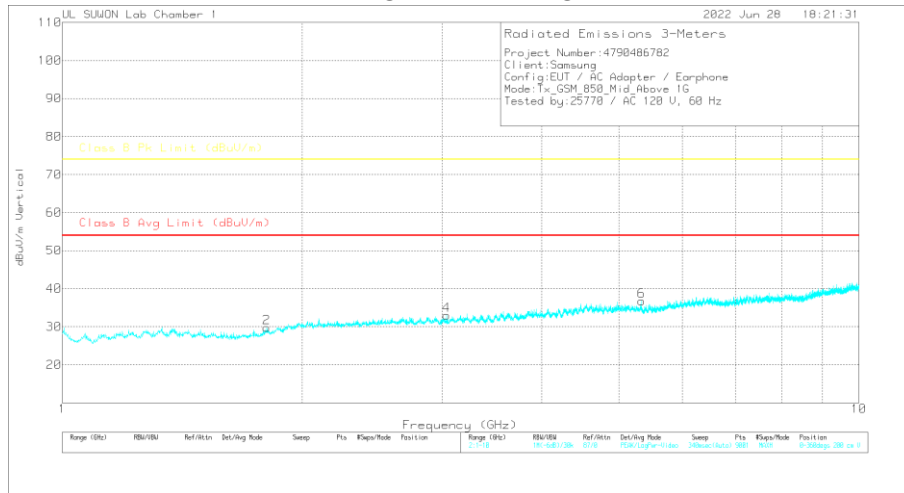
Pk - Peak detector
Ca - CISPR average detection

MID CHANNEL(881.6 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT

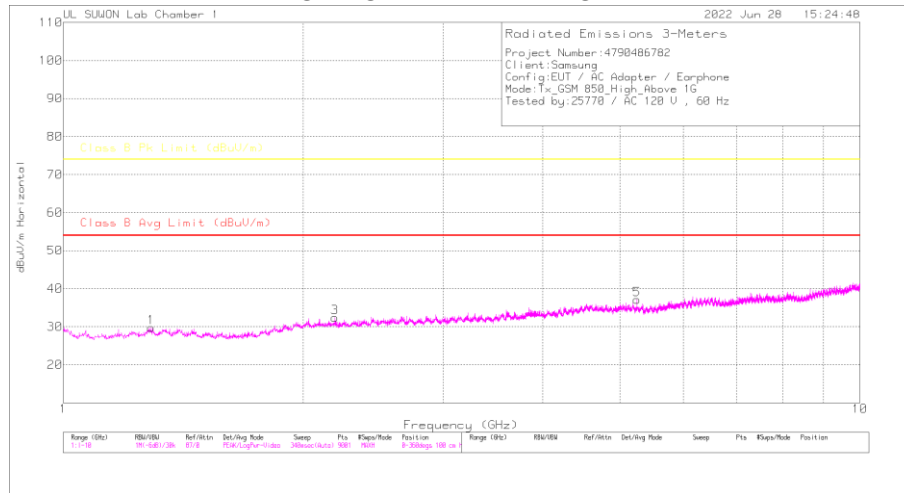
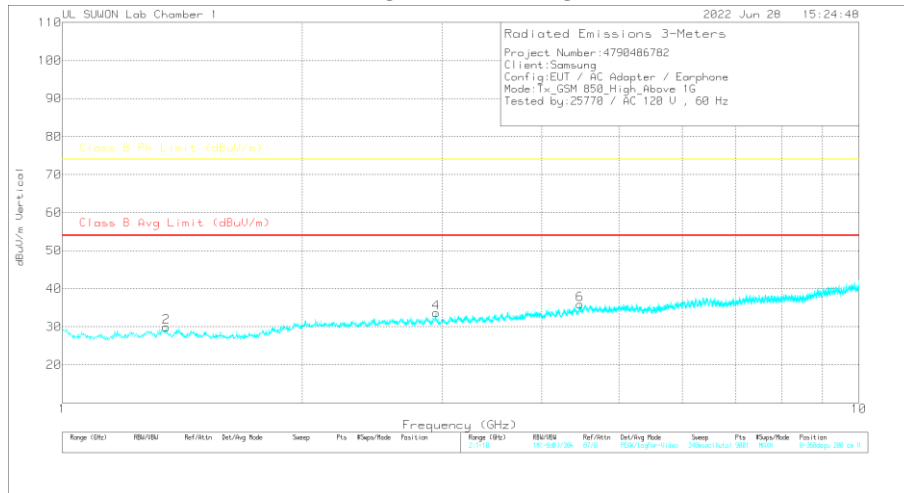


DATA

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871 7	1-18GHz[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.851	42.22	Pk	30.2	-36	.6	37.02	-	-	74	-36.98	360	100	H
1.851	30.14	Ca	30.2	-36	.6	24.94	54	-29.06	-	-	360	100	H
1.806	42.45	Pk	29.6	-36.2	.6	36.45	-	-	74	-37.55	360	100	V
1.806	30.44	Ca	29.6	-36.2	.6	24.44	54	-29.56	-	-	360	100	V
3.09	40.88	Pk	32.5	-33.8	.6	40.18	-	-	74	-33.82	360	100	H
3.09	28.44	Ca	32.5	-33.8	.6	27.74	54	-26.26	-	-	360	100	H
3.036	39.82	Pk	32.4	-33.8	.4	38.82	-	-	74	-35.18	360	100	V
3.036	27.94	Ca	32.4	-33.8	.4	26.94	54	-27.06	-	-	360	100	V
5.447	38.92	Pk	34.5	-31.2	.5	42.72	-	-	74	-31.28	360	100	H
5.447	26.86	Ca	34.5	-31.2	.5	30.66	54	-23.34	-	-	360	100	H
5.335	40.94	Pk	34.5	-31.4	.4	44.44	-	-	74	-29.56	360	100	V
5.335	27.62	Ca	34.5	-31.4	.4	31.12	54	-22.88	-	-	360	100	V

Pk - Peak detector
Ca - CISPR average detection

HIGH CHANNEL(893.8 MHz)**HORIZONTAL PEAK PLOT****VERTICAL PEAK PLOT****DATA****Radiated Emissions**

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871 7	1-18GHz[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av[CISPR]Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.289	43.27	Pk	29.3	-37.2	1	36.37	-	-	74	-37.63	0	100	H
1.289	31.32	Ca	29.3	-37.2	1	24.42	54	-29.58	-	-	0	100	H
1.351	42.78	Pk	29.5	-37	9	36.18	-	-	74	-37.82	0	100	V
1.351	30.87	Ca	29.5	-37	9	24.27	54	-29.73	-	-	0	100	V
2.194	42.08	Pk	31.5	-35.4	6	38.78	-	-	74	-35.22	0	100	H
2.194	29.58	Ca	31.5	-35.4	6	26.28	54	-27.72	-	-	0	100	H
2.945	40.27	Pk	32.3	-34	7	39.27	-	-	74	-34.73	0	100	V
2.945	28.59	Ca	32.3	-34	7	27.59	54	-26.41	-	-	0	100	V
5.251	39.38	Pk	34.4	-31.4	5	42.88	-	-	74	-31.12	0	100	H
5.251	27.5	Ca	34.4	-31.4	5	31	54	-23	-	-	0	100	H
4.467	39.82	Pk	34.2	-32.2	5	42.32	-	-	74	-31.68	0	100	V
4.467	28.21	Ca	34.2	-32.2	5	30.71	54	-23.29	-	-	0	100	V

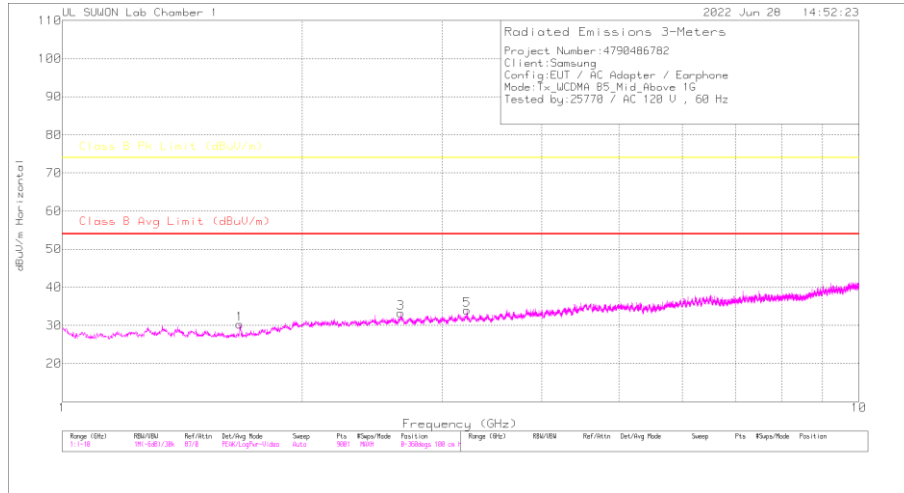
Pk - Peak detector

Ca - CISPR average detection

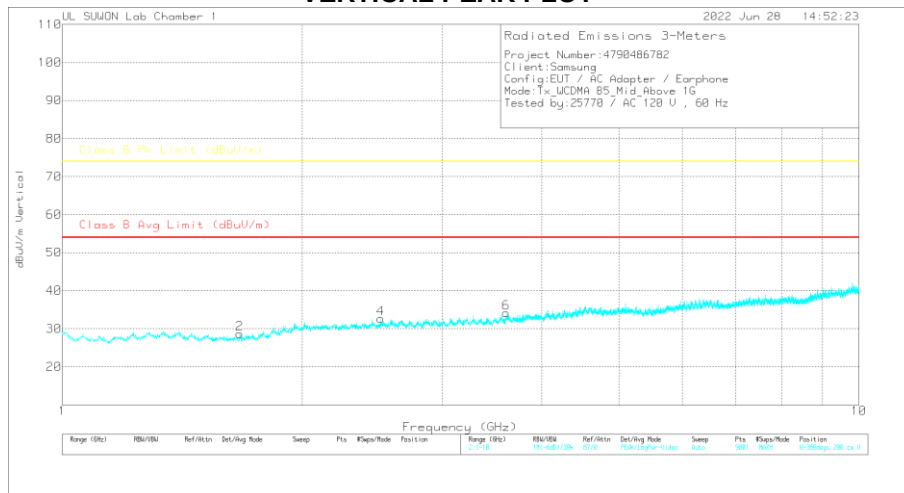
7.1.2. Above 1 GHz in the WCDMA Band 5

MID CHANNEL(881.6 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871	1-18GHz[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Marg in (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.671	43.71	Pk	28.5	-36.4	.7	36.51	-	-	74	-37.49	0	100	H
1.671	31.18	Ca	28.5	-36.4	.7	23.98	54	-30.02	-	-	0	100	H
1.671	42.79	Pk	28.5	-36.4	.7	35.59	-	-	74	-38.41	0	100	V
1.671	30.72	Ca	28.5	-36.4	.7	23.52	54	-30.48	-	-	0	100	V
2.659	41.12	Pk	32.1	-34.5	.8	39.52	-	-	74	-34.48	0	100	H
2.659	29.09	Ca	32.1	-34.5	.8	27.49	54	-26.51	-	-	0	100	H
2.512	41.05	Pk	32	-34.7	.7	39.05	-	-	74	-34.95	0	100	V
2.512	28.87	Ca	32	-34.7	.7	26.87	54	-27.13	-	-	0	100	V
3.22	39.69	Pk	32.7	-33.7	.6	39.29	-	-	74	-34.71	0	100	H
3.22	28.32	Ca	32.7	-33.7	.6	27.92	54	-26.08	-	-	0	100	H
3.607	40.47	Pk	33.1	-33.2	.6	40.97	-	-	74	-33.03	0	100	V
3.607	28.46	Ca	33.1	-33.2	.6	28.96	54	-25.04	-	-	0	100	V

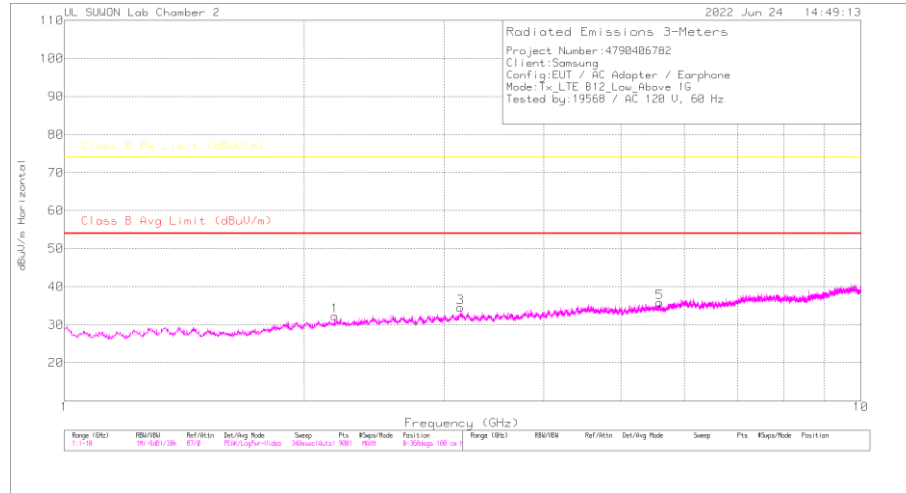
Pk - Peak detector

Ca - CISPR average detection

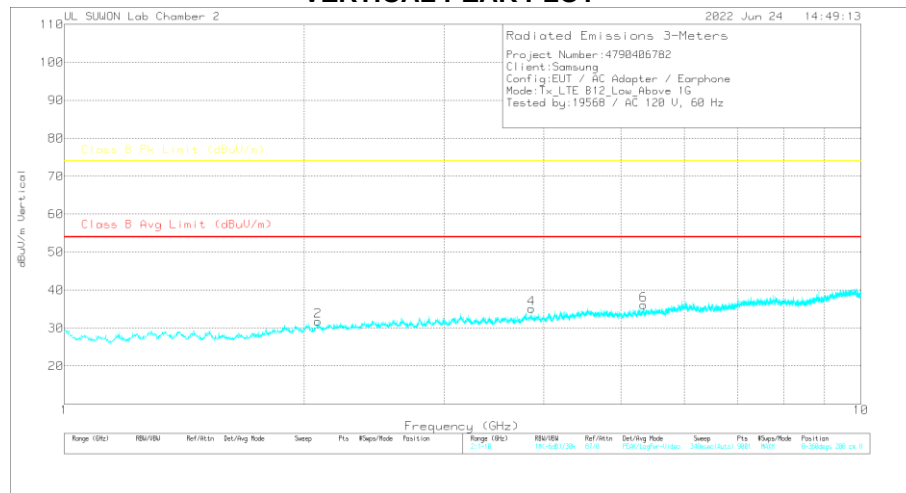
7.1.3. Above 1 GHz in the LTE Band 12

LOW CHANNEL(731.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



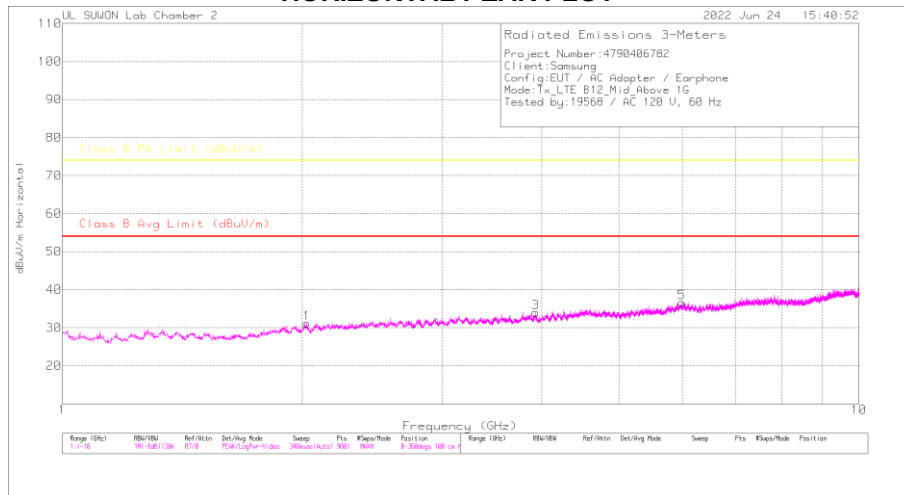
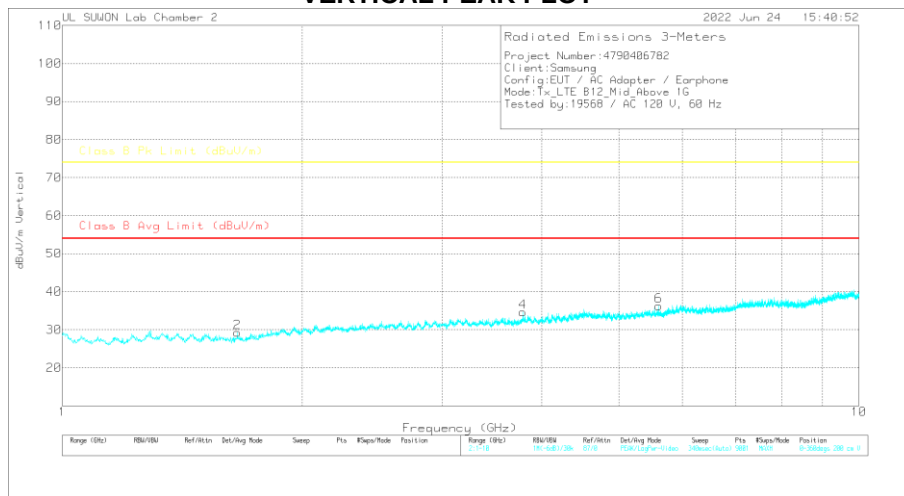
DATA

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016872 4	1-18GHz[dB]	1GHz HPF[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.186	35.49	Pk	31.7	-30.4	.7	37.49	-	-	74	-36.51	360	100	H
2.186	23.99	Ca	31.7	-30.4	.7	25.99	54	-28.01	-	-	360	100	H
2.082	36.9	Pk	31.5	-30.5	.6	38.5	-	-	74	-35.5	360	100	V
2.082	24.64	Ca	31.5	-30.5	.6	26.24	54	-27.76	-	-	360	100	V
3.143	35.96	Pk	33	-29.6	.7	40.06	-	-	74	-33.94	360	100	H
3.143	24.14	Ca	33	-29.6	.7	28.24	54	-25.76	-	-	360	100	H
3.859	36.11	Pk	33.4	-29.2	.6	40.91	-	-	74	-33.09	360	100	V
3.859	24.12	Ca	33.4	-29.2	.6	28.92	54	-25.08	-	-	360	100	V
5.594	35.34	Pk	34.6	-27.9	.5	42.54	-	-	74	-31.46	360	100	H
5.594	22.97	Ca	34.6	-27.9	.5	30.17	54	-23.83	-	-	360	100	H
5.335	36.24	Pk	34.5	-28.4	.5	42.84	-	-	74	-31.16	360	100	V
5.335	23.96	Ca	34.5	-28.4	.5	30.56	54	-23.44	-	-	360	100	V

Pk - Peak detector

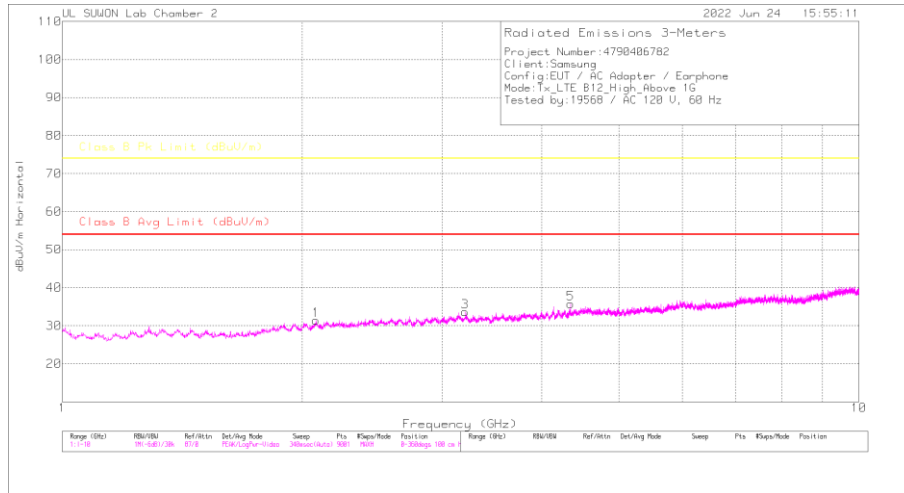
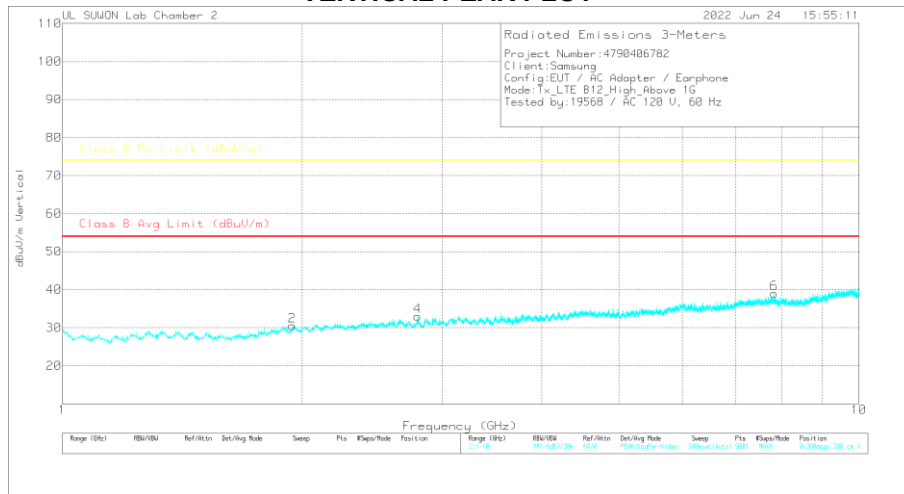
Ca - CISPR average detection

MID CHANNEL(737.5 MHz)**HORIZONTAL PEAK PLOT****VERTICAL PEAK PLOT****DATA****Radiated Emissions**

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016872 4	1-18GHz[dB]	1GHz HPF[dB]	Corrected Reading (dBuV/m)	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.029	36.35	Pk	31.3	-30.6	.5	37.55	-	-	74	-36.45	360	100	H
2.029	24.54	Ca	31.3	-30.6	.5	25.74	54	-28.26	-	-	360	100	H
1.659	38.84	Pk	28.6	-31	.8	37.24	-	-	74	-36.76	360	100	V
1.659	25.26	Ca	28.6	-31	.8	23.66	54	-30.34	-	-	360	100	V
3.927	35.84	Pk	33.5	-29.5	.6	40.44	-	-	74	-33.56	360	100	H
3.927	24.22	Ca	33.5	-29.5	.6	28.82	54	-25.18	-	-	360	100	H
3.787	36.25	Pk	33.3	-29.3	.5	40.75	-	-	74	-33.25	360	100	V
3.787	24.37	Ca	33.3	-29.3	.5	28.87	54	-25.13	-	-	360	100	V
5.991	35.61	Pk	35.1	-27.5	.5	43.71	-	-	74	-30.29	360	100	H
5.991	23.47	Ca	35.1	-27.5	.5	31.57	54	-22.43	-	-	360	100	H
5.608	35.42	Pk	34.6	-27.8	.4	42.62	-	-	74	-31.38	360	100	V
5.608	23.25	Ca	34.6	-27.8	.4	30.45	54	-23.55	-	-	360	100	V

Pk - Peak detector

Ca - CISPR average detection

HIGH CHANNEL(743.5 MHz)**HORIZONTAL PEAK PLOT****VERTICAL PEAK PLOT****DATA****Radiated Emissions**

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016872 4	1-18GHz[dB]	1GHz HPF[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.081	37.92	Pk	31.5	-30.5	.6	39.52	-	-	74	-34.48	360	100	H
2.081	24.67	Ca	31.5	-30.5	.6	26.27	54	-27.73	-	-	360	100	H
1.945	36.93	Pk	31	-30.8	.7	37.83	-	-	74	-36.17	360	100	V
1.945	24.71	Ca	31	-30.8	.7	25.61	54	-28.39	-	-	360	100	V
3.204	36.64	Pk	33	-29.6	.7	40.74	-	-	74	-33.26	360	100	H
3.204	23.96	Ca	33	-29.6	.7	28.06	54	-25.94	-	-	360	100	H
2.795	36.76	Pk	32.2	-29.7	.7	39.96	-	-	74	-34.04	360	100	V
2.795	24.32	Ca	32.2	-29.7	.7	27.52	54	-26.48	-	-	360	100	V
4.345	36.12	Pk	33.6	-28.9	.5	41.32	-	-	74	-32.68	360	100	H
4.345	24.45	Ca	33.6	-28.9	.5	29.65	54	-24.35	-	-	360	100	H
7.824	34.7	Pk	36	-24.4	.5	46.8	-	-	74	-27.2	360	100	V
7.824	21.73	Ca	36	-24.4	.5	33.83	54	-20.17	-	-	360	100	V

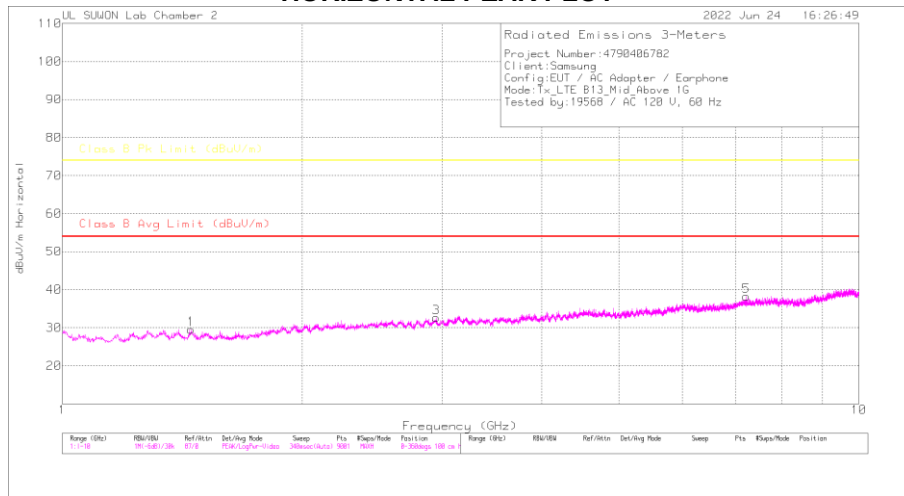
Pk - Peak detector

Ca - CISPR average detection

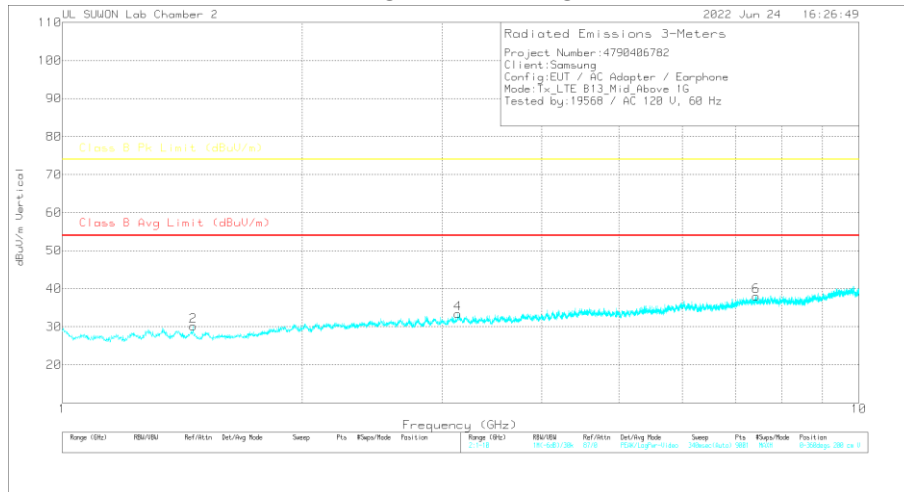
7.1.4. Above 1 GHz in the LTE Band 13

MID CHANNEL(751.0 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT

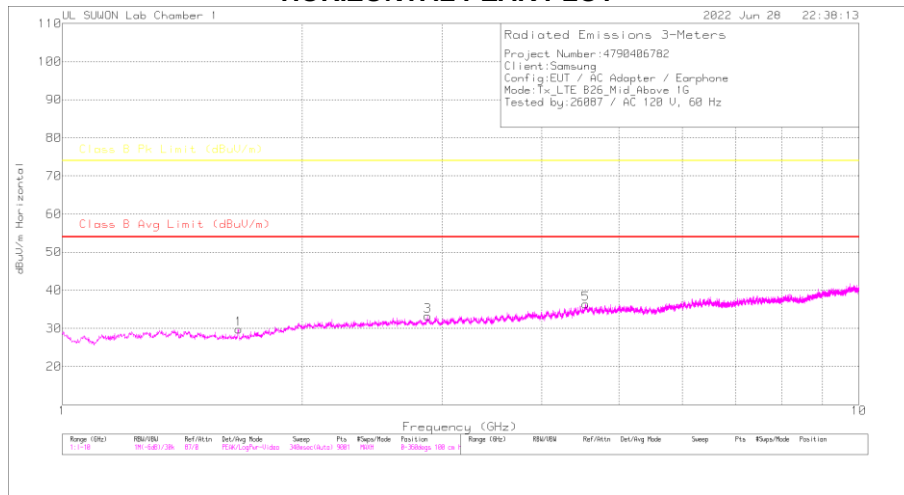
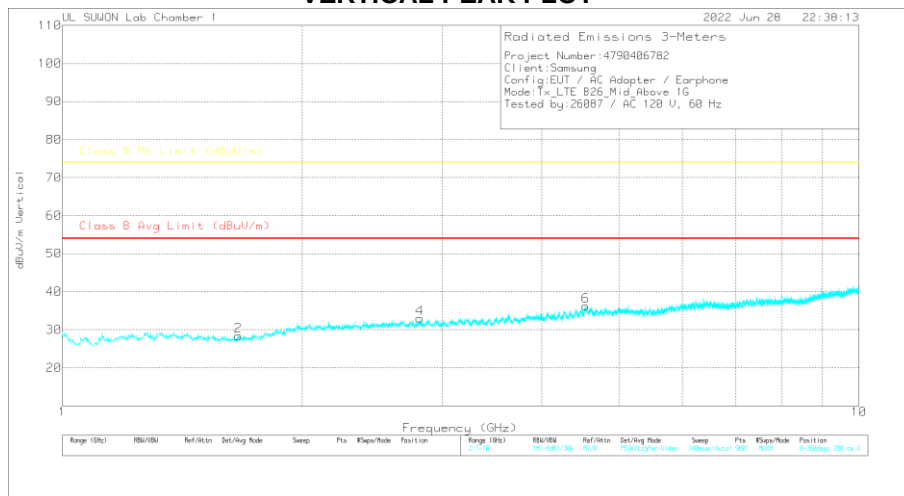


DATA

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016872_4	1-18GHz[dB]	1GHz HPF[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.451	37.89	Pk	29.2	-31.3	.8	36.59	-	-	74	-37.41	360	100	H
1.451	25.61	Ca	29.2	-31.3	.8	24.31	54	-29.69	-	-	360	100	H
1.46	37.9	Pk	29.2	-31.3	.8	36.6	-	-	74	-37.4	360	100	V
1.46	25.47	Ca	29.2	-31.3	.8	24.17	54	-29.83	-	-	360	100	V
2.948	35.87	Pk	32.5	-30.2	.7	38.87	-	-	74	-35.13	360	100	H
2.948	24.29	Ca	32.5	-30.2	.7	27.29	54	-26.71	-	-	360	100	H
3.139	35.52	Pk	33	-29.6	.7	39.62	-	-	74	-34.38	360	100	V
3.139	24.05	Ca	33	-29.6	.7	28.15	54	-25.85	-	-	360	100	V
7.22	34.1	Pk	36.2	-25.8	.4	44.9	-	-	74	-29.1	360	100	H
7.22	22.29	Ca	36.2	-25.8	.4	33.09	54	-20.91	-	-	360	100	H
7.435	34.03	Pk	36	-25	.4	45.43	-	-	74	-28.57	360	100	V
7.435	22.13	Ca	36	-25	.4	33.53	54	-20.47	-	-	360	100	V

Pk - Peak detector
Ca - CISPR average detection

MID CHANNEL(876.5 MHz)**HORIZONTAL PEAK PLOT****VERTICAL PEAK PLOT****DATA****Radiated Emissions**

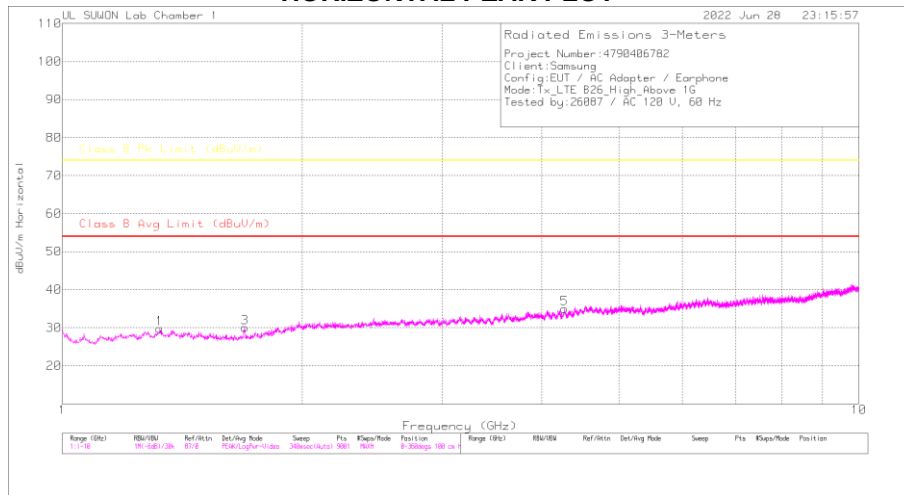
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871 7	1-18GHz[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.665	43.18	Pk	28.4	-36.4	.7	35.88	-	-	74	-38.12	0	100	H
1.665	31.33	Ca	28.4	-36.4	.7	24.03	54	-29.97	-	-	0	100	H
1.663	44.42	Pk	28.4	-36.4	.7	37.12	-	-	74	-36.88	0	100	V
1.663	30.38	Ca	28.4	-36.4	.7	23.08	54	-30.92	-	-	0	100	V
2.876	40.6	Pk	32.3	-33.9	.7	39.7	-	-	74	-34.3	0	100	H
2.876	28.8	Ca	32.3	-33.9	.7	27.9	54	-26.1	-	-	0	100	H
2.811	40.77	Pk	32.2	-34.2	.6	39.37	-	-	74	-34.63	0	100	V
2.811	28.91	Ca	32.2	-34.2	.6	27.51	54	-26.49	-	-	0	100	V
4.538	39.82	Pk	34.2	-32	.7	42.72	-	-	74	-31.28	0	100	H
4.538	27.87	Ca	34.2	-32	.7	30.77	54	-23.23	-	-	0	100	H
4.543	40.54	Pk	34.2	-32.1	.6	43.24	-	-	74	-30.76	0	100	V
4.543	28.11	Ca	34.2	-32.1	.6	30.81	54	-23.19	-	-	0	100	V

Pk - Peak detector

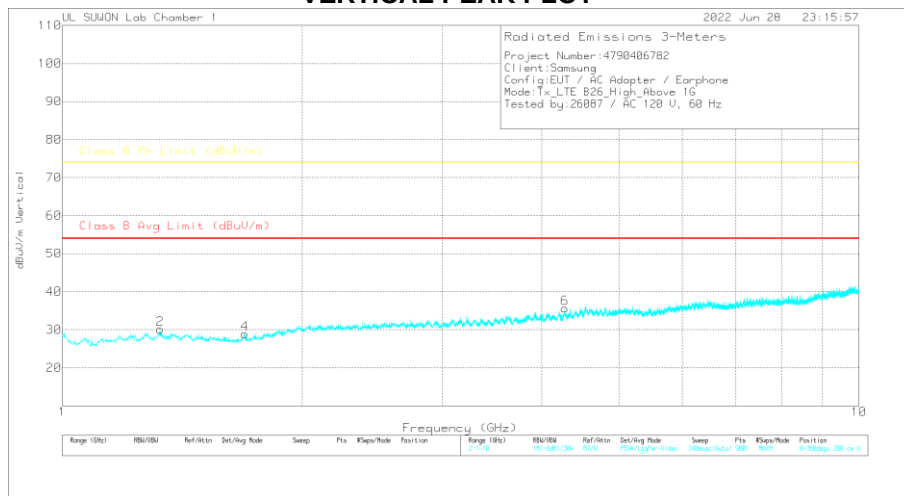
Ca - CISPR average detection

HIGH CHANNEL(886.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Radiated Emissions

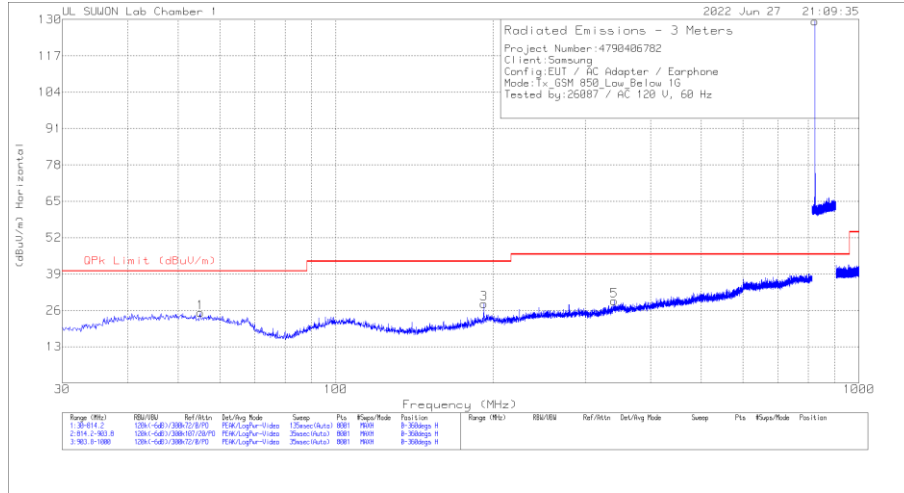
Frequency (GHz)	Meter Reading (dBuV)	Det	3117_0016871 7	1-18GHz[dB]	1GHz_HP[dB]	Corrected Reading dBuV/m	Class B Avg Limit (dBuV/m)	Av(CISPR)Margin (dB)	Class B Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.326	43.14	Pk	29.5	-37.1	.9	36.44	-	-	74	-37.56	0	100	H
1.326	31.21	Ca	29.5	-37.1	.9	24.51	54	-29.49	-	-	0	100	H
1.328	43.37	Pk	29.5	-37.1	.9	36.67	-	-	74	-37.33	0	100	V
1.328	31.24	Ca	29.5	-37.1	.9	24.54	54	-29.46	-	-	0	100	V
1.695	43.26	Pk	28.6	-36.3	.6	36.16	-	-	74	-37.84	0	100	H
1.695	31.33	Ca	28.6	-36.3	.6	24.23	54	-29.77	-	-	0	100	H
1.695	43.45	Pk	28.6	-36.3	.6	36.35	-	-	74	-37.65	0	100	V
1.695	30.66	Ca	28.6	-36.3	.6	23.56	54	-30.44	-	-	0	100	V
4.268	40.64	Pk	33.7	-32.4	.7	42.64	-	-	74	-31.36	0	100	H
4.268	28.74	Ca	33.7	-32.4	.7	30.74	54	-23.26	-	-	0	100	H
4.276	41.54	Pk	33.7	-32.5	.7	43.44	-	-	74	-30.56	0	100	V
4.276	28.73	Ca	33.7	-32.5	.7	30.63	54	-23.37	-	-	0	100	V

Pk - Peak detector
Ca - CISPR average detection

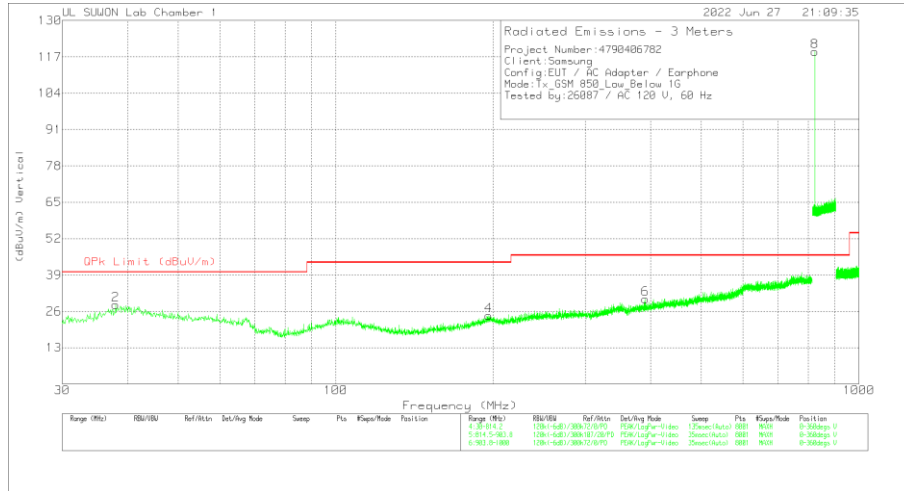
7.1.6. Below 1 GHz in the GSM850

LOW CHANNEL(869.2 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



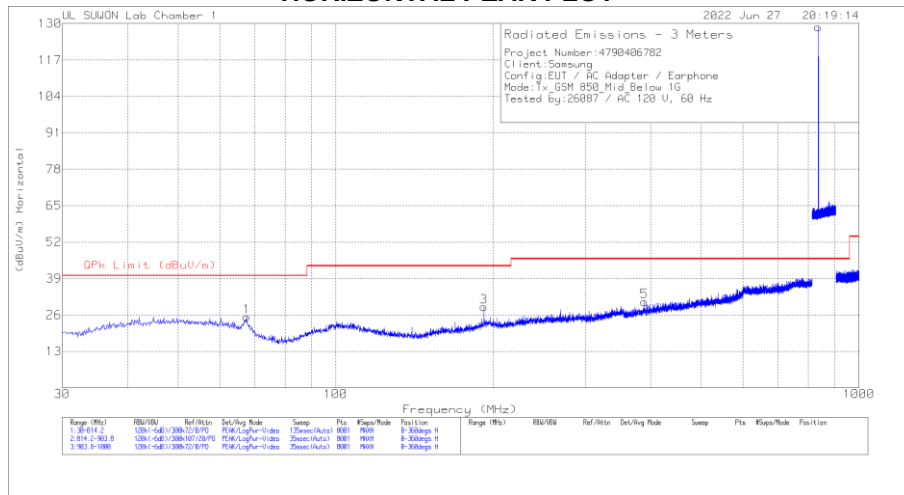
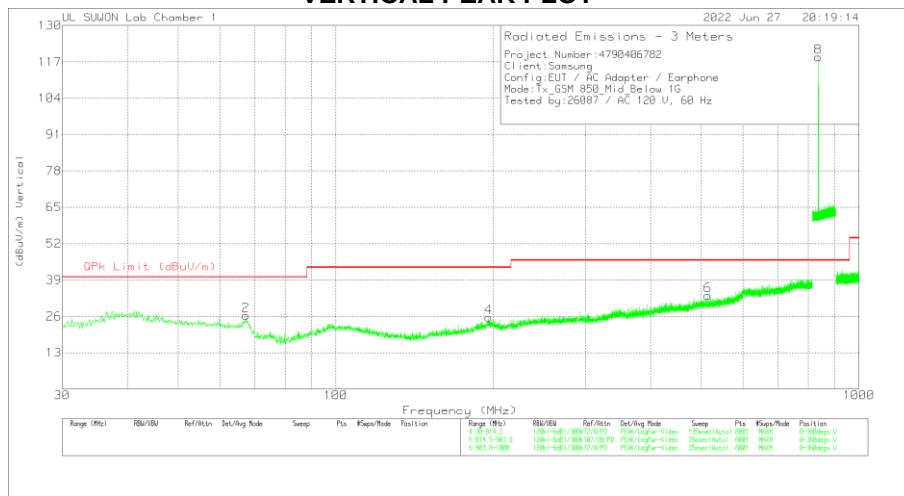
DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	55.0944	4.29	Pk	19.4	1.5	25.19	40	-14.81	0-360	200	H
3	191.9373	8.6	Pk	16.8	2.9	28.3	43.52	-15.22	0-360	100	H
5	340.2491	5.15	Pk	20.5	3.8	29.45	46.02	-16.57	0-360	100	H
7	824.2016	96.35	PK	27.1	5.9	129.35	46.02	83.33	0-360	200	H
2	37.94	9.22	Pk	17.9	1.3	28.42	40	-11.58	0-360	200	V
4	195.8583	4.14	Pk	17.5	2.9	24.54	43.52	-18.98	0-360	300	V
6	390.9281	5.15	Pk	21.2	4.1	30.45	46.02	-15.57	0-360	200	V
8	824.2006	85.92	PK	27.1	5.9	118.92	46.02	72.9	0-360	100	V

Pk - Peak detector

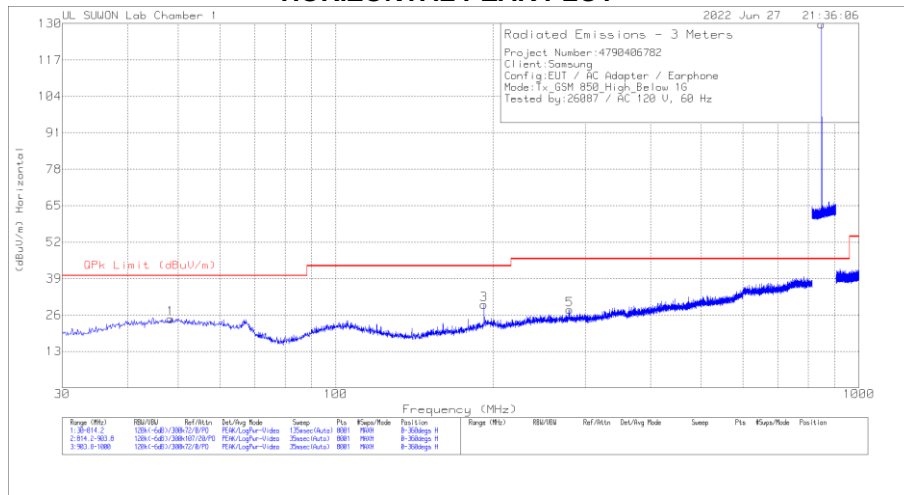
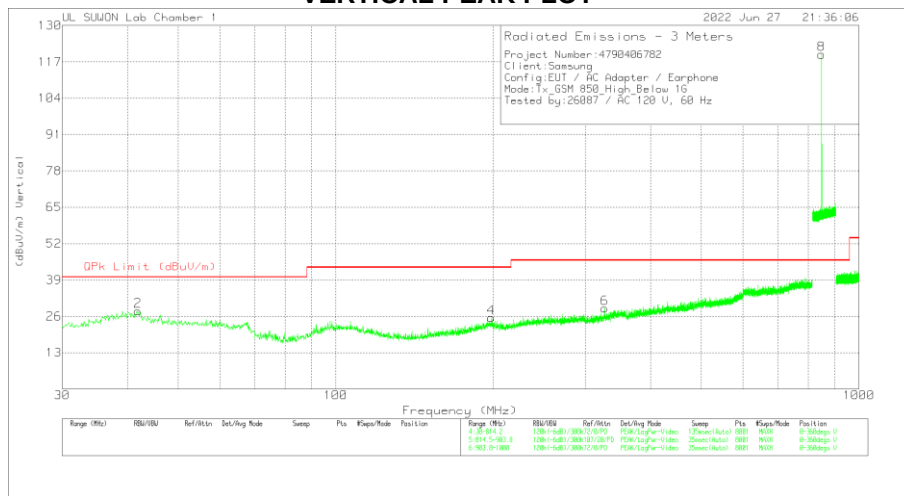
Note: Unwanted emissions captured from 824MHz to 849MHz and from 869MHz to 894MHz were the TX and RX signals generated from the call-simulator.

MID CHANNEL(881.6 MHz)**HORIZONTAL PEAK PLOT****VERTICAL PEAK PLOT****DATA****Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below 1G Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	67.5436	7.16	Pk	16.4	1.7	25.26	40	-14.74	0-360	300	H
3	191.9373	9.19	Pk	16.8	2.9	28.89	43.52	-14.63	0-360	100	H
5	389.2616	5.52	Pk	21.2	4.1	30.82	46.02	-15.2	0-360	100	H
7	836.656	95.65	Pk	27.1	6	128.75	46.02	82.73	0-360	200	H
2	67.2495	8.18	Pk	16.5	1.7	26.38	40	-13.62	0-360	300	V
4	195.8583	5.33	Pk	17.5	2.9	25.73	43.52	-17.79	0-360	400	V
6	514.4396	5.41	Pk	23.3	4.7	33.41	46.02	-12.61	0-360	400	V
8	836.5246	85.62	Pk	27.1	6	118.72	46.02	72.7	0-360	100	V

Pk - Peak detector

Note: Unwanted emissions captured from 824MHz to 849MHz and from 869MHz to 894MHz were the TX and RX signals generated from the call-simulator.

HIGH CHANNEL(893.8 MHz)**HORIZONTAL PEAK PLOT****VERTICAL PEAK PLOT****DATA****Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below 1G Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	48.3307	3.4	Pk	19.9	1.4	24.7	40	-15.3	0-360	200	H
3	192.0353	10.1	Pk	16.8	2.9	29.8	43.52	-13.72	0-360	100	H
5	279.6697	5.49	Pk	18.8	3.5	27.79	46.02	-18.23	0-360	100	H
7	848.8416	96.25	Pk	27.4	6	129.65	46.02	83.63	0-360	200	H
2	41.861	7.54	Pk	19.1	1.3	27.94	40	-12.06	0-360	200	V
4	197.9168	5.21	Pk	17.4	2.9	25.51	43.52	-18.01	0-360	400	V
6	326.3296	5.24	Pk	19.9	3.7	28.84	46.02	-17.18	0-360	200	V
8	848.8597	86.23	Pk	27.4	6	119.63	46.02	73.61	0-360	100	V

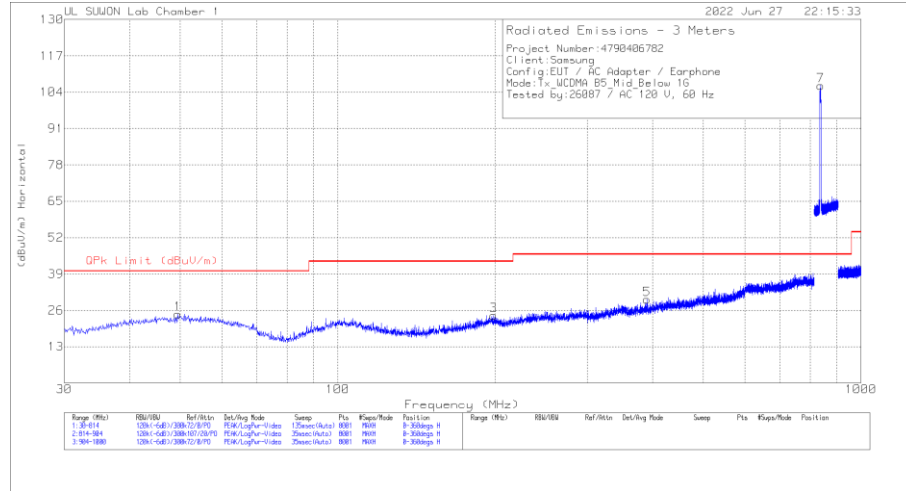
Pk - Peak detector

Note: Unwanted emissions captured from 824MHz to 849MHz and from 869MHz to 894MHz were the TX and RX signals generated from the call-simulator.

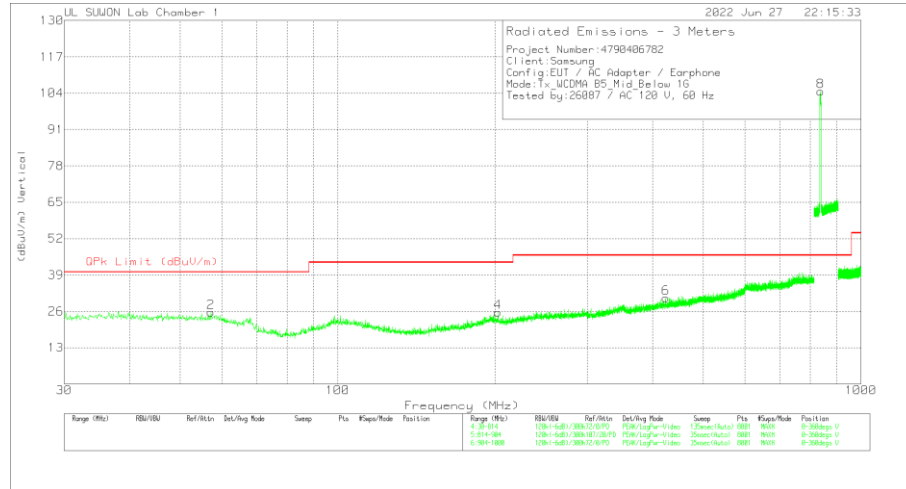
7.1.7. Below 1 GHz in the WCDMA Band 5

MID CHANNEL(881.6 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	49.502	3.18	Pk	19.9	1.5	24.58	40	-15.42	0-360	100	H
3	198.658	3.92	Pk	17.3	2.9	24.12	43.52	-19.4	0-360	100	H
5	390.052	4.62	Pk	21.2	4.1	29.92	46.02	-16.1	0-360	100	H
7	838.1538	73.2	Pk	27.1	6	106.3	46.02	60.28	0-360	100	H
2	57.244	4.84	Pk	19.2	1.6	25.64	40	-14.36	0-360	100	V
4	202.382	5.91	Pk	16.9	2.9	25.71	43.52	-17.81	0-360	200	V
6	423.47	4.45	Pk	22	4.3	30.75	46.02	-15.27	0-360	100	V
8	836.815	71.47	Pk	27.1	6	104.57	46.02	58.55	0-360	300	V

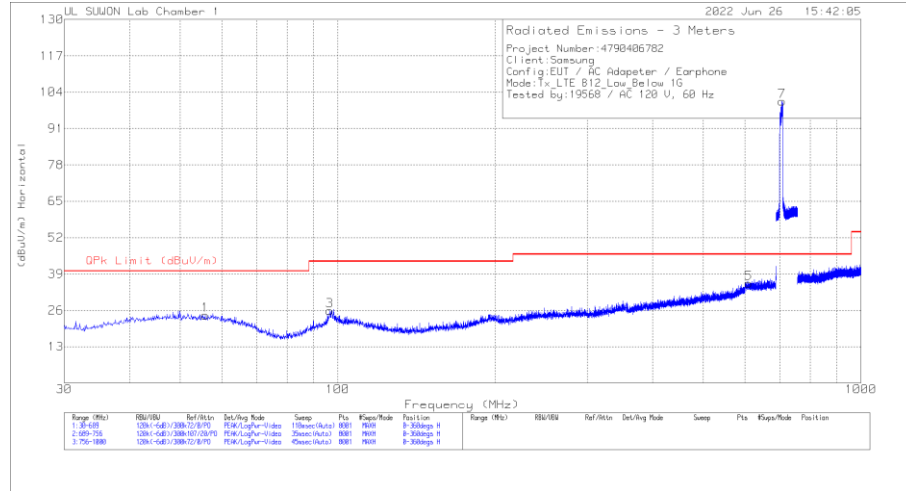
Pk - Peak detector

Note: Unwanted emissions captured from 824MHz to 849MHz and from 869MHz to 894MHz were the TX and RX signals generated from the call-simulator.

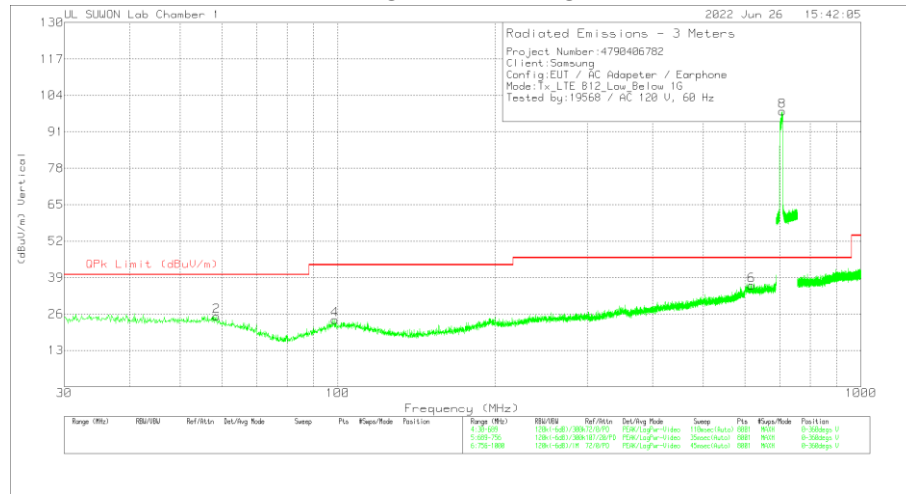
7.1.8. Below 1 GHz in the LTE Band 12

LOW CHANNEL(731.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



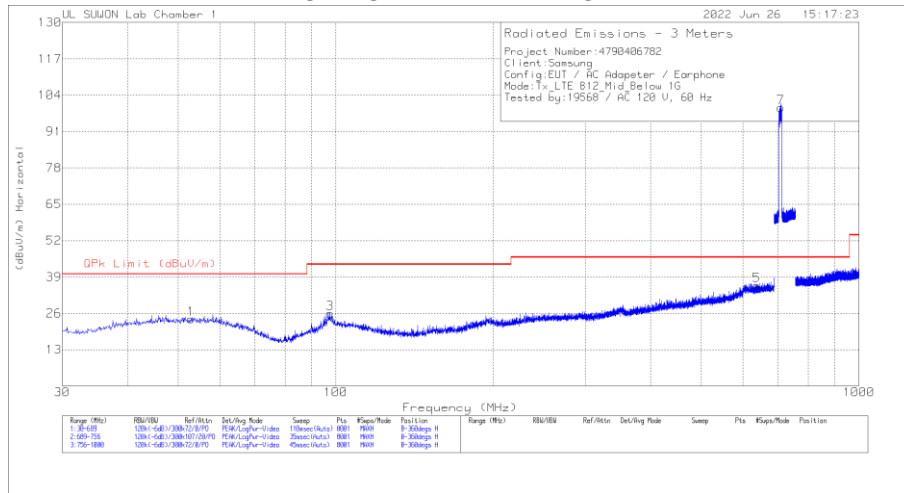
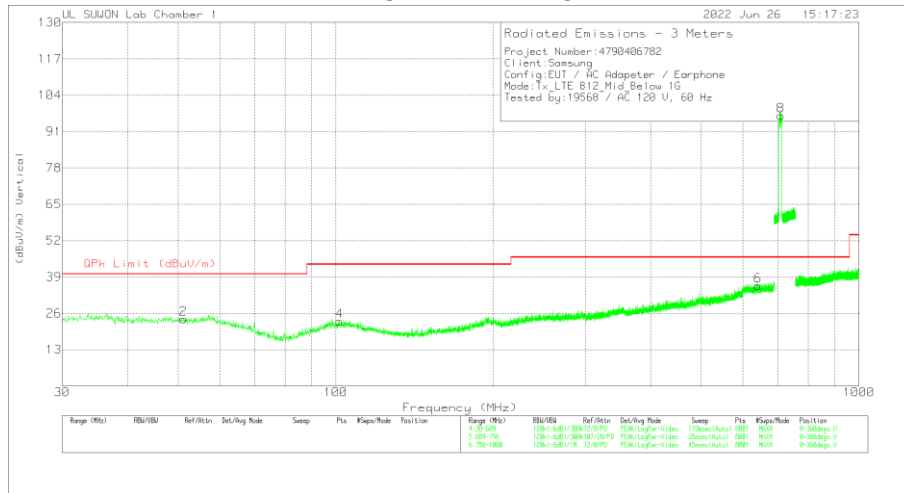
DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	55.7834	3.42	Pk	19.3	1.5	24.22	40	-15.78	0-360	300	H
3	96.4766	6.89	Pk	16.9	2	25.79	43.52	-17.73	0-360	200	H
5	610.6614	5.34	PK	25.2	5.1	35.64	46.02	-10.38	0-360	300	H
7	706.7969	69.68	Pk	25.6	5.5	100.78	46.02	54.76	0-360	200	H
2	58.6665	4.67	Pk	18.9	1.6	25.17	40	-14.83	0-360	400	V
4	98.7831	4.5	Pk	17.4	2.1	24	43.52	-19.52	0-360	400	V
6	617.9928	5.84	Pk	25.2	5.1	36.14	46.02	-9.88	0-360	400	V
8	706.9476	67.33	Pk	25.6	5.5	98.43	46.02	52.41	0-360	100	V

Pk - Peak detector

Note: Unwanted emissions captured from 699MHz to 716MHz and from 729MHz to 746MHz were the TX and RX signals generated from the call-simulator.

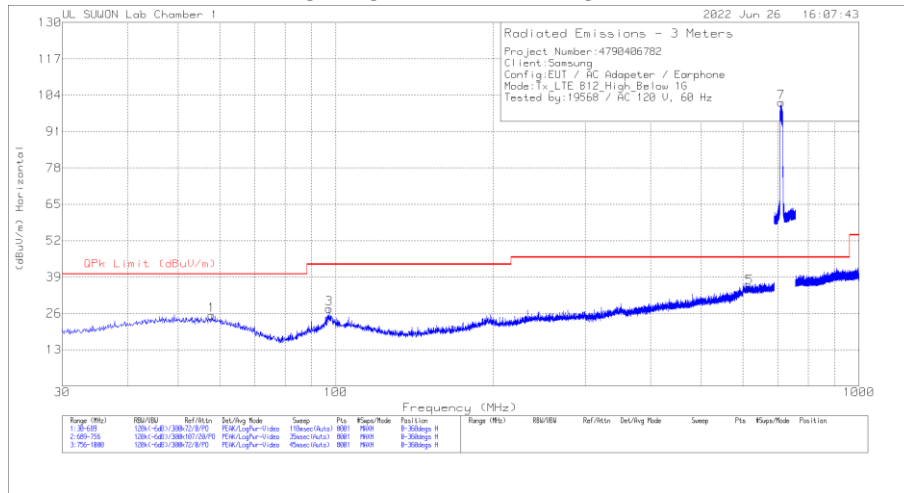
MID CHANNEL(737.5 MHz)**HORIZONTAL PEAK PLOT****VERTICAL PEAK PLOT****DATA****Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	52.8179	2.93	Pk	19.6	1.5	24.03	40	-15.97	0-360	300	H
3	97.5475	6.8	Pk	17.2	2	26	43.52	-17.52	0-360	100	H
5	637.2685	5.66	PK	25.1	5.2	35.96	46.02	-10.06	0-360	300	H
7	708.7315	68.3	PK	25.7	5.5	99.5	46.02	53.48	0-360	200	H
2	51.1704	2.7	PK	19.8	1.5	24	40	-16	0-360	400	V
4	101.6663	3.26	PK	17.7	2.1	23.06	43.52	-20.46	0-360	200	V
6	641.8815	5.58	PK	25.1	5.2	35.88	46.02	-10.14	0-360	200	V
8	708.5221	65.47	PK	25.7	5.5	96.67	46.02	50.65	0-360	100	V

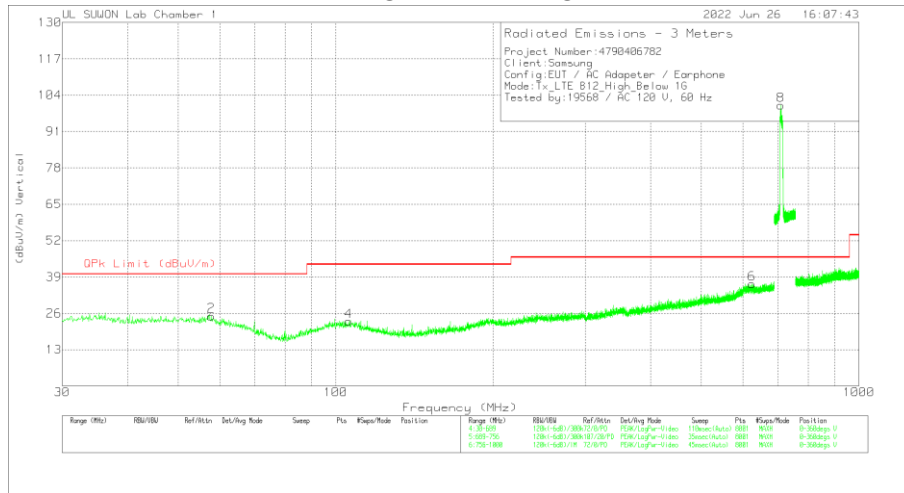
Pk - Peak detector

HIGH CHANNEL(743.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

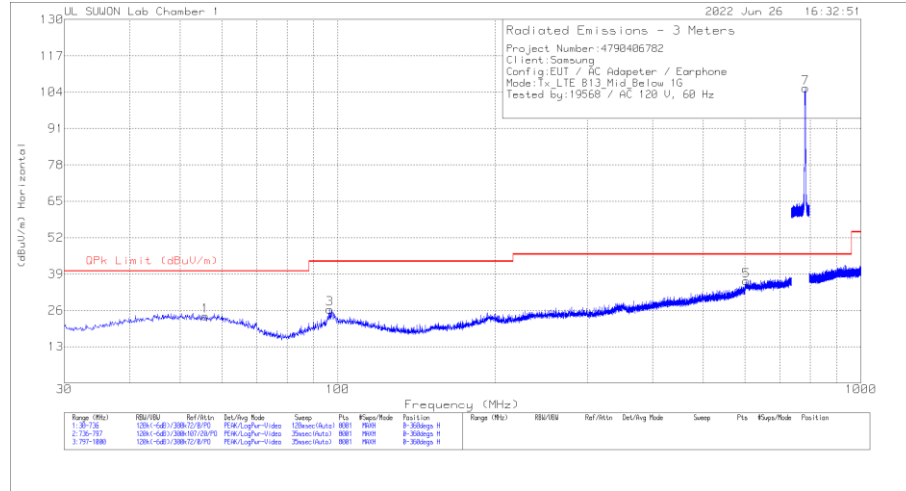
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	57.9251	4.7	Pk	19	1.6	25.3	40	-14.7	0-360	300	H
3	97.1356	8.53	Pk	17.1	2	27.63	43.52	-15.89	0-360	200	H
5	617.4985	5.02	PK	25.2	5.1	35.32	46.02	-10.7	0-360	300	H
7	710.3898	70.27	PK	25.7	5.5	101.47	46.02	55.45	0-360	200	H
2	57.8428	4.46	Pk	19	1.6	25.06	40	-14.94	0-360	200	V
4	105.785	3.37	Pk	17.7	2.1	23.17	43.52	-20.35	0-360	400	V
6	624.6651	6.26	Pk	25.1	5.2	36.56	46.02	-9.46	0-360	300	V
8	708.5808	69.18	PK	25.7	5.5	100.38	46.02	54.36	0-360	100	V

Pk - Peak detector

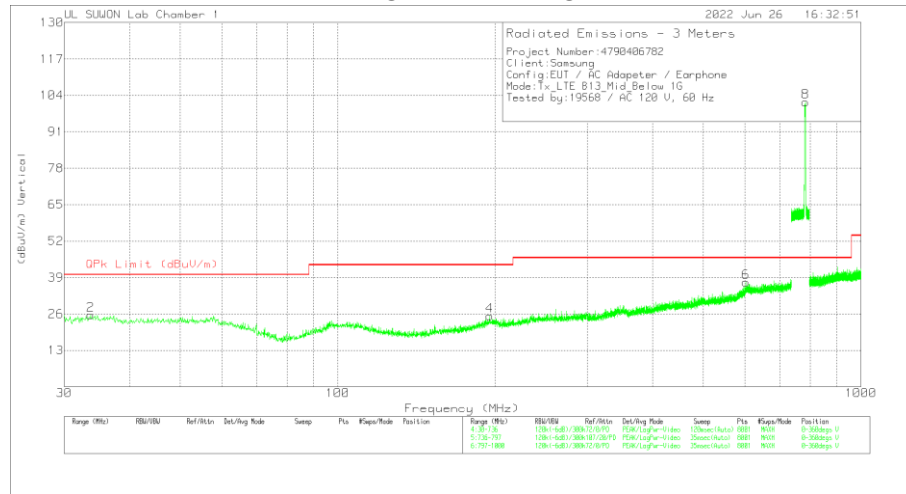
7.1.9. Below 1 GHz in the LTE Band 13

MID CHANNEL(751.0 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

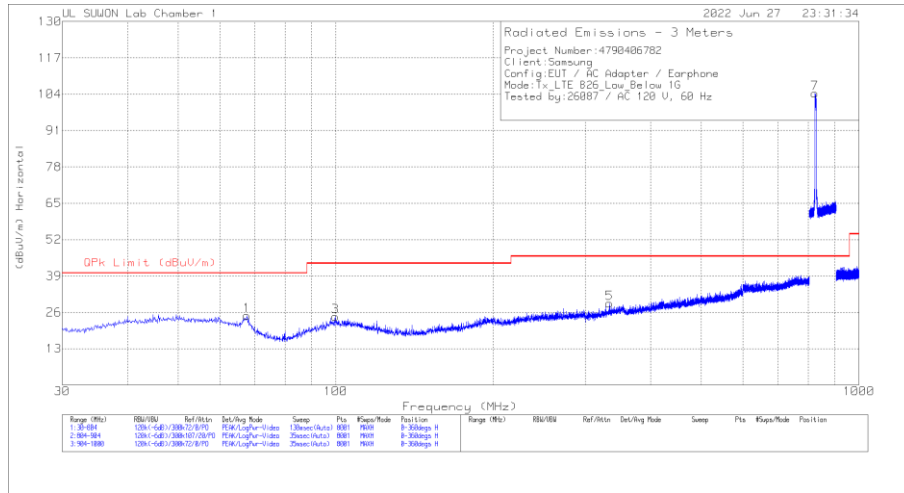
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	55.8573	3.23	Pk	19.3	1.5	24.03	40	-15.97	0-360	200	H
3	96.5405	7.42	Pk	17	2	26.42	43.52	-17.1	0-360	100	H
5	603.625	6.19	PK	25.2	5.1	36.49	46.02	-9.53	0-360	100	H
7	783.3208	73.04	Pk	26.6	5.8	105.44	46.02	59.42	0-360	200	H
2	33.7065	8.32	Pk	16.1	1.2	25.62	40	-14.38	0-360	200	V
4	195.0275	5.09	Pk	17.4	2.9	25.39	43.52	-18.13	0-360	400	V
6	603.0955	7.1	Pk	25.2	5.1	37.4	46.02	-8.62	0-360	200	V
8	783.7554	69.26	Pk	26.6	5.8	101.66	46.02	55.64	0-360	100	V

Pk - Peak detector

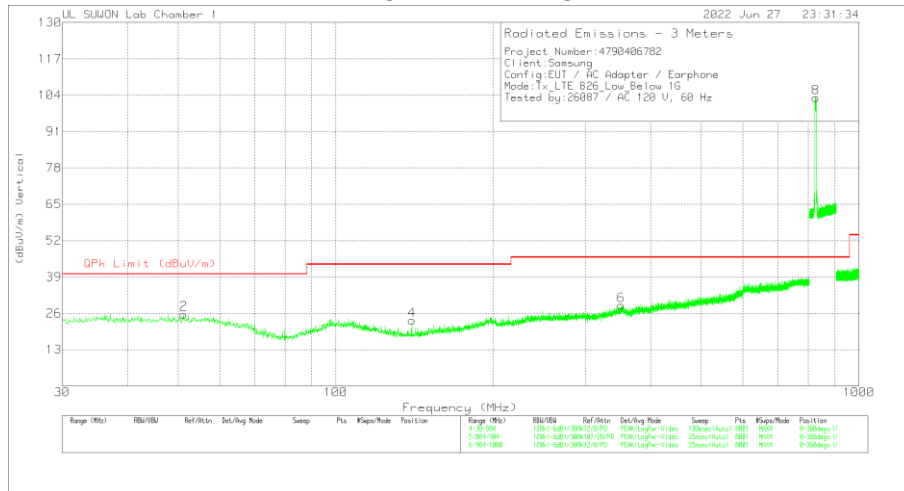
7.1.10.Below 1 GHz in the LTE Band 26

LOW CHANNEL(860.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



DATA

Trace Markers

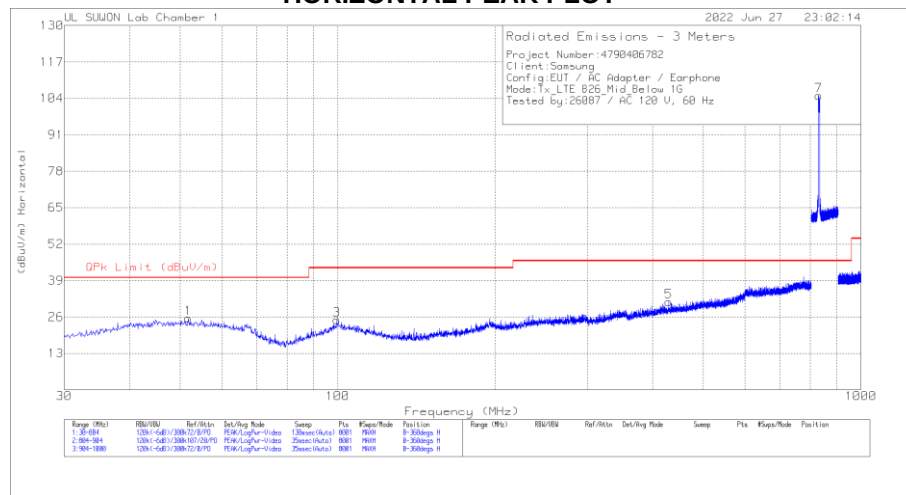
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	67.6358	6.84	PK	16.3	1.7	24.84	40	-15.16	0-360	300	H
3	99.7568	4.94	PK	17.5	2.1	24.54	43.52	-18.98	0-360	300	H
5	333.795	5.14	PK	20.2	3.8	29.14	46.02	-16.88	0-360	300	H
7	824.3875	71.22	PK	27.1	5.9	104.22	46.02	58.2	0-360	200	H
2	51.1883	4.44	PK	19.8	1.5	25.74	40	-14.26	0-360	200	V
4	139.8113	7.26	PK	13.8	2.4	23.46	43.52	-20.06	0-360	300	V
6	351.21	3.92	PK	21	3.9	28.82	46.02	-17.2	0-360	200	V
8	826.525	70.03	PK	27.1	5.9	103.03	46.02	57.01	0-360	100	V

PK - Peak detector

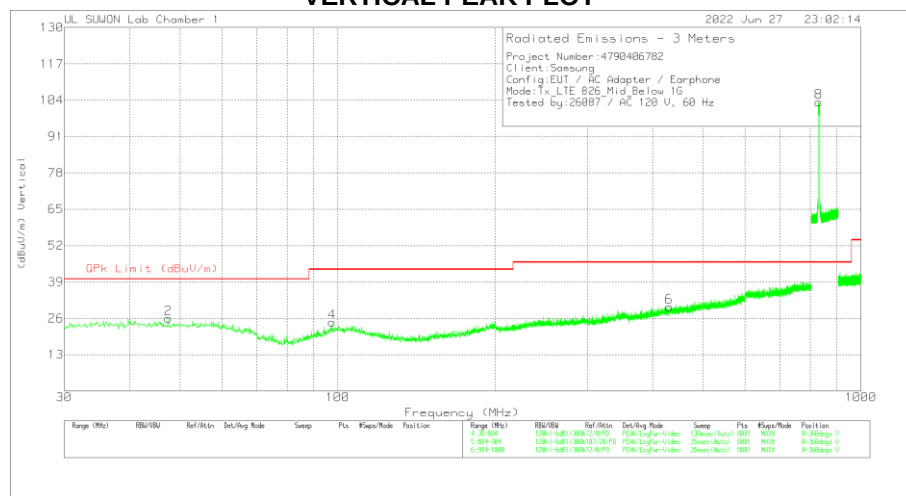
Note: Unwanted emissions captured from 814MHz to 849MHz and from 849MHz to 859MHz were the TX and RX signals generated from the call-simulator.

MID CHANNEL(876.5 MHz)

HORIZONTAL PEAK PLOT



VERTICAL PEAK PLOT



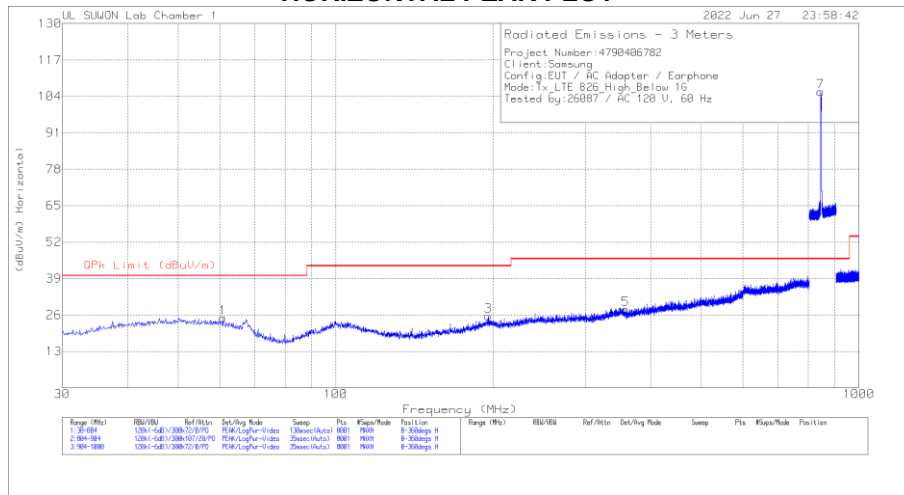
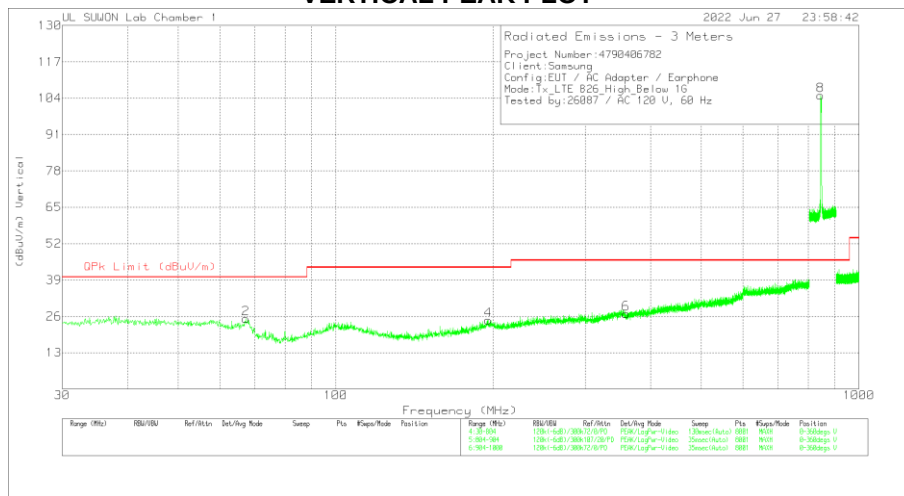
DATA

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VUL89163_750	Below 1G_Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	51.7688	4.21	Pk	19.7	1.5	25.41	40	-14.59	0-360	200	H
3	99.5633	5.35	Pk	17.5	2.1	24.95	43.52	-18.57	0-360	100	H
5	429.1905	4.98	Pk	22.1	4.3	31.38	46.02	-14.64	0-360	100	H
7	829.8875	72.12	Pk	27	5.9	105.02	46.02	59	0-360	200	H
2	47.415	4.7	Pk	19.9	1.4	26	40	-14	0-360	400	V
4	97.5315	5.46	Pk	17.2	2	24.66	43.52	-18.86	0-360	200	V
6	429.8678	3.74	Pk	22.1	4.3	30.14	46.02	-15.88	0-360	400	V
8	830.9875	70.45	Pk	27	5.9	103.35	46.02	57.33	0-360	100	V

Pk - Peak detector

Note: Unwanted emissions captured from 814MHz to 849MHz and from 849MHz to 859MHz were the TX and RX signals generated from the call-simulator.

HIGH CHANNEL(892.5 MHz)**HORIZONTAL PEAK PLOT****VERTICAL PEAK PLOT****DATA****Trace Markers**

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	VULB9163_750	Below_1G Bypass [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	60.96	4.92	Pk	18.4	1.6	24.92	40	-15.08	0-360	300	H
3	195.4425	5.29	Pk	17.4	2.9	25.59	43.52	-17.93	0-360	100	H
5	357.789	3.75	PK	20.4	3.9	28.05	46.02	-17.97	0-360	300	H
7	845.05	72.33	PK	27.3	6	105.63	46.02	59.61	0-360	200	H
2	67.2488	6.96	PK	16.5	1.7	25.16	40	-14.84	0-360	300	V
4	195.4425	4.3	PK	17.4	2.9	24.6	43.52	-18.92	0-360	400	V
6	358.4663	2.72	PK	20.3	3.9	26.92	46.02	-19.1	0-360	300	V
8	844.8125	71.67	PK	27.3	6	104.97	46.02	58.95	0-360	100	V

Pk - Peak detector

Note: Unwanted emissions captured from 814MHz to 849MHz and from 849MHz to 859MHz were the TX and RX signals generated from the call-simulator.

7.2. CONDUCTED EMISSIONS

TEST PROCEDURE

ANSI C63.4-2014

LIMIT

§15.107 (a) Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μ H/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges.

Frequency range (MHz)	Limits (dB μ V)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56	56 to 46
0.50 to 5	56	46
5 to 30	60	50

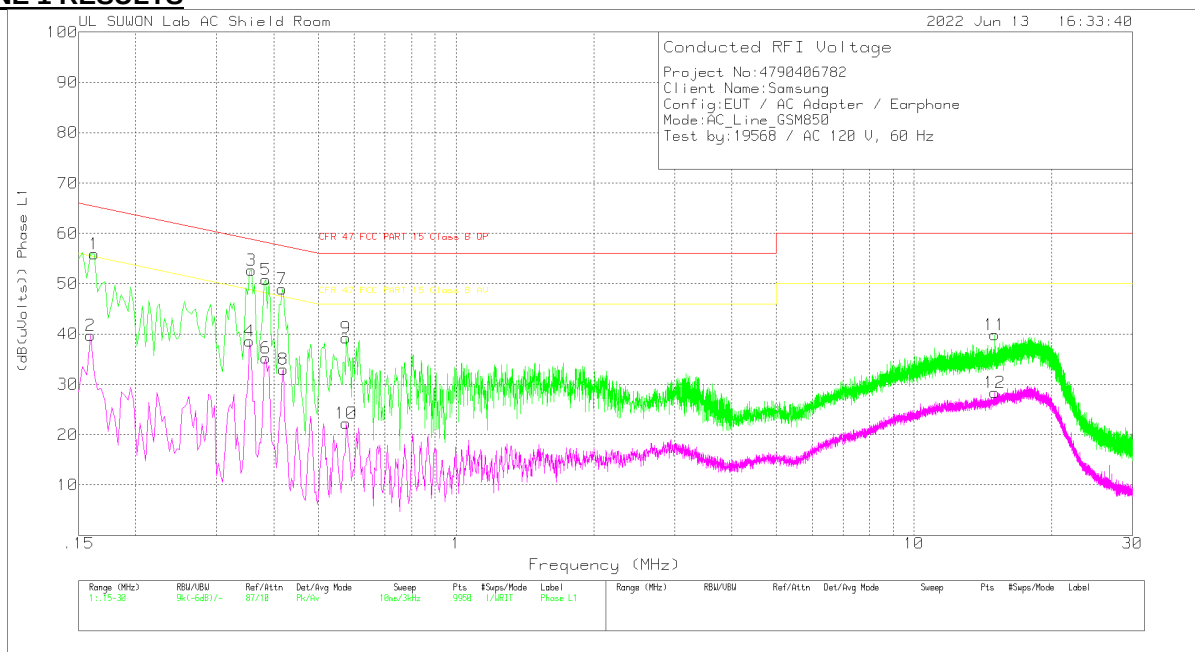
Notes:
1. The lower limit shall apply at the transition frequencies
2. The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz.

7.2.1 CONDUCTED EMISSIONS

6 WORST EMISSIONS(GSM850 + Rear camera on)

Line-L1 .15 – 30 MHz

LINE 1 RESULTS



Trace Markers

Range 1: Phase L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_L1[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
1	.162	45.93	Pk	9.9	.1	55.93	65.36	-9.43	-	-
2	.159	29.81	Av	9.8	.1	39.71	-	-	55.52	-15.81
3	.357	42.66	Pk	9.8	.2	52.66	58.8	-6.14	-	-
4	.354	28.57	Av	9.8	.2	38.57	-	-	48.87	-10.3
5	.384	40.8	Pk	9.8	.2	50.8	58.19	-7.39	-	-
6	.384	25.17	Av	9.8	.2	35.17	-	-	48.19	-13.02
7	.417	38.98	Pk	9.8	.2	48.98	57.51	-8.53	-	-
8	.42	22.96	Av	9.8	.2	32.96	-	-	47.45	-14.49
9	.576	29.27	Pk	9.8	.2	39.27	56	-16.73	-	-
10	.576	12.29	Av	9.8	.2	22.29	-	-	46	-23.71
11	15.003	29.41	Pk	10	.4	39.81	60	-20.19	-	-
12	15	17.98	Av	10	.4	28.38	-	-	50	-21.62

Pk - Peak detector

Av - Average detection

Quasi-Peak Emissions

Range 1: Phase L1 .15 - 30MHz

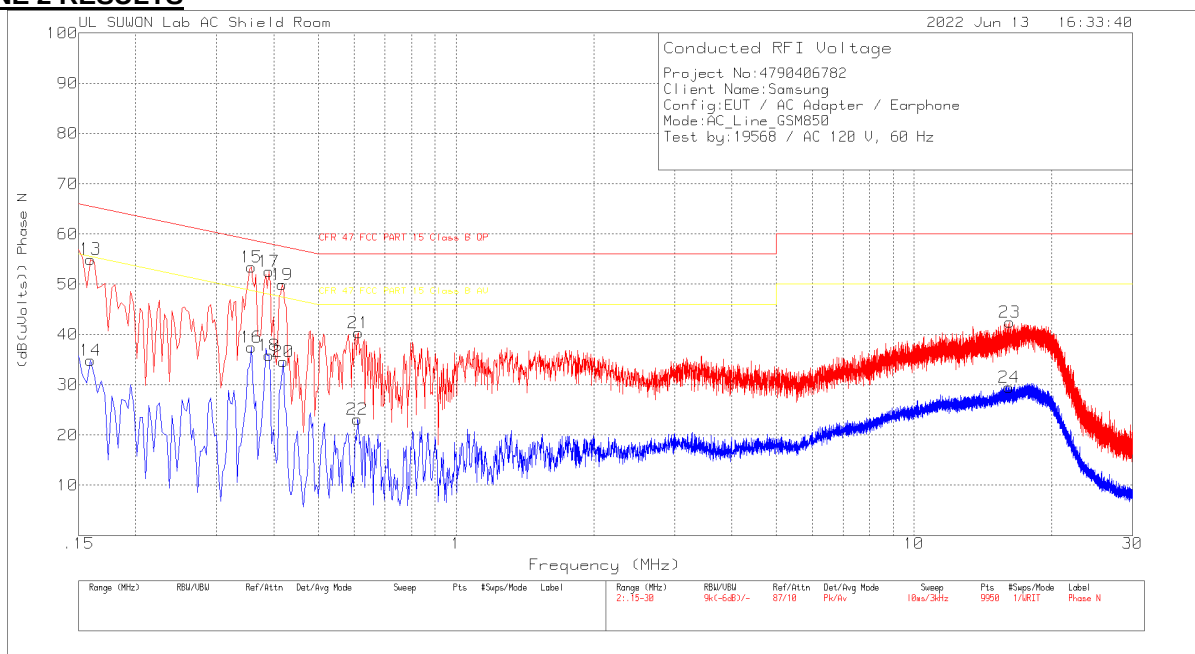
Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_L1[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.16125	44.99	Qp	9.9	.1	54.99	65.4	-10.41	-	-
.35625	40.31	Qp	9.8	.2	50.31	58.82	-8.51	-	-
.38475	38.46	Qp	9.8	.2	48.46	58.18	-9.72	-	-
.41775	36.93	Qp	9.8	.2	46.93	57.49	-10.56	-	-

Qp - Quasi-Peak detector

6 WORST EMISSIONS(GSM850 + Rear camera on)

Line-L2 .15 – 30 MHz

LINE 2 RESULTS



Trace Markers

Range 2: Phase N .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_N[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
13	.159	45.08	Pk	9.8	.1	54.98	65.52	-10.54	-	-
14	.159	24.91	Av	9.8	.1	34.81	-	-	55.52	-20.71
15	.357	43.39	Pk	9.8	.2	53.39	58.8	-5.41	-	-
16	.357	27.44	Av	9.8	.2	37.44	-	-	48.8	-11.36
17	.39	42.6	Pk	9.8	.2	52.6	58.06	-5.46	-	-
18	.39	25.88	Av	9.8	.2	35.88	-	-	48.06	-12.18
19	.417	39.94	Pk	9.8	.2	49.94	57.51	-7.57	-	-
20	.42	24.6	Av	9.8	.2	34.6	-	-	47.45	-12.85
21	.612	30.36	Pk	9.8	.2	40.36	56	-15.64	-	-
22	.609	13.12	Av	9.8	.2	23.12	-	-	46	-22.88
23	16.194	31.92	Pk	10.1	.4	42.42	60	-17.58	-	-
24	16.155	19.01	Av	10.1	.4	29.51	-	-	50	-20.49

Pk - Peak detector

Av - Average detection

Quasi-Peak Emissions

Range 2: Phase N .15 - 30MHz

Frequency (MHz)	Meter Reading (dBuV)	Det	101836_Wit h EX_N[dB]	CABLELOS S(dB)	Corrected Reading (dB(uVolts))	CFR 47 FCC PART 15 Class B QP	Margin (dB)	CFR 47 FCC PART 15 Class B AV	Margin (dB)
.35625	41.4	Qp	9.8	.2	51.4	58.82	-7.42	-	-
.38925	40.16	Qp	9.8	.2	50.16	58.08	-7.92	-	-
.41775	37.81	Qp	9.8	.2	47.81	57.49	-9.68	-	-

Qp - Quasi-Peak detector

END OF TEST REPORT